
Snap-on
Snap-on
17mm
Snap-on
1920•2015

# THE BEST DEMAND THE BEST.



TOOL STORAGE 3-98

1/4" DRIVE TOOLS 102-136

3/8" DRIVE TOOLS 137-183

1/2" DRIVE TOOLS 184-212

3/4" DRIVE TOOLS 213-221

1" 1-1/2" 2-1/2" DRIVE TOOLS 222-232

WRENCHES 233-274

TORQUE 275-301

SCREWDRIVERS 302-332
Awls • Hooks • Picks • Prybars

PLIERS 333-349

PUNCHES/CHISELS/HAMMERS 350-356

GENERAL HAND TOOLS 357-429
Files • Scrapers • Spark Plugs • Threading • Extractors • Pullers • Diesel • Other

SET BUILDING 430-440

POWER TOOLS 441-506

TESTING & ELECTRONICS 510-551
Specialty Meters • Analyzers • Fuel and Engine Systems

WELDING 552-567

UNDERCAR 568-605

BATTERY SERVICE 606-615

AIR CONDITIONING 616-628

COOLING 629-636

SHOP EQUIPMENT 637-720
Lighting • Creepers • Measuring • Pick-up Tools • Compressors • Presses

SHOP CLEANING 721-727
Parts Washers • Pressure Washers • Vacuums • Shop Fans

SAFETY 728-740

DIAGNOSTICS 741-775

INDEX I1-I30


QUICK REFERENCE

# THE WORLD'S FINEST TOOLS. 95 YEARS IN THE MAKING.



## 1920s

PIONEERED INTERCHANGEABLE SOCKETS ("5 DO THE WORK OF 50") AND DIRECT-TO-CUSTOMER SALES; RATCHETING ATTACHMENT DEBUTS




## 1940s

SNAP-ON INTRODUCES A COMPLETE YET COMPACT WHEEL ALIGNMENT SYSTEM TO MEASURE CAMBER, CASTER AND STEERING GEOMETRY



## 1960s

INNOVATIVE FLANK DRIVE® WRENCHING SYSTEM IS INTRODUCED TO THE ENTIRE PRODUCT LINE; UNDERSCORES "THERE IS A DIFFERENCE" IN SNAP-ON PRODUCTS

## 1930s

TORQOMETER® (PIONEERING TORQUE WRENCH) & SUPER SERVICE SETS (WITH 150+ TOOLS) INTRODUCED




## 1950s

THE MASTER ANALYZER, A COMPREHENSIVE IGNITION AND ENGINE TESTING SYSTEM IN ONE CONSOLE, IS UNVEILED






**In 1920, with the turn of a socket wrench, Joe Johnson revolutionized the tool industry. His ingenious "5 Do the Work of 50" interchangeable sockets and handles set a new standard – and Snap-on has been innovating ever since. From a rented building in Milwaukee, Johnson and his colleague Bill Seidemann agreed: interchangeable sockets had the potential for unrivaled productivity. And so, Snap-on Wrench Company was born. They teamed with Stanton Palmer and Newton Tarble, the pioneers of direct sales and delivery of tools to mechanics at their place of business. Today, Snap-on is poised to spearhead innovation well into the 21st century. And, with roots still firmly planted here at home, we'll continue to define the cutting edge: by creating unique productivity solutions for techs and professionals in critical industries around the globe.**




## 1980s

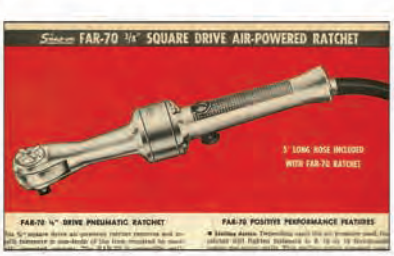
SNAP-ON DEVELOPS COLD-FORMED ALLOY STEEL TECHNOLOGY FOR SOCKETS; HANDHELD DIAGNOSTIC TOOL MT2500, "THE BRICK," IS LAUNCHED

## 2000s

DUAL 80™ RATCHETING TECHNOLOGY INTRODUCED; EPIQ, A POWERED TOOL STORAGE SYSTEM, IS CREATED

## 1970s

SNAP-ON PIONEERS AIR-POWERED RATCHETS WITH INTRODUCTION OF THE PATENTED FAR70




## 1990s

FLANKDRIVE® PLUS (WITH 40% GREATER TURNING POWER) INTRODUCED; SNAP-ON PATENTS A 3D VISUAL ALIGNMENT SYSTEM




## 2010s

SURETRACK® – EXPERT INFORMATION SYSTEM WITH REAL FIXES AND VERIFIED PARTS REPLACEMENT RECORDS FROM MILLIONS OF SUCCESSFUL REPAIR ORDERS



# OUR THANKS TO THOSE WHO CONTINUE TO PUT SNAP-ON ON THE MAP.

Behind every great tool is an incredible workforce. At Snap-on, we proudly salute the men and women who design, engineer, and manufacture the best tools in the world.



**ELIZABETHTON, TN**
Wrenches, Ratchets, Prybars, Punches, and Chisels



**MURPHY, NC**
Cordless and Pneumatic Tools



**MILWAUKEE, WI**
Sockets, Extensions, Pliers, and Screwdrivers



**CONWAY, AR**
Wheel Balancers and Tire Changers



**ALGONA, IA**
Tool Storage



**CITY OF INDUSTRY, CA**
Torque Products



**ELKMONT, AL**
Ratcheting Screwdrivers, Hammers, Large Sockets, and Custom Tools



**SAN JOSE, CA**
Diagnostic Platforms and Software













Overview.....4
EPIQ Series.....7
Masters Series.....21
Classic Series.....41
Heritage Series.....49
Mobile Solutions.....56
Accessories.....67

# TOOL STORAGE



# WHEN IT COMES TO STORING TOOLS, SNAP-ON RULES.

For every job, for every need, for every tech, Snap-on has the storage solution. With an incredible breadth and depth of tool storage systems, the ability to personalize and customize a system that suits you, innovative expansion options and rock-solid construction, Snap-on leads the way. When you want a system that puts every tool perfectly in its place, we have your perfect solution.



## COUNTLESS WAYS TO CUSTOMIZE.

The needs of every job – and every tech – are different. Snap-on® tool storage systems give you the power to customize one to your exact requirements.

**BREADTH —** From the groundbreaking EPIQ Series to the Masters, Classic and Heritage Series, to carts and specialty storage, you'll find your solution here.

**SYSTEM EXPANSION —** As your career and capabilities grow, so will your tool storage system. We've got the options to keep pace.

**"Since I bought my big box, I haven't heard anyone come in and tell me they know of someone with a bigger one. The quality and tool control adds value daily."**

Kevin Kassel
Des Moines, IA

Kevin has:
2 Red TUVs - KRT1032BPBO
1 Red Roll Cab w/ Stainless Steel Top - KRL1022CPBO1
1 Red Riser, Workstation 54" - KRL1054PBO

## PACKED WITH INNOVATION.

Innovation starts with listening. And when you told us what you needed, we designed industry-leading features that work with you and for you.

**POWERED TOOL STORAGE —** Charge your tools while securely storing them in the revolutionary EPIQ Series with PowerBank™.

**MOBILE STORAGE —** From roll cabs to carts to the one-of-a-kind Road Chest, *Snap-on* tool storage is always right beside you.

**INPULSE™ DRAWERS —** Intuitive flush finish drawers that are easier to open, smoother to close and don't drift open.

## FIRST IN STORAGE. BUILT TO LAST.

Because you work hard, *Snap-on* tool storage is tested to its limits. Which means these tough, reliable systems will go the distance. Depend on it.

**STRUCTURAL CONTINUITY —** A structural, integrated bond makes the overall strength of the unit greater than the sum of its parts.

**DOUBLE WALL CONSTRUCTION —** Double up on durability: the double wall guards against faulty drawer operation caused by dents and dings.

**HIGH-END PAINT —** An ultra-tough powder coat process provides impressive finishes in a variety of colors.

# ROLL CAB – QUICK REFERENCE CHART


EPIQ Series


Masters Series


Classic Series


Heritage Series

| | Features | EPIQ | Masters | Classic | Heritage |
|---|---|---|---|---|---|
| **Steel Gauge:** | Bottom | 16 (14 Gauge Super Duty Skid Support System) | 16 (14 Gauge Extra Heavy Duty Skid Support System) | 16 (14 Gauge Heavy Duty Skid Support System) | 16 (14 Gauge Heavy Duty Skid Support System on 53" Roll Cabs) |
| | Top | 16 (Super Duty Stiffeners) | 16 (Extra HD Stiffeners) | 16 (Heavy Duty Stiffeners) | 16 (Medium Duty Stiffeners on 53") |
| | Back | 16 | 16 | 16 | 18 |
| | Side | 16 | 16 | 16 | 18 |
| | False Side Panels | 18 | 18 | 18 | 20 |
| | Drawer Front | 18 | 18 | 18 | 20 |
| | Drawer Body | 18 | 18 | 18 | 18/20 |
| | Drawer Back | 18 | 18 | 18 | 20 |
| | Standing Seam | • | • | • | — |
| | Corner Gussets | 4 | 4 | 4 | 4 (53"); 2 (40") |
| **Features:** | Slides, lb (ball bearing) | 227 | 227 | 120 | 120 |
| | Handle | Chrome with grips | Chrome with insert | Ergonomic | Ergonomic |
| | Drawer Trim | Dual-function Aluminum | Aluminum Installed | Aluminum Installed | Aluminum Installed |
| | Case Trim | Alum. Wrap Installed | Aluminum Installed | — | — |
| | Lock | Removeable Core | Removeable Core | Removeable Core | Removeable Core |
| | Casters | 7" x 2" Super Duty ISO-Ride® 8,000 lb | 6" x 2" Extra Heavy *ISO-Ride* 6,800 lb* | 6" x 2" 2,400 lb | 6" x 2" 2,400 lb |
| | Caster/Handle Mounting | Weld Nut/ Heavy Plate | Weld Nut/ Heavy Plate | Weld Nut/ Heavy Plate | Weld Nut & Plate |
| | Top Mat | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber | Unidirectional Rubber |
| | Drawer Liner | Nonslip Premium | Nonslip Premium | Nonslip Premium | Foam |
| | Drawer Retention | InPulse | Lock-n-Roll | Lock-n-Roll | Lock-n-Roll |
| | Paint | All Powder Coat Scratch Resistant | All Powder Coat Scratch Resistant | All Powder Coat Scratch Resistant | All Powder Coat Scratch Resistant |
| | Colors Available | 12 Standard | 12 Standard | 8 Standard | 4 Standard |
| | Integrated Power Available | • | Optional Cabinet | — | — |

*6,800 lb casters on all Masters except KRL722A, KRL756B, KRL1056B

# TOOL STORAGE. TAKEN TO THE NEXT LEVEL.

Created by technicians to meet the most rigorous demands of any job, the EPIQ Series is the first Snap-on® tool storage series with integrated power. This is what happens when Snap-on – and the pros that use them – takes legendary tool storage to the next level.

**PowerBank™ —** Charge and store your cordless tools in this lockable bank.

**PowerHouse™ —** Power and store a diagnostic tool or PC under the lockable flip-top.

**PowerTop™ —** A stainless steel work surface with integrated power sources accommodates laptops, power tools and a variety of accessories.

**TOP-OF-THE-LINE. FROM TOP-TO-BOTTOM.**

When it comes to these tool storage units, EPIQ power is just the beginning. Because to top things off, this series is built with the best components – many of which are EPIQ exclusives. The EPIQ Series: Snap-on at the top of its game.

**InPulse™ Drawers —** Intuitive flush-finished drawers for the ultimate in performance and professional look.

**ISO-Ride® Casters —** Smooth-riding 7" swivel-lock mag wheels with independent suspension.

**Standing Seams —** Increases the weight-bearing strength while protecting edges from unnecessary bumps and bruises.

**Corner Gussets —** Reinforcement in the corners to prevent racking – even under the heaviest loads.

**Structural Support —** Stiffeners, gussets and reinforcements used in strategic places throughout the drawers and roll cab.



# EPIQ SERIES

## This roll cab is not just monumental. It's EPIQ.

Only one name is worthy of our top-of-the-line roll cab series: EPIQ. This is the ultimate choice in tool storage – designed and created by techs, for techs. EPIQ unites the most rugged, reliable and functional roll cabs in the industry, letting you customize one that's tailor-made for the way you work. Choose your additions, optimize your tool storage, ramp up your productivity. Now that's EPIQ.




KERP843B4PUN

### EPIQ SERIES

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

### TRIM COLORS

| Blue | Red | Titanium | Black | Bright Chrome |
|---|---|---|---|---|



## TOP DRAWER SECTION

As your tool collection grows, a Top Drawer Section provides you with the extra storage space you need. It maximizes both drawer space and organization by providing 75% of the storage space of a roll cab. Each drawer bank features three 4" drawers.

## OVERHEAD CABINET

It's a simple equation: adding an overhead storage cabinet equals more wide-open shelf and cabinet space. This bulk space is perfect for plastic cases, manuals and personal items. Actuated gas springs raise the door for convenient access.

## BULK END CAB

EPIQ bulk end cab provides storage for larger items and additional usable work space; features 17,260 cubic inches of storage, 3 pull-out shelves, and 1 stationary shelf.





## WORKCENTER

The WorkCenter serves as the perfect hub when you need to jot down notes, work off your laptop, monitor diagnostic equipment and charge cordless power tools. It also offers a great way to organize the back wall for tool holders, shelves and lighting. Two gas cylinders assist in opening the door for effortless operation.

## LOCKER

Our 30"-deep EPIQ lockers are perfect for larger tools, with configurations available in both left and right side doors. It is equipped with six 4"-deep drawers and a stationary shelf; includes two swivel casters for support and easy maneuverability.



*Note stainless steel or bed liner top required when adding a WorkCenter.

# EPIQ SERIES: QUICK REFERENCE CHART


KEXP725A


KEXN725A


KEXN603A


KERP842B


KERN842B


KERP843B

| Roll Cabs | Specifications | KEXP725A | KEXN725A | KEXN603A | KERP842B | KERN842B | KERP843B |
|---|---|---|---|---|---|---|---|
| Capacity | Approx Cubic Inches ($cm^3$) | 91,690 (1,501,882) | 91,627 (1,500,850) | 77,672 (1,272,267) | 55,670 (912,268) | 55,550 (910,301) | 53,407 (875,184) |
| | Approx Square Inches ($cm^2$) | 25,319 (163,308) | 25,340 (163,443) | 22,690 (146,351) | 13,541 (87,361) | 13,769 (88,832) | 13,876 (89,522) |
| | Load Capacity, lb (kg) | 16,000 (7,258) | 16,000 (7,258) | 16,000 (7,258) | 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) |
| Footprint | Width, inches (mm) | 144 (3,658) | 144 (3658) | 120 (3,048) | 84 (2,134) | 84 (2,134) | 84 (2,134) |
| | Depth, inches (mm) | 30 (762) | 30 (762) | 30 (762) | 30 (762) | 30 (762) | 30 (762) |
| | Height, inches (mm) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) |
| Drawers | Drawer Banks | 5 | 5 | 3 | 2 | 2 | 3 |
| | Drawer Count | 26 | 31 | 20 | 8 | 13 | 14 |
| | Widest Drawer, inches (mm) [Qty] | 62" (1,575) [3] | 54" (1,372) [6] | 54" (1,372) [11] | 62 (1,575) [7] | 54 (1,372) [7] | 62 (1,575) [2] |
| | Slides, lb (kg) [ball bearing] | 227 | 227 | 227 | 227 (103) | 227 (103) | 227 (103) |
| | Double Slide (included) | Yes (7) | Yes (7) | Yes (8) | Yes (5) | Yes (6) | Yes (3) |
| Extras | Writing Surface (Qty) | Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) |
| | Third Caster Set Option | N/A | N/A | N/A | Yes | Yes | Yes |
| Weight | Net Weight, lb (kg) | — | — | — | 990 (449) | 1,044 (474) | 990 (449) |
| | Shipping Weight, lb (kg) | 1,925 (873) | 1,925 (873) | 1,970 (802) | 990 (449) | 1,044 (474) | 990 (449) |
| EPIQ Configurations | PowerBank™ unit | Yes | No | No | Yes | No | Yes |
| | Non-directional Rubber Top | KEXP725A0 | KEXN725A0 | KEXN603A0 | KERP842B0 | KERN842B0 | KERP843B0 |
| | Stainless-Steel PowerTop™ | Choose combination of 60" and 84" tops. See p.72 for part numbers. | | Choose combination of 60" tops. See p.72 for part numbers. | KERP842B4 | KERN842B4 | KERP843B4 |
| | Stainless-Steel PowerHouse™ Top | | | | KERP842B5 | KERN842B5 | KERP843B5 |
| Optional Add-ons Available | Top Chest | — | — | — | KECN842A | KECN842A | KECN843A |
| | Top Drawer Section | KESN843A KESN602A | KESN843A KESN602A | KESN602A | KESN842A | KESN842A | KESN843A |
| | Bulk Side Cabinet | KEBN302AL KEBN302AR | KEBN302AL KEBN302AR | KEBN302AL KEBN302AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR |
| | Locker | KELN301BL KELN301BR | KELN302BL KELN302BR | KELN302BL KELN302BR | KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR |
| | WorkCenter | KEWN840B KEWN600B | KEWN840B KEWN600B | KEWN600B | KEWN840B | KEWN840B | KEWN840B |
| | Overhead | KEWN840B KEWN600B | KEWN840B KEWN600B | KEWN600B | KEWN840B | KEWN840B | KEWN840B |
| | Stainless-Steel *PowerTop* | KWSN3012AST | KWSN3012AST | KWSN3010AST | KWSP3084BST | KWSP3084BST | KWSP3084BST |
| | Stainless-Steel *PowerHouse* Top | — | — | — | KWSH3084BST | KWSH3084BST | KWSH3084BST |
| | Stainless-Steel Work Surfaces | — | — | — | KWSN3084BST | KWSN3084BST | KWSN3084BST |
| | Bedliner Steel Work Surface | — | — | — | KWSN3084ABL | KWSN3084ABL | KWSN3084ABL |
| | Bedliner *PowerTop* | — | — | — | KWSP3084ABL | KWSP3084ABL | KWSP3084ABL |
| | Hardwood Top | KWSN3012AWT | KWSN3012AWT | KWSN3010AWT | KWSN3084AWT | KWSN3084AWT | KWSN3084AWT |

## Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

Tools shown in tool storage not included. Images may be shown without actual warning labels.

All EPIQ Series units are available in 12 standard colors. $GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLD FRORV.

# EPIQ SERIES: QUICK REFERENCE CHART



KERN843B



KERP762B



KERP763B



KERN682B



KERN602B

| KERN843B | KERP762B | KERP763B | KERN682B | KETN682A | KERN602B | KETN602A |
|---|---|---|---|---|---|---|
| 53,316 (873,693) | 49,719 (814,748) | 47,485 (778,140) | 43,922 (719,753) | 45,147 (739,831) | 38,000 (622,708) | 39,119 (641,045) |
| 13,898 (89,664) | 11,985 (77,322) | 12,114 (78,155) | 12,412 (80,077) | 11,046 (71,264) | 10,650 (68,710) | 9,490 (61,225) |
| 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) | 8,000 (3,629) |
| 84 (2,134) | 76 (1,930) | 76 (1,930) | 68 (1,727) | 68 (1,727) | 60 (1,524) | 60 (1,524) |
| 30 (762) | 30 (762) | 30 (762) | 30 (762) | 30 (762) | 30 (762) | 30 (762) |
| 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) | 46 7/8 (1,191) |
| 3 | 2 | 3 | 2 | 2 | 2 | 2 |
| 19 | 8 | 14 | 13 | 10 | 13 | 10 |
| 54 (1,372) [2] | 54 (1,372) [7] | 54 (1,372) [2] | 62 (1,575) [2] | 62" (1,575) [3] | 54 (1,372) [2] | 54 (3) |
| 227 (103) | 227 (103) | 227 (103) | 227 (103) | 227 (103) | 227 (103) | 227 (103) |
| Yes (4) | Yes (5) | Yes (3) | Yes (3) | Yes (4) | Yes (3) | Yes (4) |
| Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) |
| Yes | Yes | Yes | No | No | No | No |
| 1,044 (474) | 936 (425) | 936 (425) | 832 (377) | 832 (377) | 774 (351) | 880 (399) |
| 1,044 (474) | 936 (425) | 936 (425) | 946 (429) | 912 (413) | 880 (399) | 774 (351) |
| No | Yes | Yes | No | No | No | No |
| KERN843B0 | KERP762B0 | KERP763B0 | KERN682B0 | KETN682A0 | KERN602B0 | KETN602A0 |
| KERN843B4 | KERP762B4 | KERP763B4 | KERN682B4 | KETN682A4 | KERN602B4 | KETN602A4 |
| KERN843B5 | KERP762B5 | KERP763B5 | — | — | — | — |
| KECN843A | — | — | KECN682A | KECN682A | KECN602A | KECN602A |
| KESN843A | — | — | KESN682A | KESN682A | KESN602A | KESN602A |
| KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR | KEBN301AL KEBN301AR |
| KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR | KELN301BL KELN301BR |
| KEWN840B | KEWN760B | KEWN760B | KEWN680B | KEWN680B | KEWN600B | KEWN600B |
| KEHN840B | KEHN760B | KEHN760B | KEHN680B | KEHN680B | KEHN600B | KEHN600B |
| KWSP3084BST | KWSP3076BST | KWSP3076BST | KWSP3068BST | KWSP3068BST | KWSP3060BST | KWSP3060BST |
| KWSH3084BST | KWSH3076BST | KWSH3076BST | — | — | — | — |
| KWSN3084BST | KWSN3076BST | KWSN3076BST | KWSN3068BST | KWSN3068BST | KWSN3060BST | KWSN3060BST |
| KWSN3084ABL | KWSN3076ABL | KWSN3076ABL | KWSN3068ABL | KWSN3068ABL | KWSN3060ABL | KWSN3060ABL |
| KWSP3084ABL | KWSP3076ABL | KWSP3076ABL | KWSP3068ABL | KWSP3068ABL | KWSP3060ABL | KWSP3060ABL |
| KWSN3084AWT | KWSN3076AWT | KWSN3076AWT | KWSN3068AWT | KWSN3068AWT | KWSN3060AWT | KWSN3060AWT |

Tools shown in tool storage not included

**⚠WARNING**



- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# EPIQ SERIES: ROLL CABS




KEXN725A1PES



KEXN603A0PJJ




KEXP725A0PJK

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KEXN725A | KEXN603A | KEXP725A |
|---|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers |
| 11 5/8 | 295 | 26 13/16 | 681 | 30 1/2 | 775 | — | — | 1 |
| 19 5/8 | 498 | 26 7/8 | 683 | 1 11/16 | 43 | 8 | 3 | 6 |
| 19 5/8 | 498 | 27 15/16 | 710 | 3 15/16 | 100 | 3 | — | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 6 3/16 | 157 | 2 | — | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 10 5/8 | 270 | 2 | 1 | 1 |
| 30 1/16 | 764 | 26 7/8 | 683 | 1 11/16 | 43 | 6 | 3 | 3 |
| 30 1/16 | 764 | 27 15/16 | 710 | 3 15/16 | 100 | 2 | 1 | 1 |
| 30 1/16 | 764 | 27 15/16 | 710 | 6 3/16 | 157 | 2 | 1 | 1 |
| 38 1/16 | 967 | 26 7/8 | 683 | 1 11/16 | 43 | — | — | 3 |
| 38 1/16 | 967 | 27 15/16 | 710 | 3 15/16 | 100 | — | — | 1 |
| 38 1/16 | 967 | 27 15/16 | 710 | 6 3/16 | 157 | — | — | 1 |
| 54 1/16 | 1,373 | 26 7/8 | 683 | 1 11/16 | 43 | — | 3 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 2 | 2 | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 3 13/16 | 97 | 2 | 3 | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 2 | 2 | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 6 | 152 | — | 1 | — |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 2 11/16 | 68 | — | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 3 13/16 | 97 | — | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 4 7/8 | 124 | — | — | 1 |
| | | | | | Total Drawer Count | 31 | 20 | 26 |

Tools shown in tool storage not included

### Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

All EPIQ Series units are available in 12 standard colors. $GG:VXÀ[IR:EDVH:VIRFN:QXPEHU:RU:VHFLD:FRORV.



**KERP763B4PCM**
**76" EPIQ with PowerBank™ Unit and PowerTop™**



**KERP763B0PDG**
**76" EPIQ with *PowerBank* Unit**



**KERP763B5PES**
**76" EPIQ with *PowerBank* Unit and *PowerHouse* Top**



**KERP843B5PJK**
**84" EPIQ with *PowerBank* Unit and PowerHouse™ Top**



**KERP843B0PJH**
**84" EPIQ with *PowerBank* Unit**



**KERP843B4PKS**
**84" EPIQ with *PowerBank* Unit and *PowerTop* Unit**

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KERP763B | KERP843B |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 11 5/8 | 295 | 26 13/16 | 681 | 30 1/2 | 775 | 1 | 1 |
| 19 5/8 | 498 | 26 7/8 | 683 | 1 11/16 | 43 | 3 | 3 |
| 19 5/8 | 498 | 27 15/16 | 710 | 3 15/16 | 100 | 1 | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 10 5/8 | 270 | 1 | 1 |
| 30 1/16 | 764 | 26 7/8 | 683 | 1 11/16 | 43 | 3 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 3 15/16 | 100 | 2 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 6 3/16 | 157 | 1 | — |
| 38 1/16 | 967 | 26 7/8 | 683 | 1 11/16 | 43 | — | 3 |
| 38 1/16 | 967 | 27 15/16 | 710 | 3 15/16 | 100 | — | 2 |
| 38 1/16 | 967 | 27 15/16 | 710 | 6 3/16 | 157 | — | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 1 | — |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 2 11/16 | 68 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 4 7/8 | 124 | — | 1 |
| | | | | | Total Drawer Count | 14 | 14 |

Tools shown in tool storage not included

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# EPIQ SERIES: ROLL CABS



**KERP762B5PU**
**76" EPIQ with *PowerBank* Unit and PowerHouse™ Top**



**KERP762B4PBO**
**76" EPIQ with PowerBank™ Unit and PowerTop™**



**KERP762B0PC**
**76" EPIQ with *PowerBank* Unit**



**KERP842B4PDG**
**84" EPIQ with *PowerBank* Unit and *PowerTop***



**KERP842B5PJK**
**84" EPIQ with *PowerBank* Unit and *PowerHouse* Top**



**KERP842B0PJJ**
**84" EPIQ with *PowerBank* Unit**

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KERP762B | KERP842B |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 11 5/8 | 295 | 26 13/16 | 681 | 30 1/2 | 775 | 1 | 1 |
| 54 1/16 | 1,373 | 26 7/8 | 683 | 1 11/16 | 43 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 3 13/16 | 97 | 3 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 6 | 152 | 1 | — |
| 62 1/16 | 1,576 | 26 7/8 | 683 | 1 11/16 | 43 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 2 11/16 | 68 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 3 13/16 | 97 | — | 3 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 4 7/8 | 124 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 6 | 152 | — | 1 |
| | | | | | Total Drawer Count | 8 | 8 |

Tools shown in tool storage not included

### Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

All EPIQ Series units are available in 12 standard colors. $GG:VXÌÀ[ IR:EDVH:VIRFN:QXPEHU:RU:VSHFLDO:FRORV.



**KERN842B4PC**
**84" EPIQ with PowerTop™**



**KERN842B0PES**
**84" EPIQ**



**KERN843B5PCM**
**84" EPIQ with *PowerHouse* Top**



**KERN843B0PKS**
**84" EPIQ**



**KERN842B5PBO**
**84" EPIQ with PowerHouse™ Top**



**KERN843B4PC**
**84" EPIQ with *PowerTop***

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KERN842B | KERN843B |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 19 5/8 | 498 | 26 7/8 | 683 | 1 11/16 | 43 | 2 | 5 |
| 19 5/8 | 498 | 27 15/16 | 710 | 3 15/16 | 100 | 2 | 3 |
| 19 5/8 | 498 | 27 15/16 | 710 | 6 3/16 | 157 | 1 | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 10 5/8 | 270 | 1 | 2 |
| 30 1/16 | 764 | 26 7/8 | 683 | 1 11/16 | 43 | — | 3 |
| 30 1/16 | 764 | 27 15/16 | 710 | 3 15/16 | 100 | — | 2 |
| 30 1/16 | 764 | 27 15/16 | 710 | 6 3/16 | 157 | — | 1 |
| 54 1/16 | 1,373 | 26 7/8 | 683 | 1 11/16 | 43 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 1 | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 3 13/16 | 97 | 3 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 1 | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 6 | 152 | 1 | — |
| | | | | | **Total Drawer Count** | 13 | 19 |

Tools shown in tool storage not included

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# EPIQ SERIES: ROLL CABS



**KERN602B4PBO**
**60" EPIQ with PowerTop™**



**KERN602BOPJJ**
**60" EPIQ**



**KERN682B0PU**
**68" EPIQ**



**KERN682B4PCM**
**68" EPIQ with *PowerTop***

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KERN602B | KERN682B |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 19 5/8 | 498 | 26 7/8 | 683 | 1 11/16 | 43 | 3 | 3 |
| 19 5/8 | 498 | 27 15/16 | 710 | 3 15/16 | 100 | 1 | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 10 5/8 | 270 | 1 | 1 |
| 30 1/16 | 764 | 26 7/8 | 683 | 1 11/16 | 43 | 3 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 3 15/16 | 100 | 2 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 6 3/16 | 157 | 1 | — |
| 38 1/16 | 967 | 26 7/8 | 683 | 1 11/16 | 43 | — | 3 |
| 38 1/16 | 967 | 27 15/16 | 710 | 3 15/16 | 100 | — | 2 |
| 38 1/16 | 967 | 27 15/16 | 710 | 6 3/16 | 157 | — | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 1 | — |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 2 11/16 | 68 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 4 7/8 | 124 | — | 1 |
| | | | | | **Total Drawer Count** | 13 | 13 |

Images shown with optional *PowerTop*

### Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

All EPIQ Series units are available in 12 standard colors. $GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLD FRORV.



**KETN682A0PBO**
**68" EPIQ**



**KETN602A0PBO**

## EPIQ Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KETN602A | KETN682A |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 19 5/8 | 498 | 26 7/8 | 683 | 1 11/16 | 43 | 1 | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 3 15/16 | 100 | 1 | 1 |
| 19 5/8 | 498 | 27 15/16 | 710 | 10 5/8 | 270 | 1 | 1 |
| 30 1/16 | 764 | 26 7/8 | 683 | 1 11/16 | 43 | 1 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 3 15/16 | 100 | 2 | — |
| 30 1/16 | 764 | 27 15/16 | 710 | 6 3/16 | 157 | 1 | — |
| 38 1/16 | 967 | 26 7/8 | 683 | 1 11/16 | 43 | — | 1 |
| 38 1/16 | 967 | 27 15/16 | 710 | 3 15/16 | 100 | — | 2 |
| 38 1/16 | 967 | 27 15/16 | 710 | 6 3/16 | 157 | — | 1 |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 2 11/16 | 68 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 3 13/16 | 97 | 1 | — |
| 54 1/16 | 1,373 | 27 15/16 | 710 | 4 7/8 | 124 | 1 | — |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 2 11/16 | 68 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 3 13/16 | 97 | — | 1 |
| 62 1/16 | 1,576 | 27 15/16 | 710 | 4 7/8 | 124 | — | 1 |
| | | | | | Total Drawer Count | 10 | 10 |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# EPIQ SERIES: TOP CHESTS



KECN602A0PBO



KECN682A0PC

## KECN602A0 Series Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 28,330 (464,245) | 8,400 (54,193) | 525 (238) | 605 (274) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 10 | 60 (1,524) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 30 1/16 (764) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 30 1/16 (764) | 27 15/16 (710) | 3 15/16 (100) |
| **Top Compartment** | 1 | 54 (1,372) | 27 15/16 (710) | 4 7/8 (124) |

## KECN682A0 Series Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 32,741 (536,528) | 9,721 (62,716) | 600 (272) | 685 (311) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 10 | 68 (1,727) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 38 1/16 (967) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 38 1/16 (967) | 27 15/16 (710) | 3 15/16 (100) |
| **Top Compartment** | 1 | 62 (1,575) | 27 15/16 (710) | 4 7/8 (124) |



KECN842A0PU



KECN843A0PDG

## KECN842A0 Series Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 40,996 (671,804) | 12,362 (79,754) | 750 (340) | 850 (386) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 10 | 84 (2,134) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 54 1/16 (1,373) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 54 1/16 (1,373) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| **Top Compartment** | 1 | 80 (2,032) | 27 15/16 (710) | 4 7/8 (124) |

## KECN843A0 Series Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 39,722 (650,926) | 11,760 (75,870) | 750 (340) | 850 (386) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 15 | 84 (2,134) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 4 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 6 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 30 1/16 (764) | 26 7/8 (683) | 1 11/16 (43) |
| | 3 | 30 1/16 (764) | 27 15/16 (710) | 3 15/16 (100) |
| **Top Compartment** | 1 | 80 (2,032) | 27 15/16 (710) | 4 7/8 (124) |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

All EPIQ Series units are available in 12 standard colors. $GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLD FRORV.



KESN602A0PBO



KESN682A0PC

## KESN602A0 Series Drawer Sections

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 26,370 (431,941) | 8,223 (53,038) | 525 (238) | 605 (274) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 12 | 60 (1,524) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 30 1/16 (764) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 30 1/16 (764) | 27 15/16 (710) | 3 15/16 (100) |

## KESN682A0 Series Drawer Sections

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 30,616 (501,490) | 9,547 (61,578) | 600 (272) | 685 (311) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 12 | 68 (1,727) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 38 1/16 (967) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 38 1/16 (967) | 27 15/16 (710) | 3 15/16 (100) |



KESN842A0PU



KESN843A0PDG

## KESN842A0 Series Drawer Sections

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 38,352 (628,206) | 12,195 (78,658) | 750 (340) | 850 (386) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 12 | 84 (2,032) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 2 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 54 1/16 (1,373) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 54 1/16 (1,373) | 27 15/16 (710) | 3 15/16 (100) |

## KESN843A0 Series Drawer Sections

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 36,785 (602,538) | 11,471 (73,988) | 750 (340) | 850 (386) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 18 | 84 (2,032) | 30 (762) | 27 1/2 (699) |
| **Drawers** | 4 | 19 5/8 (498) | 26 7/8 (683) | 1 11/16 (43) |
| | 8 | 19 5/8 (498) | 27 15/16 (710) | 3 15/16 (100) |
| | 2 | 30 1/16 (764) | 26 7/8 (683) | 1 11/16 (43) |
| | 4 | 30 1/16 (764) | 27 15/16 (710) | 3 15/16 (100) |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# EPIQ SERIES: WORKCENTERS



KEWN840B0PBO

## EPIQ WorkCenters – Stainless-Steel, Bed Liner or Butcher Block worksurface required to use WorkCenter.

| | Overall | | | Inside | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) | Square Inches (cm²) | Cubic Inches (cm³) | Weight Net/Ship, lb (kg) |
| KEWN840B0 | 84 (2,134) | 30 (762) | 25 1/2 (648) | 80 9/16 (2,046) | 26 5/8 (676) | 25 (635) | 5,130 (33,090) | 38,924 (657,575) | 355 (161) 410 (186) |
| KEWN760B0 | 76 (1,930) | 30 (762) | 25 1/2 (648) | 72 9/16 (1,843) | 26 5/8 (676) | 25 (635) | 4,717 (30,424) | 35,060 (574,283) | 325 (147) 375 (170) |
| KEWN680B0 | 68 (1,727) | 30 (762) | 25 1/2 (648) | 64 9/16 (1,640) | 26 5/8 (676) | 25 (635) | 4,303 (27,757) | 31,196 (510,991) | 300 (136) 345 (156) |
| KEWN600B0 | 60 (1,524) | 30 (762) | 25 1/2 (648) | 56 9/16 (1,437) | 26 5/8 (676) | 25 (635) | 3,890 (25,091) | 27,332 (447,698) | 275 (125) 315 (143) |

# OVERHEAD CABINETS



KEHN840B0PBO

## Bulk Overhead Cabinets

| | Overall | | | Inside | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) | Square Inches (cm²) | Cubic Inches (cm³) | Weight Net/Ship, lb (kg) |
| KEHN840B0 | 84 (2,134) | 30 (762) | 20 7/8 (530) | 80 1/4 (2,038) | 28 3/16 (716) | 13 5/8 (346) | 2,263 (14,595) | 30,888 (505,945) | 320 (145) 368 (167) |
| KEHN760B0 | 76 (1,930) | 30 (762) | 20 7/8 (530) | 72 1/4 (1,835) | 28 3/16 (716) | 13 5/8 (346) | 2,037 (13,141) | 27,811 (455,539) | 300 (136) 348 (158) |
| KEHN680B0 | 68 (1,727) | 30 (762) | 20 7/8 (530) | 64 1/4 (1,632) | 28 3/16 (716) | 13 5/8 (346) | 1,812 (11,687) | 24,733 (405,134) | 275 (125) 318 (144) |
| KEHN600B0 | 60 (1,524) | 30 (762) | 20 7/8 (530) | 56 1/4 (1,429) | 28 3/16 (716) | 13 5/8 (346) | 1,587 (10,233) | 21,656 (354,728) | 260 (118) 298 (135) |

# LOCKERS



KELN301BLPBO

## KELN301B Side Locker Cabinets

Side cabinets require attachment to an EPIQ roll cabinet or side cabinet. Cannot be used as a standalone unit.

| Cubic Inches (cm³) | Square Inches (cm²) | Load Capacity, lb (kg) | Net Weight, lb (kg) |
|---|---|---|---|
| 32,835 (537,837) | 4,310 (27,800) | 4,000 (1,814) | 467 (212) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 6/1 | 30 (762) | 30 (762) | 74 (1,880) |
| Pull-Out Bin | 2 | 24 1/8 (613) | 23 3/8 (594) | 4 (102) |
| Pull-Out Bin | 4 | 24 1/8 (613) | 26 5/8 (676) | 4 (102) |
| Stationary Shelf | 1 | 25 1/2 (648) | 24 (610) | — |
| Can Racks | 2 | 17 7/8 (454) | 3 3/16 (81) | 4 (102) |

**KELN301BL – Left side locker**
**KELN301BR – Right side locker**



KEBN301ALPBO

## KEBN301A Series Bulk End Cabinet

Cannot be used as a standalone unit.

| Cubic Inches (cm³) | Square Inches (cm²) | Load Capacity, lb (kg) | Weight Net/Ship,lb (kg) |
|---|---|---|---|
| 17,260 (282,719) | 2,461 (15,873) | 4,000 (1,814) | 390 (177) 440 (200) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 3/1 | 30 (762) | 30 (762) | 46 7/8 (1,191) |
| Pull-Out Bin | 1 | 24 1/8 (613) | 23 3/8 (594) | 4 (102) |
| Pull-Out Bin | 2 | 24 1/8 (613) | 26 5/8 (676) | 4 (102) |
| Stationary Shelf | 1 | 25 1/2 (648) | 24 (610) | — |
| Can Racks | 2 | 17 7/8 (454) | 3 3/16 (81) | 4 (102) |

**KEBN301AL – Left side bulk end cabinet**
**KEBN301AR – Right side bulk end cabinet**

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

All EPIQ Series units are available in 12 standard colors. \$GG\VXIÀ[\IR\EDVH\VIRFN\QXPEHU\IRU\VSHFLD\FRORUV.

# A HIGHER DEGREE OF TOOL STORAGE.

From ball bearing drawer slides, to the chemical-resistant powder coat paint, the Masters Series is built to the most exacting standards. It's tool storage, a step above.

**STANDS UP TO THE TOUGHEST TASKS. AND HIGHEST EXPECTATIONS.**

Built for tough jobs done by tough customers: the ones with high expectations. That's why the Masters Series is made with no-compromise construction – to ensure the strength and durability the job requires.

**Breadth —** The widest variety of configuration options – from the single bank roll cab to the race-inspired Tool Utility Vehicle – with all the add-on options you can imagine.

**FINE-TUNED FOR PRODUCTIVITY.**

Snap-on designed the Masters Series around the way you work, precisely engineering each box and loading it with features to keep you moving forward efficiently.

**PowerCab™ —** Bolt on to any Masters Series roll cab for a secure way to power your cordless tools.

**Extended Cab Feature —** Extra-wide drawers for maximum organizational power.

**Security —** Round key interchangeable core and a lifetime guarantee on all components for peace of mind.

**ISO-Ride® Casters —** 6" casters for unmatched strength and smoothness when transporting heavy loads.



**COLOR:** Extreme Green

# MASTERS SERIES

## No matter what your storage needs, the Masters serves you well.

At Snap-on, we've mastered the art of tool storage – and our Masters Series cabs live up to the loftiest of standards. Built to accommodate any and every storage need, these roll cabs can be customized to sync with every stage of your career. And, from the smooth ball bearing slides to the tough powder-coat paint, they take everything you put in them – and everything the work environment throws at them. Durable, smart, customizable. The Masters serves all that up, and more.




KRL7042PC

### MASTERS SERIES

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |

### TRIM COLORS

Blue | Red | Titanium | Black | Bright Chrome



## TOP CHEST

As your skill set grows, so does your tool kit. Our Top Chest helps you max both drawer space and organization by providing 75% of the storage space of a roll cab. Gas shock-assisted lid opens to spacious surface with quick access to batteries, cases and go-to items. For even more convenient space, each drawer bank provides three 4" drawers.

## OVERHEAD CABINET

Because it's secure, this bulk space is great for cases and personal items. Actuated gas springs raise the door for convenient access.

## DRAWER END CAB

An end cab is an upgrade to a wider roll cab. Snap-on offers a variety of end cab configurations – and the extra work space you'll get from an end cab is yet another benefit.





## WORKCENTER

Get the most out of a workday at this convenient place to take notes, work off a laptop, or monitor diagnostic equipment. A WorkCenter opens the door to a back wall that can be organized for tool holders, shelves and lighting. Two gas cylinders assist in opening the door for ease of operation.

## LOCKERS

These lockers offer an incredible combination: the ability to expand lengthwise, generous space for larger tools, and configurations to fit both sides of a cab. A standard locker is equipped with four 4"-deep drawers and three adjustable shelves.



*Note stainless steel or bed liner top required when adding a WorkCenter.

# MASTERS SERIES: QUICK REFERENCE CHART


KRL1032E


KRL1033C


KRL1023C


KRL1163


KRL7023C

| Roll Cabs | Specifications | KRL1032E | KRL1033C | KRL1023C | KRL1163 | KRL7023C |
|---|---|---|---|---|---|---|
| Capacity | Approx. Cubic Inches ($cm^3$) | 46,425 (760,769.4) | 44,761 (733,501) | 44,260 (725,291) | 45,593 (747,135) | 37,812 (619,628) |
| | Approx. Square Inches ($cm^2$) | 12,251 (79,038) | 12,925 (83,387) | 13,111 (84,587) | 10,314 (66,542) | 11,499 (74,187) |
| | Load Capacity, lb (Kg) | 6,800 (3,084) | 6,800 (3,084) | 6,800 (3,084) | 6,800 (3,084) | 6,800 (3,084) |
| Footprint | Width, inches (mm) | 72 7/8 (1,851) | 72 7/8 (1,851) | 72 7/8 (000) | 72 7/8 (1851) | 72 7/8 (1,851) |
| | Depth, inches (mm) | 29 1/8 (740) | 29 1/8 (740) | 29 1/8 (740) | 29 1/8 (739.7) | 29 1/8 (740) |
| | Height, inches (mm) | 45 7/8 (1,165) | 45 7/8 (1,165) | 45 7/8 (1,165) | 45 7/8 (1,165) | 41 3/8 (1, 051) |
| Drawers | Drawer Banks | 2 | 3 | 3 | 3 | 3 |
| | Drawer Count | 12 | 19 | 22 | 16 | 19 |
| | Widest Drawer, inches (mm) [Qty] | 69 (1,753) [2] | 69 (1,753) [2] | 50 (1,270) [2] | 50 (1,270) [2] | 50 (1,270) [2] |
| | Slides, lb (Kg) (Ball Bearing) | 227 (103) | 227 (103) | 227 (103) | 227 (103) | 227 (103) |
| | Double Slide (included) | Yes (5) | Yes (2) | Yes (2) | Yes (2) | Yes (2) |
| Extras | Work Surface | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber |
| | Writing Surface (Qty) | Yes (1) | Yes (1) | Yes (1) | Yes (1) | Yes (1) |
| | Third Caster Set Option | Yes | Yes | Yes | Yes | Yes |
| Weight | Net Weight, lb (Kg) | 892 (405) | 892 (405) | 892 (405) | 785 (356) | 785 (356) |
| | Shipping Weight, lb (Kg) | 1,006 (456) | 1,006 (456) | 1,006 (456) | 1,006 (456) | 893 (405) |
| Optional Add-ons Available | Top Chest | KRL1232 | KRL1203B | KRL1203B | KRL1203B | KRL1203B |
| | Side Cab | KRL1011A KRL1015B | KRL1011A KRL1015B | KRL1011A KRL1015B | KRL1011A KRL1015B | KRL7011A KRL7015B |
| | Locker | KRL1012B KRL1018 | KRL1012B KRL1018 | KRL1012B KRL1018 | KRL1012B KRL1018 | KRL7012A KRL7018 |
| | WorkCenter/ Riser with Door | KRL1072 | KRL1072 | KRL1072 | KRL1072 | KRL1072 |
| | Overhead | KRL7245A | KRL7245A | KRL7245A | KRL7245A | KRL7245A |
| | Stainless-Steel Top | KRSST7003B | KRSST7003B | KRSST7003B | KRSST7003B | KRSST7003B |
| | Hardwood Top | KRWT7003B | KRWT7003B | KRWT7003B | KRWT7003B | KRWT7003B |
| | Bedliner Top | KRBLT1023 | KRBLT1023 | KRBLT1023 | KRBLT1023 | KRBLT1023 |

## Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG□VXIÀ[□IR□EDVH□VIRFN□QXPEHU□IRU□VSHFLDO□FRORV.

# MASTERS SERIES: QUICK REFERENCE CHART


KRL1022C


KRL7022CPBO


KRL722BPQA


KRL1056C


KRL756C

| Roll Cabs | Specifications | KRL1022C | KRL7022C | KRL722B | KRL1056C | KRL756C |
|---|---|---|---|---|---|---|
| Capacity | Approx. Cubic Inches ($cm^3$) | 33,735 (552,818) | 32,160 (527,008) | 23,251 (381,000) | 22,356 (366,350) | 15,506 (254,100) |
| | Approx. Square Inches ($cm^2$) | 9,563 (61,697) | 8,341 (53,813) | 6,770 (43,677) | 6,585 (42,484) | 4,677 (30,174) |
| | Load Capacity, lb (Kg) | 6,800 (3,084) | 6,800 (3,084) | 3,600 (1,633) | 3,600 (1,633) | 3,600 (1,633) |
| Footprint | Width, inches (mm) | 54 1/4 (1,378) | 54 1/4 (1,378) | 54 1/4 (1,378) | 35 5/8 (892) | 35 5/8 (892) |
| | Depth, inches (mm) | 29 1/8 (740) | 29 1/8 (740) | 24 (610) | 29 1/8 (740) | 24 (610) |
| | Height, inches (mm) | 45 7/8 (1,165) | 41 3/8 (1,051) | 39 7/8 (1,013) | 44 1/4 (1,124) | 39 7/8 (1,013) |
| Drawers | Drawer Banks | 2 | 2 | 2 | 1 | 1 |
| | Drawer Count | 13 | 11 | 11 | 8 | 7 |
| | Widest Drawer, inches (mm) [Qty] | 50 (1,270) [2] | 50 (1,270) [2] | 50 (1,270) [2] | 34 (864) | 34 (864) |
| | Slides, lb (Kg) (Ball Bearing) | 227 (103) | 227 (103) | 261 (118) | 227 (103) | 261 (118) |
| | Double Slide (included) | Yes (2) | Yes (2) | Yes (2) | Yes (1) | Yes (1) |
| Extras | Work Surface | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber | Non-directional Rubber |
| | Writing Surface (Qty) | Yes (1) | Yes (1) | Yes (1) | No | No |
| | Third Caster Set Option | No | No | No | No | No |
| Weight | Net Weight, lb (Kg) | 632 (287) | 562 (255) | 489 (222) | 396 (180) | 306 (139) |
| | Shipping Weight, lb (Kg) | 720 (326) | 645 (292) | 548 (248) | 450 (204) | 361 (164) |
| Optional Add-ons Available | Top Chest | KRL1201A | KRL1201A | KRL791A | KRL1251 | KRL751 |
| | Side Cab | KRL1011A KRL1015B | KRL7011A KRL7015B | KRL711A KRL715B | KRL1011A KRL1015B | KRL711A KRL715B |
| | Locker | KRL1012B KRL1018 | KRL7012A KRL7018 | KRL712B | KRL1012B KRL1018 | — |
| | WorkCenter/ Riser with Door | KRL1054 | KRL1054 | KRA2454 | — | — |
| | Overhead | KRL5445A | KRL5445A | KRWL5435 | — | — |
| | Stainless-Steel Top | KRSST1001B | KRSST1001B | KRSST761B | KRSST7001 | KRSST756 |
| | Hardwood Top | KRWT7002A | KRWT7002A | KRWT761B | KRWT7001A | KRWT756A |
| | Bedliner Top | KRBLT1022 | KRBLT1022 | KRBLT722 | — | KRBLT756 |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTERS SERIES: ROLL CABS



KRL1032EPBO



KRL1033CPCM

## MASTERS Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KRL1032E | KRL1033C |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 14 5/8 | 371 | 26 15/16 | 684 | 1 11/16 | 43 | 3 | 6 |
| 14 5/8 | 371 | 26 15/16 | 684 | 4 | 102 | 1 | 3 |
| 14 5/8 | 371 | 26 15/16 | 684 | 6 3/16 | 157 | — | 1 |
| 14 5/8 | 371 | 26 15/16 | 684 | 10 5/8 | 270 | 1 | 1 |
| 30 1/2 | 775 | 26 15/16 | 684 | 1 11/16 | 43 | — | 3 |
| 30 1/2 | 775 | 26 15/16 | 684 | 4 | 102 | — | 2 |
| 30 1/2 | 775 | 26 15/16 | 684 | 6 3/16 | 157 | — | 1 |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 1 9/16 | 40 | 1 | — |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 3 13/16 | 97 | 3 | — |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 6 | 152 | 1 | — |
| 67 1/8 | 1,705 | 26 15/16 | 684 | 2 11/16 | 68 | 1 | 1 |
| 67 1/8 | 1,705 | 26 15/16 | 684 | 4 7/8 | 124 | 1 | 1 |
| | | | | | Total Drawer Count | 12 | 19 |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLDO FRORV.



KRL1023CPC



KRL1163PJK



KRL7023CPJJ



**KRL1163**
**Includes power tool organizer drawer (tools not included)**

## MASTERS Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KRL1023C | KRL1163 | KRL7023C |
|---|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers |
| 14 5/8 | 371 | 26 15/16 | 684 | 1 11/16 | 43 | 8 | 2 | 8 |
| 14 5/8 | 371 | 26 15/16 | 684 | 4 | 102 | 4 | 4 | 2 |
| 14 5/8 | 371 | 26 15/16 | 684 | 6 3/16 | 157 | 1 | 1 | 1 |
| 14 5/8 | 371 | 26 15/16 | 684 | 10 5/8 | 270 | 1 | 1 | 1 |
| 14 5/8 | 371 | 26 15/16 | 684 | 12 13/16 | 326 | — | 1 | — |
| 30 1/2 | 775 | 26 15/16 | 684 | 1 11/16 | 43 | 3 | 1 | 3 |
| 30 1/2 | 775 | 26 15/16 | 684 | 4 | 102 | 2 | 3 | 1 |
| 30 1/2 | 775 | 26 15/16 | 684 | 6 3/16 | 157 | 1 | 1 | 1 |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 2 11/16 | 68 | 1 | 1 | 1 |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 4 7/8 | 124 | 1 | 1 | 1 |
| | | | | | Total Drawer Count | 22 | 16 | 19 |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTERS SERIES: ROLL CABS




KRL1022CPES




KRL7022CPBO

## MASTERS Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KRL1022C | KRL7022C |
|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| 14 5/8 | 371 | 26 15/16 | 684 | 1 11/16 | 43 | 3 | 3 |
| 14 5/8 | 371 | 26 15/16 | 684 | 4 | 102 | 1 | — |
| 14 5/8 | 371 | 26 15/16 | 684 | 10 5/8 | 270 | 1 | 1 |
| 30 1/2 | 775 | 26 15/16 | 684 | 1 11/16 | 43 | 3 | 3 |
| 30 1/2 | 775 | 26 15/16 | 684 | 4 | 102 | 2 | 1 |
| 30 1/2 | 775 | 26 15/16 | 684 | 6 3/16 | 157 | 1 | 1 |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 2 11/16 | 68 | 1 | 1 |
| 49 1/8 | 1,248 | 26 15/16 | 684 | 4 7/8 | 124 | 1 | 1 |
| | | | | | Total Drawer Count | 13 | 11 |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG□VXIÀ[□IR□EDVH□VIRFN□QXPEHU□IRU□VSHFLD□FRORV.




KRL722BPC




KRL1056CPJK




KRL756CPC

## MASTERS Series Roll Cab Drawer Sizes

| Width | | Depth | | Height | | KRL722B | KRL1056C | KRL756C |
|---|---|---|---|---|---|---|---|---|
| inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers |
| 14 5/8 | 371 | 21 7/8 | 557 | 1 11/16 | 43 | 3 | — | — |
| 14 5/8 | 371 | 21 7/8 | 557 | 10 5/8 | 270 | 1 | — | — |
| 30 1/2 | 775 | 21 7/8 | 557 | 1 11/16 | 43 | 3 | — | 3 |
| 30 1/2 | 775 | 21 7/8 | 557 | 4 | 102 | 1 | — | 3 |
| 30 1/2 | 775 | 21 7/8 | 557 | 6 3/16 | 157 | 1 | — | 1 |
| 49 1/8 | 1,248 | 21 7/8 | 557 | 2 11/16 | 68 | 1 | — | — |
| 49 1/8 | 1,248 | 21 7/8 | 557 | 4 7/8 | 124 | 1 | — | — |
| 30 1/2 | 775 | 26 15/16 | 684 | 1 11/16 | 43 | — | 3 | — |
| 30 1/2 | 775 | 26 15/16 | 684 | 4 | 102 | — | 4 | — |
| 30 1/2 | 775 | 26 15/16 | 684 | 6 3/16 | 157 | — | 1 | — |
| | | | | | Total Drawer Count | 11 | 8 | 7 |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTERS SERIES: TOP CHESTS



KRL1232PCM

## KRL1232 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 33,358 (546,404) | 10,533 (67,938) | 590 (268) | 668 (303) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 10 | 72 7/8 (1,851) | 29 1/8 (740) | 25 3/8 (645) |
| Drawers | 2 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 2 | 49 1/8 (1,248) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 49 1/8 (1,248) | 26 15/16 (684) | 4 (102) |
| Top Compartment | Narrow | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |
| | Wide | 53 7/8 (1,368) | 26 7/8 (683) | 4 1/8 (105) |



KRL1203BPBO

## KRL1203B Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 32,109 (525,945) | 9,994 (64,461) | 590 (268) | 681 (309) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 15 | 72 7/8 (1,851) | 29 1/8 (740) | 25 3/8 (645) |
| Drawers | 4 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 6 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 2 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| Top Compartment | Narrow | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |
| | Wide | 53 7/8 (1,368) | 26 7/8 (683) | 4 1/8 (105) |



KRL1201APES

## KRL1201A Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 24,456 (400,589) | 7,526 (48,543) | 424 (192) | 505 (229) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 10 | 54 1/4 (1,375) | 29 1/8 (740) | 25 3/8 (645) |
| Drawers | 2 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 2 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| Top Compartment | — | 53 7/8 (1,368) | 26 7/8 (683) | 4 1/8 (105) |



KRL1251PJK

## KRL1251 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 16,348 (267,780) | 5,059 (32,631) | 267 (121) | 306 (140) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 5 | 35 5/8 (905) | 29 1/8 (740) | 25 3/8 (645) |
| Drawers | 2 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| Top Compartment | — | 35 3/8 (899) | 26 7/8 (683) | 4 1/8 (105) |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLDO FRORV.

## KRL791A Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 15,927 (260,884) | 5,132 (33,101) | 302 (137) | 384 (174) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 8 | 54 1/4 (1,375) | 24 (610) | 21 (533) |
| **Drawers** | 2 | 14 5/8 (371) | 21 7/8 (557) | 1 11/16 (43) |
| | 2 | 14 5/8 (371) | 21 7/8 (557) | 4 (102) |
| | 2 | 30 1/2 (775) | 21 7/8 (557) | 1 11/16 (43) |
| | 2 | 30 1/2 (775) | 21 7/8 (557) | 4 (102) |
| **Top Compartment** | — | 53 7/8 (1,368) | 21 3/4 (552) | 4 1/8 (105) |



**KRL791APJK**

## KRL751 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 13,294 (217,756) | 4,115 (26,542) | 194 (88) | 245 (111) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 35 5/8 (905) | 24 (610) | 21 (533) |
| **Drawers** | 2 | 30 1/2 (775) | 21 7/8 (557) | 1 11/16 (43) |
| | 2 | 30 1/2 (775) | 21 7/8 (557) | 4 (102) |
| **Top Compartment** | — | 35 3/8 (899) | 21 3/4 (552) | 4 1/8 (105) |

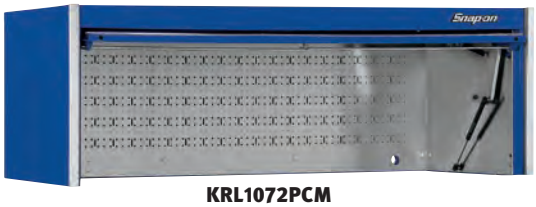


**KRL751PC**

## WORKCENTERS

### WorkCenters

- Door opens virtually effortlessly with gas springs and cam-assist design
- Convenient access to tools, convenient security – able to lock up work-in-progress
- Slots 'n dots™ Plus back panel for use with our tool organizing accessories
- Structural continuity design with corner gussets and the standing seam for increased strength and durability
- Stainless-steel inside walls allow magnetic items to be attached to the walls
- Shiny stainless-steel walls reflect the light, magnifying available light
- Extra key plug to key-alike to roll cab
- Mounting template for drilling – including a drill bit for easier installation




**KRL1072PCM**




**KRA2454PBO**

| Specifications | KRL1072 Series | KRL1054 Series | KRA2454 Series |
|---|---|---|---|
| Cubic Inches (cm³) | 26,522 (434,617) | 19,409 (318,056) | 13,524 (221,619) |
| Square Inches (cm²) | 4,005 (25,838) | 3,136 (20,232) | 1,127 (7,271) |
| Width, inches (mm) | 72 7/8 (1,851) | 54 1/8 (1,851) | 55 (1,397) |
| Height, inches (mm) | 23 9/16 (598.5) | 23 9/16 (598.5) | 27 (686) |
| Depth, inches (mm) | 27 1/2 (698.5) | 27 1/2 (698.5) | 22 7/16 (570) |
| Inside Width, inches (mm) | 69 7/16 (1,764) | 50 13/16 (1,764) | 50 13/16 (1,764) |
| Net Weight, lb (kg) | 214 (97) | 176 (80) | 165 (74.8) |
| Shipping Weight, lb (kg) | 320 (146) | 258 (117) | 258 (117) |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTER SERIES: BULK OVERHEAD CABINETS



KRL7245APKS



KRWL5435PBO

## Bulk Overhead Cabinets

| Specifications | KRL7245A | KRL5445A | KRWL5435 |
|---|---|---|---|
| Cubic Inches (cm³) | 26,814 (439,219) | 19,629 (321,516) | 15,076 (246,948) |
| Square Inches (cm²) | 1,740 (11,224) | 1,274 (8,216) | 1,042 (6,719) |
| Width, inches (mm) | 72 7/8 (1,851) | 54 1/4 (1,378) | 54 1/4 (1,378) |
| Height, inches (mm) | 18 1/8 (460) | 18 1/8 (460) | 16 (406) |
| Depth, inches (mm) | 27 1/2 (699) | 27 1/2 (699) | 21 (533) |

# DRAWER END CABINETS



KRL1221PC

## KRL1221 Series Top Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 8,115 (132,924) | 2,469 (15,925) | 170 (77) | 218 (99) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 5 | 19 3/4 (502) | 29 1/8 (740) | 25 3/8 (645) |
| Drawers | 2 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| Top Compartment | — | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |



KRL1011APJJ

## KRL1011A Series End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 10,735 (175,839) | 3,152 (20,330) | 267 (121) | 295 (134) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 8 | 19 3/4 (502) | 29 1/8 (740) | 37 5/16 (948) |
| Drawers | 3 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 4 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (685) | 6 3/16 (157) |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLDO FRORV.

## KRL1098 Series End Cabinet*

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|---|
| 11,088 (181,700) | 2,364 (15,252) | | 267 (121) | — |
| | **Drawers** | **Width, inches (mm)** | **Depth, inches (mm)** | **Height, inches (mm)** |
| **Specifications** | 6 | 19 3/4 (502) | 29 1/8 (746) | 37 5/16 (948) |
| **Drawers** | 2 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 12 13/16 (326) |

*The KRL1098 and KRL1163 include a 12" drawer that has a power tool organizer kit.





**KRL1098PBO**

## KRL7011A Series End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|---|
| 9,160 (150,041) | 2,758 (17,789) | | 230 (104) | 267 (121) |
| | **Drawers** | **Width, inches (mm)** | **Depth, inches (mm)** | **Height, inches (mm)** |
| **Specifications** | 7 | 19 3/4 (502) | 29 1/8 (740) | 32 15/16 (837) |
| **Drawers** | 3 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 6 3/16 (157) |



**KRL7011APCM**

## KRL711A Series End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|---|
| 7,438 (121,834) | 2,239 (14,442) | | 193 (88) | 225 (102) |
| | **Drawers** | **Width, inches (mm)** | **Depth, inches (mm)** | **Height, inches (mm)** |
| **Specifications** | 7 | 19 3/4 (502) | 24 (610) | 32 15/16 (837) |
| **Drawers** | 3 | 14 5/8 (371) | 21 7/8 (557) | 1 11/16 (43) |
| | 3 | 14 5/8 (371) | 21 7/8 (557) | 4 (102) |
| | 1 | 14 5/8 (371) | 21 7/8 (557) | 6 3/16 (157) |



**KRL711APES**

**⚠WARNING**

- Secure end cab to roll cab per instructions
- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTERS SERIES: POWERCAB™ END CABINETS



KRL1099PBO

Tools not included

## KRL1099 Series *PowerCab* End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 11,375 (186,323) | 1,584 (10,217) | 184 (83) | 220 (100) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 1 | 19 3/4 (502) | 29 1/8 (740) | 37 5/16 (948) |

- Includes two adjustable shelves
- Includes integrated power strip

# BULK END CABINETS



KRL1015BPBO

## KRL1015B Series Bulk End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 11,608 (190,139) | 1,094 (7,056) | 184 (83) | 220 (100) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 2 | 19 3/4 (502) | 29 1/8 (740) | 37 5/16 (948) |
| **Drawers** | 2 | 13 1/4 (337) | 24 3/4 (629) | 4 (102) |
| **Shelves** | 1 | 16 1/4 (413) | 25 3/8 (645) | Adjustable |

## KRL7015B Series Bulk End Cabinet

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 9,770 (160,033) | 1,094 (7,056) | 142 (64) | 181 (82) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 2 | 19 3/4 (502) | 29 1/8 (740) | 32 15/16 (837) |
| **Drawers** | 2 | 13 1/4 (337) | 24 3/4 (629) | 4 (102) |
| **Shelves** | 1 | 16 1/4 (413) | 25 3/8 (645) | Adjustable |

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors.
$GG□VXIÀ[□IR□EDVH□VIRFN□QXPEHU□IRU□VSHFLD□FRORV.

## KRL1012B Series Locker

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 28,446 (465,945) | 3,564 (22,988) | 306 (139) | 369 (167) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 24 1/16 (611) | 29 1/8 (740) | 62 3/8 (1,584) |
| **Drawers** | 4 | 19 7/16 (495) | 25 1/8 (638) | 4 (102) |
| **Shelves** | 3 | 24 1/16 (611) | 22 3/4 (578) | Adjustable |
| **Trays** | 2 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |

## KRL7012A Series Locker

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 26,085 (427,272) | 3,564 (22,988) | 285 (129) | 345 (156) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 24 1/16 (611) | 29 1/8 (740) | 57 15/16 (1,472) |
| **Drawers** | 4 | 19 1/2 (495) | 25 1/8 (638) | 4 (102) |
| **Shelves** | 3 | 24 1/16 (611) | 22 3/4 (578) | Adjustable |
| **Trays** | 2 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |

## KRL712B Series Locker

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 20,568 (336,904) | 2,831 (18,260) | 238 (108) | 297 (135) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 24 1/16 (611) | 24 (610) | 53 7/16 (1,357) |
| **Drawers** | 4 | 19 7/16 (495) | 20 (508) | 4 (102) |
| **Shelves** | 3 | 21 1/16 (535) | 17 9/16 (446) | Adjustable |
| **Trays** | 3 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |



**KRL1012BPBO**

**⚠WARNING**

- Secure end cab to roll cab per instructions
- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTERS SERIES: DOCKER LOCKERS®



**KRL1018PBO**

## *Docker Locker* Lockers

Provides a quick way to secure tools and gives additional bulk storage. Includes a roll cart designed to fit locker (not available separately), KAT18PV can rack and one adjustable shelf. Mounts on either side of KRL1000 or KRL7000 Series roll cabs. Not designed for use with standard roll carts.

## KRL1018 Series

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 31,642 (518,296) | 1,578 (10,178) | 202 (92) | 295 (134) |
| | **Width, inches (mm)** | **Depth, inches (mm)** | **Height, inches (mm)** |
| **Specifications** | 24 1/16 (611) | 29 1/8 (740) | 62 3/8 (1,584) |

## KRL7018 Series

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 29,139 (477,297) | 1,578 (10,178) | 190 (86) | 287 (130) |
| | **Width, inches (mm)** | **Depth, inches (mm)** | **Height, inches (mm)** |
| **Specifications** | 24 1/16 (611) | 29 1/8 (740) | 57 15/16 (1,472) |

(US Patent 6, 719, 384)

Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PWL | PU |

All KRL Series units are available in 12 standard colors. $GG□VXIÀ[□IR□EDVH□VIRFN□QXPEHU□IRU□VSHFLDO□FRORV.



KRP1032BPBO1



KRT1032BPC1

## KRP1032B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 113,947 (1,866,452) | 19,426 (125,298) | 1,975 (896) | 6,000 (2,722) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 16 | 124 (3,150) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab** | 3 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 1 9/16 (40) |
| | 3 | 49 1/8 (1,248) | 26 15/16 (684) | 3 13/16 (97) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 6 (152) |
| | 1 | 67 1/8 (1,705) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 67 1/8 (1,705) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **WorkCenter** | Dimensions | 71 3/8 (1,813) | 23 3/4 (603) | 23 (584) |

## Optional Add-Ons Available

| | |
|---|---|
| **Locker** | 2 Included |
| **WorkStation Riser** | KRL1072 Included |
| **Hardwood Top** | KRWT7003A option |
| **Stainless Top** | Included KRSST7003B |
| **Protective Cover (roll cab)** | KACP1023 option |
| **Overhead** | KRL7245A option |

Includes (1) KAS12PV, (1) KASR12PV and (1) writing surface

## KRT1032B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 120,528 (1,974,249) | 26,709 (172,273) | 2,350 (1,066) | 6,000 (2,722) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 26 | 124 (3,150) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab** | 5 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 4 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 3 | 49 1/8 (1,248) | 26 15/16 (684) | 1 9/16 (40) |
| | 3 | 49 1/8 (1,248) | 26 15/16 (684) | 3 13/16 (97) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 6 (152) |
| | 1 | 67 1/8 (1,705) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 67 1/8 (1,705) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **Top Chest Compartment** | Narrow | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |
| | Wide | 53 7/8 (1,348) | 26 7/8 (683) | 4 1/8 (105) |

## Optional Add-Ons Available

| | |
|---|---|
| **Top Chest** | KRL1232 included |
| **Locker** | 2 Included |
| **Protective Cover (roll cab)** | KACP1023 option |

Includes (1) KASR12PV and (1) writing surface

### Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO1 | PC1 | PCM1 | PDG1 | PES1 | PJH1 | PJJ1 | PJK1 | PKS1 | POT1 | PWL1 | PU1 |
| PBO7 | PC7 | PCM7 | PDG7 | PES7 | PJH7 | PJJ7 | PJK7 | PKS7 | POT7 | PWL7 | PU7 |

All TUV Series units are available in 12 standard colors. $GG VXIÁ[ IR EDVH VIRFN QXPEHU IRU VSHFLD FR RUV.

1 = Stainless-steel work surface (P model) and stainless-steel fenders (P and T models)
7 = Bedliner work surface (P model) and bedliner fenders (P and T models)

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTER SERIES: TOOL UTILITY VEHICLE (TUV)



KRP1023BPOT7



KRT1023BPLU7

## KRP1023B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 111,477 (1,825,993) | 20,277 (130,787) | 1,975 (896) | 6,000 (2,722) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 26 | 124 (3,150) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab** | 8 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 4 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 3 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 2 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| | 1 | 30 1/2 (775) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **WorkCenter** | Dimensions | 71 3/8 (1,813) | 23 3/4 (603) | 23 (5e84) |

Includes (1) KAS12PV shelf, (1) KASR12PV screwdriver rack and (1) writing surface

## Optional Add-Ons Available

| | |
|---|---|
| **Locker** | 2 Included |
| **WorkStation Riser** | KRL1072 Included |
| **Hardwood Top** | KRWT7003A option |
| **Stainless Top** | Included KRSST7003B |
| **Protective Cover (roll cab)** | KACP1023 option |
| **Overhead** | KRL7245A option |
| **Body Guards** | See next page for full listing |

## KRT1023B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 117,472 (1,924,191) | 27,018 (174,266) | 2,350 (1,066) | 6,000 (2,722) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 41 | 124 (3,150) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab /Top Chest** | 12 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 10 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 5 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 5 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| | 1 | 30 1/2 (775) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **Top Chest Compartment** | Narrow | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |
| | Wide | 53 7/8 (1,368) | 26 7/8 (683) | 4 1/8 (105) |

Includes (1) KASR12PV screwdriver rack and (1) writing surface

## Optional Add-Ons Available

| | |
|---|---|
| **Top Chest** | KRL1203B Included |
| **Locker** | 2 Included |
| **Protective Cover (roll cab)** | KACP1023 option |
| **Body Guards** | See next page for full listing |

### Colors Available

| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | Flat Blue Blk Trim | White |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO1 | PC1 | PCM1 | PDG1 | PES1 | PJH1 | PJJ1 | PJK1 | PKS1 | POT1 | PWL1 | PU1 |
| PBO7 | PC7 | PCM7 | PDG7 | PES7 | PJH7 | PJJ7 | PJK7 | PKS7 | POT7 | PWL7 | PU7 |

1 = Stainless-steel work surface (P model) and stainless-steel fenders (P and T models)
7 = Bedliner work surface (P model) and bedliner fenders (P and T models)

All TUV Series units are available in 12 standard colors.
$GG VXIÀ IR EDVH VIRFN QXPEHU IRU VSHFLDO FRORUV.



KRP1022BPMP1

## KRP1022B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 98,413 (1,612,005) | 16,868 (108,799) | 1,582 (718) | 6,000 (2,722) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 17 | 106 (2,692) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab** | 3 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 3 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 2 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| | 1 | 30 1/2 (775) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **WorkCenter** | Dimensions | 52 3/4 (1,340) | 23 3/4 (603) | 23 (584) |

## Optional Add-Ons Available

| | |
|---|---|
| **Locker** | 2 Included |
| **WorkStation Riser** | KRL1054 Included |
| **Hardwood Top** | KRWT7002A option |
| **Stainless Top** | Included KRSST1001B |
| **Protective Cover (roll cab)** | KACP1022 option |
| **Overhead** | KRL5445A option |

Includes (1) KAS12PV shelf, (1) 7065JL719 writing surface and (1) KASR12PV screwdriver rack



KRT1022BPQA1

## KRT1022B Series TUV

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 99,267 (1,626,688) | 21,036 (135,715) | 1,786 (810) | 6,000 (2,777) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 27 | 106 (2,692) | 29 7/8 (759) 35 for tires (889) | 70 (1,778) |
| **Drawers in Roll Cab** | 5 | 14 5/8 (371) | 26 15/16 (684) | 1 11/16 (43) |
| | 4 | 14 5/8 (371) | 26 15/16 (684) | 4 (102) |
| | 1 | 14 5/8 (371) | 26 15/16 (684) | 10 5/8 (270) |
| | 5 | 30 1/2 (775) | 26 15/16 (684) | 1 11/16 (43) |
| | 5 | 30 1/2 (775) | 26 15/16 (684) | 4 (102) |
| | 1 | 30 1/2 (775) | 26 15/16 (684) | 6 3/16 (157) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 4 7/8 (124) |
| | 1 | 49 1/8 (1,248) | 26 15/16 (684) | 2 11/16 (68) |
| **Locker Drawers** | 4 | 19 7/16 (494) | 25 1/8 (638) | 4 (102) |
| **Locker Shelves** | 4 | 21 1/16 (535) | 22 3/4 (578) | Adjustable |
| **Can Tray** | 1 | 17 7/8 (454) | 3 1/8 (79) | 4 (102) |
| **Top Chest Compartment** | Narrow | 18 9/16 (471) | 26 7/8 (683) | 4 1/8 (105) |
| | Wide | 53 7/8 (1,368) | 26 7/8 (683) | 4 1/8 (105) |

## Optional Add-Ons Available

| | |
|---|---|
| **Top Chest** | KRL1201A Included |
| **Locker** | 2 Included |
| **Protective Cover (roll cab)** | KACP1022 |
| **Third Caster Set Option** | KACP1022 option |

Includes (1) KAS12PV shelf and (1) writing surface

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MASTER SERIES: TOOL UTILITY VEHICLE (TUV) ACCESSORIES







**KP1023JS**

## KRP/KRT Series Chassis Accessories

| Stock No. | Description | Application |
|---|---|---|
| **KATUVGRILL** | Stainless-Steel Front Grill | Fits all Snap-on® TUV units |
| **KATUVFENDER** | Stainless-Steel Fender | Fits all *Snap-on* TUV units |
| **KATUVBUMPER** | Stainles-Steel Back Bumper | Fits all *Snap-on* TUV units |
| **KP1023JS** | Jack Stand | Fits all *Snap-on* TUV units |
| **KATUVBAR54** | Stainles-Steel Side Bar | 54" step bar fits KRP1022/KRT1022 and KRLR1022 series of TUV units |
| **KATUVBAR72** | Stainles-Steel Side Bar | 72" step bar fits KRP1023/KRT1023 and KRP1032/KRT1032 series of TUV units |
| **KATUVBRAKE54** | Hydraulic Brake Kit | Fits KRP1022/KRT1022 and KRLR1022 series of TUV units |
| **KATUVBRAKE72** | Hydraulic Brake Kit | Fits KRP1023/KRT1023 and KRP1032/KRT1032 series of TUV units |

## KRP/KRT Series Body Guards

| Stock No. | Description | Application |
|---|---|---|
| **KABGBB54** | Back bottom body guard for roll cab (54" TUV) | KRP1022/KRT1022 |
| **KABGBB72** | Back bottom body guard for roll cab (72" TUV) | KRP1023/KRT1023, KRP1032/KRT1032 |
| **KABGFB17** | Left/Right front bottom body guard for roll cab (17 9/16") | KRP1022/KRT1022, KRP1023/KRT1023, KRP1032/KRT1032 |
| **KABGFB33** | Center front bottom body guard for roll cab (33 1/2") | KRP1022/KRT1022, KRP1023/KRT1023 |
| **KABGFB52** | Front bottom body guard for roll cab (52 1/4") | KRP1032/KRT1032 – All units work on "A" & non-A versions |
| **KABGFT17** | Left/Right front top body guard for roll cab (17 9/16") | KRP1023/KRT1023, KRP1032/KRT1032 |
| **KABGFT51** | Front top body guard for roll cab (52 1/8") | KRP1022/KRT1022 |
| **KABGFT52A** | Front top body guard for roll cab (52 1/8") | KRP1023/KRT1023, KRP1032/KRT1032 |
| **KABGFF17** | Front face body guard for tool chest (5 1/16" x 17 3/16") | KRT1023/KRT1032 |
| **KABGFF51** | Front face body guard for tool chest (5 1/16" x 51") | KRT1022/KRT1023/KRT1032 |
| **KABGFF52** | Front face body guard for WorkCenter (2 7/16" x 52 11/16") | KRP1022 |
| **KABGFF71** | Front face body guard for WorkCenter (2 7/16" x 71 1/4") | KRP1023/KRP1032 |
| **7516X70R** | Locker Door Inlay (3 7/8" x 46 7/8") | KRP1022/KRT1022, KRP1023/KRT1023, KRP1032/KRT1032 |

## KRP/KRT Series Diamond Plate Top Mats

| Silver Stock No. | Black Stock No. | Description |
|---|---|---|
| **KPP1022DP** | **KPP1022RP** | Diamond plate top mat set for KRP1022 Series TUV units |
| **KPP1023DP** | **KPP1023RP** | Diamond plate top mat set for KRP1023/KRP1032 Series TUV units |
| **KPT1023DP** | **KPT1023RP** | Diamond plate top mat set for locker tops on KRT1022/ KRT1023/KRT1032 Series TUV units |

## KRP/KRT Series Covers

| Red Stock No. | Black Stock No. | Description |
|---|---|---|
| **KACP1022** | **KACP1022PC** | Cover for KRP1022/KRT1022 TUV units |
| **KACP1023** | **KACP1023PC** | Cover for KRP1023/KRT1023 TUV units |

All listed TUV accessories will work on older KRLP and KRLT TUV units.

# MODERN NEEDS. CLASSIC SOLUTION.

Tool storage with a future – but built on a solid past. The Classic Series from Snap-on puts you in control. Add lockers, end cabs, a WorkCenter riser and overhead storage to create tool storage that fits all your needs.

**Customizable —** Choose your color from nine standard options, your work surface, your lighting and your protection package. Add skins and other options to make your piece unique.

**Affordable —** Classic tool storage that grows with you by adding top boxes and other storage. Solid engineering, solid value, solid investment: it's built into every Classic Series Snap-on makes.

**Lock-n-Roll® Drawers —** Retention system keeps drawers in place for safety and security.

**Locker Topper —** An optional locker topper creates an even height between the locker and top chest or WorkCenter, serving as extra storage space or a battery charging station.

**Reinforced Corner Gussets —** For strength and durability.

**Double-Wall Construction —** Full-height inner wall is welded in place for durable, consistent performance.




**COLOR:** Royal Blue

# CLASSIC SERIES

## Versatile. Resilient. Stands the test of time. That's how you define a Classic.

Our Classic Series is classic Snap-on: storage that's smart, adaptable and built to last. It's designed to accommodate added storage, and that's a huge plus – because as your career grows, these boxes will grow with you. And, they're rigorously tested to the equivalent of more than 20 years. Which means they'll not only hold your tools – they'll hold their value. Make some additions that will help multiply your business: it all starts with a Classic.




KRA2422PKG8

### CLASSIC SERIES

| Red | Gloss Black | Royal Blue | White Blk Trim | Midnight Blue | Extreme Green | Electric Orange | Flat Black Blk Trim | White |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDC | PDG | PJJ | PJK | POT | PU |

### TRIM COLORS

| Blue | Red | Titanium | Black | Bright Chrome |
|---|---|---|---|---|



## TOP CHEST

Classic Top Chests offer a generous amount of drawer and storage space – in fact, they nearly double the storage space when added to a roll cab. Six 4" drawers provide for ample tool storage area. And the gas-assisted lid opens to a 5" deep top compartment, configured with a power strip for charging and lighting. For a top performer, choose a Top Chest.

## WORKCENTER

Work better with our WorkCenter. It fits over a stainless steel or bed liner work surface to provide a locking work area, the 27" height means more wall space and head clearance than competitive hutches, and two gas cylinders provide smooth, effortless door operation. Need mounting space for magnetic and hanging accessories? The inside walls are stainless steel. And to top things off, an easy installation kit is included.





## END CAB

Looking for a big boost in capacity for any Classic Roll Cab? Our End Cabs do the job, with a full bank of six drawers and over 7,500 cubic inches of space. They can be used on either or both sides, and feature double-wall construction with corner gussets to support heavily loaded drawers. A 12-gauge bottom-mounting bracket with two swivel casters equals solid support and easy maneuverability.

## LOCKERS

If the Classic Locker is your choice, more power to you: it accommodates a power strip for use as a charging area. You can adjust the position of the three drawers and three shelves – and, add extra drawers/shelves to fit your needs.



*Note stainless steel or bed liner top required when adding a WorkCenter.

# CLASSIC SERIES: QUICK REFERENCE CHART


KRA2496PBO


KRA2432PJJ


KRA2423PDC


KRA2411PCM


KRA2422PC


KRA2407PJK

| Roll Cabs | Specifications | KRA2496 | KRA2432 | KRA2423 | KRA2411 | KRA2422 | KRA2407 |
|---|---|---|---|---|---|---|---|
| Capacity | Approx. Cubic Inches ($cm^3$) | 33,000 (540,773) | 33,000 (540,773) | 31,237 (530,000) | 25,000 (409,677) | 25,000 (409,677) | 16,000 (262,193) |
| | Approx. Square Inches ($cm^2$) | 8,000 (51,613) | 8,500 (54,839) | 8,604 (55,509) | 6,300 (40,645) | 6,300 (40,645) | 4,700 (30,322) |
| | Load Capacity (kg) | 2,400 (1,089) | 2,400 (1,089) | 2400 (1089) | 2,400 (1,089) | 2,400 (1,089) | 2,400 (1,089) |
| Footprint | Width, inches (mm) | 73 (1,854) | 73 (1,854) | 73 (1,854) | 55 (1,397) | 55 (1,397) | 36 (914) |
| | Depth, inches (mm) | 24 (610) | 24 (610) | 24 (609.6) | 24 (610) | 24 (610) | 24 (610) |
| | Height, inches (mm) | 39 (991) | 39 (991) | 39 (991) | 39 (991) | 39 (991) | 39 (991) |
| Drawers | Drawer Banks | 2 | 2 | 3 | 2 | 2 | 1 |
| | Drawer Count | 12 | 12 | 17 | 11 | 10 | 7 |
| | Widest Drawer, inches (mm) | 50 (1,270) | 50 (1,270) | 50 (1,270) | 50 (1,270) | 50 (1,270) | 32 (813) |
| | Slides, lb (kg) (ball bearing) | 120 (54) | 120 (54) | 120 (54) | 120 (54) | 120 (54) | 120 (54) |
| | Double Slides | Yes (2 drawers) | Yes (5 drawers) | Yes (2 drawers) | Yes (2 drawers) | Yes (2 drawers) | No |
| Extras | Top Mat | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber |
| | Writing Surface | Optional | Optional | Optional | Optional | Optional | Optional |
| Weight | Net Weight, lb (kg) | 555 (252) | 547 (248) | 555 (252) | 412 (187) | 412 (187) | 320 (145) |
| | Shipping Weight, lb (kg) | 637 (289) | 643 (292) | 670 (303) | 480 (218) | 480 (218) | 356 (162) |
| Optional Add-ons Available | Top Chest | KRA2415 | KRA2415 | KRA2415 | KRA2410 | KRA2410 | KRA2405 |
| | Side Cab | KRA2406 | KRA2406 | KRA2406 | KRA2406 | KRA2406 | KRA2406 |
| | Locker | KRA2403 | KRA2403 | KRA2403 | KRA2403 | KRA2403 | KRA2403 |
| | Work Station Riser w/ Door | KRA2472 | KRA2472 | KRA2472 | KRA2454 | KRA2454 | No |
| | Overhead | KRWL3635 (2) | KRWL3635 (2) | KRWL3635 (2) | KRWL5435 | KRWL5435 | No |
| | Hardwood Top | KRWT2418 | KRWT2418 | KRWT2418 | KRWT2411 | KRWT2411 | KRWT2407 |
| | Stainless Top | KRSST2418 | KRSST2418 | KRSST2418 | KRSST2411 | KRSST2411 | KRSST2407 |
| | Bedliner Top | KRBLT2418 | KRBLT2418 | KRBLT2418 | KRBLT2411 | KRBLT2411 | KRBLT2407 |
| | Third Caster Set Option | No | No | No | No | No | No |

# CUSTOM GUARD SETS FOR CLASSIC



KRA2422PWEBO

Custom Guard Sets for CLASSIC, available in over 13 color schemes. Talk to your Snap-on® representative.




**KRA2496PBO**




**KRA2432PC**
**(Optional Stainless-Steel Top Shown)**

## CLASSIC Series Roll Cab Drawer Sizes

| Specifications | Width | | Depth | | Height | | KRA2496 | KRA2432 |
|---|---|---|---|---|---|---|---|---|
| | inches | mm | inches | mm | inches | mm | Drawers | Drawers |
| **2" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 1 11/16 | 43 | 1 | 3 |
| **4" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 4 | 102 | 3 | 2 |
| **6" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 6 3/16 | 157 | 1 | — |
| **10" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 10 9/16 | 270 | — | 1 |
| **2" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 1 11/16 | 43 | 3 | — |
| **4" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 4 | 102 | 2 | — |
| **6" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 6 3/16 | 157 | 1 | — |
| **2" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 1 9/16 | 40 | — | 1 |
| **4" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 4 | 102 | 1 | 4 |
| **6" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 6 3/16 | 157 | — | 1 |
| | | | | | **Total Drawer Count** | | 12 | 12 |

### Colors Available

| Red | Gloss Black | Royal Blue | White Blk Trim | Midnight Blue | Extreme Green | Electric Orange | Flat Black Blk Trim | White |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDC | PDG | PJJ | PJK | POT | PU |

All CLASSIC Series units are available in nine standard colors.
$GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLD FR RUV

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# CLASSIC SERIES: ROLL CABS


KRA2422PJJ


KRA2423PBO


KRA2411PCM


KRA2407PBO

## CLASSIC Series Roll Cab Drawer Sizes

| Specifications | Width | | Depth | | Height | | KRA2422 | KRA2423 | KRA2411 | KRA2407 |
|---|---|---|---|---|---|---|---|---|---|---|
| | inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers | Drawers |
| **2" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 1 3/4 | 43 | 1 | 4 | 1 | — |
| **4" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 4 | 102 | 1 | 4 | 2 | — |
| **6" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 6 3/16 | 157 | — | 1 | — | — |
| **10" Narrow** | 14 5/8 | 371 | 21 7/8 | 557 | 10 9/16 | 270 | 1 | 1 | 1 | — |
| **2" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 1 3/4 | 43 | 3 | 3 | 3 | 3 |
| **4" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 4 | 102 | 1 | 1 | 2 | 3 |
| **6" Wide** | 30 1/2 | 775 | 21 7/8 | 557 | 6 3/16 | 157 | 1 | 1 | 1 | 1 |
| **4" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 3 13/16 | 97 | — | 0 | 1 | — |
| **5" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 4 7/8 | 124 | 1 | 1 | — | — |
| **3" Extra Wide** | 49 1/8 | 1,248 | 21 7/8 | 557 | 2 11/16 | 68 | 1 | 1 | — | — |
| | | | | | **Total Drawer Count** | | 10 | 17 | 11 | 7 |

Colors Available

| Red | Gloss Black | Royal Blue | White Blk Trim | Midnight Blue | Extreme Green | Electric Orange | Flat Black Blk Trim | White |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDC | PDG | PJJ | PJK | POT | PU |

All CLASSIC Series units are available in nine standard colors.
$GG VXIÀ [ IR EDVH VIIRFN QXP EHU IRU VSHFLDO FR RUV

## KRA2415 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 28,348 (464,540) | 8,174 (52,735) | 496 (225) | 555 (252) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 15 | 73 3/8 (1,864) | 24 (609) | 28 5/8 (726) |
| **Drawers 2" Narrow** | 4 | 14 5/8 (371) | 21 7/8 (557) | 1 11/16 (43) |
| **4" Narrow** | 6 | 14 5/8 (371) | 21 7/8 (557) | 4 (102) |
| **2" Wide** | 2 | 30 1/2 (775) | 21 7/8 (557) | 1 11/16 (43) |
| **4" Wide** | 3 | 30 1/2 (775) | 21 7/8 (557) | 4 (102) |
| **Top Compartment** | — | 72 (1,829) | 23 3/4 (603) | 5 (127) |



KRA2415PBO

## KRA2410 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 21,283 (348,766) | 6,137 (39,593) | 361 (163) | 417 (189) |

| | Drawer Description | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|---|
| **Specifications** | | 10 | 55 (1,397) | 24 (607) | 28 5/8 (726) |
| **Drawers** | 2" Narrow | 2 | 14 5/8 (371) | 21 7/8 (557) | 1 11/16 (43) |
| | 4" Narrow | 3 | 14 5/8 (371) | 21 7/8 (557) | 4 (102) |
| | 2" Wide | 2 | 30 1/2 (775) | 21 7/8 (557) | 1 11/16 (43) |
| | 4" Wide | 3 | 30 1/2 (775) | 21 7/8 (557) | 4 (102) |
| **Top Compartment** | | — | 54 (1,372) | 23 3/4 (603) | 5 (125) |




KRA2410PBO

## KRA2405 Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 14,333 (234,875) | 4,139 (26,703) | 222 (101) | 281 (127) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 5 | 36 3/8 (924) | 24 (609) | 28 5/8 (711) |
| **Drawers** | 2 | 30 1/2 (775) | 21 7/8 (557) | 1 11/16 (43) |
| | 3 | 30 1/2 (775) | 21 7/8 (557) | 4 (102) |
| **Top Compartment** | — | 35 3/4 (907) | 23 3/4 (603) | 5 (125) |




KRA2405PC



**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# CLASSIC SERIES: WORKSTATION RISERS



KRA2472PCM

- Factory assembled unit complete with door
- Work surface required

| Stock Number | KRA2472 Riser | KRA2454 Riser |
|---|---|---|
| Cubic Inches (cm³) | 23,265 (381,245) | 13,524 (221,619) |
| Square Inches (cm²) | 1,551 (10,006) | 1,127 (7,271) |
| Width, inches (mm) | 73 (1,854) | 55 (1,397) |
| Height, inches (mm) | 27 (686) | 27 (686) |
| Depth, inches (mm) | 22 7/16 (570) | 22 7/16 (570) |

# LOCKERS



KRA2403PJK

## KRA2403 Series Lockers

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 17,035 (279,154) | 2,509 (16,188) | 375 (170) | 418 (189) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 3 | 24 3/4 (635) | 24 (610) | 61 (1,549) w/ casters<br>54 (1,372) w/out casters |
| Drawers | 3 | 20 3/8 (518) | 19 1/2 (495) | 3 13/16 (97) |
| Shelves/Trays | 3 | 20 3/8 (518) | 21 1/2 (546) | 9 1/2 (241) |

Ball slide capacity 125 lb per drawer.

# END CABINETS



KRA2406APJK

## KRA2406A Series End Cabinets

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 7,574 (124,115) | 1,918 (12,374) | 220 (99) | 258 (117) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 6 | 20 1/4 (514) | 24 (609) | 39 1/4 (997) |
| Drawers | 3 | 14 5/8 (371) | 21 7/8 (557) | 1 11/16 (43) |
| | 2 | 14 5/8 (371) | 21 7/8 (557) | 4 (102) |
| | 1 | 14 5/8 (371) | 21 7/8 (557) | 10 9/16 (270) |

Ball slide capacity 125 lb per drawer.

Colors Available

| Red | Gloss Black | Royal Blue | White Blk Trim | Midnight Blue | Extreme Green | Electric Orange | Flat Black Blk Trim | White |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDC | PDG | PJJ | PJK | POT | PU |

All CLASSIC Series units are available in nine standard colors.
$GG VXIÀ[ IR EDVH VIRFN QXPEHU IRU VSHFLDO FRUV

# STORAGE. LOADED WITH POTENTIAL.

Even new techs deserve Snap-on quality. The Heritage Series delivers exceptional construction at a superior value. Build your tool storage as your career grows, adding components to meet your needs along the way.

**Lock-n-Roll® Drawers —** Premium-quality drawers that won't drift open.

**Double-Wall Construction —** Ensures an outer dent won't affect drawer performance.

**Gas-assisted Lifts on Top Chests —** Quality hydraulic lifts for safety and performance.

**Flexible Storage Options —** Interchangeable drawers adjust to the way you work.

**Medium-Duty Casters —** Impact-absorbing wheels with smooth performance.

**Four Color Options —** Add a range of optional accessories to personalize your tool storage.




**COLOR:** Red

# HERITAGE SERIES: ROLL CABS


KRA5318F


KRA5311F


KRA4813F


KRA4107F


KRA4008F


KRA2007F


KRA2005F

| Roll Cabs | Specifications | KRA5318F | KRA5311F | KRA4813F | KRA4107F | KRA4008F | KRA2007F | KRA2005F |
|---|---|---|---|---|---|---|---|---|
| Capacity | Approx. Cubic Inches (cm³) | 19,200 (314,632) | 20,000 (327,741) | 14,000 (229,419) | 15,000 (245,806) | 10,000 (163,871) | 10,000 (163,871) | 10,000 (163,871) |
| | Approx. Square Inches (cm²) | 5,000 (32,258) | 5,000 (32,258) | 4,000 (25,806) | 4,250 (27,419) | 3,000 (19,355) | 2,800 (18,064) | 2,400 (15,484) |
| | Load Capacity, lb (Kg) | 2,400 (1,089) | 2,400 (1,089) | 2,400 (1,089) | 2,400 (1,089) | 1,300 (590) | 1,100 (499) | 1,100 (499) |
| Footprint | Width, inches (mm) | 53 (1,397) | 53 (1,397) | 40 (1,016) | 40 (1,016) | 26 (660) | 26 (660) | 26 (660) |
| | Depth, inches (mm) | 20 (508) | 20 (508) | 20 (508) | 20 (508) | 20 (508) | 20 (508) | 20 (508) |
| | Height, inches (mm) | 38 1/2 (978) | 38 1/2 (978) | 38 1/2 (978) | 38 1/2 (978) | 37 (940) | 37 (940) | 37 (940) |
| Drawers | Drawer Banks | 3 | 2 | 2 | 1 | 1 | 1 | 1 |
| | Drawer Count | 18 | 11 | 13 | 7 | 8 | 7 | 5 |
| | Widest Drawer, inches (mm) | 35 (880) | 48 (1,219) | 35 (880) | 35 (880) | 23 (584) | 23 (584) | 23 (584) |
| | Slides, lb (Kg) (ball bearing) | 120 (54) | 120 (54) | 120 (54) | 120 (54) | 120 (54) | 100 (45) | 100 (45) |
| | Double Slides | Yes (1 drawer) | Yes (1 drawer) | Yes (1 drawer) | Yes (1 drawer) | Optional | Optional | Optional |
| Extras | Top Mat | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber | Unidirectional Rubber |
| Weight | Net Weight, lb (Kg) | 371 (168) | 349 (158) | 297 (135) | 275 (125) | 183 (83) | 170 (77) | 162 (73) |
| | Shipping Weight, lb (Kg) | 454 (206) | 400 (181) | 327 (148) | 305 (138) | 252 (114) | 239 (108) | 231 (105) |
| Optional Add-ons Available | Top Chest | KRA5308F | KRA5308F | KRA4114F, KRA4810F | KRA4114F, KRA4810F | KRA4014F | KRA2055, KRA4014F | KRA2055, KRA4014F |
| | Side Cab | KRA4820F, KRA4830F | KRA4820F, KRA4830F | KRA4820F, KRA4830F | KRA4820F, KRA4830F | — | — | — |
| | Locker | KRA5012F | KRA5012F | KRA5012F | KRA5012F | — | — | — |
| | Middle Drawer Section | — | — | KRA4860F | KRA4860F | KRA2063 | KRA2063 | KRA2063 |
| | Hardwood Top | KRWT5300 | KRWT5300 | KRWT40F | KRWT40F | KRWT26F | KRWT26F | KRWT26F |
| | Stainless Top | KRSST5300 | KRSST5300 | KRSST40F | KRSST40F | — | — | — |




KRA5318FPBO




KRA5311FPC




KRA4813FPCM




KRA4107FPJK

## HERITAGE Series Roll Cab Drawer Sizes

| Specifications | Width | | Depth | | Height | | KRA5318F | KRA5311F | KRA4813F | KRA4107F |
|---|---|---|---|---|---|---|---|---|---|---|
| | inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers | Drawers |
| **2" Narrow** | 11 3/16 | 285 | 17 1/2 | 445 | 1 5/8 | 41 | 2 | 3 | 4 | — |
| **4" Narrow** | 11 3/16 | 285 | 17 1/2 | 445 | 3 5/8 | 92 | 7 | 1 | 1 | — |
| **8" Narrow** | 11 3/16 | 285 | 17 1/2 | 445 | 7 5/8 | 193 | 1 | — | — | — |
| **12" Narrow** | 11 3/16 | 285 | 17 1/2 | 445 | 11 5/8 | 295 | 1 | 1 | 1 | — |
| **2" Wide** | 21 7/16 | 544 | 17 1/2 | 445 | 1 5/8 | 41 | 2 | — | 2 | — |
| **2" Extra Wide** | 34 3/4 | 881 | 17 1/2 | 445 | 1 5/8 | 41 | — | 1 | | 2 |
| **4" Wide** | 21 7/16 | 544 | 17 1/2 | 445 | 3 5/8 | 92 | 3 | — | 3 | — |
| **4" Extra Wide** | 34 3/4 | 881 | 17 1/2 | 445 | 3 5/8 | 92 | 1 | 3 | 1 | 4 |
| **8" Wide** | 21 7/16 | 544 | 17 1/2 | 445 | 7 5/8 | 193 | 1 | — | 1 | — |
| **8" Extra Wide** | 34 3/4 | 881 | 17 1/2 | 445 | 7 5/8 | 193 | — | 1 | — | 1 |
| **6" Super Wide** | 47 3/4 | 1,214 | 17 1/2 | 445 | 5 9/16 | 141 | — | 1 | — | — |
| | | | | | | **Total Drawer Count** | 18 | 11 | 13 | 7 |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# HERITAGE SERIES: ROLL CABS



KRA4008FPC



KRA2007FPBO



KRA2005FPCM

## HERITAGE Series Roll Cab Drawer Sizes

| Specifications | Width | | Depth | | Height | | KRA4008F | KRA2007F | KRA2005F |
|---|---|---|---|---|---|---|---|---|---|
| | inches | mm | inches | mm | inches | mm | Drawers | Drawers | Drawers |
| **2" Wide** | 21 3/8 | 544 | 17 1/2 | 445 | 1 5/8 | 41 | 4 | 2 | — |
| **4" Wide** | 21 3/8 | 544 | 17 1/2 | 445 | 3 5/8 | 92 | 3 | 4 | 4 |
| **8" Wide** | 21 3/8 | 544 | 17 1/2 | 445 | 7 5/8 | 193 | 1 | 1 | — |
| **12" Wide** | 21 3/8 | 544 | 17 1/2 | 445 | 11 5/8 | 295 | — | — | 1 |
| | | | | | **Total Drawer Count** | | 8 | 7 | 5 |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**

Colors Available

| Red | Gloss Black | Royal Blue |
|---|---|---|
| **PBO** | **PC** | **PCM** |

KRA2007and KRA2005 Series units are available in three standard colors.

**Add suffix to base stock number for special colors.**

# TOP CHESTS



KRA5308FPBO

## KRA5308F Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 12,970 (212,540) | 4,191 (27,039) | 224 (102) | 269 (122) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 8 | 53 3/8 (1,356) | 19 13/16 (503) | 19 3/8 (493) |
| **Drawers** | 2 | 11 1/8 (283) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 11 1/8 (283) | 17 1/2 (445) | 3 5/8 (92) |
| | 2 | 34 3/4 (881) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 34 3/4 (881) | 17 1/2 (445) | 3 5/8 (92) |
| **Top Compartment** | — | 52 3/8 (1,328) | 18 3/4 (475) | 4 5/8 (118) |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**



KRA5315FPCM

## KRA5315F Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 10,758 (176,324) | 4,065 (26,227) | 244 (110) | 298 (135) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 15 | 53 3/8 (1,356) | 19 13/16 (503) | 19 7/16 (494) |
| **Drawers** | 6 | 11 1/8 (283) | 17 1/2 (445) | 1 5/8 (41) |
| | 4 | 11 1/8 (283) | 17 1/2 (445) | 3 5/8 (91) |
| | 2 | 21 3/8 (542) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 21 3/8 (542) | 17 1/2 (445) | 3 5/8 (91) |
| | 1 | 34 3/4 (881) | 17 1/2 (445) | 3 5/8 (91) |



KRA4810FPJK

## KRA4810F Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 9,359 (153,370) | 3,026 (19,520) | 196 (89) | 226 (103) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 8 | 40 (1,016) | 19 13/16 (503) | 19 7/16 (494) |
| **Drawers** | 2 | 11 1/8 (283) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 11 1/8 (283) | 17 1/2 (445) | 3 5/8 (91) |
| | 2 | 21 3/8 (283) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 21 3/8 (283) | 17 1/2 (445) | 3 5/8 (91) |
| **Top Compartment** | — | 39 7/8 (1,013) | 18 1/2 (475) | 4 3/4 (120) |



KRA4114FPCM

## KRA4114F Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 9,746 (159,710) | 3,178 (20,500) | 183 (83) | 213 (97) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 40 (1,016) | 19 13/16 (503.2) | 19 7/16 (493.7) |
| **Drawers** | 2 | 34 3/4 (881) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 34 3/4 (881) | 17 1/2 (445) | 3 5/8 (91) |
| **Top Compartment** | — | 39 7/8 (1,014) | 18 3/4 (475) | 4 3/4 (120) |



KRA4014FPC

## KRA4014F Series Top Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 6,180 (101,270) | 1,995 (12,870) | 119 (54) | 142 (64) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 4 | 26 3/4 (678) | 19 13/16 (503) | 19 7/16 (494) |
| **Drawers** | 2 | 21 3/8 (542) | 17 1/2 (445) | 1 5/8 (41) |
| | 2 | 21 3/8 (542) | 17 1/2 (445) | 3 5/8 (91) |
| **Top Compartment** | — | 26 5/8 (675) | 18 3/4 (475) | 4 3/4 (120) |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# HERITAGE SERIES: TOP CHESTS



KRA2055FPBO

## KRA2055F Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 4,452 (72,955) | 1,814 (11,703) | 90 (41) | 110 (50) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 5 | 26 (660) | 14 3/4 (373) | 17 1/4 (437) |
| **Drawers** | 4 | 22 1/8 (559) | 13 1/8 (332) | 1 7/8 (47) |
| | 1 | 22 1/8 (559) | 13 1/8 (332) | 3 1/8 (79) |
| **Top Compartment** | — | 25 13/16 (655) | 13 3/4 (348) | 3 7/8 (97) |

Colors Available

| Red | Gloss Black | Royal Blue |
|---|---|---|
| **PBO** | **PC** | **PCM** |

All KRA2055 Series units are available in three standard colors.
**Add suffix to base stock number for special colors.**



KRA4059FPC

## KRA4059F Series Top Chest

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 4,288 (70,268) | 1,753 (11,309) | 92 (42) | 117 (53) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 9 | 26 (660) | 14 3/4 (373) | 17 3/16 (436) |
| **Drawers** | 6 | 6 11/16 (169) | 13 1/8 (332) | 1 3/4 (44) |
| | 2 | 22 1/8 (559) | 13 1/8 (332) | 1 7/8 (47) |
| | 1 | 22 1/8 (559) | 13 1/8 (332) | 3 1/8 (79) |
| **Top Compartment** | — | 25 13/16 (655) | 13 3/4 (348) | 3 7/8 (97) |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.
**Add suffix to base stock number for special colors.**

# DRAWER SECTIONS



KRA4860FPBO

## KRA4860F Series Drawer Sections

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 3,112 (50,997) | 1,216 (7,845) | 115 (52) | 145 (66) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 2 | 40 (1,016) | 19 13/16 (503) | 9 13/16 (249) |
| **Drawers** | 1 | 34 11/16 (881) | 17 9/16 (445) | 1 5/8 (41) |
| | 1 | 34 11/16 (881) | 17 9/16 (445) | 3 5/8 (91) |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.
**Add suffix to base stock number for special colors.**



KRA2063FPC

## KRA2063F Series Drawer Sections

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 1,792 (29,365) | 1,124 (7,252) | 70 (22) | 94 (43) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | 3 | 26 (660) | 19 13/16 (503) | 9 11/16 (246) |
| **Drawers** | 3 | 21 3/8 (544) | 17 9/16 (445) | 1 5/8 (41) |

Colors Available

| Red | Gloss Black | Royal Blue |
|---|---|---|
| **PBO** | **PC** | **PCM** |

All KRA2063 Series units are available in three standard colors.
**Add suffix to base stock number for special colors.**

## KRA5012F Series Lockers

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 10,177 (166,770) | 1,480 (9,548) | 115 (52) | 145 (66) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | **4** | 16 1/2 (419) | 19 13/16 (503) | 51 1/2 (1,308) |
| **Drawers** | **2** | 11 3/16 (288) | 17 9/16 (445) | 1 5/8 (41) |
| | **2** | 11 3/16 (288) | 17 9/16 (445) | 3 5/8 (92) |
| **Shelves** | **3** | 12 3/8 (315) | 18 3/4 (475) | 11 3/4 (297) |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**



**KRA5012FPBO**

## END CABINETS

## KRA4820F Series End Cabinets

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 5,094 (83,476) | 1,174 (7,574) | 117 (53) | 147 (67) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| **Specifications** | **6** | 16 1/2 (419) | 19 13/16 (503) | 32 1/8 (815) |
| **Drawers** | **2** | 11 1/8 (283) | 17 9/16 (445) | 1 9/16 (39.7) |
| | **3** | 11 1/8 (283) | 17 9/16 (445) | 3 1/2 (88.9) |
| | **1** | 11 1/8 (283) | 17 9/16 (445) | 11 3/4 (297) |




**KRA4820FPC**

## KRA4830F Series End Cabinets

| Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 8,426 (138,080) | 843 (5,439) | 76 (35) | 97 (44) |

| | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|
| **Specifications** | 16 1/2 (419) | 19 13/16 (503) | 32 5/16 (820) |
| **Shelves 2** | 15 1/16 (381) | 18 5/8 (473) | — |
| **Lower Compartment 1** | 15 1/16 (381) | 18 5/8 (473) | — |

Colors Available

| Red | Gloss Black | Royal Blue | Electric Orange |
|---|---|---|---|
| **PBO** | **PC** | **PCM** | **PJK** |

All KRA5000 and KRA4000 Series units are available in four standard colors.

**Add suffix to base stock number for special colors.**



**KRA4830FPBO**

**⚠WARNING**

- Secure end cab to roll cab per instructions
- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# DURABILITY. IN MOTION.

Wherever you go, Snap-on has the perfect tool storage solution to take along. With over a dozen options, Snap-on® Mobile Solutions are strong, safe and ready to roll. Stranded? That's something you'll never have to worry about again.

**Mobility —** Heavy Duty EPIQ SideKIQ™ has 7"x2" ISO-ride® casters to navigate rough floors and gravel. 40" carts use 6"x2" monoprene soft vibration-resistant casters to overcome small obstacles.

**Safety —** Lockable wheels, bumpers, rolled drawer edges, radiused corners and fully welded designs keep you and your shop damage-free.

**HEAVY DUTY SOLUTIONS FOR ANY SIZE JOB.**

From the basic two-tray cart to the EPIQ *SideKIQ,* Snap-on and Blue-Point® carts have you covered.

**EPIQ *SideKIQ* —** The ultimate high-capacity mobile unit has a lid that can hold up to 500 lb.

**Lock-n-Roll® or InPulse™ Drawers —** *Snap-on* carts feature high-capacity drawers that hold more tools and will not drift open. Drawer slides can be added to double drawer capacity.

**Lid Selection —** Many of *Snap-on's* larger carts allow you to choose from traditional, sliding stainless, or bed liner-coated lids to meet any and every need.



## KRSC100A Series Mobile WorkStations

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | | Load Capacity, lb (kg) |
|---|---|---|---|---|---|
| 7,943 (130,162) | 2,362 (15,238) | | 320 (145) | | 2,000 (907) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | | Height, inches (mm) |
| Specifications | 2 | 38 (965) | 26 (660) | | 43 5/16 (1,100) |
| Drawers | 1 | 30 1/16 (768) | 24 (609) | | 6 3/16 (157) |
| | 1 | 30 1/16 (768) | 24 (609) | | 3 15/16 (100) |
| Bottom Tray | 1 | 35 (889) | 26 (660) | | 3/4 (19) |

### KRSC100A Series Mobile WorkStations

- Each unit holds 1 ton (2,000 lb), fully welded body
- 8" semi-soft swivel-lock casters, extra heavy duty weight capacity will go over obstacles that stop ordinary carts
- Optional convenience drawer large enough for short-term storage of work-in-progress parts
- 1,000 lb capacity, 38" x 26" top work surface (stainless-steel) has raised edge all the way around
- 4" and 6" InPulse™ drawers retain up to 20x the weight of standard detents without drifting open
- Vertical bumper system with soft edges
- Large diameter handle with stainless-steel grip



KRSC100APBO

Colors Available



| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Extreme Green | Electric Orange | Arctic Silver | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJJ | PJK | PKS | POT |

## KRSC100A Optional Accessories

| Stock No. | Description |
|---|---|
| 100W16S | 6" optional (non-locking) bottom convenience drawer for KRSC100A (Add proper color suffix) |
| KASR12APV | Screwdriver rack |
| KAT12APV | 12" Can holder |
| KAPR24PVB | Pry bar rack |
| KAS12PWRPV | Power tool rack (Holds 3 power tools) |
| KAHK63 | 6" Extended hook |
| KAHCK33 | 3" Curved hook |
| KAHLK33 | 3" Loop |
| KALS15 | Laptop shelf 15" |

# ROLL CARTS

## KEMN361A Series SideKIQ EPIQ Roll Cart

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | | Load Capacity, lb (kg) | |
|---|---|---|---|---|---|---|
| 26,023 (426,644) | 6,004 (37,735) | | 498 (227) | | 2,000 (907) | |
| | Width | | Depth | | Height | |
| Drawers | inches | mm | inches | mm | inches | mm |
| 2 | 30 1/16 | 764 | 27 1/2 | 699 | 1 11/16 | 43 |
| 3 | 30 1/16 | 764 | 27 1/2 | 699 | 3 15/16 | 100 |
| 1 | 30 1/16 | 764 | 27 1/2 | 699 | 6 3/16 | 157 |
| Top Compartment | 36 | 914 | 29 | 717 | 8 | 203 |
| Overall | 37 | 940 | 30 | 762 | 48 3/8 | 1229 |
| Six Total Drawers | | | | | | |

### KEMN361A Series Roll Carts

- 37" inches wide and 30" inches deep – super capacity in a maneuverable footprint
- Same 48" height as EPIQ Roll Cab
- 8" deep top compartment for large pry bars, chargers, diagnostics, etc.
- Four 7" ISO-Ride® casters all swivel – or they can be locked into rigid position when desired
- *ISO-Ride* torsion puck system
- Casters are designed to carry 2,000 lb each
- *InPulse* drawer retention system
- Six heavy duty drawers hold 227 lb per drawer
- Radiused trim and inset drawers – no sharp corners



KEMN361APBO

Colors Available



| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Arctic Silver | Flat Black Blk Trim | White | Flat Blue Blk Trim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | PKS | POT | PU | PWL |




- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MOBILE SOLUTIONS: ROLL CARTS



KRSC246PCM1

KRSC246PDO7

Colors Available

| | Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Extreme Green | Electric Orange | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|
| Stainless: | PBO1 | PC1 | PCM1 | PDG1 | PES1 | PJJ1 | PJK1 | POT1 |
| Bed Liner: | PN7 | PFI7 | PET7 | PQD7 | PDO7 | PKG7 | PKH7 | POT7 |




KRSC46GPES

Colors Available

| Red | Gloss Black | Royal Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Midnight Blue | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PES | PJH | PJJ | PJK | PDG | POT |

## KRSC246 Series Roll Carts

| Specifications | KRSC246 Series |
|---|---|
| Cubic Inches (cm³) | 21,979 (360,171) |
| Square Inches (cm²) | 4,880 (31,483) |
| Width, inches (mm) | 36 (914) |
| Height, inches (mm) | 46 (1,168) |
| Depth, inches (mm) | 24 (610) |
| Load Capacity, lb (kg) | 2,400 (1,089) |
| Lid Capacity, lb (kg) | 150 (68) |
| Drawers | 6 |
| Casters | 6" x 2" |
| Net Weight, lb (kg) | 318 (144) |
| Shipping Weight, lb (kg) | 373 (172) |

### KRSC246 Series Roll Carts

- Unit is 24" deep for the most storage capacity
- Lockable top section is 7" deep, allowing you to lock up work in process
- Top section also provides openings to vertically store pry bars and extensions up to 36" (914 mm) long
- Welded cart body yields lasting strength
- Choose from two durable flip-lid materials: stainless-steel or truck bed liner
- Bumpers have a hard interior yet a soft exterior to reduce damage to other objects
- Six drawers: two 2" deep; two 4" deep; and two 6" deep
- Four monoprene casters for better maneuverability and less vibration

## KRSC46G Series Roll Cart

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 20,783 (340,572) | 4,392 (28,335) | 265 (120) | 2400 (1089) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 6 | 40 (1,029) | 20 (508) | 46 (1,168) |
| Drawers | 5 | 34 3/4 (882) | 17 1/2 (444) | 3 5/8 (92) |
| | 1 | 34 3/4 (882) | 17 1/2 (444) | 7 5/8 (193) |
| Top Compartment | — | 39 13/16 (1,011) | 18 13/16 (478) | 7 (178) |

### KRSC46G Series Roll Carts

- The one-piece fully welded body is designed for maximum strength
- Inherent strength for storage capacity found only in the best tool storage cabinets
- Switch out one of the 4" drawers and the 8" drawer and add a 12" drawer
- 7" top compartment uses nonslip liner internally to accommodate heavy tools and parts
- Top compartment will also store battery charger and can be used as a charging station while locked
- Drawers are 36" wide. Drawer capacity: 100 lb per drawer; up to 200 lb with double slide
- Stronger lock and cam – round key lock for interchangeability and larger cam for security
- Accessory panels can be added to both sides providing slot pattern for accessories, and accommodates KAPS4 Power Strip and 6007K0120PV Cord Wrap with no extra drilling
- Also accommodates the KRA4830 End Cab (KRSC404APV adaptor panel required)
- Snap-on® paint and steel standards using the same paint and steel as *Snap-on* toolboxes
- *Snap-on* KRA-with LOCK 'N ROLL® drawers will not drift open when rolling
- *Snap-on* Warranty – the *Snap-on* lifetime warranty on all parts
- Thoroughly tested with rigorous bump track testing has proven the *Snap-on* cart lasts longer
- Optional JKRR46GW55 – Rubber Top Mat (not included)

## KRSC43 Series Roll Carts

| Specifications | KRSC43 Series |
|---|---|
| Cubic Inches (cm³) | 20,783 (340,572) |
| Square Inches (cm²) | 4,392 (28,335) |
| Width, inches (mm) | 40 (1,016) |
| Height, inches (mm) | 46 (1,168) |
| Depth, inches (mm) | 20 (508) |
| Load Capacity, lb (kg) | 2,400 (1,089) |
| Lid Capacity, lb (kg) | 120 (54) each side |
| Drawers | 6 |
| Casters | 6" x 2" |
| Net Weight, lb (kg) | 262 (112) |
| Shipping Weight, lb (kg) | 312 (135) |



KRSC43PJJ

### KRSC43 Series Roll Carts

- Features a split top that slides out from the center to provide total access to a generous 7" deep top compartment
- Cart body is entirely welded double-wall design, not bolted, for lasting strength – spot welds 3"–4" apart
- Rolled edges and a rear flange on drawers provide a solid feel to drawers under load
- Two shot-molded rubber/nylon corner bumpers protect nearby objects and provide long-lasting brand identification and professional appearance
- Full-length two-point locking lid and separate manual rear lock rod for drawers – more secure than single-point lock used by many other manufacturers

Colors Available

| | Red | Gloss Black | Royal Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Midnight Blue | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|---|
| Stainless: | PBO1 | PC1 | PCM1 | PES1 | PJH1 | PJJ1 | PJK1 | PDG1 | POT1 |
| Bed Liner: | PN7 | PF17 | PET7 | PDO7 | PPS7 | PKG7 | PKH7 | PQD7 | POT7 |

## KRSC46G & KRSC43 Series Roll Cart Accessories

- Create the ultimate shop cart
- Easier to customize than any shop cart in the industry

| Stock No. | Description |
|---|---|
| KAPR17 | Prybar Rack (available in nine colors) |
| KRA412F* | Folding side shelf |
| KRA4830F* | End cab. Comes equipped with adjustable shelves; optional drawers can also be added |
| KACSC40PC | Protective nylon cover (black 200 Denier® nylon) |
| KRSC404APV | Accessory mounting/adaptor panel; also used to mount end cab |
| 6007K0120PV* | Cord wrap |
| KAS12APV* | 12" flat shelf |
| KAT12APV* | 12" can rack: 12" wide, 3" deep |
| KEWLEDFLEXL | Rechargeable LED flexible long neck work light (magnetic base) |

*Requires KRSC404APV adaptor panel

## KRSC326F Series Compact Roll Cart

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|---|
| 16,847 (276,073) | 3,533 (22,794) | | 157 (71.2) | 1,200 (544) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 6 | 32 11/16 (830) | 20 1/2 (520) | 43 (1,092) |
| Drawers | 5 | 27 1/8 (689) | 17 1/2 (445) | 3 5/8 (92) |
| | 1 | 27 1/8 (689) | 17 1/2 (445) | 7 5/8 (193) |
| Top Compartment | — | 32 (812) | 18 13/16 (478) | 6 11/16 (170) |



KRSC326FPBO

### KRSC326F Roll Cart

- Similar features to KRSC46G
- More compact width and four swivel casters

Colors Available

| | Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|---|
| | PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | POT |

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MOBILE SOLUTIONS: ROLL CARTS



KRSC33APC

## KRSC33A Series Roll Carts

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|---|
| 9,591 (157,168) | 2,110 (13,613) | | 157 (71.2) | 600 (272) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 3 | 32 9/16 (827.1) | 20 1/2 (520.7) | 43 5/16 (1,100) |
| Top Compartment | — | 32 (812.8) | 19 1/8 (485.8) | 6 1/2 (165.1) |

**KRSC33A Series Roll Carts**
- Entirely welded body and legs for super strength versus bolt-together units
- 27" locking drawers
- Large top compartment
- 5" x 2" swivel casters, factory installed
- Factory assembled, welded tray and leg assembly
- Slots 'N Dots™ side panels for mounting accessories

**KRSC312FPV Optional Side Shelf, Textured Black**

Colors Available



| Red | Gloss Black | Royal Blue | Midnight Blue | Ultra Yellow | Candy Apple Red | Extreme Green | Electric Orange | Flat Black w/Blk Trim |
|---|---|---|---|---|---|---|---|---|
| PBO | PC | PCM | PDG | PES | PJH | PJJ | PJK | POT |



KRBC60T

## KRBC60T Welding WorkStation Cart

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|---|
| 19,804 | 1,949 | | 295 lb | 1,000 (453) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 3 | 50 3/4 (1,289) | 25 3/4 (654) | 37 1/2 (352) |
| Top Compartment | — | 26 (660.4) | 19 1/8 (485.8) | 6 1/2 (165.1) |

**KRBC60T Welding WorkStation Cart**
- 3/8" plate steel work surface
- Four dual-purpose mounting locations serve as accessory mount and wand holder
- HD textured black matte finish
- Large locking compartment stores two welders
- *Slots 'N Dots* rear panel accommodates many accessories
- Three drawers with liners and high quality roller bearing slides
- Three large cord hooks included – extra hook kits available



KRP1HD

## KRP1HD Polymer Roll Cart

| | Net Weight, lb (kg) | | Load Capacity, lb (kg) | |
|---|---|---|---|---|
| | 37 (16.8) | | 320 (145) | |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 1 | 43 (1,092) | 21 3/4 (552) | 38 1/2 (978) |
| Top Tray | 1 | 43 (1,092) | 21 3/4 (552) | 3 3/16 (80.9) |
| Bottom Tray | 1 | 43 (1,092) | 21 3/4 (552) | 2 13/16 (71.4) |

**KRP1HD Polymer Roll Cart**
- Heavy duty polymer construction will not scratch painted surfaces, will not corrode and is non-conductive
- Top slides in either direction to reveal storage compartment and work surface underneath
- Built-in tool holders in handles accept wide variety of screwdrivers, small prybars, pliers and other small to medium hand tools
- Drain plugs in both upper and lower trays facilitate cleanup
- Red trays with gray lid and legs
- Locking swivel casters
- Each tray has 160 lb (73 kg) load capacity

## KRA6200F/KRA6210F Series Road Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Shipping Weight, lb (kg) |
|---|---|---|---|
| 11,937 (195,612) | 3,460 (22,323) | 282 (128)* | 325 (147)* |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 4 | 36 (914) | 24 (610) | 24 (610) |
| Drawers | 2 | 30 1/2 (775) | 21 3/4 (552) | 1 3/4 (44) |
| | 2 | 30 1/2 (775) | 21 3/4 (552) | 3 5/8 (92) |
| Top Compartment | — | 34 7/8 (885) | 22 1/2 (571) | 5 1/2 (139) |

*Add 25 lb for cage on KRA6200F

**KRA6200F/KRA6210F Series Road Chest**

- Wider side walls with added corner gussets to keep corners square
- Three stiffeners behind front cover with inside padding: strengthens cover and protects drawers
- Cover and front are hinged together for quick and easy access to all tools
- Overlap on lid allows water to flow past without entering the front section
- Handles on KRA6210F Series provide easier lifting (Handle 8 – 3533, add color suffix)
- Three friction hinges keep the front cover from slamming

KRA6200FPBO



KRA6210FPBO




## Optional Waterproof Covers

| | | |
|---|---|---|
| **KRA6200** | KAC6200 (Red) | KAC6200PC (Black) |
| **KRA6210** | KAC6210 (Red) | KAC6210PC (Black) |

KADDS2404 – Optional 4" steel drawer divider set
KADDS2402 – Optional 2" steel drawer divider set

Colors Available



| Red | Gloss Black | Royal Blue | Green Mica | Electric Orange | Tractor Green | Candy Apple w/ Black Trim |
|---|---|---|---|---|---|---|
| PBO | PC | PCM | PAW | PJK | PLP | PPS |

## KRA60B Series Heavy Duty Road Chests

| Specifications | KRA60B Series |
|---|---|
| Cubic Inches (cm³) | 5,343 (87,556) |
| Square Inches (cm²) | 1,939 (12,509) |
| Width, inches (mm) | 26 (660) |
| Height, inches (mm) | 19 5/16 (491) |
| Depth, inches (mm) | 16 7/8 (428) |
| Load Capacity, lb (kg) | 500 (220) |
| Drawers | 8 |
| Net Weight, lb (kg) | 120 (54) |
| Shipping Weight, lb (kg) | 155 (70) |

**KRA60B Series Heavy Duty Road Chests**

- Deeper drawers, over 15" front to back, holds more tools required for service
- 5" deep narrow drawer and 5" deep top compartment holds power tools and deep sockets
- Friction-style drawer slides for optimal use in dusty, gritty environments
- Protective cover and drop front for quick access to top compartment and drawers
- Lid (cover/front) is rigid enough for repeated heavy use and keeps its shape due to a unique full length lid stiffener, which is welded to the sides for optimal rigidity
- The front section of the cover contains a backing plate to reduce flex
- Safety lock on cover keeps cover in position when open
- Two full-length piano hinges help to position the cover with little effort
- Class 1 heavy gauge steel is used throughout – spot welds 3"–4" apart
- Full width double-wall construction supports loaded drawers
- Rolled edges and a rear flange on drawers provide a solid feel to drawers under load
- Plastic bumper tops for quiet closing and protection
- Full length, two-point lock rod secures both sides – more secure than single point lock used by many other manufacturers

**KRC20 Nylon Cover**

- Protective nylon cover for KRA60B Series Heavy Duty road chests




KRA60BPCM

Colors Available



| Red | Gloss Black | Royal Blue |
|---|---|---|
| | PC | PCM |



WARNING



- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MOBILE SOLUTIONS: ROAD CHEST



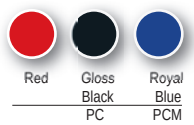
KRA62D

## KRA62D Heavy Duty Road Chest

| Cubic Inches (cm³) | Square Inches (cm²) | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|
| 8,187 (134,160) | 3,108 (20,050) | 178 (81) | 450 (204) |

| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
|---|---|---|---|---|
| Specifications | 10 | 31 3/32 (789.8) | 20 5/16 (515.9)) | 21 7/32 (539) |
| Top Compartment | — | 26 (660.4) | 19 1/8 (485.8) | 6 1/2 (165.1) |

Colors Available




# MOBILE TOOL CHEST





KMC18043NOR



KMC18A062NTN

## All Weather Mobile Tool Chest

- 22.1" wheel base on the wide corners for stability
- Innovative four-bar latch system for secure lid closure
- Telescoping handle with higher reach
- Over top hinged lid can be used as a seat when case is closed
- Drawers fully extend on Snap-on® proprietary composite slides
- Usable space interior dimensions: 21.2" W x 11.9" D x 15.4" H
- 4,130 cubic inches of internal space
- Heavy duty butterfly hinges
- Auto pressure equalization valve
- Large side handles that may be gripped with two hands
- Configurable drawers; interchangeable with other mobile tool chests
- Heavy duty roll cage ribs; durable, shock-resistant material
- Stackable design even when fully loaded
- *Snap-on* padlock holder with 250 lb of break-in resistance
- Water resistant when submerged to one meter
- Case material made with Zerust® corrosion inhibitor to help prevent tools from rusting
- Net weight 44 lb (20 kg)

| | Drawers | Color |
|---|---|---|
| KMC18043NBK | 7 | Black |
| KMC18043NGR | 7 | Green |
| KMC18043NOR | 7 | Orange |
| KMC18043NTN | 7 | Tan |
| KMC18062NBK | 8 | Black |
| KMC18062NGR | 8 | Green |
| KMC18062NOR | 8 | Orange |
| KMC18062NTN | 8 | Tan |

**Optional Accessories:**

**TCK18043BR Tool Control Kit.** For seven-drawer units only.

**JIKMC18-7NS Nonslip Drawer Liner Kit.** For seven-drawer units only.



TB50W

## Soft-Sided Tool Bag with Wheels and a Telescoping Handle

**TB50W Soft-Sided Tool Bag**

- Multiple pockets inside and outside, to store a multitude of smaller items
- Large gate mouth opening to store larger items and for easy access
- Made of durable 1680 Denier® oxford nylon fabric, for strength and durability
- Telescoping handle with wheels, to roll rather than carry the bag
- Dimensions – 20" W x 12" H x 12" D

## Aviation Dog Boxes

Aviation technicians told us what they need. And we listened. Snap-on® is excited to introduce this new line of rolling toolboxes with convenient hand-tow handles. Available in three sizes, these dog boxes let you load up the tools you need for a specific task and comfortably wheel them across the tarmac, from hangar to hangar, through the terminal or on a plane.

**Interchangeable Handles**
- Small and medium dog boxes feature an interchangeable hard steel wagon-style handle that keeps the box from wandering or nipping at your heels, or a soft nylon leash so you can choose the hand-tow handle that best fits your needs
- Handles can be quickly installed or changed with the wire lock pin

**Deluxe Wagon-Style Handle**
- The large dog boxes feature a deluxe hard steel wagon-style handle that is easy to steer and easy to control
- The swivel feature allows for a comfortable pulling position while the spring-loaded action keeps the handle in the upright position when the box is at rest

**Hinged And Foldable Top**
- Both large dog boxes feature a front lid that folds up and under the top lid to create a convenient, flat work surface, while still allowing access to the drawers
- When fully closed, the hinged cover lets you keep the drawers and box securely locked

**Removable Chassis**
- Each dog box can be removed from the rolling chassis with convenient lifting handles to allow for stationary storage on a bench or roll cab for easy accessibility

**Rubber Wheels**
- All models feature rubber caster wheels for a smooth and quiet ride along with maximum shock absorption
- Wheels can also be locked for safety













| Specification | KRDB265 | KRDB269 | KRDB18 | KRDB24 |
|---|---|---|---|---|
| Brand | *Snap-on* | *Snap-on* | Blue-Point® | *Blue-Point* |
| Description | Dog Box Large, 5-Drawer Wheeled Tool Box | Dog Box Large, 9-Drawer Wheeled Tool Box | Dog Box Small, Wheeled Tool Box | Dog Box Medium, Wheeled Tool Box |
| Storage Space (Cubic Inches) | 4,452 | 4,288 | 1,530 | 2,540 |
| Storage Space (Square Inches) | 1,814 | 1,753 | 525 | 670 |
| Number of Trays | — | — | 4 | 4 |
| Number of Drawers | 5 full length | 3 full length 6 compartment | — | — |
| Cantilever, Split-Top Opening | — | — | Yes | Yes |
| Flat Work Top | Yes | Yes | — | — |
| Pull Handle* | Deluxe hard steel wagon handle with soft grip | Deluxe hard steel wagon handle with soft grip | Interchangeable hard steel wagon handle or soft nylon leash | Interchangeable hard steel wagon handle or soft nylon leash |
| Carrying Handle | No | No | Yes | Yes |
| Rubber Wheels | Yes | Yes | Yes | Yes |
| Removable Chassis | Yes | Yes | Yes | Yes |
| Length, inches (mm) | 26 (660) | 26 (660) | 18 (457) | 24 (610) |
| Width, inches (mm) | 14 3/4 (375) | 14 3/4 (375) | 10 (254) | 12 (305) |
| Height, inches (mm) | 17 1/4 (438) | 17 1/4 (438) | 13 1/4 (349) | 12 (305) |
| Weight, lb (kg) | 103 (47) | 103 (47) | 32 (14) | 55 (25) |

*Designed to be pulled by hand

Already own a *Snap-on* toolbox? Add a rolling chassis to create your own dog box.
**DB18CHASSIS:** 18" Chassis with interchangeable hard and soft handles
**DB24CHASSIS:** 24" Chassis with interchangeable hard and soft handles
**DB26CHASSIS:** 26" Chassis hard handle only




- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MOBILE SOLUTIONS: ROLL CARTS Blue-Point®




KRBC50TPC

## KRBC50T Series Roll Carts

| Specifications | KRBC50T Series |
|---|---|
| Cubic Inches (cm³) | 17,935 (293,902) |
| Square Inches (cm²) | 7,878 (50,826) |
| Width, inches (mm) | 36 (965) |
| Height, inches (mm) | 42 (1,071) |
| Depth, inches (mm) | 22.4 (569) |
| Load Capacity, lb (kg) | 705 (319) |
| Drawers | 5 |
| Casters | 6" x 2" |
| Net Weight, lb (kg) | 180 (81.6) |
| Shipping Weight, lb (kg) | 216 (98) |

### KRBC50T Series Roll Carts

- New cart locking system for theft protection
- Heavy duty cart push handle
- Roll-off pallet design for easy customer delivery
- 6" x 2" heavy duty casters (brakes on two of the casters)
- Rugged one-piece bumper guards
- Retractable side work table
- Longer drawer handles
- Can holder
- Prybar and tool holders on each side of cart

Colors Available






KRBC30TBPCM

## KRBC30TB Series Roll Carts

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|---|
| 11,050 | 2,153 (13,890) | | 180 (81.5) | 800 (362) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 4 | 35 (889) | 21 (533) | 41 1/4 (1,048) |
| Top Compartment | — | 24 (610) | 20" | 6" |

### KRBC30TB Series Roll Carts

- Portable 20' electrical cord reel with four outlets and circuit breakers
- Adjustable personal organizer tray in top compartment (3" deep x 24" wide x 1.5" high)
- One-piece rubber bumper for each leg (already installed)
- Bottom corner bump blocks for extra corner protection
- Sturdy, spacious bottom drawer with two sets of drawer slides
- Larger pull handles for easy drawer opening
- Heavy duty padded handle
- Removable garbage can
- Sturdy side work table
- Removable spray can holder
- Comes with casters assembled on cart

Colors Available






KRBC10TBPC

## KRBC10TB Series Roll Carts

| | Cubic inches (cm³) | Square inches (cm²) | Load Capacity, lb (kg) |
|---|---|---|---|
| | 7,428 (121,700) | 2,400 (15,480) | 540 (245) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 4 | 30 1/2 (775) | 20 1/2 (520) | 41 1/4 (1,048) |
| Drawers | 2 | 11 1/2 (292) | 17 1/2 (444) | 2 1/2 (63.5) |
| | 1 | 24 1/2 (622) | 17 1/2 (444) | 2 1/2 (63.5) |
| | 1 | 24 1/2 (622) | 17 1/2 (444) | 2 1/2 (63.5) |
| Bottom Shelf | 2 | 30 (762) | 19 (482) | 3 1/2 (88.9) |
| Top Compartment | — | 30 (762) | 19 (482) | 2 1/2 (63.5) |
| External Tray (rear) | — | 15 3/8 (390) | 4 (101) | 3 3/8 (85.9) |
| External Tray (front) | — | 15 3/8 (390) | 4 (101) | 2 (50.8) |

BPNCVR10T Roll Cart Cover. Fits all KRBC10T, KRBC9T and KRBC30T series roll carts. Protects cart from dirty shop conditions. High quality 210 Denier® nylon. Sturdy zipper makes using the cover quick and easy. Waterproof and durable.

### KRBC10TB Series Roll Carts

- Plated fasteners resist corrosion and self-locking nuts assure a rigid, secure assembly
- Locking support tabs add strength, increase load capacity and facilitate quick assembly
- Made from heavy gauge steel for superior strength
- Retractable side work table
- Protective rubber bumpers
- Comes with casters assembled

Colors Available



## KRBCSST Series Roll Carts

- Padded lid protects finish and provides additional work surface
- Roller bearing slide drawers, locking slide top and internal prybar holder
- Dual locking casters keep cart in place during use
- Convenient storage trays on both sides

| Cubic Inches (cm³) | Square Inches (cm²) | | Net Weight, lb (kg) | Load Capacity, lb (kg) |
|---|---|---|---|---|
| 15,931 (261,062) | 1,618 (26,514) | | 23.5 (56) | 300 (136) |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 2 | 29 7/16 (747) | 20 5/8 (524) | 38 11/16 (982) |
| Top Compartment | — | 29 7/16 (747) | 20 5/8 (524) | 6 13/16 (171) |
| Drawers | 2 | 29 5/16 (744) | 17 1/2 (444) | 2 3/4 (69) |
| Bottom Compartment | | 29 5/16 (744) | 17 1/2 (444) | 3 (75.9) |

BPNCVRSST Roll Cart Cover Fits all KRBCSST series roll carts. Protects cart from dirty shop conditions. High quality 210 Denier® nylon. Sturdy zipper makes using the cover quick and easy. Waterproof and durable.



KRBCSST

Colors Available



| Red | Gloss Black PC | Royal Blue PCM | Ultra Yellow PES |
|---|---|---|---|

## KRBC7TD Series Roll Carts

- 4" zinc-plated casters (two locking, two swivel)
- Six liners on drawer and tray, and one rubber mat for side work shelf
- Latch system to unlock all four drawers once the top lid has been opened with a key
- Gas springs on lid for greater control
- Folding side work shelf provides extra work space
- Locking flip-top lid with full length piano hinge
- Locking prybar compartment securely holds all length prybars and screwdrivers

| | Net Weight, lb (kg) | | Load Capacity, lb (kg) | |
|---|---|---|---|---|
| | 112.2 (50.8) | | 300 (136) | |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | 4 | 35 (889) | 17 (431) | 41 (1,041) |
| Drawers | 2 | 13 13/16 (350) | 15 3/8 (398) | 2 (50.8) |
| | 1 | 27 9/16 (700) | 15 7/16 (391) | 2 (50.8) |
| | 1 | 27 9/16 (700) | 15 7/16 (391) | 4 (101) |
| Bottom Shelf | 1 | 27 9/16 (700) | 15 7/16 (391) | 3 (76.2) |



KRBC7TDPCM

Colors Available



| Red | Gloss Black PC | Royal Blue PCM | Ultra Yellow PES | Extreme Green PJJ | Electric Orange PJK |
|---|---|---|---|---|---|

**⚠WARNING**



- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# MOBILE SOLUTIONS ROLL CARTS Blue-Point®



KRBC2TC

Colors Available

Red | Gloss Black PC | Royal Blue PCM

**KRBC2TC Series Roll Cart**
- Rugged, general duty dual shelf roll cart
- Trays feature rolled edges for improved strength and rigidity
- Maximum load capacity 150 lb (68 kg) per tray
- Casters are 4" x 1 1/8" (two locking, two standard)

| | Net Weight, lb (kg) | | Load Capacity, lb (kg) | |
|---|---|---|---|---|
| | 38 (17.2) | | 300 (136) | |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | — | 30 (756) | 17 (428) | 36 1/4 (920) |
| Trays | 2 | 30 (756) | 17 (428) | 3 (75) |

**KRBC3TD-1 Locking Drawer.** Optional add-on locking drawer for KRBC2TC.

**350ABMF09 Replacement Add-On Tray.** For KRBC2TC/KRBC3TD.




KRBC3TDPC

Colors Available

Red | Gloss Black PC | Royal Blue PCM

**KRBC3TD Roll Cart**
- Features locking drawer with tubular lock for added tool security
- Two sturdy, 3" deep trays are positioned for convenience
- 150 lb (68 kg) load capacity per tray
- Made of heavy gauge steel
- 4" x 1 1/8" casters (two locking, two standard)

| | Net Weight, lb (kg) | | Load Capacity, lb (kg) | |
|---|---|---|---|---|
| | 65 (29.4) | | 300 (136) | |
| | Drawers | Width, inches (mm) | Depth, inches (mm) | Height, inches (mm) |
| Specifications | — | 30 (762) | 17 (428) | 36 1/4 (920) |
| Trays | 2 | 30 (762) | 17 (428) | 3 (76.2) |
| Drawer | 1 | 27 (685) | 14 1/2 (368) | 4 (101) |

# SERVICE TRAYS



SOSTPC

**SOSTPC Automotive Service Tray (Matte Black)**
- Leg clearance of 25" allows service tray to slide under hood from the front or side of vehicle
- Height-adjustable support post (36.5"–48.6") allows tray to clear fender or front end on most vehicles
- Removable parts tray and screwdriver holders built into the tray
- Protective bumpers included for the support post
- Maximum load capacity: Tray (125 lb), Drawer (25 lb)
- Large bottom storage basket
- Dimensions (fully assembled): 38" x 28 1/2" x 36 1/2"–48.6" (adj. ht.)



BLPUHST



BLPUHSTPC (matte black)

**BLPUHST Under-Hood Service Tray**
- Convenience with less user motion and fatigue
- 24" leg clearance allows the service tray to slide under the hood from the front or the side of vehicle
- Parts dividers and screwdriver holders built in the tray
- Protective bumpers included for top tray and support post
- 3" heavy duty swivel casters
- Height-adjustable support post adjusts from 35 13/16"–48 3/8" for the tray to clear the fender or front end of most vehicles
- EVA pads in all tray compartments
- Dimensions (fully assembled): 29 1/2" L x 26" W x 48 3/8" H
- Maximum load capacity: 75 lb (34 kg)

# CUSTOMIZED STORAGE: THAT'S HOW WE ROLL.

Snap-on® tool storage units can be built just the way you like them: customized and personalized to fit your specific needs. Whether you require something practical, or something a little more tailor-made, we've got the storage for you.

**Handle-mounted Laptop & Table Holders —** Free up workspace, and provide the best keyboard position and viewing angles for your electronic equipment.

**Carbon Fiber Drawer Guards —** Made from real resin-infused carbon fiber; enhance the appearance while keeping drawer tops clean and protected.

**Steel Drawer Guards —** Stainless or powder-coated steel guards protect the front corners and drawers of a roll cab. Laser-cut Wrench "S" exposes paint beneath the guard.

**Drawer Front —** Drawer front covers are made from powder-coated steel and are available in a variety of colors. Cut-out Snap-on logo exposes paint beneath the drawer front.

**LED Lights —** Automatic WorkCenter lights, switch lights and colored decorative logo panels.



# ACCESSORIES: BOXES AND TOTE TRAYS



YA481



YA483



YA486

## Plastic Boxes (Blue-Point®)

Ideal for a wide range of storage needs. YA481 through YA486 are made of tough, injection-molded plastic to ensure a precise fitting lid and durability. Top carrying handle, tension latches, tote tray and padlock provision are also featured.

| Stock No. | Dimensions, inches |
|---|---|
| YA481 | 14 1/2 W x 7 1/4 D x 4 1/2 H |
| YA482 | 16 1/2 W x 8 1/4 D x 6 1/2 H |
| YA483 | 20 1/4 W x 9 D x 7 3/4 H |
| YA484 | 23 1/8 W x 10 1/4 D x 10 1/2 H |
| YA486 | 27 1/2 W x 13 3/8 D x 14 H |



KRP5CAB



KRP5PB



YA402

## Parts Storage Cases

**KRP5CAB Five-Drawer Storage Cabinet**

- Use to store or inventory small tools and parts
- Black, heavy duty polypropylene cabinet with five removable drawers (KRP5PB)
- Each drawer features a translucent plastic divider system that allows full customization for individual needs
- Drawers are easily removable for transport to job location
- Units can be stacked or wall mounted
- Resistant to common solvents
- Cabinet dimensions are 15 1/2" W x 14 1/2" D x 16" H

**KRP5PB Storage Drawer**

- Plastic storage drawer for KRP5CAB parts storage cabinet
- Each drawer features 16 translucent section dividers for unlimited customizing options (KRP5PB-16 = 16 Dividers)
- Drawer measures 13 5/8" W x 9 5/8" D x 2 1/4" H

**YA402 Parts Storage Case**

- Interchangeable partitions allow customizing from 9–24 compartments
- Rugged polypropylene construction
- 14 5/8" W x 10 3/4" D x 2 5/16" H

**YA485 Parts Storage Case**

- Similar to YA402 except interchangeable partitions can form 8–32 compartments
- 18" x 12" x 3"

## Plastic Boxes with Steel Drawers (F.O.D. Design)

- Portable tool chest designed specifically for Foreign Object Damage (F.O.D.) applications
- Accepts both magnetic and foam tool control systems for tool accountability
- 22 gauge steel drawers are interchangeable for custom configurations
- Standard drawer configuration includes four drawers measuring 7 7/8" x 19 9/32" x 1 7/8" and one drawer measuring 7 7/8" x 19 9/32" x 4"
- Molded polymer one-piece design (handle, latches, strap pins, hinges and lock clasp) minimizes potential loose pieces that could cause F.O.D.
- Molded recesses in outer case allow vertical and horizontal stacking
- Padded carrying strap for extra comfort
- 24" W x 10 5/32" D x 17 13/32" H; with capacities of 759 sq in and 1,760 cu in; weight 33 lb (capacity specifications listed are based on standard drawer configuration)

**KRP825PCA Portable Tool Chest (F.O.D.)**
Gray case and red drawers

**KRP825PCC Portable Tool Chest (F.O.D.)**
Red case and red drawers



KRP825PCA



KRP825PCC

## Tote Trays

**KTA3A Metal Tote Tray**

- Tubular pull up handle lifts 1 5/8"
- Measures 20 1/4" x 8" x 3 1/4" with handle down

**KTA8PV Metal Tote Tray**

- Drops in any 14" wide (4" deep) drawers on KRL1000 and KRL700 series tool storage units
- Four non-skid rubber feet protect finished surfaces from scratching
- Raised lips hold tray securely in drawer
- Tubular pull up handle raises 1 3/4"
- Measures 10" W x 14 13/16" L x 3 13/16" H with handle down
- Black textured finish

**KRP1001A Plastic Tote Tray**

- Made of tough, rust-proof, nonconductive, chemical-resistant polymer
- Includes two deep end pockets
- Bottom drawer is divided into 12 compartments and can be opened from either side
- 16 5/8" x 10 1/4" x 6 7/8"



KTA3A



KTA8PV



KRP1001A

## Wall Cabinet

**KRA276D Wall Cabinet**

- Snap-on® wall cabinets provide both security and inventory control
- Wall cabinet can be mounted to wall, stationary bench or roll cab
- Ruggedly built of heavy gauge steel for durability
- Theft-resistant cylinder locks and a two-point locking system provide protection for your tools
- Features PLEXIGLAS® door panels to permit checking tool inventory without opening doors
- Cabinet measures 33 7/8" x 24 3/4" x 6"



KRA276D






- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: METAL BOXES



KRW184B



KRW185



KRA25D



KRW48C



UT22K



KRA21G



KRW182B



KRW183C



KRA24



KRU24B



KRU24GB

| Stock No. | Cubic Inches ($cm^3$) | Square Inches ($cm^2$) | Dimensions, inches | Description/Features |
|---|---|---|---|---|
| **KRW184B*** | 1,851 (30,330) | 684 (4,413) | Overall: 20 19/32 x 8 1/2 x 14 1/4<br>Top 3 Drawers: 17 13/16 x 7 5/16 x 2<br>Bottom Drawer: 17 13/16 x 7 5/16 x 2 1/2 | Four drawers lock when lid is closed. Tote tray not included. Net weight 25 lb |
| **KRW185*** | 2,030 (33,266) | 845 (5,452) | 20 1/4 x 18 x 8 1/2 | Five locking drawers and a top compartment. Drawers lock when lid is shut. Portable: weight empty is 27 lb |
| **KRA25D** | 1,568 (25,690) | 180 (1,161) | 20 7/8 x 8 3/4 x 8 3/4 | Includes KTA3A Partitioned Tote Tray |
| **KRW48C*** | 1,530 (25,070) | 476 (3,071) | 18 x 10 x 13 1/4 | Split top opening for tool access. Cantilever trays on either side of cover, carrying handle. |
| **UT22K** | 1,444 (23,660) | 525 (3,837) | Overall: 22 x 8 x 9<br>4 Small Trays: 22 x 4 x 2 | Opens up to expose five storage trays; no trays to lift out, no drawers to open. One Large Tray: 22 x 8 x 9. |
| **KRA21G** | 996 (16,320) | 486 (3,135) | Bottom Drawer: 19 3/4 x 7 3/4 x 2 13/16 | Includes KTA3A Partitioned Tote Tray. Net weight: 28 lb |
| **KRW182B*** | 1,137 (18,630) | — | 18 1/2 x 8 1/2 x 9 1/2 | Net weight: 12.5 lb<br>Shipping weight: 14.5 lb |
| **KRW183C*** | 1,637 (26,830) | — | Overall: 20 19/32 x 8 1/2 x 12<br>Each Drawer: 17 13/16 x 7 5/16 x 2 1/2 | Drawers lock when lid is closed. Net weight 20 lb |
| **KRA24** | 1,155 (18,930) | 154 (994) | 19 7/8 x 7 3/4 x 7 1/2 | Includes partitioned tote tray |
| **KRU24B*** | 2,540 (41,623) | 670 (4,322) | Bottom Section: 23 3/5 x 11 3/5 x 7 1/4 | Lightweight, only 27 lb (12.3 kg).<br>Four trays allow organization of smaller items. |
| **KRU24GB*** | 2,540 (41,623) | 670 (4,322) | Bottom Section: 23 3/5 x 11 3/5 x 7 1/4 | Lightweight, only 27 lb (12.3 kg).<br>Four trays allow organization of smaller items. |

*Blue Point®



TB10A



TB20A



TB30



TB40



TB50



CTTOTEA



CTUTOTE



BPTOTE

## Tote Bags

- Rugged, versatile tote bags are constructed from heavy duty 600 x 300 D-polyester
- Water-resistant PVC backing
- Reinforced top hem
- Wide top opening for easy access
- Padded handles and shoulder strap
- Embroidered logos

**TB10A Collapsible Tote Bag**

- Folds flat for convenient storage using Velcro® with metal snap corner closures
- Multiple interior and exterior pockets
- Fold-down interior bin dividers
- Molded plastic bottom for strength
- Overall dimensions: 18" L x 8" W x 9" D

**TB20A Tote Bag**

- Multiple interior and exterior pockets
- Removable plastic parts storage bin accessed via lower side storage pocket
- Overall dimensions: 15" L x 10 1/2" W x 12" H

**TB30 Tote Bag**

- Ultimate small tool organizer
- Multi-organizing pockets
- Heavy duty zippers
- Overall dimensions 13" x 10" x 8"

**TB40 Tote Bag**

- Lots of cargo space for air tools, etc.
- Heavy duty shoulder strap
- Overall dimensions 17" x 9" x 11"

**TB50 Tote Bag**

- Multi-pockets inside and out
- Easy grip handle
- Special hard body design
- Overall dimensions 20" x 11" x 9"

**CTTOTEA Power Tool Tote Bag**

- Wide opening for easy access to tools, extra padding for protection
- Durable 600 Denier® outside for strength
- Interior pockets and compartments for tool organization
- Padded handles for comfortable transport
- Reinforced bottom for strength
- Six external pockets for extra storage
- Approximate inside dimensions, open: 18" L x 8" W x 11 1/2" D

**CTUTOTE Power Tool Mini Tote Bag**

- Wide opening for easy access to your tools
- Durable 600 *Denier* nylon outside for strength
- Pockets and compartments for tool organization
- Padded handles for comfortable transport
- Reinforced bottom for strength
- Heavy duty industrial zipper
- 12" L x 10" D x 10" W

**BPTOTE Tote Bag (Blue-Point®)**

- Heavy duty 600 x 300 D polyester
- Water resistant, rugged and versatile
- Wide top opening for easy access
- Multiple interior and external pockets for organization
- Overall dimensions: 16 1/2" L x 10 1/2" W x 12 1/4" H

**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: WORK SURFACES



KRSST761B

## Stainless-Steel Work Surfaces

Stainless-steel tops turn roll cabs into moveable work benches. Constructed from high grade, 16 gauge 304 stainless-steel. Raised front lip keeps sockets and parts from rolling off. Tops are 1 7/8" thick.

| Stock No. | Applications | Width, inches | Depth, inches |
|---|---|---|---|
| KWSN3010AST | KEXN603A EPIQ Roll Cab | 120 | 30 |
| KWSN3012AST | KEXN725A/KEXP725A EPIQ Roll Cabs | 144 | 30 |
| KWSN3030AST | KEBN301A EPIQ End Cabinet | 30 | 30 |
| KWSN3060BST | EPIQ Series Roll Cabs | 60 | 30 |
| KWSN3068BST | EPIQ Series Roll Cabs | 68 | 30 |
| KWSN3076BST | EPIQ Series Roll Cabs | 76 | 30 |
| KWSN3084BST | EPIQ Series Roll Cabs | 84 | 30 |
| KWSP3060BST | PowerTop™ for EPIQ Series Roll Cabs | 60 | 30 |
| KWSP3068BST | *PowerTop* for EPIQ Series Roll Cabs | 68 | 30 |
| KWSP3076BST | *PowerTop* for EPIQ Series Roll Cabs | 76 | 30 |
| KWSP3084BST | *PowerTop* for EPIQ Series Roll Cabs | 84 | 30 |
| KWSH3076BST | PowerHouse™ Top for EPIQ Series Roll Cabs | 76 | 30 |
| KWSH3084BST | *PowerHouse* Top for EPIQ Series Roll Cabs | 84 | 30 |
| KRSST1001B | KRL1022/KRL7022 Roll Cabs | 54 3/16 | 28 15/16 |
| KRSST7003B | KRL1163/KRL1023/KRL1032/KRL1033/KRL7023 Roll Cabs | 72 13/16 | 28 15/16 |
| KRSST7001 | KRL1056 Roll Cabs | 35 9/16 | 28 15/16 |
| KRSST761B | KRL722 Roll Cabs | 54 3/16 | 23 7/8 |
| KRSST756 | KRL756 Series Roll Cabs | 35 9/16 | 23 7/8 |
| KRSST7011 | KRL7011/KRL7015/KRL1011/KRL1015 End Cabs | 19 7/8 | 28 15/16 |
| KRSST711 | KRL711/KRL715 End Cabs | 19 7/8 | 23 7/8 |
| KRSST40F | KRA Series 40" Roll Cabs, Square Corner | 39 3/4 | 19 1/2 |
| KRSST4107 | KRA Series 40" Roll Cabs with Rounded Corners | 39 3/4 | 19 1/2 |
| KRSST2418 | KRA2423/KRA2418/KRA2432/KRA2496 Roll Cabs | 73 3/8 | 23 11/16 |
| KRSST2411 | KRA2411/KRA2422 Roll Cabs | 54 3/4 | 23 11/16 |
| KRSST2406 | KRA2406/KRA2406A End Cabs | 20 | 23 7/8 |
| KRSST2407 | KRA2407 Roll Cabs | 35 7/8 | 23 11/16 |
| KRSST5300 | KRA5318/KRA5311 Roll Cabs | 53 1/16 | 19 1/2 |
| KRSST4008 | KRA4008/KRA2007 Roll Cabs | 26 | 19 1/2 |



KRWT7002A

## Hardwood Tops

Northern hard maple butcher block tops allow roll cabs to double as full-length workbenches. Tops are 1 3/4" thick.

| Stock No. | Applications | Width, inches | Depth, inches |
|---|---|---|---|
| KWSN3010AWT | KEXN603A EPIQ Roll Cab | 120 | 30 |
| KWSN3060AWT | EPIQ Series Roll Cabs | 60 | 30 |
| KWSN3012AWT | KEXN725A/KEXP725A EPIQ Roll Cabs | 144 | 30 |
| KWSN3030AWT | KEBN301A EPIQ End Cabinet | 30 | 30 |
| KWSN3068AWT | EPIQ Series Roll Cabs | 68 | 30 |
| KWSN3076AWT | EPIQ Series Roll Cabs | 76 | 30 |
| KWSN3084AWT | EPIQ Series Roll Cabs | 84 | 30 |
| KRWT7002A | KRL1022/KRL7022 Roll Cabs | 53 11/16 | 27 5/8 |
| KRWT7003A | KRL1023/KRL1032/KRL1033/KRL7023 Roll Cabs | 72 5/16 | 27 5/8 |
| KRWT7001A | KRL1056 Roll Cabs | 35 1/8 | 27 5/8 |
| KRWT761B | KRL722 Roll Cabs | 53 3/4 | 22 9/16 |
| KRWT756A | KRL756 Roll Cabs | 35 1/8 | 22 9/16 |
| KRWT7011A | KRL7011/KRL7015/KTL1011/KRL1015 End Cabs | 19 5/16 | 27 5/8 |
| KRWT711A | KRL711/KRL715 End Cabs | 19 5/16 | 22 5/8 |
| KRWT5000A | KRA5213/KRA5319/KRA2306/KRA2300 Series Roll Cabs (Rounded) | 53 1/16 | 19 7/16 |
| KRWT4800B | KRA4107/KRA4813 Roll Cabs (Rounded) | 39 3/4 | 19 7/16 |
| KRWT2411 | KRA2422/KRA2411 Roll Cabs | 54 3/4 | 23 11/16 |
| KRWT2418 | KRA2423/KRA2418/KRA2432/KRA2496 Roll Cabs | 73 3/8 | 23 11/16 |
| KRWT2407 | KRA2407 Roll Cabs | 35 7/8 | 23 11/16 |
| KRWT26F | KRA4008F/KRA2007F Square Corner | 26 | 19 7/16 |
| KRWT40F | 40" Roll Cabs Square Corner | 39 3/4 | 19 7/16 |
| KRWT5300 | KRA5318/KRA5311 Roll Cabs (Square) | 53 1/16 | 19 7/16 |
| KRWT4008 | KRA4008E/KRA2007 Roll Cabs (Rounded) | 26 | 19 7/16 |

## Steel Work Surfaces

Steel work surface is coated with a substance similar to that used in truck bed liners. Extremely durable, easy to clean, chemical and abrasion resistant, and won't crack or peel. Installation hardware included.



KRBLT1023

| Stock No. | Applications | Width, inches | Depth, inches |
|---|---|---|---|
| KRBLT1023 | KRL1163, KRL1023, KRL1032, KRL7023, KRL1033 | 72 13/16 | 29 |
| KRBLT1022 | KRL1022, KRL7022 | 54 3/16 | 29 |
| KRBLT722 | KRL722 | 54 3/16 | 24 |
| KRBLT1011 | KRL1011, KRL7011, KRL1015, KRL7015 | 19 7/8 | 29 |
| KRBLT711 | KRL711, KRL715 | 19 7/8 | 24 |
| KRBLT2406 | KRA2406/KRA2406A End Cabs | 20 | 23 7/8 |
| KRBLT2418 | KRA2423, KRA2432, KRA2496 | 73 3/8 | 24 |
| KRBLT756 | KRL756 | 36 | 24 |
| KRBLT2411 | KRA2422/KRA2411 | 54 3/4 | 23 11/16 |
| KRBLT5311 | KRA5311, KRA5318 | 53 3/4 | 19 1/2 |
| KWSN3010ABL | KEXN603A EPIQ Roll Cab | 120 | 30 |
| KWSN3012ABL | KEXN725A/KEXP725A EPIQ Roll Cabs | 144 | 30 |
| KWSN3030ABL | KEBN301A EPIQ End Cabinet | 30 | 30 |
| KWSN3060ABL | EPIQ Series Roll Cabs | 60 | 30 |
| KWSN3068ABL | EPIQ Series Roll Cabs | 68 | 30 |
| KWSN3076ABL | EPIQ Series Roll Cabs | 76 | 30 |
| KWSN3084ABL | EPIQ Series Roll Cabs | 84 | 30 |
| KWSP3060ABL | EPIQ Series Roll Cabs | 60 | 30 |
| KWSP3068ABL | EPIQ Series Roll Cabs | 68 | 30 |
| KWSP3076ABL | EPIQ Series Roll Cabs | 76 | 30 |
| KWSP3084ABL | EPIQ Series Roll Cabs | 84 | 30 |
| KWSH3076ABL | EPIQ Series Roll Cabs | 76 | 30 |
| KWSH3084ABL | EPIQ Series Roll Cabs | 84 | 30 |

## Non-directional Rubber Mats

Non-directional rubber-top mats protect tool storage units from damage. Lightweight, fine textured, all rubber construction. Will not shrink, curl or separate. Cleans easily and quickly. Impervious to most oil and chemicals.



JKRR711CR

| Stock No. | Applications |
|---|---|
| JKRR10011CR | KRL1022/KRL7022 Series Roll Cabs |
| JKRR1003CR | KRL1023/KRL1032/KRL7023/KRL1033 Series Roll Cabs |
| JKRR1056CR | KRL1056 Series Roll Cabs |
| JKRR761CR | KRL722 Series Roll Cabs |
| JKRR756CR | KRL756 Series Roll Cabs |
| JKRR1010CR | KRL1011/KRL7011/KRL7015/KRL1015 Series End Cabs |
| JKRR7012CR | KRL1012/KRL7012/KRLV1012 Series Lockers |
| JKRR711CR | KRL711 Series End Cabs |
| JKRR712CR | KRL712 Series Lockers |
| JKRR3800CR | KRA4107/KRA4800 Series Roll Cabs |
| JKRR379ACR | KRA4007/KRA3027/KRA3025 Series Roll Cabs |
| JKRR2411CR | KRA2422/KRA2411 Series Roll Cabs |
| JKRR2418CR | KRA2423/KRA2418/KRA2432 Series Roll Cabs |
| JKRR3820CR | KRA4820/KRA4833 End Cabs, KRA5012 Locker |
| JKRR33W55 | KRSC326/KRSC33 Roll Carts |
| JKRR46GW55 | KRSC40/KRSC46 Roll Carts |
| KWSN3060ACR | EPIQ Series Roll Cabs (60") |
| KWSN3068ACR | EPIQ Series Roll Cabs (68") |
| KWSN3076ACR | EPIQ Series Roll Cabs (76") |
| KWSN3084ACR | EPIQ Series Roll Cabs (84") |
| KWSN30120ACR | EPIQ KEXN603A Series Roll Cabs (120") |
| KWSN30144ACR | EPIQ KEXN725A/KEXP725A Series Roll Cabs (144") |

**⚠WARNING**



- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: COVERS

The KAC Series of Storage Unit Covers can be used individually per unit or zipped together with the heavy duty nylon zipper to form a cover to match your tool storage combination. Magnets on the locker and end cab covers hold the door flap open to allow entry to the unit without removing the cover itself. Covers are available for a wide variety of tool storage roll cabs, WorkCenters, Risers and Lockers.




**KAC307660BK**




**KAC1003**

## KRL7000 Series Covers

| Cover Description | Red Stock No. | Black Stock No. |
|---|---|---|
| KRL7022 Cover | KAC7002 | KAC7002 |
| KRL7022/KRL1201 or KRL1054 Combination Cover | KAC72121 | KAC72121PC |
| KRL7023 Cover | KAC7003 | KAC7003PC |
| KRL7023/KRL1203A or KRL1072 Combination Cover | KAC73123 | KAC73123PC |
| KRL7011A/KRL7015A/KRLV7015 Cover (Left Side) | KAC7011L | KAC7011LPC |
| KRL7011A/KRL7015A/KRLV7015 Cover (Right Side) | KAC7011R | KAC7011RPC |
| KRL7012/KRLV7012 Cover (Left Side) | KAC7012L | KAC7012LPC |
| KRL7012/KRLV7012 Cover (Right Side) | KAC7012R | KAC7012RPC |
| KRL7022 with KRL7954/KRL5445 Cover | – | KAC702245PC |
| KRL7023 with KRL7972/KRL7245 (2) Cover | – | KAC702345PC |

## EPIQ Series Roll Cab Covers

| Cover Description | Black Stock No. |
|---|---|
| KERN60 Cover | KAC304860BK |
| KERN68 Cover | KAC304868BK |
| KERP76 Cover | KAC304876BK |
| KERN84/KERP84 Cover | KAC304884BK |
| KEXN603 Cover | KAC3048120BK |
| KEXN725/KEXP725 Cover | KAC3048144BK |
| 60" EPIQ Roll Cab, WorkCenter, 1 Locker | KAC307690BK |
| 68" EPIQ Roll Cab, WorkCenter, 1 Locker | KAC307698BK |
| 76" EPIQ Roll Cab, WorkCenter, 1 Locker | KAC3076106BK |
| 84" EPIQ Roll Cab, WorkCenter, 1 Locker | KAC3076114BK |
| 60" EPIQ Roll Cab, WorkCenter, 2 Lockers | KAC3076120BK |
| 68" EPIQ Roll Cab, WorkCenter, 2 Lockers | KAC3076128BK |
| 76" EPIQ Roll Cab, WorkCenter, 2 Lockers | KAC3076136BK |
| 84" EPIQ Roll Cab, WorkCenter, 2 Lockers | KAC3076144BK |
| 60" EPIQ Roll Cab, WorkCenter, 4 Lockers | KAC3076180BK |
| 68" EPIQ Roll Cab, WorkCenter, 4 Lockers | KAC3076188BK |
| 76" EPIQ Roll Cab, WorkCenter, 4 Lockers | KAC3076196BK |
| 84" EPIQ Roll Cab, WorkCenter, 4 Lockers | KAC3076204BK |
| 60" EPIQ Roll Cab and WorkCenter | KAC307660BK |
| 68" EPIQ Roll Cab and WorkCenter | KAC307668BK |
| 76" EPIQ Roll Cab and WorkCenter | KAC307676BK |
| 84" EPIQ Roll Cab and Workcenter | KAC307684BK |
| 60" EPIQ Roll Cab, WorkCenter, Overheads, 2 Lockers | KAC3097120BK |
| 68" EPIQ Roll Cab, WorkCenter, Overheads, 2 Lockers | KAC3097128BK |
| 76" EPIQ Roll Cab, WorkCenter, Overheads, 2 Lockers | KAC3097136BK |
| 84" EPIQ Roll Cab, WorkCenter, Overheads, 2 Lockers | KAC3097144BK |
| 60" EPIQ Roll Cab, WorkCenter, Overheads, 4 Lockers | KAC3097180BK |
| 68" EPIQ Roll Cab, WorkCenter, Overheads, 4 Lockers | KAC3097188BK |
| 76" EPIQ Roll Cab, WorkCenter, Overheads, 4 Lockers | KAC3097196BK |
| 84" EPIQ Roll Cab, WorkCenter, Overheads, 4 Lockers | KAC3097204BK |
| 60" EPIQ Roll Cab, WorkCenter, Overhead | KAC309760BK |
| 68" EPIQ Roll Cab, WorkCenter, Overhead | KAC309768BK |
| 76" EPIQ Roll Cab, WorkCenter, Overhead | KAC309776BK |
| 84" EPIQ Roll Cab, WorkCenter, Overhead | KAC309784BK |

## KRL1000 Series Covers

| Cover Description | Red Stock No. | Black Stock No. |
|---|---|---|
| KRL1065 Cover | KAC1065 | KAC1065PC |
| KRL1022 Cover | KAC1001 | KAC1001PC |
| KRL1022/KRL1201A or KRL1072 Combination Cover | KAC100112 | KAC100112PC |
| KRL1022/KRL1201A/KRL1012A or KRL1072 Combination Cover | KAC1001TL | KAC1001TLPC |
| KRL1022/KRL7954/KRL5445 Cover | KAC1001WD | KAC1001WDPC |
| KRL1023/KRL1032/KRL1033 Cover | KAC1003 | KAC1003PC |
| KRL1023 or KRL1032/KRL1203A Combination Cover | KAC13123 | KAC13123PC |
| KRL1023 or KRL1032 with KRL7972/KRL7245 Cover | KAC1003WD | KAC1003WDPC |
| KRL1056 Cover | KAC1056 | KAC1056PC |
| KRL1056/KRL1251 Combination Cover | KAC161251 | KAC161251PC |
| KRL1011A/KRL1015A Cover (Left Side) | KAC1011L | KAC1011LPC |
| KRL1011A/KRL1015A Cover (Right Side) | KAC1011R | KAC1011RPC |
| KRL1012A Cover (Left Side) | KAC1012L | KAC1012LPC |
| KRL1012A Cover (Right Side) | KAC1012R | KAC1012RPC |
| KRL1022/KRL7954/KRL5445 Cover | KAC102245PC | – |
| KRL1023/KRL7954/KRL5445 Cover | KAC102345PC | – |
| KAC1003TL(xxx) KRL 72" Roll Cab & WorkCenter or Top Chest & Locker Cover | | |
| KAC1001TL(xxx) KRL 54" Roll Cab & WorkCenter or Top Chest & Locker Cover | | |

$GG FR\RU VXL¿[ 3.6 3Q N &$6 &DQG\ $SS\H 5%6 5R\D %XH
(*6 ([WHPH *UHHQ (26 2DQJH



KAC761CAS



KAC761EGS



KAC761EOS



KAC761RBS

## Color Logo "S" Cover

| Cover Description | Stock No. | Cover Description | Stock No. |
|---|---|---|---|
| KRL722/KRA2411/KRA2422 Cover | KAC761CAS | KRL722/KRA2411/KRA2422 Cover | KAC761PKS |
| KRA2423 Cover | KAC773CAS | KRA2423 Cover | KAC773PKS |
| KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791CAS | KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791PKS |
| KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815CAS | KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815PKS |
| KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210CAS | KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210PKS |
| KRL722/KRA2411/KRA2422 Cover | KAC761EGS | KRL722/KRA2411/KRA2422 Cover | KAC761RBS |
| KRA2423 Cover | KAC773EGS | KRA2423 Cover | KAC773RBS |
| KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791EGS | KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791RBS |
| KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815EGS | KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815RBS |
| KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210EGS | KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210RBS |
| KRL722/KRA2411/KRA2422 Cover | KAC761EOS | KRL722/KRA2411/KRA2422 Cover | KAC761RDS |
| KRA2423 Cover | KAC773EOS | KRA2423 Cover | KAC773RDS |
| KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791EOS | KRL722/KRL791 or KRL722/KRA2454 Combination Cover | KAC761791RDS |
| KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815EOS | KRA2423 Roll Cab/KRA2454 Riser Combination Cover | KAC241815RDS |
| KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210EOS | KRA2422/KRA2411 Roll Cab/KRA2454 Riser Combination Cover | KAC242210RDS |

Color Stock No. PKS=Pink, CAS=Candy Apple, RBS=Royal Blue, EGS=Extreme Green, RDS=Red, EOS=Orange

## KRL700 and Classic Series Storage Unit Covers

| Cover Description | Red Stock No. | Black Stock No. | Cover Description | Red Stock No. | Black Stock No. |
|---|---|---|---|---|---|
| KRL722/KRA2411 Cover | KAC761 | KAC761PC | KRL712 Cover (Left Side) | KAC712L | KAC712LPC |
| KRL722/KRL791A or KRA2411/KRA2408 Combination Cover | KAC761791 | KAC761791PC | KRL712 Cover (Right Side) | KAC712R | KAC712RPC |
| KRL722/KRA2411/KRW7554/KRWL5435 Cover | KAC761WD | KAC761WDPC | KRA2423/KRA2496/KRA2432 Cover | KAC773 | KAC773PC |
| KRL722/KRL791A/KRL712 Combination Cover | KAC761TL | KAC761TLPC | Classic 73" Roll Cab/Chest Cover | KAC773793 | KAC773793PC |
| KRL756 or KRA2407 Cover | KAC756 | KAC756PC | KRA2418/KRA2432/KRA2496 with KRA2472 Cover | KAC773WD | KAC773WDPC |
| KRL756/KRL751, KRA2407/KRA2404 or Combination Cover | KAC756731 | KAC756731PC | Classic 73" Roll Cab/KRA2415 Chest | – | KAC241815PC |
| KRL711/KRL715 Cover (Left Side) | KAC711L | KAC711LPC | KRL722/KRA2411/KRA2454/KRWL5435 Cover | – | KAC242210PC |
| KRL711/KRL715 Cover (Right Side) | KAC711R | KAC711RPC | KRA2407 Roll Cab/KRA2405 Chest Cover | – | KAC240705PC |
| | | | KRA2418/KRA2432/KRA2496 with KRW7572 Cover | – | KAC773WDPC |

## Heritage Series Covers

| Cover Description | Red Stock No. | Black Stock No. |
|---|---|---|
| KRA5000 Series/KRA2300 Series Roll Cab Cover/53" Roll Cabs | KAC5000 | KAC5000PC |
| KRA5000/KRA2300 Series Roll Cab/Top Chest Cover/53" Roll Cab/Top Chest Combination | KAC530015 | KAC530015PC |
| KRA5012 Locker Cover, Left Side | KAC5012L | KAC5012LPC |
| KRA5012 Locker Cover, Right Side | KAC5012R | KAC5012RPC |
| KRA4000/2000 Series 40" Roll Cab Cover | KAC4800 | KAC4800PC |
| KRA4000/KRA2000 Series 40" Roll Cab/Top Chest Combination Cover | KAC48004810 | KAC480010PC |
| KRA4000 Series 40" Roll Cab/Drawer Section/Top Chest Combinations | KAC48006010 | KAC486010PC |
| KRA Series End Cabs Cover, Left Side | KAC4820L | KAC4820LPC |
| KRA Series End Cabs Cover, Right Side | KAC4820R | KAC4820RPC |
| KRA4008/KRA2007 Roll Cab Cover | KAC4007 | KAC4007PC |
| KRA4000 Series 26" Roll Cab/Top Chest Combination Cover | KAC40074014 | KAC40074014PC |
| KRA4059 Series | KRAC59 | – |

## Other Units

| Cover Description | Black Stock No. |
|---|---|
| KRSC40/KRSC416/KRSC46 Carts | KACSC40APC |
| KRSC31/KRSC33 Series Roll Carts | KACSC30PC |
| KRA6200 Road Chest Waterproof | KAC6200PC |
| KRA6210 Road Chest Waterproof | KAC6210PC |



WARNING

• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: DRAWER GUARDS/PROTECTORS/EPIQ SERIES



Protects top of drawers from dings and scratches. Adds a custom, personalized look to tool storage units. Installs easily. No trimming or fasteners required. Simply remove tape from underside of guard, align guard with drawer, snap in place and press firmly. Constructed from stainless-steel with brushed or polished finish. Individual replacement guards are available.

## Drawer Guards/EPIQ Series

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADGSERN602A | KADGPERN602A | KERN602A Roll Cabs |
| KADGSERN682A | KADGPERN682A | KERN682A Roll Cabs |
| KADGSERN762A | KADGPERP762A | KERN762A Roll Cabs |
| KADGSERP763A | KADGPERP763A | KERP763A Roll Cabs |
| KADGSERN842A | KADGPERN842A | KERN842A Roll Cabs |
| KADGSERP842A | KADGPERP842A | KERP842A Roll Cabs |
| KADGSERN843A | KADGPERN843A | KERN843A Roll Cabs |
| KADGSERP843A | KADGPERP843A | KERP843A Roll Cabs |
| KADGSECN602A | KADGPECN602A | KECN602A Top Chests |
| – | KADGPECN682A | KECN682A Top Chests |
| – | KADGPECN843A | KECN843A Top Chests |
| KADGSESN602A | KADGPESN602A | KESN602A Drawer Sections |
| – | KADGPESN682A | KESN682A Drawer Sections |
| KADGSESN843A | KADGPESN843A | KESN843A Drawer Sections |

Some units also available in Matte Black KADGME-prefix and Titanium Gray i.e., KADGN843AFGY for KERN843.



**KADPPERN602A**

Protects offset area that angles in on 4" and deeper drawers from scratches.

## Drawer Protectors/EPIQ Roll Cabs

| Brushed Stock No. | Polished Stock No. | Matte Black Stock No. | Applications |
|---|---|---|---|
| KADPSERN602A | KADPPERN602A | KADPMERN602A | KERN602B Roll Cabs |
| KADPSERN682A | KADPPERN682A | KADPMERN682A | KERN682B Roll Cabs |
| KADPSERP763A | KADPPERN843A | KADPMERN843A | KERP763B Roll Cabs |
| KADPSERN843A | KADPPERP763A | KADPMERP763A | KERN843B Roll Cabs |
| KADPSERP843A | KADPPERP843A | KADPMERP843A | KERP843B Roll Cabs |
| KADPSETN682A | KADPPETN682A | KADPMETN682A | KETN682B Roll Cabs |
| KADPSE12 | KADPPE12 | KADPME12 | 12" EPIQ Series Roll Cab Drawers |
| KADPSE20 | KADPPE20 | KADPME20 | 20" EPIQ Series Roll Cab Drawers |
| KADPSE30 | KADPPE30 | KADPME30 | 30" EPIQ Series Roll Cab Drawers |
| KADPSE38 | KADPPE38 | KADPME38 | 38" EPIQ Series Roll Cab Drawers |
| KADPSE54 | KADPPE54 | KADPME54 | 54" EPIQ Series Roll Cab Drawers |
| KADPSE62 | KADPPE62 | KADPME62 | 62" EPIQ Series Roll Cab Drawers |

# ACCESSORIES: DRAWER GUARDS/KRL SERIES

## Stainless-Steel Drawer Guards/KRL Roll Cabs

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADG1022 | KADGP1022 | KRL1022 |
| KADG1023 | KADGP1023 | KRL1023 |
| KADG1056 | KADGP1056 | KRL1056, KRL1056B |
| KADG7022 | KADGP7022 | KRL7022, KRLP7022, KRL722 |
| KADG7023 | KADGP7023 | KRL7023 |
| KADG756 | KADGP756 | KRL756, KRL756B |

Gloss Black and Matte Black steel drawer guard sets available for some units.

## Stainless-Steel Drawer Guards/KRL Top Chests and End Cabs

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADG1011A | KADGP1011A | KRL1011A |
| KADG1201 | KADGP1201 | KRL1201, KRL1201A, KRL1202 |
| KADG1203 | KADGP1203 | KRL1203, KRL1203A, KRL1203B |
| KADG1221 | KADG1221 | KRL1221 |
| KADG1232 | KADG1232 | KRL1232 |
| KADG1251 | KADGP1251 | KRL1251 |
| KADG7011A | KADGP7011A | KRL1221, KRL711, KRL711A, KRL7011A |
| KADG731 | KADG731 | KRL731, KRL751 |
| KADG791 | KADGP791 | KRL791, KRL791A |



KADGSHORT



KADG4107

## KRA and KRL Drawer Guards/Individual Replacements

| Brushed Stock No. | Polished Stock No. | Applications | Length, inches |
|---|---|---|---|
| KADGNARROW | KADGPNARROW | KRL/Classic Narrow Drawer Guard | 16 |
| KADGWIDE | KADGPWIDE | KRL/Classic Wide Drawer Guard | 32 |
| KADGXWIDE | KADGPXWIDE | KRL/Classic Extra wide Drawer Guard | 50 1/2 |
| KADGSWIDE | KADGPSWIDE | KRL/Heritage Super wide Drawer Guard | 69 3/16 |
| KADGSHORT | KADGPSHORT | Heritage Short Drawer Guard | 12 1/16 |
| KADGMEDIUM | KADGPMEDIUM | Heritage Medium Drawer Guard | 22 |
| KADGLONG | KADGPLONG | Heritage Long Drawer Guard | 35 9/16 |

Use “KADGB” for Gloss Black; “KADGM” for Matte Black.

## Drawer Guards/KRA Roll Cabs

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADG5311 | KADGP5311 | KRA5311 Series Roll Cabs |
| KADG4008 | KADGP4008 | KRA4008 Series Roll Cabs |
| KADG4107 | KADGP4107 | KRA2306/KRA4107 Series Roll Cabs |
| KADG4813 | KADGP4813 | KRA4813 Series Roll Cabs |
| KADG4007 | KADGP4007 | KRA2007/KRA4007 Series Roll Cabs |
| KADG2432 | KADGP2432 | KRA2432 Series Roll Cabs |
| KADG2418 | KADGP2418 | KRA2418 Series Roll Cabs |
| KADG2411 | KADGP2411 | KRA2411 Series Roll Cabs |
| KADG2422 | KADGP2422 | KRA2422 Series Roll Cabs |
| KADG2496 | KADGP2496 | KRA2496 Series Roll Cabs |

## KRA Top Chests and End Cabs

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADG5315 | KADGP5315 | KRA5315 Series Top Chests |
| KADG5208 | KADGP5208 | KRA5208 Series Top Chests |
| KADG4114 | KADGP4114 | KRA4114 Series Top Chests |
| KADG4014 | KADGP4014 | KRA4014 Series Top Chests |
| KADG4810 | KADGP4810 | KRA4810 Series Top Chests |
| KADG4820 | KADGP4820 | KRA4820 Series End Cabs |



WARNING

• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: BODY GUARDS

Made of brushed stainless-steel. Designed to protect the toolbox from solvents and floor cleaning solutions. Custom-fit pieces are adhesively applied. Adds a fresh look to newer tool storage units. Can also be used to complete the restoration of older tool storage units. Bottom guards only. Does not include top guards.



## Masters Body Guard Sets

| Stock No. | Applications |
|---|---|
| KABG1022 | KRL1022, KRL7022, KRL1001B & KRL7002 |
| KABG1023A | KRL1023, KRL1163, KRL7023, KRL7003 |
| KABG1024 | KRL1024 |
| KABG1032A | KRL1032 |
| KABG1032B | KRL1032B, KRL1032C |
| KABG1033 | KRL1033 |
| KABG722 | KR722 and KRL761B |
| KABG1065 | KRL1065, KRL7065 |

## EPIQ Body Guard Sets

| Stock No. | Applications |
|---|---|
| KABGSERN602A | KERN602 Series Roll Cabs Brushed |
| KABGSERN682A | KERN682 Series Brushed |
| KABGSERN842A | KERN842 Series Brushed |
| KABGSERN843A | KERN843 Series Brushed |
| KABGSERP762A | KERP762 Series Brushed |
| KABGSERP763A | KERP763 Series Brushed |
| KABGSERP842A | KERP842 Series Brushed |
| KABGSERP843A | KERP843 Series Brushed |
| KABGPERN602A | KERN602 Series Polished |
| KABGPERN682A | KERN682 Series Polished |
| KABGPERN842A | KERN842 Series Polished |
| KABGPERN843A | KERN843 Series Polished |
| KABGPERP762A | KERP762 Series Polished |
| KABGPERP763A | KERP763 Series Polished |
| KABGPERP842A | KERP842 Series Polished |
| KABGPERP843A | KERP843 Series Polished |

Bottom guards only. Does not include top guards.

# CUSTOMIZATION







KADF32X6

## Classic and Masters Stainless-Steel Drawer Fronts

- Brushed and polished stainless-steel drawer fronts for Classic and Masters series roll cabs and top chests
- Fronts for 50" drawers and 32" x 6" drawers feature a precision cut Snap-on® logo in panel that allows the paint color to show through the logo
- Fronts for 16" x 10" deep drawers feature a precision-cut *Snap-on* logo "S" in panel that allows the paint color to show through the logo
- Fronts for 32" x 4" and 16" x 4" drawers do note any logo
- All drawer fronts are applied with double sided 3M® 300LSE tape with flanges and bending tabs to hold them in place

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADF50X4 | KADFP50X4 | 50" drawers on all Classic Series Roll Cabs |
| KADF32X6 | KADFP32X6 | 32" x 6" drawers on all Masters and Classic Series Roll Cabs |
| KADF32X4 | KADFP32X4 | 32" x 4" drawers on all Masters and Classic Series Roll Cabs and Top Chests |
| KADF16X4 | KADFP16X4 | 16" x 4" drawers on all Classic Series Roll Cabs and Top Chests |
| KADF16X10 | KADFP16X10 | 16" x 10" deep drawers on all Masters and Classic Series Roll Cabs |

## Masters Series Stainless-Steel Drawer Front Sets

| Stock No. | Description |
|---|---|
| KADFKRLSTDA | Brushed Drawer Front Kit, 3pc |
| KADFPKRLSTDA | Polished Drawer Front Kit, 3pc |
| KADFP50X5 | All Masters Top Drawer: KRA2422 Top Drawer |



KADFMBS

## Drawer Front, "S", Magnetic

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADFMBS | KADFMPS | Magnetic *Snap-on* "S" logo 10" x 6" fits narrow bottom drawers on all KRA & KRL Roll Cabs |

## Stainless-Steel Drawer Fronts, Heritage Series

- Drawer front guards are available in brushed stainless-steel and polished stainless-steel (polished units contain "P" in part number)
- Each drawer and corner guard is applied with double sided 3M® 300LSE tape and with flanges and/or bending tabs to hold them in place

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KADF35X8 | KADFP35X8 | Fits all KRA4107, KRA5311, KRSC46 |
| KADF35X4 | KADFP35X4 | Fits all KRA4107, Top Chest KRA4114 & KRSC46 |
| KADF22X8 | KADFP22X8 | Fits all KRA2007, KRA4008, KRA4813 & KRA5319 |
| KADF12X11 | KADFP12X11 | Fits 12" deep, narrow drawers on all Heritage |




KADFP35X4

## Carbon Fiber Drawer Fronts (Masters, Classic & Heritage)

| Stock No. | Description |
|---|---|
| KADFC16X10 | 16" x 10" Classic & Masters Drawer Front |
| KADFC16X4 | 16" x 4" Classic & Masters Drawer Front |
| KADFC32X6 | 32" x 6" Classic & Masters Drawer Front |
| KADFC35X8 | 35" x 8" Heritage Drawer Front |
| KADFC50X4 | 50" x 4" Classic & Masters Drawer Front |
| KADFC50X5 | 50" x 5" Classic & Masters Drawer Front |




KADF35X8




KADFC32X6

## Gloss Black Steel Drawer Fronts

- Gloss black drawer fronts are made from powder-coated steel
- Provide a nice contrast to tool storage colors like Flat Black, White, Midnight Blue, Purple and Red
- Laser cut Snap-on® logo reveals paint color

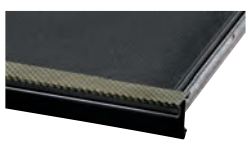
| Stock No. | Dimensions, inches | Applications |
|---|---|---|
| KADFB12X11 | 12 x 11 | Heritage Series – Deep, Narrow Drawers |
| KADFB16X10 | 16 x 10 | Heritage Series – Deep, Narrow Drawers |
| KADFB22X8 | 22 x 8 | Heritage Series – Medium Width Drawers |
| KADFB32X6 | 32 x 6 | Masters/Classic Series – Wide Drawers |
| KADFB35X4 | 35 x 4 | Heritage Series and KRSC Series Roll Carts – Deep Drawers |
| KADFB35X8 | 35 x 8 | Heritage Series and KRSC Series Roll Carts – Deep Drawers |
| KADFB50X4 | 50 x 4 | Classic Series – Extra Wide Drawers |
| KADFB50X5 | 50 x 5 | Masters Series – Extra Wide Drawers |
| KADFB8X11 | 8 x 11 | KRA2318/KRA5318 Series – Bottom Drawer |

## Carbon Fiber Drawer Guards

| | Stock No. | Description |
|---|---|---|
| Sets | KACF2411 | Carbon Fiber Drawer Guard Set KRA2411 |
| | KACF2418 | Carbon Fiber Drawer Guard Set KRA2418 |
| | KACF5311 | Carbon Fiber Drawer Guard Set KRA5311 |
| | KACF1022 | 13pc Drawer Guard Set for KRL1022 Series Roll Cabs |
| | KACF1023 | 22pc Drawer Guard Set for KRL1023 Series Roll Cabs |
| | KACF2423 | 17pc Drawer Guard Set for KRA2423 Series Roll Cabs |
| | KACF722 | 11pc Drawer Guard Set for KRL722 Series Roll Cabs |
| | KACF4107 | 7pc Drawer Guard Set for KRA4107 Series Roll Cabs |
| | KACF4114 | 4pc Drawer Guard Set for KRA4114 Series Roll Cabs |
| | KACF46 | 6pc Carbon Fiber Set for 35" Drawer, KRA Heritage KRSC46/KRSC43 |
| | KACF2410 | KRA2410 Top Chest |
| | KACF2422 | Carbon Fiber Drawer Guard Set KRA2422 |
| Individual Replacements | KACFHWIDE | 35" Heritage Drawer 1pc |
| | KACFHXWIDE | 49" Heritage Drawer 1pc |
| | KACFHMED | 22" Heritage Drawer 1pc |
| | KACFHNRW | 11" Heritage Drawer 1pc |
| | KACFCMED | Classic/Masters |
| | KACFCXWIDE | Classic/Masters |
| | KACFCNRW | Classic/Masters |

## KEVLAR®/Carbon Fiber Drawer Guards

| | Stock No. | Description |
|---|---|---|
| Sets | KACF2411YL | KRA2411 Series Roll Cabs |
| | KACF1022YL | KRL1022 Series Roll Cabs |
| | KACF1023YL | KRL1023 Series Roll Cabs |
| | KACF722YL | KRL722 Series Roll Cabs |
| | KACF2422YL | KRA2422 Series Roll Cabs |
| Individual Replacements | KACFCMEDYL | 32" Classic/Masters Drawers, 1pc |
| | KACFCNRWYL | 16" Classic/Masters Drawers, 1pc |
| | KACFCXWIDEYL | 50" Classic/Masters Drawers, 1pc |
| | KACFHMEDYL | 22" Heritage Drawer 1pc |
| | KACFHNRWYL | 11" Heritage Drawer 1pc |
| | KACFHWIDEYL | 35" Heritage Drawer 1pc |
| | KACFHXWIDEYL | Top Drawer Only KRA5311 Roll Cabs, 1pc |



KACF2422YL

**⚠WARNING**



- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: CUSTOMIZATION



KACGP24RC

## Stainless-Steel Corner Guards, Classic Series

- Fits all Classic series roll cabs and top chests
- Available in brushed and polished stainless-steel plus Gloss Black and Matte Black coated steel
- Designed to cover the Classic series front edges vertically (top to bottom)
- Custom wrench "S" stamped into top and bottom
- Applied with double sided 3M® 300LSE tape and has a flange on top and bending tabs on the bottom to securely hold them in place

| Brushed Stock No. | Polished Stock No. | Matte Black Stock No. | Applications |
|---|---|---|---|
| KACG24RC | KACGP24RC | KACGM24RC | Classic Series Roll Cabs |
| KACG2410TC | KACGP2410TC | KACGM2410TC | Classic Series Top Chests with Lid |

Use "KACGB" prefix for Gloss Black corner guards.



KACNG2

## Soft Corner Guards, Classic/Heritage Series

**KACNG2 Flexible Corner Guard Set, Classic/Heritage Series**

- Fits all Classic and Heritage roll cabinets
- Die-cut black pebbled buna nitrile
- Over-molded spring steel tabs inserted for mounting corner guard to toolbox
- Custom molded material – installs in seconds
- Brand molded into corners
- Overall height 32 1/2", thickness .19"



KACGHRC

## Stainless-Steel Corner Guards, Heritage Series

- Corner guards are available in brushed and polished stainless-steel
- Corner guards are designed to cover top to bottom vertically
- Custom wrench S machined into top and bottom
- Each corner guard is applied with double-sided *3M* 300LSE tape and has a flange on top and bending tabs on the bottom to hold them in place

| Brushed Stock No. | Polished Stock No. | Applications |
|---|---|---|
| KACGHRC | – | Fits all Heritage Roll Cabs with rounded corners (2 sides included) |
| KACG53RC | KACGP53RC | Fits all Heritage Roll Cabs with square corners |
| KACGHTC | – | Fits all Heritage Top Chests with rounded corners (2 sides included) |
| KACG53TC | KACGP53TC | Fits Heritage Top Chests with lid and square corners |

Rounded corners shown. Also comes in new version with square corners KACG53RC and KACGP53RC.

## Powder-Coated Steel Corner Guards

- Corner guards are made from powder-coated steel
- Provide a nice contrast to tool storage colors
- Laser cut Snap-on® "S" reveals paint color

| Stock No. | Applications |
|---|---|
| KACGB24RC | Gloss Black: KRA2407, KRA2411, KRA2422, KRA2418 plus all other Classic Series Roll Cabs |
| KACGB53RC | Gloss Black: KRA5308F Series Square Corner Heritage Roll Cabs |
| KACGB53TC | Gloss Black: KRA5308F Only |
| KACGB2410TC | Gloss Black: KRA2405, KRA2410 & KRA2415 Only |
| KACG24RC(xxx) | KRA2407, KRA2411, KRA2422, KRA2418 plus all other Classic Series Roll Cabs |
| KACG24TC(xxx) | KRA2410 & KRA2415 Top Chests |

Add color suffix: PBO=Red, PCM=Royal Blue, PDG=Midnight Blue, PJJ=Extreme Green, PJK=Electric Orange, POT=Flat Black w/ Black Trim, PU=White

## Guard Sets

- Protective accessories coated in actual Snap-on® powder-coat paint colors
- Made from laser-cut steel
- Bottom guard is made from stainless-steel for corrosion protection
- Provides scratch protection
- Available in ten powder-coated colors: Red (PBO), Royal Blue (PCM), Candy Apple Red (PJH), Extreme Green (PJJ), Electric Orange (PJK), Hot Pink (PNK), Gloss Black (PC), Titanium (FGY), Purple (PPL) and Flat Blue (FBU)
- Orange tint is slightly different than the actual *Snap-on* orange color

### KA2423BSET KRA2423 Series Roll Cab 21pc Guard Set

Includes one 50" drawer front, one corner guard set, one drawer guard set and one stainless-steel bottom guard (roll cab not included)

| Stock No. | Color |
|---|---|
| KA2423SETPBO | Red |
| KA2423SETPCM | Royal Blue |
| KA2423SETPJH | Candy Apple Red |
| KA2423SETPJJ | Extreme Green |
| KA2423SETPJK | Electric Orange |
| KA2423SETPNK | Hot Pink |
| KA2423BSET | Gloss Black |
| KA2423SETFGY | Titanium Gray |
| KA2423SETPPL | Purple |
| KA2423SETFBU | Flat Blue |



KA2411SETPCM



KA2411SETPJH

### KA2422BSET KRA2422 Series Roll Cab 14 Piece Guard Set

Includes one 50" drawer front, one corner guard set, one drawer guard set and one stainless-steel bottom guard (roll cab not included)

| Stock No. | Color |
|---|---|
| KA2422SETPBO | Red |
| KA2422SETPCM | Royal Blue |
| KA2422SETPJH | Candy Apple Red |
| KA2422SETPJJ | Extreme Green |
| KA2422SETPJK | Electric Orange |
| KA2422SETPNK | Hot Pink |
| KA2422BSET | Gloss Black |
| KA2422SETFGY | Titanium Gray |
| KA2422SETPPL | Purple |
| KA2422SETFBU | Flat Blue |



KA2411SETPJJ



KA2411SETPJK

### KA2411BSET KRA2411 Series Roll Cab 15pc Guard Set

Includes one 50" drawer front, one corner guard set, one drawer guard set and one stainless-steel bottom guard (roll cab not included)

| Stock No. | Color |
|---|---|
| KA2411SETPBO | Red |
| KA2411SETPCM | Royal Blue |
| KA2411SETPJH | Candy Apple Red |
| KA2411SETPJJ | Extreme Green |
| KA2411SETPJK | Electric Orange |
| KA2411SETPNK | Hot Pink |
| KA2411BSET | Gloss Black |



KA2411SETPNK



**⚠WARNING**

- Do not open multiple drawers
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: CUSTOMIZATION



## Wrench Wheel Cover Sets

| Stock No. | Description |
|---|---|
| KAWCR-6 | Red, 6pc |
| KAWCB-6 | Black, 6pc |
| KAWC-6 | Chrome, 6pc |



KA2422HDLBU



KA2422HDLGN

## Roll Cab Handle Bars

- Fits all Classic, Heritage and KRSC carts
- Hot new colors to match or contrast roll cabs or carts
- Heavy duty aluminum construction
- Powder-coated paint
- Knurled grip

| Stock No. | Description |
|---|---|
| KA2422HDLB | Black with Silver Etching |
| KA2422HDLBU | Royal Blue with Silver Etching |
| KA2422HDLGN | Extreme Green with Silver Etching |
| KA2422HDLOR | Electric Orange with Silver Etching |
| KA2422HDLP | Polished Chrome with Etching |
| KA2422HDLPK | Pink with Silver Etching |
| KA2422HDLRD | Candy Apple Red with Silver Etching |

# TOOL STORAGE LIGHTING



KEWLED4

## LED Light Bars

- Automatic on/off: durable and strong contacts provide positive engagement
- Magnetic installation of the light bar and the power switch provides easy installation and maneuverability
- Create a lighting experience that outshines anything in the shop
- Top quality materials and construction
- Low energy use
- Best heat dissipation
- High-output LED system uses application specific LED technology with a three-year unlimited warranty

| Stock No. | Useful Light Output (lumen) | LED Input Power (W) | System Input Power (W) | System Efficacy (lumen/W) | Length, feet |
|---|---|---|---|---|---|
| KEWLED2 | 540 | 6.6 | 8.0 | 67 | 2 |
| KEWLED4 | 1,733 | 21.7 | 25.5 | 68 | 4 |
| KEWLED5 | 2,080 | 26.0 | 30.6 | 68 | 5 |
| KEWLED3P4 | 1,733 | 21.7 | 25.5 | 68 | 4 |
| KEWLED4P5 | 2,080 | 26.0 | 30.6 | 68 | 5 |

*LEDs are in individual ports for premium light dispersion.
**LEDs are grouped with fewer ports for a more economical solution.
KEWLED Series Bars fit: EPIQ Series: KEWN WorkCenters, KEHN Overheads, KELN Lockers (24" model), Masters Series: KRL1072 and KRL1054 WorkCenters, Classic Series: KRA2472 and KRA2454 WorkCenters



KALEDBLUE

## LED Light Kits

- 13" LED strips are lightweight and can be attached to any surface using two-way soft tape
- LED strips can be connected in a straight line
- Connecting the LED strips with the included short connector cord allows the 13" LED strips to be placed around corners or at different levels from each other
- Each kit has a white six-way terminal to allow up to five additional LED add-on kits
- Kit includes three 13" LED strips, two short connector cords, one six-way terminal and two-way soft tape
- Add-on kits contain ten 13" LED strips, one short connector cord, one 6' cord and two-way soft tape

| Stock No. | Color | Stock No. | Color |
|---|---|---|---|
| KALEDWHITE | White | KALEDWHITE-1 | White Add-on Kit |
| KALEDBLUE | Blue | KALEDBLUE-1 | Blue Add-on Kit |
| KALEDGREEN | Green | KALEDGREEN-1 | Green Add-on Kit |
| KALEDRED | Red | KALEDRED-1 | Red Add-on Kit |

## LED WorkCenter Desk Lights

**KEWLEDFLEXL Flexible WorkCenter Desk Light**
- 18" shaft, magnetic base, rechargeable 2,600 mAL Li-ion battery
- 110V AC charger
- Great for carts

**KEWLED24 WorkCenter Light**
- Flexible shaft can be bent up to 160° to provide lighting where needed
- Magnetic flexible posts make it easy to install on any flat steel surface above or on the back wall
- 144 LEDs located throughout entire length of light for maximum brightness
- Diffuser included for uniform light



KEWLEDFLEXL



KEWLED24

## LED Light Box

**KALED24 Stainless-Steel LED Lighted Panel**
- 28" x 7" polished stainless-steel case with laser-cut Snap-on® logo and a mirror-like finish
- Internal LED system contains two 27" strips lined with high quality LEDs
- Use on inside top chest and roll cart lids plus back riser walls
- Polished stainless-steel case with laser-cut *Snap-on* logo
- Two cool white extra bright internal LED strips pre-assembled in case
- White diffuser
- Wall outlet/switch adaptor included
- Compatible with US and Canadian electrical requirements
- Bright LED lighting with low power use
- Includes LED Flexible Light Strip (2" x 27") and 110–240V AC Power Adaptor with Switch




## LED *Snap-on* Logo Display Panels
- Can be mounted to steel surface via included rare earth magnets
- Use AC or DC power comes with 110V AC plug and battery pack
- Acrylic panel is dipped and coated for abrasion resistance

| Stock No. | Size, inches | Description |
|---|---|---|
| KALED28X7R | 28 x 7 | Red Light |
| KALED28X7B | 28 x 7 | Blue Light |
| KALED28X7G | 28 x 7 | Green Light |
| KALED28X7O | 28 x 7 | Orange Light |
| KALED28X7P | 28 x 7 | Pink Light |
| KALED28X7W | 28 x 7 | White Light |
| KALED8X11B | 11 x 8 | Blue Light |
| KALED8X11G | 11 x 8 | Green Light |
| KALED8X11O | 11 x 8 | Orange Light |
| KALED8X11P | 11 x 8 | Pink Light |
| KALED8X11R | 11 x 8 | Red Light |
| KALED8X11W | 11 x 8 | White Light |
| KALED12X15MC | 12 x 15 | Multi-color |




KALED28X7R



KALED8X11R



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: DECALS

## Logo and Racing Decals

(Background is not a part of decal.)
Logo and racing decals show customers that you use the best while supporting Snap-on® Racing™ programs.




SS3266A



SS2201A

| Stock No. | Description | Size, inches | Logo Color |
|---|---|---|---|
| SS2751A | *Snap-on* Logo Decal | 43 x 8 | White |
| SS2752A | *Snap-on* Logo Decal | 43 x 8 | Black |
| SS2753A | *Snap-on* Logo Decal | 43 x 8 | Silver |
| SS2809A | *Snap-on* Logo Decal | 43 x 8 | Red |
| SS3266A | *Snap-on* Logo Decal | 23 x 4 | White |
| SS2231A | *Snap-on* Logo Decal | 23 x 4 | Silver |
| SS2232A | *Snap-on* Logo Decal | 23 x 4 | Black |
| SS2808A | *Snap-on* Logo Decal | 23 x 4 | Red |
| SS2201A | *Snap-on* "S" Decal | 13 x 8 1/2 | White |
| SS2240A | *Snap-on* "S" Decal | 13 x 8 1/2 | Black |
| SS2241A | *Snap-on* "S" Decal | 13 x 8 1/2 | Silver |
| SS2810A | *Snap-on* "S" Decal | 13 x 8 1/2 | Red |
| SS2935A | *Snap-on* "S" Decal | 23 x 15 | White |
| SS2937A | *Snap-on* "S" Decal | 23 x 15 | Black |
| SS2936A | *Snap-on* "S" Decal | 23 x 15 | Silver |
| SS2938A | *Snap-on* "S" Decal | 23 x 15 | Red |

# HAND TOOL ORGANIZATION



A264A



63A5000



A269A



A271A

## Socket Rails and Clips

| Stock No. | Rail Length, inches | Clip Size |
|---|---|---|
| A265A | 7 3/8 | 1/4" Drive |
| A267A | 13 3/8 | 3/8" Drive |
| A269A | 10 3/8 | 3/8" Drive |
| A270A | 16 3/4 | 1/2" Drive |
| A271A | — | 1/4" Drive (package of 25) |
| A272A | — | 3/8" Drive (package of 25) |
| A273A | — | 1/2" Drive (package of 25) |
| A274C | — | 3/4" Drive (package of 25) |

**A264A Socket Rail Hold Down Clip**
- Mounts to drawer, tote tray or wall board
- Snaps open to release socket rail
- Package of ten

**63A5000 Hardware Clips Package**
- Assorted socket rail clips in bag
- Fits Slots-N-Dots™ system (included with WorkStation risers)

**A278 Mounting Clips**
- 5/16"–3/4"
- Screws into 1/8" holes
- Package of ten

**A279 Mounting Clips**
- 5/8"–3/4"
- Screws into 1/8" holes
- Package of ten



LSR1406



LSR3812A



YA438B

## Socket Rails (with Quick Release Locking Clips)

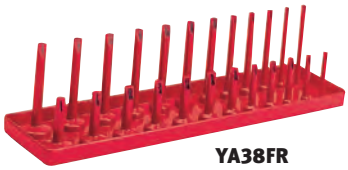
- Push button, spring-loaded clips provide for quick, easy release of socket, even with greasy hands
- Extruded aluminum socket rail for light weight and durability
- Detent ball at bottom of clip permits clip to be easily positioned on rail
- Rail also features laser-engraved *Snap-on* logo

| Stock No. | Square Drive, inches | Clips | Rail Color | Overall Length, inches |
|---|---|---|---|---|
| LSR1406 | 1/4 | 6 | Black | 7 3/8 (187.3) |
| LSR1412 | 1/4 | 12 | Black | 10 (254) |
| LSR3812A | 3/8 | 12 | Black | 12 (304.8) |
| LSR1213 | 1/2 | 13 | Black | 14 (355.6) |

## Movable Peg Socket Rails

- 18" rails feature adjustable pegs to organize sockets
- Pegs can be stacked for extra storage
- Adhesive backed rail

**YA425B Socket Rail**
1/4" square drive (20 pegs)
**YA438B Socket Rail**
3/8" square drive (18 pegs)
**YA450B Socket Rail**
1/2" square drive (14 pegs)
**PEN7410 Replacement Square Pegs, 1/4"**
**PEN7411 Replacement Square Pegs, 3/8"**
**PEN7412 Replacement Square Pegs, 1/2"**



YA38FR

## Socket Holders with Posts

- All sockets are easily visible
- Each post is marked for correct socket size
- Sockets are easily removed with one hand
- Use for hand, power and impact sockets
- High-impact plastic resists oil and grease
- Socket must have a through hole (Some smaller Snap-on® sockets manufactured before 1983 do not have through holes)

| Stock No. | Color | Square Drive, inches | Stores Socket Sizes (deep and shallow) | Overall Dimensions, inches |
|---|---|---|---|---|
| YA12FR | Red | 1/2 | 3/8"–1 1/4" in 1/16" increments | 18 x 4 x 3 3/4 |
| YA12MET | Gray | 1/2 | 10 mm–27 mm in 1 mm increments | 20 1/2 x 3 1/2 x 3 3/4 |
| YA14FR | Red | 1/4 | 1/8"–5/8" in 1/16" increments | 9 x 2 1/8 x 2 1/2 |
| YA14MET | Gray | 1/4 | 4 mm–15 mm in 1 mm increments | 9 x 2 1/8 x 2 1/2 |
| YA38FR | Red | 3/8 | 1/4"–1" in 1/16" increments | 11 3/4 x 3 x 3 |
| YA38MET | Gray | 3/8 | 6 mm–20 mm in 1 mm increments | 13 1/8 x 3 x 3 |



BPMVSR12A



BPMVSR14A



BPMVSR38A

## Magnetic Vertical Socket Rails

- View socket sizes quickly and easily with these new magnetic vertical socket rails
- Magnet backing (with protective foam covering) allows sockets to be attached to any metal surface
- Allows sockets to be placed on rack so size is visible
- Posts replaceable if lost or broken
- Can be laid down flat in drawer if necessary

**BPMVSR14A Magnetic Vertical Socket Rail**
1/4" drive

**BPMVSR38A Magnetic Vertical Socket Rail**
3/8" drive

**BPMVSR12A Magnetic Vertical Socket Rail**
1/2" drive



A263B



KTA500



BPSKTRLSTRY



YAURSET

## Multi-Row Socket Trays

- Steel panel units have socket rails attached and a carrying handle

**A263B Socket Holder**
- Fits in top, below pallet
- For square drive tools to 4" deep
- Holds four 10 3/8" rows and two 3 1/2" rows of sockets
- Five-row organizer measures 10 1/8" x 8 1/4" (US Patent #5,284,245)

**A288B Socket Holder**
- Ten-row organizer measures 14 1/2" x 17 3/16"
- Two handles (US Patent No. #5,284,245)

**KTA500 Multi-Row Socket Tray**
- Holds up to 80 sockets in 1/4", 3/8" and 1/2" drive sizes
- Features one rail with (16) 1/4" drive clips, two rails with (16) 3/8" drive clips each and two rails with (16) 1/2" drive clips each
- Aligns sockets for fast, easy selection
- Use on roll carts and will fit into most roll cab/tool chest drawers
- Overall length of 20"
- 17 1/2" L x 7 9/16" W x 2 1/2" D
- Made of heavy gauge steel

**BPSKTRLSTRY Multi-Row Socket Tray (Blue-Point®)**
- Holds up to 80 sockets in 1/4", 3/8" and 1/2" drive sizes
- Four rails with (20) 1/4" drive clips, (30) 3/8" drive clips and (30) 1/2" drive clips
- Low-profile design to fit most drawer sizes
- Sturdy handle for either hanging or carrying the tray

**YAURSET Socket Organizer**
- Accommodates up to 60 tools in 1/4", 3/8" and 1/2" drive sizes
- Complete economical socket system organizes sockets in thel box drawer or on peg board; individual rails lift out for easy portability
- Includes ratchet extension storage

**YA38UR 3/8" Drive Socket Organizer**
- Holds up to 15 sockets
- Economical socket organizer rail fully adjusts to fit a wide variety of socket configurations

**YAURCMH Horizontal Cart Mount Kit**
- Holds up to 30 sockets
- Easily attaches to the side of mobile tool carts

**YAURCMV Vertical Cart Mount Kit**
- Holds up to 15 sockets or wrenches
- Easily attaches to the side of mobile tool carts



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: HAND TOOL ORGANIZATION



BPTRYLAS



BPSSTRYLAS

## Lock-A-Socket Trays (Blue-Point®)

**BPTRYLAS Lock-A-Socket Tray**
- Holds a variety of drive sizes on one tray
- Tray measures 8 3/4" x 20"
- Sockets are locked by turning to the right 90°, unlocked by turning to the left 90°
- Eight clips are included for ratchets and other attachments
  - Rubber pegs are located underneath for surface grip and protection
- Swivel handles included for easy carrying
- Manufactured from 16 gauge powder-coated steel for extra strength
- Lock-A-Socket posts are available separately and are interchangeable for customization

**BPSSTRYLAS Lock-A-Socket Tray**
BPTRYLAS, manufactured from 16 gauge stainless-steel for extra strength

**MTSLAS50LP25 Lock-A-Socket Posts**
1/2" drive posts for BPTRYLAS. Pack of 25.

**MTSLAS38LP25 Lock-A-Socket Posts**
3/8" drive posts for BPTRYLAS. Pack of 25.

**MTSLAS25LP25 Lock-A-Socket Posts**
1/4" drive posts for BPTRYLAS. Pack of 25.



YA38HTD

## Socket Driver Tray

**YA38HTD Socket Driver Tray**
- Organizes the most commonly used 3/8" drive hex and TORX® socket drivers
- Use only with chrome hand socket drivers
- Sizes are clearly indicated on the holder
- Stores fractional hex drivers in 1/8" – 3/8" range (1/8", 9/6", 5/3", 3/1", 7/3", 1/4", 5/16" and 3/8"), metric hex drivers in 4–10 mm range (4 mm, 5 mm, 6 mm, 7 mm, 8 mm, 9mm and 10 mm) and *TORX* drivers from T27–T60 sizes (T27, T30, T40, T45, T47, T50, T55 and T60)
- Three open pockets for additional sockets
- Overall dimensions of 9 1/4" x 3 5/16" x 1/16"
- Made of durable, lightweight ABS plastic




KMAGBIT37R

## Magnetic Hex Bit Holders/Rubber Base *(Blue-Point)*

- Magnetic base affixes to any ferrous metal without scratching surface
- Bits will stay in holder, even in upside down applications
- Non-transferable magnetic material will not magnetize tools or damage onboard automotive computers or other related circuitry
- Resists most shop chemicals
- Rubber base won't mar finishes
- Holds up to 37 bits
- Bits not included

**KMAGBIT37O Magnetic Hex Bit Holder** Orange
**KMAGBIT37R Magnetic Hex Bit Holder** Red
**KMAGBIT37B Magnetic Hex Bit Holder** Black



KMAG38S12O




KMAG38D12R



KMAG38SD24B

## Magnetic Socket Holders *(Blue-Point)*

- Magnetic base affixes to any ferrous metal without scratching surface
- Sockets will stay in holder, even in upside down applications
- Non-transferable magnetic material will not magnetize tools or damage onboard automotive computers or other related circuitry
- Resists most shop chemicals
- Rubber base won't mar finishes

| Stock No. | Color | Storage | Socket Size Ranges |
|---|---|---|---|
| KMAG14SD26B | Black | Holds 13 standard and 13 deep 1/4" drive sockets | 1/4"–9/16", 4 mm–14 mm |
| KMAG14SD26O | Orange | Holds 13 standard and 13 deep 1/4" drive sockets | 1/4"–9/16", 4 mm–14 mm |
| KMAG14SD26R | Red | Holds 13 standard and 13 deep 1/4" drive sockets | 1/4"–9/16", 4 mm–14 mm |
| KMAG38S12B | Black | Holds 12 shallow 3/8" drive sockets | Up to 1" |
| KMAG38S12O | Orange | Holds 12 shallow 3/8" drive sockets | Up to 1" |
| KMAG38S12R | Red | Holds 12 shallow 3/8" drive sockets | Up to 1" |
| KMAG38D12B | Black | Holds 12 deep 3/8" drive sockets | Up to 1" |
| KMAG38D12O | Orange | Holds 12 deep 3/8" drive sockets | Up to 1" |
| KMAG38D12R | Red | Holds 12 deep 3/8" drive sockets | Up to 1" |
| KMAG38SD24B | Black | Holds 12 shallow and 12 deep 3/8" drive sockets | Up to 1" |
| KMAG38SD24O | Orange | Holds 12 shallow and 12 deep 3/8" drive sockets | Up to 1" |
| KMAG38SD24R | Red | Holds 12 shallow and 12 deep 3/8" drive sockets | Up to 1" |



MR1426



MR3828BL

## Magnetic Socket Trays

- Hold metric or fractional sockets in these molded ABS plastic trays
- Handle for easy movement to job sites

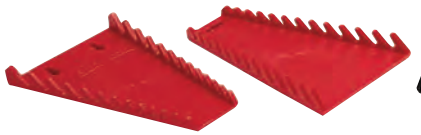
| Stock No. | Color | Storage | No. of Compartments |
|---|---|---|---|
| MR1426 | Red | Holds 13 standard and 13 deep 1/4" drive sockets | 26 |
| MR1426BL | Black | Holds 13 standard and 13 deep 1/4" drive sockets | 26 |
| MR3828 | Red | Holds 13 standard and 13 deep 3/8" drive sockets | 28 |
| MR3828BL | Black | Holds 13 standard and 13 deep 3/8" drive sockets | 28 |

**MR1426 Magnetic Socket Tray**
- For 1/4" drive sockets
- 26 compartments
- Storage for 13 standard, 13 deep sockets

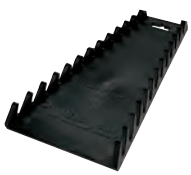
**MR3828 Magnetic Socket Tray**
- For 3/8" drive sockets
- 28 compartments
- Storage for 14 standard, 14 deep sockets

**MR1426BL Magnetic Socket Tray**
Black

**MR3828BL Magnetic Socket Tray**
Black



YA381A



YA389ABL

## Wrench Organizers (Blue-Point®)

- The wrench holding tabs on the YA389 series are the reverse of the YA381 series so two or more sets can be stored side by side with all wrenches facing forward
- 6 1/4" x 2 1/2" x 9 1/2" long

| Stock No. | Color | Storage |
|---|---|---|
| YA381A | Red | Holds up to 12 wrenches |
| YA381ABL | Black | Holds up to 12 wrenches |
| YA389A | Red | Holds up to 12 wrenches |
| YA389ABL | Black | Holds up to 12 wrenches |

**YA381A Wrench Organizer**
Red, holds up to 12 wrenches

**YA381ABL Wrench Organizer**
Black, holds up to 12 wrenches

**YA389A Wrench Organizer**
Red, holds up to 12 wrenches

**YA389ABL Wrench Organizer**
Black, holds up to 12 wrenches



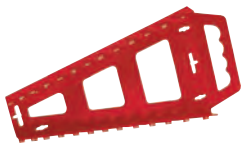
KRA15A

## Wrench Organizers

Includes a pair of 24" long plastic organizers. Cut to desired length and attach to any drawer with foam backing.

**KRA15A Wrench Organizer**
For smaller wrenches

**KRA22A Wrench Organizer**
For larger wrenches



YA381FRA

## Wrench Racks

- Specifically designed to hold up to 13 Snap-on® wrenches
- Wrench size is clearly visible on rack
- Fits 2" deep KRL drawers and most 2" deep KRA drawers
- Retaining tabs for convenient vertical mounting or carrying

**YA381FRA Wrench Rack**
Red, holds 1/4"–1" sizes

**YA381MET Wrench Rack**
Gray, holds 7 mm–19 mm sizes



MAGRAK10



WRM10



BPS14MWH



BPM14MWH

## Magnetic Wrench Organizers *(Blue-Point)*

**MAGRAK10 Magnetic Wrench Organizer**
- Ten angular slots provide storage for most wrenches
- A ridge at the base prevents wrenches from contacting tool storage surfaces
- Mount magnetically for instant wrench access
- Black

**MAGRAK10R Magnetic Wrench Organizer**
- Red

**WRM10 Adjustable Wrench Organizer**
- Holds ten wrenches
- Adjusts to hold a variety of wrench sizes
- Magnets secure individual wrenches to rack
- Individual magnets hold each wrench securely at its center, allowing easy one-hand removal
- Magnetic holders slide on aluminum rail to adjust wrench spacing
- Base magnets secure the wrench rack to tool storage unit or other ferrous metal surfaces
- Base is made of non-scratch, heavy duty anodized aluminum
- Red

**WRM10-B Adjustable Wrench Organizer**
- Holds ten wrenches
- Blue

**WRM15 Adjustable Wrench Organizer**
- Holds 15 wrenches
- Red

**BPS14MWH Magnetic Wrench Holder**
- Holds sizes 1/4"–1" wrenches
- Strong magnets secure wrenches in place during movement
- Entire unit is magnetized to hold rack to drawer
- Blue

**BPM14MWH Magnetic Wrench Holder**
- Same as BPS14MHW except it holds 8 mm–21 mm wrench sizes
- Black



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: HAND TOOL ORGANIZATION



YA384SSG7B



YA384SSG7R

## Soft Grip Stubby Wrench Racks (Blue-Point®)

- Easily stores and organizes wrenches
- Fits all 2" deep drawers in Snap-on® tool storage units
- Mounting holes align with the Slots-N-Dots™ system on *Snap-on* WorkCenter riser units
- Molded handle allows easy transport of loaded rack
- Red and black color schemes allow user to easily differentiate fractional from metric sizes
- Racks may be trimmed for use with smaller wrench sets
- Flexible plastic material will not corrode or mar wrench finish

**YA384SSG7B Stubby Wrench Rack**
Holds seven stubby wrenches. Black.
**YA384SSG10B Stubby Wrench Rack**
Holds ten stubby wrenches. Black.
**YA384SSG7R Stubby Wrench Rack**
Holds seven stubby wrenches. Red.
**YA384SSG10R Stubby Wrench Rack**
Holds ten stubby wrenches. Red.



A277

## Crowfoot Wrench Holder

**A277 3/8" Crowfoot Holder**
- Organize and store your crowfoot wrenches
- Two-piece design snaps apart for access to desired size
- 8 3/4" long



YA207

## Magnetic Nut Holder

**YA207 Nut Holder**
- Flexible stainless-steel body with pivoting magnetic head clips onto open-end and box end wrenches
- Holds nut on sizes 3/8"–3/4" (10 mm–19 mm)



YA381SG12



YA389SG12

## Soft Grip Wrench Racks

- Design holds wrench securely yet provides quick and easy release
- Easily stores and organizes wrenches
- Fits all 2" deep drawers in *Snap-on* tool storage units
- Mounting holes align with the *Slots-N-Dots* system on *Snap-on* WorkCenter riser units
- Molded handle allows easy transport of loaded rack
- Red and gray color schemes allow user to easily differentiate fractional from metric sizes
- Racks may be trimmed for use with smaller wrench sets
- Flexible plastic material will not corrode or mar wrench finish
- Available in standard and reverse styles for convenient side-by-side mounting in tool drawers (US Patent #5,638,964 applies)

**Standard configuration (Red):**
**YA381SG8 Soft Grip Wrench Organizer**
Holds up to eight wrenches
**YA381SG12 Soft Grip Wrench Organizer**
Holds up to 12 wrenches
**YA381SG15 Soft Grip Wrench Organizer**
Holds up to 15 wrenches
**Reverse configuration (Gray):**
**YA389SG8 Soft Grip Wrench Organizer**
Holds up to eight wrenches
**YA389SG12 Soft Grip Wrench Organizer**
Holds up to 12 wrenches
**YA389SG15 Soft Grip Wrench Organizer**
Holds up to 15 wrenches



TCK1827BBR

## Tool Control Kits

**TCK1827BBR Tool Control Kit** 18" x 27"
**TCK3627BBR Tool Control Kit** 36" x 27"
**TCK4020BBR Tool Control Kit** 40" x 20"



BLP3CANHLDR



BLP2CANHLDR



BLPPTHLDR

## Magnetic Can/Bottle Holder (Blue-Point®)

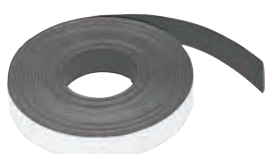
**BLP3CANHLDR Magnetic Can/ Screwdriver Holder**
- Ideal for use on side of toolbox or service cart
- Holds three spray cans and seven screwdrivers
- Spray can slot is 3" diameter
- Eight powerful cushioned magnets resist surface scratching
- Heavy gauge 0.80 mm black powder-coated steel construction
- Weight: 2.62 lb
- Dimensions: 5" W x 11.75" L x 5.12" H

**BLP2CANHLDR Magnetic Can/ Screwdriver Holder**
- Ideal for use on side of toolbox or service cart
- Holds two spray cans and five screwdrivers
- Spray can slot is 3" diameter
- Six powerful cushioned magnets resist surface scratching
- Heavy gauge 0.80 mm black powder-coated steel construction
- Weight: 1.92 lbs
- Dimensions: 5" W x 8.5" L x 5.12" H

**BLPPTHLDR Magnetic Roll Towel Holder**
- Ideal for use on side of toolbox or service cart
- Holds roll of shop towels (set of two holders)
- Powerful cushioned magnet resists surface scratching
- Heavy gauge 0.80 mm black powder-coated steel construction
- Weight: 1.38 lb Dimensions: 4" W x 5 1/8" L x 3 1/4" H (each piece)



KRSA30



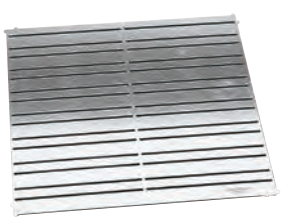
KRDDMAG130

## Magnetic Tool Silhouettes

**KRSA30 Magnetic Tool Silhouettes**
- (30) 1" x 1 1/2" magnetic tool silhouettes
- Apply anywhere on tool storage unit to visually aid in tool organization
- Magnetic; leaves no sticky adhesive

## Flexible Magnetic Strip

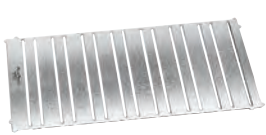
**KRDDMAG130 Flexible Magnetic Strip**
- Magnetic, adhesive-backed strip allows easy drawer divider attachment
- 1" wide, 30' long



KAMM1212



KAMM126



KAMM612



KAMM122

## Magnetic Panels

- Magnetic base attaches to riser, toolbox, cart, creeper or any ferrous surface in seconds
- Tools are easily positioned on the magnetic panel
- Ideal for holding fasteners during removal and assembly operations
- High-strength magnets
- Made from 16 gauge steel. 3/16" thick
- Will not magnetize tools

**KAMM1212 Magnetic Panel**
Measures 12" x 12"

**KAMM126 Magnetic Panel**
Measures 12" x 6"

**KAMM612 Magnetic Panel**
Measures 6" x 12"

**KAMM122 Magnetic Panel**
Measures 2" x 10 5/8"



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: MAGNETIC



BLPMPTSETA



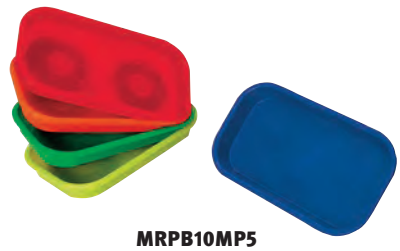
MRB5A



MRB10A



MRB12A



MRPB10MP5



MRB15A



BPMST135

## Magnetic Trays and Dishes (Blue-Point®)

**Magnetic Parts Trays**
- Tray attaches to a cart or box with full-length magnets that cover the entire backside of tray
- Holds nuts, bolts, sockets or a variety of other tools and hardware
- Tray won't scratch paint and attaches to any flat metal surface
- Corrosion-resistant finish

**BLPMPT6A Magnetic Parts Tray**
6" long

**BLPMPT8A Magnetic Parts Tray**
8" long

**BLPMPT10A Magnetic Parts Tray**
10" long

**BLPMPT12A Magnetic Parts Tray**
12" long

**BLPMPTSETA Set**
One each of BLPMPT6A, BLPMPT8A, BLPMPT10A and BLPMPT12A

**MRB5A Magnetic Bowl**
- Round stainless-steel dish features powerful mounting magnet
- Securely holds small parts and tools
- 5 3/8" ID

**MRB10A Magnetic Tray**
- Rectangular magnetic tray holds metal parts and small tools
- Magnetically attaches to any flat iron or steel surface
- Measures 9 1/2" x 5 1/2"

**MRB12A Magnetic Tray**
- Rectangular magnetic tray holds metal parts and small tools
- Magnetically attaches to any flat iron or steel surface
- Features three 3 1/8" diameter magnets that are rubber coated to prevent scratching
- Measures 6 5/16" x 14 7/32"

**MRPB10MP5 Magnetic Dish (5 pack)**
- Each tray measures 9 1/2" L x 5 1/2" W x 1 1/8" D
- Molded plastic design coupled with rubber base helps prevent damage to vehicle finish
- Fully magnetized to hold contents and adhere to ferrous surfaces
- Use upside down or on the side of the vehicle
- Each tray weighs 1.4 lb
- Package of five trays includes one tray each in the following high visibility colors: red, orange, green, yellow and blue

**MRB15A Magnetic Tool Tray**
- Keep tools or parts within easy reach with this magnetic tray
- Stainless-steel with four large rubber based magnets on the bottom to resist scratching
- 11 5/8" L x 10 3/4" W x 1/2" D

**BPMST135 Storage Tray**
- Create additional workspace for your toolbox or roll cart
- Strong magnetic panel inside tray holds a variety of metal objects like sockets, nuts, bolts, extensions and parts
- Hangs easily on the side of a drawer or toolbox tray
- Made of heavy duty powder-coated steel
- Measures 2" H x 2" D x 13 1/2" L



YA162



KAMR123

## Magnetic Bar Tool Holders

Magnet holds tools for easy access

**YA161 Magnetic Tool Bar Holder**
Black finish, 24" long

**YA162 Magnetic Bar Tool Holder**
Black finish, 13" long

**KAMR123 Magnetic Bar Tool Holder**
- Can magnetically mount to metal surface or can be screw-mounted
- Measures 11 3/4" L x 2 1/4" W x 7/8" D
- Housing is black finish with chrome finished magnet plate



YA209

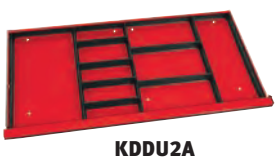


MAGWRENCH

**YA209 Magnetic Bar Tool Holder**
Chrome finish, 24" long

**MAGWRENCH Magnetic Bar Tool Holder (Blue-Point®)**
- Industrial strength magnets keep it secured to a metal surface
- Holds tools for quick and easy access
- Chrome-plated steel bar with chrome-plated nylon ends
- Overall size is 20" (with approximately 12" of magnetic holding space)

# DRAWER ORGANIZATION



KDDU2A



KDD2C-4A

## Plastic Drawer Dividers/2" Drawer Height

| Stock No. | Drawer Style | Inside Drawer Dimensions, inches | Box Depth, inches |
|---|---|---|---|
| KDD402A | Heritage | 1 19/32 H x 21 W x 17 D | 20 |
| KDD412A | KRA4107/ KRSC46 | 1 19/32 H x 34 1/2 W x 17 D | 20 |
| KDD702A | KRL722/56/ Classic | 1 19/32 H x 14 7/16 W x 21 1/2 D | 24 |
| KDD712A | KRL narrow | 1 19/32 H x 14 7/16 W x 26 1/2 D | 29 |
| KDD722A | KRL722/56/ Classic | 1 19/32 H x 30 3/16 W x 21 1/2 D | 24 |
| KDD732A | KRL medium | 1 19/32 H x 30 3/16 W x 26 1/2 D | 29 |

ALL SETS (except KDDU2A) – Each set is designed to fit specific KRA and KRL drawers. Set includes four pre-cut perimeter rails that fit along the inside wall of drawers, four corner clips to attach perimeter rails to each other and an assortment of pre-cut adjustable divider rails and divider clips that match the size of the specified drawer. KDDU2 SET ONLY – Universal set that fits any Snap-on® tool storage drawer. Rails can be cut to desired length.

**KDD52-6A Drawer Divider Rail**
5" long. Pack of six.

**KDD72-6A Drawer Divider Rail**
7" long. Pack of six.

**KDD122-6A Drawer Divider Rail**
12" long. Pack of six.

**KDD2-20A Drawer Divider Rail Clips**
Rail divider clips. Use to attach divider rails to perimeter rails or to other divider rails. Pack of 20.

**KDD2C-4A Perimeter Rail Corner Clips**
Perimeter rails and corner clips. Pack of four.

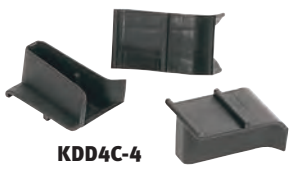
**KDD2L-2A Drawer Divider Rail**
35" long universal drawer divider rails. Can be cut to any length. Pack of two.

**KDDU2A Drawer Divider Set**
Fits one drawer deeper than 1 1/2". Includes: perimeter rail set (4pc w/corner clips), 26" divider rails (three each), 12" divider rails (three each), 7" divider rails (three each), 5" divider rails (three each) and divider clips (14 each).

**KDDP2A Perimeter Rail Set**
35" rails (four each) and corner clips (four each)



KDD54-6



KDD4C-4

## Plastic Drawer Dividers/4" Drawer Height

| Stock No. | Drawer Style | Inside Drawer Dimensions, inches | Box Depth, inches |
|---|---|---|---|
| KDD404 | KRA medium | 3 19/32 H x 21 W x 17 D | 20 |
| KDD414 | KRA wide | 3 19/32 H x 34 1/2 W x 17 D | 20 |
| KDD704 | KRL narrow | 3 19/32 H x 14 7/16 W x 21 1/2 D | 24 |
| KDD714 | KRL narrow | 3 19/32 H x 14 7/16 W x 26 1/2 D | 29 |
| KDD724 | KRL medium | 3 19/3 H x 30 3/16 W x 21 1/2 D | 24 |
| KDD734 | KRL medium | 3 19/32 H x 30 3/16 W x 26 1/2 D | 29 |

KDD404, KDD414, KDD704, KDD714, KDD724, KDD734 SETS ONLY – Each set includes four pre-cut perimeter rails that fit along the inside wall of drawers, four corner clips to attach perimeter rails to each other and an assortment of precut adjustable divider rails and divider clips that match the size of the specified drawer. KDDU4 SET ONLY – Same as other sets except rails are not pre-cut. All rails must be cut to desired length. Fits any *Snap-on* tool storage drawer.

**KDD54-6 Drawer Divider Rail**
5" long. Pack of six.

**KDD74-6 Drawer Divider Rail**
7" long. Pack of six.

**KDD124-6 Drawer Divider Rail**
12" long. Pack of six.

**KDD4C-4 Perimeter Rail Corner Clips**
Perimeter rails and corner clips. Pack of four.

**KDD4-20 Drawer Divider Rail Clips**
Rail divider clips. Use to attach divider rails to perimeter rails or to other divider rails. Pack of 20.

**KDD4L-2 Drawer Divider Rail**
35" long universal drawer divider rails. Can be cut to any length to fit any drawer storage need. Pack of two.

**KDDU4 Drawer Divider Set**
- Includes: perimeter rails that fit along the inside wall of drawers, four corner clips to attach perimeter rails to each other, and an assortment of adjustable divider rails and divider clips that fit any *Snap-on* tool storage drawer
- All rails must be cut to desired length

**KDDP4 Perimeter Rail Set**
35" rails (four each) and corner clips (four each)



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: DRAWER ORGANIZATION

Angled for easy adjustment and parts removal. Perimeter rails with adjustable slots fit around the inside wall of the drawer.

Width and length of spaces offer a wide range of adjustment with a variety of divider widths. Made from galvanized steel.



KADDS2404

## Drawer Dividers, Steel

- Designed to be used in all KRL Masters series (24" and 29" deep), Classic series (24" deep) and KRA6200 series road chests
- Simply place the side edges and front/back edges around the perimeter of the drawer and then locate middle dividers and divider tabs wherever they are needed (in 3", 5", 7", 10" and 15" width increments)
- Additional individual components for KRL1000 and KRL7000 series (29" deep) available at www.snapon.com/toolstorage

**KADDS3022 Steel Drawer Divider Set**
- Use on 20" wide, 2" high EPIQ drawers
- Set includes four perimeter rails, two front-to-back rails and six individual dividers

**KADDS3024 Steel Drawer Divider Set**
- Use on 20" wide, 4" high EPIQ drawers
- Set includes four perimeter rails, two front-to-back rails and six individual dividers

**KADDS3032 Steel Drawer Divider Set**
- Use on 30" wide, 2" high EPIQ drawers
- Set includes four perimeter rails, three front-to-back rails and eight individual dividers

**KADDS3034 Steel Drawer Divider Set**
- Use on 30" wide, 4" high EPIQ drawers
- Set includes four perimeter rails, two front to back rails and eight individual dividers

**KADDS3822 Steel Drawer Divider Set**
- Use on 38" wide, 2" high EPIQ drawers
- Set includes four perimeter rails, two front-to-back rails and six individual dividers

**KADDS3844 Steel Drawer Divider Set**
- Use on 38" wide, 4" high EPIQ drawers
- Set includes four perimeter rails, two front to back rails and six individual dividers

**KADDS2902 Steel Drawer Divider Set**
- Use on Masters or Classic series Wide, 2" high drawers (29" roll cab depth)
- Set includes four perimeter rails, three front-to-back rails and eight individual dividers

**KADDS2904 Steel Drawer Divider Set**

**KADDSN2902 Steel Drawer Divider Set**
- Use on Masters or Classic series Narrow, 2" high drawers (29" roll cab depth)
- Set includes four perimeter rails, two front-to-back rails and nine individual dividers

**KADDSN2904 Steel Drawer Divider Set**
- Use on Masters or Classic series narrow, 4" high drawers (29" roll cab depth)
- Set includes four perimeter rails, two front-to-back rails and nine individual dividers

**KADDS2404 Drawer Divider Kit, 4"**
Use on KRA2407, KRA2411, KRA2418, KRL722, KRL756 series

**KADDS2402 Drawer Divider Kit, 2"**
Use on KRA2407, KRA2411, KRA2418, KRL722, KRL756, KRA6200 and KRA6210 series

## Handle Mounting Kits and Holders

**KAMH2024A Handle Mounting Kit Classic/ Heritage/Carts**
- Kit includes mounting plate, vertical arm and horizontal swivel arm

**KAMH2930 Handle Mounting Kit KRL 29" and EPIQ**
- Kit includes mounting plate, vertical arm and horizontal swivel arm

**KAMHLAP Laptop Holder**
- Use with most laptop computers
- Requires handle mount kit

**KAMHTBLT Tablet Holder**
- Use on iPad® Version 2 thru Version 4 and some other tablets
- Requires handle mount kit

**KAMHMP Monitor Plate**
- Designed with standard mounting hole patterns for monitors up to 24"
- Requires handle mount kit

**KAMHBK Keyboard Holder**
- Holds standard sized keyboards
- Requires handle mount kit

**KAMHEXT Vertical Extension Rod**
- Increases height of standard mounting kit by 15" to 71" total

**KAMHWL Wire Holding Loops**
- Helps to manage and route wiring
- Included with some of the Handle Mount System accessories



KAMH2024A Handle Mount
KAMHTBLT Tablet Holder


YA3089A


KASR12APV


KAT12APV


KAS12PWRPV


KAMS18PV

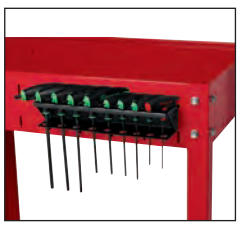

KAS12APV


KALS15


KAHCK33


KAHK63


KAHLK33


KATR12PV


KATVBRKT

## WorkCenter Accessories

- Use these quality accessories to enhance the organization and storage capabilities of the KRL7000 WorkStation series
- All accessories designed to work with the Slots-N-Dots™ mounting system

**Looped Tool Organizer.** Loops hold screwdrivers, extensions, ratchets, pliers and other small hand tools.

**YA3086A Looped Tool Organizer**
6" long

**YA3089A Looped Tool Organizer**
9" long

**YA3123A Looped Tool Organizer**
12" long

**YA3182A Looped Tool Organizer**
17 1/2" long

**KAT12APV Spray Can Rack (12")**
- Holds 3-4 spray cans
- 12" long

**KAT18APV Spray Can Rack (18")**
- Holds 5-6 spray cans
- 18" long

**KASR12APV Screwdriver Rack**
- Holds up to seven screwdrivers or other tools
- 12" long

**KASRS12PV Screwdriver Rack**
- Slotted in front for straight in/out
- Great for workstations

**KAS12PWRPV Power Tool Rack**
- Holds three units
- Fits all slotted walls found on carts and WorkStation

**KAMS18PV Shop Manual Stand**
- Shop manual stand with page holder
- 18" wide

**KAS12APV Flat Utility Shelf**

**KAPR24PVB Prybar Rack**
- Holds prybars up to 48"
- Mounts to all EPIQ, Masters, Classic and KRSC100 series
- Black textured finish

**KALS15 Laptop Stand (15")**
15" Laptop Stand. Mounts to *Slots-N-Dots* system.

**KAHCK33 Curved Hook (3")**

**KAHK63 Extended Hook (6")**

**KAHLK33 Loop (3")**

**KATR12PV T-Handle Rack (12")**
12" T-Handle rack. Mounts to *Slots-N-Dots* system.

**KATVBRKT Monitor Mounting Bracket**
- Simple and convenient way to display a flat panel television in Snap-on® WorkCenters
- The bracket fits monitor screens from 12"–36" sizes
- The mounting holes are Video Electronics Standards Association (VESA®) compatible and will fit most mounting hole patterns on the back of flat-panel monitors
- Hardware and mounting instructions mount most monitors included
- Attach wall mount to television first, making it very simple to install with one person
- It is recommended to have an assistant when installing to the *Slots-N-Dots* mounting system of *Snap-on* WorkCenters

**KEWLED24 WorkStation Light**
- Flexible shaft can be bent up to 160° to provide lighting where needed
- Magnetic flexible posts make it easy to install on any flat steel surface above or on the back wall
- 144 LEDs located throughout entire length of light for maximum brightness
- Diffuser included for uniform light


KEWLED24


KRA17B

## Plastic Drawer Dividers

**KRA17B Drawer Divider**
- Partition drawers by cutting divider to desired length
- Attach to drawer with foam backing
- 24" long

**KRA27B Drawer Divider**
- Same as KRA17B
- 31" long

## Plastic Parts Tray Drawer Inserts


SPP804-2

- Lightweight but tough reinforced polymer construction
- Each compartment has an area for labeling, if desired
- Use in tool drawers or cart to organize fasteners, clips, etc.
- Fits into a 2" narrow drawer, such as on KRL722, KRA2411 and KRA2418 models

**SPP804-1 Parts Tray**
- 14 compartments
- 1 5/16" H x 14 9/16" W x 21 7/16" D

**SPP804-2 Parts Tray**
- 35 compartments
- 1 5/16" H x 14 9/16" W x 21 7/16" D



WARNING
• Images may be shown without actual warning labels
• Read safety precautions on pages W1 to W4

# ACCESSORIES: SHELVES, TRAYS AND RACKS



KRA412FPBO

## Shelves, Hangers and Racks

**KRA412FPBO Folding Shelf**
- Fits all KRA4000 and KRA5000 series roll cabs and KRSC43/46-series carts (requires KRSC404APV adaptor plate)
- Bracket slips over raised lip of roll cab
- Full-length piano hinge
- Folds down when not in use
- 18 1/4" x 18" x 1/4" rim
- Red

**KRSC312FPBO Folding Shelf**
- Fits all KRSC33A carts
- Red

**KRSC312FPV Folding Shelf**
- Fits all KRSC33A carts
- Textured Black

## Rubber Mat

**JKRR412AR Rubber Mat**
Fits KRA412 series folding shelves



KRJC23AAPV

**KRJC23AAPV Creeper Hanger**
- Secures creepers to roll cabs
- Hanger hooks over lip of roll cab and screws down
- Adjustable to four different creeper widths
- Two hook bolts and a lock rod are included so creeper can be padlocked (not included) (US Patent #5,407,170)
- 16 13/16" length
- Black textured finish



EEDMRACKM

**EEDMRACKM Storage Rack**
- Convenient rack to hold circuit testers, DMM lead sets, amp clamps, temperature probes and other accessories for multimeters
- Can be mounted to wall with screws or placed on roll cab with magnetic block



KRA19

## Hang-on Parts Trays

**KRA19 Hang-on Parts Tray**
- Organize small parts or spray cans
- Hang on roll cabs or tool chest with 1/4" or more lip
- Also for use in drawers as storage trays
- Measures 15" x 3" x 2 1/4"

**KRA20 Hang-on Parts Tray**
Same as KRA19. Measures 25" x 3" x 2 1/4".

**KAPR17 Series Prybar Rack**
- Fits all KRSC43/KRSC46, Heritage and Classic
- Holds prybars up to 36"
- Holds 23 handled tools

**KAPR17PBO Prybar Rack, Red**
**KAPR17PC Prybar Rack, Gloss Black**
**KAPR17PCM Prybar Rack, Royal Blue**
**KAPR17PDG Prybar Rack, Midnight Blue**
**KAPR17PES Prybar Rack, Ultra Yellow**
**KAPR17PJH Prybar Rack, Candy Apple Red**
**KAPR17PJJ Prybar Rack, Extreme Green**
**KAPR17PJK Prybar Rack, Electric Orange**
**KAPR17POT Prybar Rack, Flat Black**



KAPR17PBO

**KR294AAPV Hang-On Prybar Rack**
- Hang up to four prybars or long tools with handles
- Notched angle plate keeps tools from shifting
- Suspend from roll cab or tool chest with 1/4" or more lip



KR294AAPV

**KAPR24PVB Prybar Rack**
- Holds prybars up to 48"
- Mounts to all EPIQ, Masters, Classic and KRSC100 series
- Black textured finish

**KR295 End Cab (Red)**
- End cabs offers 28 holes in various diameters for safe and secure storage of small prybars and other long tools
- Hole specifications; eight holes (5/8"), ten holes (3/4"), four holes (7/8"), four holes (1") and two holes (1 1/4")



KR295

**KR295PV Textured Black**

## Sliding Trays

Provide additional work or storage surface

**KA41X36 Sliding Tray**
Maximize drawer space. Fits common Heritage and KRSC series.

**KA41X36-6 Tray Divider Set**
Set includes six additional dividers for the KA41X36 sliding tray.



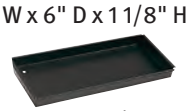
KA41X36 Tools shown not included

**KA31X36 Sliding Tray**
Maximize your 31" drawer space. Fits Masters and Classic series

**761XL36APV Sliding Tray**
Fits Masters and Classic. Measures 30.06" W x 6" D x 1.12" H

**1001XL36PV Sliding Tray**
Fits Masters and Classic. Measures 14 1/8" W x 6" D x 1 1/8" H

**1003X36PV Sliding Tray**
Fits KR761, KR1001 and KR1003 series. Measures 14 5/8" W x 6" D x 1 1/8" H



1003X36PV

**30AE3836PV Sliding Parts Tray**
- Same as 30AE2036PV
- 38" wide
- Use on KEXP725A, KERP843B and KERN682B EPIQ roll cabinets

**30AE2036PV Sliding Parts Tray**
- Optional parts tray for EPIQ roll cabinets
- Accommodates wide variety of tools for convenient access
- Utilize empty space at the top of the toolbox drawer
- 20" wide
- Use on KEXP725A, KEXN725A, KEXN603A, KERP763B, KERP843B, KERN842B, KERN843B, KERN602B, KERN682B EPIQ roll cabinets

**30AE3036PV Sliding Parts Tray**
- Same as 30AE2036PV
- 30" wide
- Use on KEXP725A, KEXN725A, KEXN603A, KERP763B, KERN843B and KERN602B EPIQ roll cabinets


KRBL4


8-27336A

## Locking Bars

Serve as a secondary locking system when ultimate protection is called for. Padlock must be purchased separately. Hardware included.

**KRBL2 Lock Bar**
32" long. For use on KRL722, KRA2411 and KRA2418.

**KRBL4 Lock Bar**
36 13/32". For use on KRL1022 and KRL1023.

**KRABL2 Lock Bar**
32" long. For use on all KRA Series Roll Cabs except KRA2400 series.

**8-26836A Lock Bar**
Hinged secondary lock bar fits side of low-profile KRL roll cabs such as KRL756 series (similar to 8-27336A).

**8-27336A Lock Bar**
Fits all Heritage and Blue-Point® hinged manual lock bars. Secondary lock system uses padlock for extra security (not included).

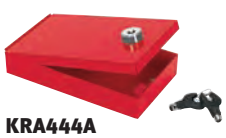
## Step Stool

**KASS13 Step Stool/Seat**
- Versatile step stool, seat and storage unit all in one
- Holds up to 305 lb and has non-skid rubber grommets for stability
- Large interior storage capacity with built-in tote tray
- Has a handle for mobility that folds flat when used as a stool
- 13" H x 22" W x 15" D


KASS13

## Accessory Box

**KRA444A Accessory Box**
- Lockable box mounts inside roll cab or tool chest for protection of valuables
- 8 1/4" x 4 3/4" x 1 1/4"
- Requires 2" minimum drawer depth


KRA444A

## Keychain *(Blue-Point)*

**GA155A Keychain**
- Spring retractable, 24" chain
- Clips onto belt or pocket


GA155A

## Floor Lock Kits

- For roll cabs that require better roll cab immobilization

**KRFL6A Adjustable Floor Lock Kit**
- For KRL Masters series
- 29" deep, 54" wide and larger


KRFL6A


ML1A


ML1504DA

## Padlocks

Master Lock® padlocks. Brass cylinders, nickel/silver pin tumblers and brass locking levers for maximum locking protection.

**ML1A Padlock**
1 3/4" steel case, 5/16" diameter

**ML3A Padlock**
1 1/2" steel case, 9/32" diameter

**ML7A Padlock**
1 1/4" steel case, 3/16" diameter

**ML1504DA Combination Padlock**
- Case hardened 9/32" steel shackle offers protection against cutting and sawing
- Secure three-digit combination
- Automatic locking lever


KACKFLTCLNR

## Cleaning Supplies

- Water-based solution is body shop-safe
- To be used on toolboxes, shop equipment and even tools. It is safe on plastic so it can be used for diagnostic hand-held product as well

**KACKCLEANER Cleaner/Degreaser, 16 oz**
- Safely remove grease, dirt, oil, fingerprints and more

**KACKFLTCLNR Matte & Flat Finish Cleaner/ Degreaser, 16 oz**
- Safely remove grease, dirt, oil, fingerprints and more
- Cleans without adding a shine to the flat/matte surface

**KACKSPDWAXX Speed Wax, 16 oz**
- Bring back the shine, and resist water spots, dust, fingerprints and grease

**KACKLQDPLSH Liquid Polish, 7.6 oz**
- Safely clean, polish and protect stainless-steel and anodized aluminum

**KACKMCFIBER1 Microfiber Cloth, 16" x 16"**
- Microfiber cloth is machine-washable, lint-free and can be used wet or dry

**KACKCAREKIT Premium Care Kit**
- Safely remove grease, dirt, oil, fingerprints and more with the cleaner/degreaser
- Bring back the shine and resist water spots, dust, fingerprints and grease with the Speed Wax
- Safely clean, polish and protect stainless-steel and anodized aluminum with the Liquid Polish
- Microfiber cloth is machine-washable, lint-free and can be used wet or dry
- Kit includes one 1.7 oz. bottle of spray cleaner, one 1.7 oz bottle of liquid polish, one 3.4 oz bottle of Speed Wax and one 16" x 16" microfiber cloth



WARNING
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: FLOOR AND KNEELING MATS




JKAFM36102DP

## Anti-Fatigue Diamond Plate Floor Mats

- Skid-resistant chrome diamond plate mat surface
- Flexible anti-fatigue material with extra padding
- Durable, easy to clean and damage resistant

| | Stock No. | Size, inches |
|---|---|---|
| Diamond Plate Anti-Fatigue Floor Mat | JKAFM3636DP | 36 x 36 |
| | JKAFM3648DP | 36 x 48 |
| | JKAFM3654DP | 36 x 54 |
| | JKAFM3660DP | 36 x 60 |
| | JKAFM3672DP | 36 x 72 |
| | JKAFM36102DP | 36 x 102 |
| | JKAFM36120DP | 36 x 120 |




JKAFM2436BK




JKAFM2448BR

## Cushioned Floor Mats

- Exceptional anti-fatigue properties
- Eases lower back stress and leg and foot discomforts from prolonged standing on hard surfaces
- Under padding hugs the smoothest floor surfaces to prevent mat slippage
- Skid-resistant diamond plate mat surface provides sure footing
- Mat resists most shop chemicals
- Graphics are inlaid PVC for greater wear resistance

| | Stock No. | Size, inches | | Stock No. | Size, inches |
|---|---|---|---|---|---|
| Black Mat with Red Snap-on® logo | JKAFM2436BK | 24 x 36 | Black Mat with Red Border/Red *Snap-on* logo | JKAFM2436BR | 24 x 36 |
| | JKAFM2448BK | 24 x 48 | | JKAFM2448BR | 24 x 48 |
| | JKAFM2460BK | 24 x 60 | | JKAFM2460BR | 24 x 60 |
| | JKAFM2472BK | 24 x 72 | | JKAFM2472BR | 24 x 72 |
| | JKAFM3636BK | 36 x 36 | | JKAFM3636BR | 36 x 36 |
| | JKAFM3648BK | 36 x 48 | | JKAFM3648BR | 36 x 48 |
| | JKAFM3660BK | 36 x 60 | | JKAFM3660BR | 36 x 60 |
| | JKAFM3672BK | 36 x 72 | | JKAFM3672BR | 36 x 72 |
| | JKAFM3676BK | 36 x 76 | | JKAFM3676BR | 36 x 76 |
| | JKAFM3684BK | 36 x 84 | | JKAFM3684BR | 36 x 84 |



JKAFM3654CAS



JKAFM3654EGS



JKAFM3654RBS

## Color “S” Logo Floor Mats

- The *Snap-on* “S” logo graphics on the floor mat are color-coded to match the color of the tool storage unit
- Anti-fatigue cushioned floor mat – 36" W x 54" L
- Floor mat eases lower back stress and leg and foot discomfort from prolonged standing on hard surfaces
- Floor mat resists most shop chemicals and provides a sure footing surface

| Stock No. | Size, inches | Description |
|---|---|---|
| JKAFM3654CAS | 36 x 54 | Black with Candy Apple Red “S” Logo |
| JKAFM3654EGS | 36 x 54 | Black with Extreme Green “S” Logo |
| JKAFM3654EOS | 36 x 54 | Black with Electric Orange “S” Logo |
| JKAFM3654RBS | 36 x 54 | Black with Royal Blue “S” Logo |
| JKAFM3654RDS | 36 x 54 | Black with Red “S” Logo |
| JKAFM3654PKS | 36 x 54 | Black with Pink “S” Logo |



MAT13PK

## Kneeling Mats

**MAT19PK Kneeling Mat**

- Kneeling mat is constructed from three layers of high density foam for comfort
- Black with *Snap-on* logo
- Handle for ease of carrying
- Only available in a package of five

**MAT13PK Kneeling Mat**

- Cushioned floor mat can help reduce fatigue, protect clothing and increase comfort
- Multi-layered closed foam construction is durable and tear-resistant
- Resistant to most shop chemicals
- Measures 8 1/2" x 13" x 1 1/8" thick
- Only available in a package of five

**MAT38PK Kneeling Mat**

- Cushioned creeper mat can be used on a creeper or on the floor
- Multi-layered foam construction is durable and tear-resistant
- Resistant to most shop chemicals
- Measures 15 3/4" x 38 1/2" x 1 1/8" thick
- Only available in a package of five

## Detent Kits

Detent kits for ball bearing slides. Kits include standard detents for normal use or firmer retrofit detents to help prevent unlocked drawers from inadvertently rolling open.

**8-88CWRK Detent Kit**
Two pairs of wide detents. Gray pair for increased stiffness. Off-white pair for standard stiffness.

**8-88HBRK Detent Kit**
A pair of heavy duty standard cabinet member bumper kits for use with latch (black).

**8-88HDRK Detent Kit**
A pair of heavy duty cabinet member detent kits for use without latch (gray).

**8-88HSRK Detent Kit**
A pair of heavy duty intermediate member sequencing detent kits for use with/without latch (black).

**8-88ANRK Detent Kit**
A pair of narrow, firm stiffness detent kits for drawers without latch (gray).

**8-88RRK Detent Kit**
A pair of firm stiffness detent kits for over under slide used on KR Series units (gray).



8-88HBRK 8-88RRK

**8-88ASNRK Detent Kit**
A pair of narrow, standard stiffness detent kits for drawers without latch (black).

**8-88SWRK Detent Kit**
A pair of wide, standard stiffness detent kits (black).

**8-88WRK Detent Kit**
A pair of wide, firm stiffness detent kits (gray).

## Ball Bearing Drawer Slides

**8-05088ALRS Drawer Slide Set**
Left/right slide kit with screws. For KRL700 series tool storage units.

**8-05188ALRS Ball Bearing Slide**
Set Left/right slide kit for Classic KRA2400 series

**8-05288ALRS Ball Bearing Slide Set**
Left/right slide kit with screws. For all narrow and wide drawers in KRA2000/KRA4000/KRA5000 series units and KRSC series carts.

**8-05388ALRS Drawer Slide Set**
Left/right slide kit with screws. For KRL1000/KRL7000 series tool storage units.



**8-05488AS Ball Bearing Slide Set**
Includes two slides and screws. For KRL712 series lockers and KRL7015 series end cabs.

**8-05588AS Ball Bearing Slide Set**
Includes two slides and screws. For KRL1012/KRL7012 lockers and KRL1015/KRL7015/KRLV7015 end cabs only.

## KRL Series Drawer Control (Special Order)

Available for new KRL series roll cabs and top chests. Drawer control permits only one drawer per bank to be opened at a time, reducing the chance of the unit tipping. Existing units cannot be retrofitted. Special order.

## Drawer Latches

**10-185B Lock'n Roll® Latch (Narrow Bank)**
Drawer latch for narrow bank drawers on KRL700/KRL1000/KRL7000 series tool storage units.

**10-285B *Lock'n Roll* Latch (Wide Bank)**
Drawer latch for wide bank drawers on KRL700/KRL1000/KRL7000 series tool storage units and KRA4000 series 40" wide drawers.

**10-385B *Lock'n Roll* Latch (Extra Wide Bank)**
Drawer latch for extra wide bank drawers on KRL700/KRL1000/KRL7000 series tool storage units.

**10-485B *Lock'n Roll* Latch (Narrow Bank)**
Drawer latch for narrow bank drawers on KRA4000 series tool storage units.

**10-885B *Lock'n Roll* Drawer Latch (Wide)**
Drawer latch for narrow bank drawers on KRA4000 series 26" wide and wide bank of 40" wide units.

**10-01085A *Lock'n Roll* Drawer Latch 67"**
Drawer latch for wide bank drawers on KRL1032B(C) and KRL1033(A) roll cabs.

**10-01185A *Lock-n-Roll* Drawer Latch**
Drawer latch for KRL1099.

## Touch-up Paint

| Color | 1/2 oz Bottle Stock No. | 12 oz Spray Can Stock No. | PPG Powder No. | PPG Ditzler Wet Spray No. |
|---|---|---|---|---|
| Red | PN2-83408 | REP12A | AR320 Resin | 73504 |
| Black (High Gloss) | PN2-84208 | PN12-84208 | PCU-90200 | 9895 (9300) |
| Black (Textured) | — | PN12-86908 | PCU-90106 | 9817 |
| Royal Blue | PN286308 | PN1286308 | PCU-50134 | 19026 |
| Cranberry | PN2-84508 | PN12-84508 | PCU-60139 | 51797 |
| Ultra Yellow | PN2-87808 | PN12-87808 | PCU-30115 | 84199 |
| Green Mica | PN286708 | PN1286708 | PCU-43100 | 47767 |
| Deep Purple | PN2-87408 | PN12-87408 | PCU-60122 | 52560 |
| Candy Apple Red | PN2-809508A | PN12-809508A | PCU-60137 | 902979 |
| Electric Orange | PN2-809908A | PN12-809908A | PCU-30132 | 90621 |
| Arctic Silver | PN2-810208A | PN12-810208A | PCU-73120 | 910517 |
| Extreme Green | PN2-809808A | PN12-809808A | PCU-40134 | 906120 |
| Tractor Green | PN2-85308 | PN12-85308 | PCU-40400 | 47403 |
| White | PN285208 | PN1285208 | PCU-80103 | 91207 |
| Midnight Blue | PN2-87308 | PN12-87308 | PCU-50117 | 191009 |
| Flat Black | PN2-811308A | PN12-811308A | PCUP-90105 | — |
| Clear | PN2-CLEAR | PN12-CLEAR | — | — |




REP12A

PN1286308

PN286308

**⚠WARNING**

- Wear mask when using aerosol spray
- Images may be shown without actual warning labels
- Read safety precautions on pages W1 to W4

# ACCESSORIES: TOOL STORAGE UNIT MAINTENANCE

## Casters

Replacement casters for Snap-on® Tool Storage Roll Cabs

| Stock No. | Description | Capacity, lb | Size, inches | Material | Application |
|---|---|---|---|---|---|
| 8-20739 | Heavy Duty Swivel Caster | 900 | 6 x 2 | GLA-NYL | KRL1056A, KRL722, KRL756A |
| 8-20839 | Heavy Duty Rigid Caster | 900 | 6 x 2 | GLA-NYL | KRL1056A, KRL722, KRL756A |
| 8-30939 | Extra Heavy Duty Rigid ISO-Ride® Caster | 1,700 | 6 x 2 | GLA-Polymer | KRL1022A, KRL1033, KRL1024A, KRL1023A, KRL1043A, KRL1053A, KRL1065A, KRL7022A, KRL7023A, KRL7065A |
| 8-30839 | Extra Heavy Duty Swivel *ISO-Ride* Caster | 1,700 | 6 x 2 | GLA-Polymer | KRL1022A, KRL1033, KRL1024A, KRL1023A, KRL1043A, KRL1053A, KRL1065A, KRL7022A, KRL7023A, KRL7065A |
| 8-26939A-SL | *ISO-Ride* Swivel Lock, Optional | — | — | — | KRL1022A, KRL1033, KRL1024A, KRL1023A, KRL1043A, KRL1053A, KRL1065A, KRL7022A, KRL7023A, KRL7065A |
| 8-27980A | Heavy Duty Rigid Caster | 900 | 6 x 2 | GLA-Polymer | KRL1056B, KRL722A, KRL756B |
| 8-28039A | Heavy Duty Swivel Caster | 900 | 6 x 2 | GLA-Polymer | KRL1056B, KRL722A, KRL756B |
| 8-28139B | Medium Duty Swivel Caster | 600 | 6 x 2 | Monoprene (Soft) | KRA2407, KRA2411, KRA2418, KRA2432, KRA4107D, KRA4813D, KRA5213D, KRA5319D, KRSC40A, KRSC41 |
| 8-28239A | Medium Duty Rigid Caster | 600 | 6 x 2 | Monoprene (Soft) | KRA2407, KRA2411, KRA2418, KRA2432, KRA4107D, KRA4813D, KRA5213D, KRA5319D, KRSC40A, KRSC41 |
| 8-26139A | Medium Duty Swivel Caster | 330 | 5 x 2 | Cast Iron w/ Rubber | KRA2106A, KRA2107A, KRA2212, KRA2306, KRA2312, KRA4008E, KRSC31, KRSC40, KRA2005, KRA2007 (Replace all 4) |
| 8-26439A | Medium Duty Rigid Caster | 330 | 5 x 2 | Cast Iron w/ Rubber | KRA2106A, KRA2107A, KRA2212, KRA2306, KRA2312, KRA4008E, KRSC31, KRSC40, KRA2005, KRA2007 (Replace all 4) |
| 8-30539A | Swivel *ISO-Ride* Caster | 2,000 | 7 x 2 | GLA/NYL | KERP763B, KERP843B, KERP762B, KERP842B, KERN842B, KERN843B, KERN602B, KERN682B |
| 8-30639A | Rigid *ISO-Ride* Caster | 2,000 | 7 x 2 | GLA/NYL | KERP763B, KERP843B, KERP762B, KERP842B, KERN842B, KERN843B, KERN602B, KERN682B |
| 8-21839B | Swivel Caster | 500 | 6 x 2 | Aluminum w/ Rubber | KRSC10. KRL756B, Classic, Heritage |
| 8-21939A | Rigid Caster | 500 | 6 x 2 | Aluminum w/ Rubber | KRL756B, Classic, Heritage |
| 8-30439AR | Heavy Duty Swivel Caster | 900 | 8 x 2 | Steel w/ Polymer | KRSC100, KRSC40, KRSC41, KRSC46 |
| 8-31039A | Aluminum Hub Swivel Caster | 500 | 6 x 2 | Aluminum w/ Rubber | KRSC10, Classic, Heritage |
| 8-31139A | Rigid Soft Wheel | 600 | 6 x 2 | Monoprene (Soft) | KRSC carts, Classic, Heritage |
| 8-31239A | Swivel Soft Wheel | 600 | 6 x 2 | Monoprene (Soft) | KRSC carts, Classic, Heritage |
| 8-24239A | Swivel Soft Wheel with Lock | 330 | 5 x 1.25 | Monoprene (Soft) | KRA2005, KRA2007 |
| 8-24339A | Rigid Soft Wheel | 330 | 5 x 1.25 | Monoprene (Soft) | KRA2005, KRA2007 |



KACAP6BK



KACAP6BU



KACAP6RD

## Custom Caster Bolt Covers

- Fits all *Snap-on* casters current models and most past models
- Caps fit all current *Snap-on* roll cabs
- Also fits the bolt on the caster horn found on all EPIQ and Masters series roll cabs
- Also fits Classic 6" x 2" caster bolt
- Machined aluminum with custom *Snap-on* wrench "S" marking
- Six-piece sets (two for each swivel caster one for each rigid)
- Includes set screw for positive attachment (includes Allen Wrench for install)

**KACAP6BK Powder-Coated Black Caster Bolt Covers (6 pcs)** Powder-coated black aluminum.

**KACAP6BU Anodized Blue Caster Bolt Covers (6 pcs)** Blue anodized aluminum.

**KACAP6RD Anodized Red Caster Bolt Covers (6 pcs)** Red anodized aluminum.

## Heavy Duty Brass Replacement Locks

- Can be used to replace all *Snap-on* round key (K-series) locks
- Replace standard locks subject to abnormal usage, exposure to shop fluids or extreme temperature and humidity fluctuations
- Ideal for multi-shift/user situations
- Hard brass cylinder plug for a longer life cycle
- Highly finished brass cylinder plug for smoother operation
- More secure retention in the tool storage unit
- Tested to operate smoothly over 25,000 cycles
- 200 different cylinder plugs available as replacement items

**K1HLA Heavy Duty Brass Lock** One lock assembly with two keys.

**K2HLA Heavy Duty Brass Lock** Two keyed alike lock assemblies with two keys.



K2HLA

**K3HLA Heavy Duty Brass Lock** Three keyed alike lock assemblies with two keys.

**K4HLA Heavy Duty Brass Lock** Four keyed alike lock assemblies with two keys.

**K5HLA Heavy Duty Brass Lock** Five keyed alike lock assemblies with two keys.

**K6HLA Heavy Duty Brass Lock** Six keyed alike lock assemblies with two keys.

**K7HLA Heavy Duty Brass Lock** Seven keyed alike lock assemblies with two keys.

## Tubular Lock Assemblies

- High security tubular tool storage locks with rotating collars are harder to pick and are more resistant to vandalism
- Key alike any number of *Snap-on* tool storage units
- Older units can be converted to this new style lock
- Each lock has an individual combination
- Lock kits include mounting nut and lock washer

**K1LA Tubular Lock Assembly**
One lock assembly with two keys.



K1LA

**K2LA Tubular Lock Assembly**
Two keyed alike lock assemblies with two keys.

**K3LA Tubular Lock Assembly**
Three keyed alike lock assemblies with two keys.

**K4LA Tubular Lock Assembly**
Four keyed alike lock assemblies with two keys.

**K5LA Tubular Lock Assembly**
Five keyed alike lock assemblies with two keys.

**K6LA Tubular Lock Assembly**
Six keyed alike lock assemblies with two keys.

**K7LA Tubular Lock Assembly**
Seven keyed alike lock assemblies with two keys.

Overview.....100

1/4" Drive ..... 102
3/8" Drive ..... 137
1/2" Drive ..... 184
3/4" Drive..... 213
1" 1-1/2" 2-1/2" Drive ..... 222
Wrenches ..... 233
Torque..... 275
Screwdrivers..... 302
Pliers ..... 333
Punches, Chisels, Hammers ... 350
General Hand Tools ..... 357
Set Building ..... 430




# HAND TOOLS

# SNAP-ON® TOOLS: BECAUSE PROS OPERATE ON A WHOLE OTHER LEVEL.

When you are the best, you demand the best. That's why, for 95 years now and counting, professional techs reach for *Snap-on* tools. Our hand tools deliver the quality, innovation and performance they need to get the job done – and done right – the first time and every time.



## PRO POWER

No one's tougher on our tools than we are. Every Snap-on® hand tool not only meets industry standards – they go above and beyond.

**STRONG AND LONG LASTING —** Born of special steel with higher alloy content than most.

**PRECISE FIT —** Upheld to exacting tolerances during manufacture for a tight fit to fastener. We will not tolerate anything less.

**CORROSION RESISTANT —** Finished with Snap-on's signature nickel-chrome plating to prevent rust.

**"Day in and day out, our service technicians rely on *Snap-on* tools to turn repairs around quickly and easily the first time – making our customers happy and our business more productive."**

Michael Harris
Hayes, VA

Michael has:
3/8" drive bent flex-head
soft grip ratchet - FHBF80




## PRO INNOVATION

More productive. More versatile. More comfortable to use. Since 1920, Snap-on has continued to refine even the most basic of hand tools. That's innovation.

**FLANK DRIVE® WRENCHING SYSTEM —** Torque turned up a notch. Add up to 15-20% more torque, all while preventing the rounding of fasteners.

**VECTOREDGE™ CUTTERS AND TALON GRIP™ PLIERS —** For cleaner cuts, more pulling power and increased durability – with greater comfort and leverage.

**TECHANGLE® TORQUE WRENCH —** Designed with aircraft technology, it's the most accurate way to achieve torque and angle tightening sequences.

## PRO PERFORMANCE

Snap-on delivers performance when it matters. And when it comes to getting the job done quickly and accurately, no one outperforms us.

**STRENGTH —** Strength is our strong point: wrenches, ratchets and screwdrivers that provide durability and performance.

**ACCESSIBILITY—** In a tight spot? No problem. Snap-on gives you the ability to access and perform work in even the tightest of quarters.

**VERSATILITY—** If you need it, we have it. Our broad and deep hand tool lines ensure you always have the right tool for the job.

# THE RIGHT TOOLS FOR THE TIGHT SPOTS.

Your jobs do not leave much room for error. And sometimes, they do not leave much room, period. So, when you are working in tight spots, you want to be working with Snap-on® tools. Our 1/4" drive tools make quick work of any problem – in even the most confined of spaces. Granted, no job is too small. But every so often, spaces are. That's why there's Snap-on.

**SMALL SPACES, BIG PRODUCTION.**

Squeeze the most productivity from your tools with our 1/4" ratchets and sockets. In low-profile, these tools allow techs to get into tight spaces – places most sockets and wrenches just cannot get to.

**WOBBLE PLUS** — The wobble function provides 16° of additional accessibility. Wobble Plus is designed for max versatility and flexibility, and is usable in both wobble and standard functionality.





T72



GT72



THL72



TL72



TLL72



TF72



THLF72



TX72



THLX72

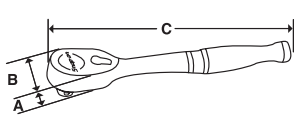
DUAL 80 TECHNOLOGY

## Dual 80® Technology Based Ratchets

Stop, Turn and Listen. A smoother, stronger ratchet. Try them to believe them.

***Dual 80* Technology Ratchets Feature:**

- 72-tooth gear
- Six teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth
- Sealed head keeps dirt and other contaminants out of the head mechanism



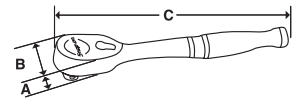

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **T72** | High Strength Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 7/16 | **RKRT72A** |
| **GT72** | High Strength Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 7/16 | **RKRT72A** |
| **THL72** | Soft Grip Long Handle | 72 | 5° | 7/16 | 15/16 | 6 7/8 | **RKRT72A** |
| **TL72** | Long Standard Handle | 72 | 5° | 7/16 | 15/16 | 6 1/2 | **RKRT72A** |
| **TLL72** | Extra Long Standard Handle | 72 | 5° | 7/16 | 15/16 | 9 | **RKRT72A** |
| **TF72*** | Standard Handle Flex Head | 72 | 5° | 7/16 | 15/16 | 6 1/4 | **RKRT72A** |
| **THLF72*** | Soft Grip Handle Flex Head | 72 | 5° | 7/16 | 15/16 | 8 1/4 | **RKRT72A** |
| **TX72**** | Standard Handle Locking Flex Head | 72 | 5° | 7/16 | 15/16 | 6 1/4 | **RKRT72A** |
| **THLX72** | Soft Grip Handle Locking Flex Head | 72 | 5° | 7/16 | 15/16 | 8 1/4 | **RKRT72A** |

ASME®/ANSI® B107.10
*Uses RKRT841JT Flex Joint Repair Kit.
**Uses RKRT841JT Flex Joint Repair Kit and RKRT841LM Locking Mechanism Repair Kit.
TH936-12 Soft Grip Replacement Handle.

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETS






TR72



THR72



THRLF72



TRF72



TRLL72

DUAL 80 TECHNOLOGY

## Dual 80® Technology Based Quick Release Ratchets

- Quick release button for rapid socket/accessory changes, even with greasy or oily hands
- Contoured handle for comfort and control
- Chrome finish for easy cleanup

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **TR72** | Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 7/16 | **RKRTR72A** |
| **THR72*** | Soft Grip Handle | 72 | 5° | 7/16 | 15/16 | 6 7/8 | **RKRTR72A** |
| **THRLF72*** | Soft Grip Handle Flex Head | 72 | 5° | 7/16 | 15/16 | 8 1/4 | **RKRTR72A** |
| **TRF72** | Standard Handle Flex Head | 72 | 5° | 7/16 | 15/16 | 6 1/4 | **RKRTR72A** |
| **TRLL72** | Long Standard Handle | 72 | 5° | 7/16 | 15/16 | 9 | **RKRTR72A** |

ASME®/ANSI® B107.10
*TH936-12 Soft Grip Replacement Handle.



TKN72



THNF72



TN72



TS72

## Round Head Ratchets

- Compact round head provides better access into tight quarters
- 72-tooth gear for 5˚ of swing arc means shorter movement between tooth engagement

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **TKN72** | Compact | 72 | 5° | 7/16 | 1 1/4 | 3 1/16 | **RKRTHNF72** |
| **THNF72*** | Soft Grip Swivel Head | 72 | 5° | 7/16 | 1 1/4 | 6 7/8 | **RKRTHNF72** |
| **TN72** | Standard Handle | 72 | 5° | 7/16 | 1 1/4 | 4 1/2 | **RKRTHNF72** |
| **TS72** | Finger Tip Ratchet | 72 | 5° | 7/16 | 1 1/2 | 1 1/2 | **RKRTHNF72** |

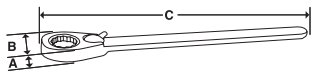
*ASME/ANSI* B107.10
*TH936-12 Soft Grip Replacement Handle.

## Dual 80® Technology Based Low-Profile Ratchet

- Square drive design works with low-profile sockets to access restricted clearance areas without loss of strength
- Thin handle cross section allows for increased accessibility in tight quarters
- *Dual 80* Technology requires less arc to engage the next gear tooth
- Six teeth in contact with gear to provide strength and durability



RAT72




| Stock No. | Drive Size | Description | Gear Teeth | Swing Arc | A | B | C |
|---|---|---|---|---|---|---|---|
| RAT72 | 11 mm Internal Hex | Low Profile | 72 | 5° | 3/8 | 15/16 | 4 7/8 |



T72FOD



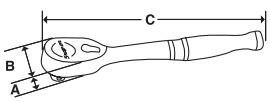
GT72FOD



TL72FOD



GTL72FOD




## *Dual 80* Technology FOD (Foreign Object Damage) Ratchets

- Designed to help prevent FOD in sensitive work environments
- Coverplate and reverse lever permanently affixed to ratchet head with rivets to prevent chance of small parts debris

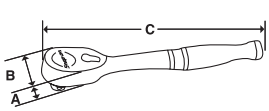
| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C |
|---|---|---|---|---|---|---|
| T72FOD | Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 11/16 |
| GT72FOD | Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 11/16 |
| TL72FOD | Long Standard Handle | 72 | 5° | 7/16 | 15/16 | 6 1/2 |
| GTL72FOD | Long Standard Handle | 72 | 5° | 7/16 | 15/16 | 6 1/2 |



TFY72



TY72




## Hi-Lok® Ratchets

- Features a hole through the head and square drive so the fastener may be held steady with a hex wrench as the fastener's collar is tightened
- Sealed head keeps dirt and other contaminants out of the head mechanism
- For use with standard or *Hi-Lok* sockets
- 5° ratcheting arc provides shorter movement between tooth engagement

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| TFY72 | *Hi-Lok* Flex Head | 72 | 5° | 7/16 | 15/16 | 6 1/4 | RKRTY72 |
| TY72 | *Hi-Lok* Standard | 72 | 5° | 7/16 | 15/16 | 4 5/8 | RKRTY72 |

ASME®/ANSI® B107.10

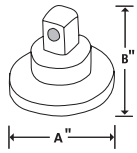
**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETS

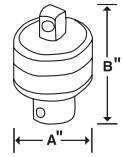


TMS70A






TM77




## Ratchet Spinner

| Stock No. | Description | A | B |
|---|---|---|---|
| TMS70A | Ratchet Spinner | 1 | 7/8 |

ASME®/ANSI® B107.10

## Ratchet Adaptor

| Stock No. | Description | Gear Teeth | Swing Arc | A | B |
|---|---|---|---|---|---|
| TM77 | Ratchet Adaptor | 20 | 18° | 15/16 | 1 5/8 |

*ASME/ANSI* B107.10

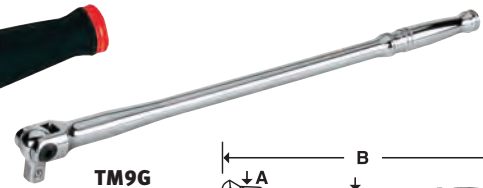
# BREAKER BARS



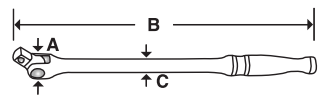
TM10G




THBB10



TM9G




## Breaker Bars

| Stock No. | Description | A | B | C | Repair Kit |
|---|---|---|---|---|---|
| TM10G* | Breaker Bar | 5/8 | 6 | 5/16 | RKBB1 |
| THBB10 | Soft Grip Handle | 5/8 | 6 1/2 | 5/16 | RKBB1 |
| TM9G | Long Handle | 5/8 | 9 | 5/16 | RKBB1 |

**ASME/ANSI* B107.10

# DRIVE HANDLES




SGT4BR



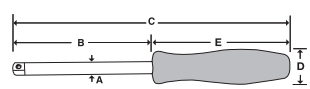

SGTL4BR

## Handled Drivers/Instinct® Handle

- Provides maximum turning power and increased comfort
- Six specially designed curves and flutes provide fingertip control and aid in spinning
- Nickel-chrome plating helps protect against corrosion and makes cleaning easy

| Stock No. | A | B | C |
|---|---|---|---|
| SGT4BR | 5/16 | 2 | 6 13/16 |
| SGTL4BR | 5/16 | 3 1/4 | 8 1/8 |

SGTL4BR features a locking pin for better socket retention.







TM4CSA

## Handled Drivers/Square Drive Handle

- Internal square drive in handle allows use with various handles

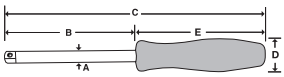
| Stock No. | A | B | C |
|---|---|---|---|
| TM4CSA | 5/16 | 2 3/8 | 6 |
| TM9CSA | 5/16 | 6 3/8 | 10 |



TM40ASA

## Handled Driver/Stubby

| Stock No. | C | E |
|---|---|---|
| TM40ASA | 2 1/8 | 1 3/4 |





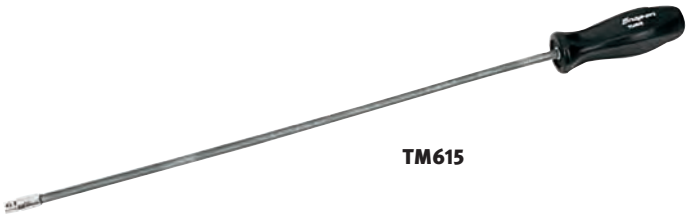

TMR4



TM62B



TMRT8



TM615

## Ratcheting Driver

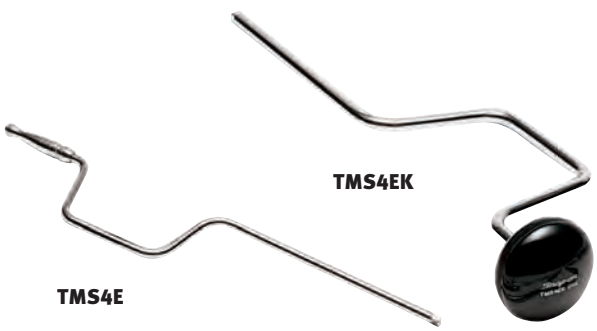
- Use with any 1/4" drive socket to create a ratcheting nut driver
- Three-position ratchet mechanism works in forward, reverse or lock out the ratcheting action completely

| Stock No. | Color | B | C | E |
|---|---|---|---|---|
| TMR4 | Black | 3 7/8 | 8 31/32 | 5 3/32 |
| TMR4O | Orange | 3 7/8 | 8 31/32 | 5 3/32 |
| TMR4G | Green | 3 7/8 | 8 31/32 | 5 3/32 |
| TMRT8 | Black | 8 | 10 | 2 |

## Flexible Drivers

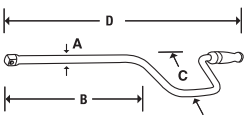
- For low-torque applications

| Stock No. | A | B | C |
|---|---|---|---|
| TM62B | 1/4 | 2 7/32 | 6 3/4 |
| TM63A | 1/4 | 4 21/32 | 9 3/16 |
| TM615 | 1/4 | 15 | 18 5/8 |



TMS4EK

TMS4E

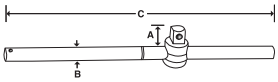



## Speeder

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| TMS4E | 5/16 | 7 1/8 | 3 | 16 |
| TMS4EK | 5/16 | 7 1/8 | 3 | 15 1/32 |



TM5




## Sliding T-handle

- Designed for heavier applications
- For use as a T-handle or offset wrench
- Spring and friction ball holds head in position

| Stock No. | A | B | C |
|---|---|---|---|
| TM5 | 13/16 | 5/16 | 4 1/2 |

ASME®/ANSI® B107.10

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# EXTENSIONS



106BTMX



GTMXK80




## Knurled

| Stock No. | Industrial Stock No. | A | B | 106BTMX† Set Contains: |
|---|---|---|---|---|
| TMX1* | – | 5/16 | 1 1/4 | • |
| TMXK2** | GTMX2* | 5/16 | 2 | • |
| TMXK3 | – | 5/16 | 3 | |
| TMXK4 | GTMX4* | 5/16 | 4 | • |
| TMXK60** | GTMX60* | 5/16 | 6 | • |
| TMXK80** | GTMXK80 | 5/16 | 8 | • |
| TMXK110 | GTMXK110 | 5/16 | 11 | • |
| TMXK140 | GTMX140* | 5/16 | 14 | |
| TMX240* | – | 3/8 | 24 | |
| TMX360 | – | 3/8 | 36 | |

*Not knurled
**ASME®/ANS®/ B107.10

Set shown includes storage tray
†,QGXVWULDO¿QLVK SURGXFWV QRW LQFOXGHG LQ WKH VHW



103TMXKLA




## Locking – Knurled

- Quick-release sleeve releases socket quickly and easily
- Knurling at the drive end provides for easy fingertip turning

| Stock No. | A | B | 103TMXKLA Set Contains: |
|---|---|---|---|
| TMXKL2 | 5/16 | 2 | |
| TMXKL60A | 5/16 | 6 | • |
| TMXKL110A | 5/16 | 11 | • |
| TMXKL240A | 3/8 | 24 | • |

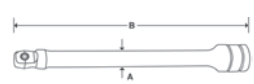
Set shown includes storage tray

**TMXKLP Locking Pins**
- Locking pins for TMXKLP Series Extensions

**TMXKLRK Repair Kit**
- Repair kit for TMXKLP Series Extensions
- Five-pack



106ATMXWP






106ATMXW

## Wobble Plus

- Provides 16° of additional accessibility
- Usable in both wobble and rigid functionality

| Stock No. | A | B | 106ATMXWP Set Contains: |
|---|---|---|---|
| TMXWP1* | 5/16 | 1 1/4 | • |
| TMXWP2 | 5/16 | 2 | • |
| TMXWP4 | 5/16 | 4 | • |
| TMXWP6 | 5/16 | 6 | • |
| TMXWP8 | 5/16 | 8 | • |
| TMXWP11 | 5/16 | 11 | • |

*Not knurled

Set shown includes storage tray

## Wobble

- Provides 16° of additional accessibility
- Knurled shanks for easy fingertip turning

| Stock No. | A | B | 106ATMXW Set Contains: |
|---|---|---|---|
| TMXW1* | 5/16 | 1 1/4 | • |
| TMXWK2 | 5/16 | 2 | • |
| TMXWK4 | 5/16 | 4 | • |
| TMXWK60 | 5/16 | 6 | • |
| TMXWK80 | 5/16 | 8 | • |
| TMXWK110 | 5/16 | 11 | • |

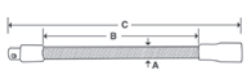
*Not knurled

Set shown includes storage tray



TM61A

## Flexible




| Stock No. | A | B | C |
|---|---|---|---|
| TM61A | 5/16 | 5 | 6 |

*ASME/ANSI* B107.10

## Connectors

**TZ1 Extension Connector**
- 1/4" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches
- Connect one or more tools for a variety of ways to reach limited access fasteners
- For use in marine, heavy truck, plumbing and manufacturing applications

**TZ2 Extension Connector Set**
- Set of two TZ1

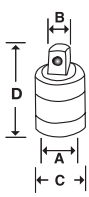


TZ1

# SOCKET/RATCHET ACCESSORIES



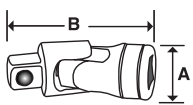
1206GS




## Square Drive Adaptors

| Stock No. | Industrial Stock No. | A | B | C | D |
|---|---|---|---|---|---|
| – | GFAT1E | 3/8 | 1/4 | 11/16 | 1 1/4 |
| TA3 | GTA3 | 1/4 | 3/8 | 1/2 | 15/16 |

**1206GS Combination Drive Adaptor Set**
- Includes 1/4" drive GFAT1E and TA3 adaptors, 3/8" drive A2A and GSAF1E adaptors and 1/2" drive GLA12B and GLAS1E adaptors (6pc) in storage tray






103UFTS

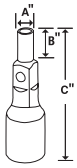
## Universal Joints

**TMU8B Universal Joint**
- Universal joints help increase access to hard-to-reach fastener applications
- Pins in the universal joint are laser-welded and will not "walk" out over time

**TMUL8 Locking Collar Universal Joint**
- Locking pin to ensure better socket retention

| Stock No. | A | B |
|---|---|---|
| TMU8B | 1/2 | 1 5/16 |
| TMUL8 | 1/2 | 2 1/4 |

**103UFTS Combination Drive Universal Joint Set**
- Includes 1/4" drive TMU8B, 3/8" drive FU8A and 1/2" drive S8
- Universal joints 3pc in storage tray





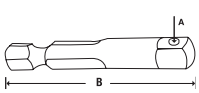

TMXM17

## Magnetic Adaptors

| Stock No. | A | B | C |
|---|---|---|---|
| TMXM17 | 7/32 | 13/32 | 1 21/32 |
| TMXM114 | 7/32 | 9/32 | 1 17/32 |



GMB3042




## Hex-To-Square Adaptors

- 1/4" hex size; 1" length of hex

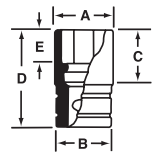
| Stock No. | A | B |
|---|---|---|
| GMB3041* | Friction Ball | 1 |
| GMB3042 | Friction Ball | 2 |
| GMB3046 | Friction Ball | 6 |

*Insert bit style, non-impact

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Wobble extensions have about half the torque strength of extensions with conventional squares
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SOCKETS






112TMMY



TMMD14



110TMY



TMD16



GTMD16

## Shallow, mm

Set Contains: 112TMMY / 111TMMDY

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 4 | TMM4* | – | 6.7 | 12.1 | 13.3 | 22.2 | 4.6 | | |
| 4.5 | TMM4.5* | – | 7.2 | 12.1 | 13.3 | 22.2 | 4.3 | | |
| 5 | TMM5* | TMMD5* | 7.7 | 12.1 | 13.3 | 22.2 | 4.3 | • | • |
| 5.5 | TMM5.5 | TMMD5.5 | 8.3 | 12.1 | 13.3 | 22.2 | 4.6 | • | • |
| 6 | TMM6 | TMMD6 | 9.3 | 12.1 | 13.3 | 22.2 | 5.6 | • | • |
| 7 | TMM7 | TMMD7 | 10.5 | 12.1 | 13.3 | 22.2 | 6.1 | • | • |
| 8 | TMM8 | TMMD8 | 11.5 | 12.1 | 13.3 | 22.2 | 6.9 | • | • |
| 9 | TMM9 | TMMD9 | 12.7 | 12.1 | 13.3 | 22.2 | 7.4 | • | • |
| 10 | TMM10 | TMMD10 | 13.2 | 13.2 | 13.3 | 22.2 | 7.4 | • | • |
| 11 | TMM11 | TMMD11 | 15.2 | 14.6 | 13.3 | 22.2 | 9.4 | • | • |
| 12 | TMM12 | TMMD12 | 16.5 | 15.6 | 13.3 | 22.2 | 9.4 | • | • |
| 13 | TMM13 | TMMD13 | 17.6 | 16.7 | 13.3 | 22.2 | 9.4 | • | • |
| 14 | TMM14 | TMMD14 | 18.8 | 17.8 | 14.1 | 22.2 | 9.7 | • | • |
| 15 | TMM15 | – | 20.4 | 19.4 | 14.1 | 23.0 | 9.1 | • | |
| 16 | TMM16 | – | 21.0 | 20.2 | 16.1 | 25.0 | 10.2 | | |

*Conventional hex ASME® B107.5m

Sets shown include magnetic storage tray

## Shallow, inches

Set Contains: 110TMY / 110TMDY

| | 6 | 12 | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/8 | TM04 | – | – | – | 7/32 | 7/16 | 1/2 | 7/8 | 1/8 | | |
| 5/32 | TM05* | – | – | – | 9/32 | 15/32 | 1/2 | 7/8 | 5/32 | | |
| 3/16 | TM6* | TMD6* | GTM6 | GTMD6 | 9/32 | 15/32 | 1/2 | 7/8 | 5/32 | • | • |
| 7/32 | TM7* | TMD7* | GTM7 | GTMD7 | 11/32 | 15/32 | 1/2 | 7/8 | 3/16 | • | • |
| 1/4 | TM8 | TMD8 | GTM8 | GTMD8 | 3/8 | 15/32 | 1/2 | 7/8 | 7/32 | • | • |
| 9/32 | TM9 | TMD9 | GTM9 | GTMD9 | 13/32 | 15/32 | 1/2 | 7/8 | 1/4 | • | • |
| 5/16 | TM10 | TMD10 | GTM10 | GTMD10 | 15/32 | 15/32 | 1/2 | 7/8 | 9/32 | • | • |
| 11/32 | TM11 | TMD11 | GTM11 | GTMD11 | 1/2 | 15/32 | 5/16 | 7/8 | 9/32 | • | • |
| 3/8 | TM12 | TMD12 | GTM12 | GTMD12 | 17/32 | 1/2 | 1/2 | 7/8 | 9/32 | • | • |
| 7/16 | TM14 | TMD14 | GTM14 | GTMD14 | 19/32 | 9/16 | 1/2 | 7/8 | 3/8 | • | • |
| 1/2 | TM16 | TMD16 | GTM16 | GTMD16 | 11/16 | 21/32 | 1/2 | 7/8 | 3/8 | • | • |
| 9/16 | TM18 | TMD18 | – | GTMD18 | 25/32 | 23/32 | 1/2 | 29/32 | 3/8 | • | • |
| 5/8 | TM20 | – | – | – | 27/32 | 25/32 | 19/32 | 31/32 | 13/32 | | |

*Conventional hex *ASME* B107.1

Sets shown include magnetic storage tray



112TMMSY



TMMDS14



110TMSY



TMDS14

## Semi Deep, mm

Set Contains: 112TMMSY / 112TMMDSY

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 5 | TMMS5* | TMMDS5* | 7.7 | 12.1 | 22.9 | 31.8 | 5.1 | • | • |
| 5.5 | TMMS5.5* | TMMDS5.5 | 8.3 | 12.1 | 22.9 | 31.8 | 5.3 | • | • |
| 6 | TMMS6 | TMMDS6 | 9.3 | 12.1 | 22.9 | 31.8 | 5.8 | • | • |
| 7 | TMMS7 | TMMDS7 | 10.5 | 12.1 | 22.9 | 31.8 | 6.1 | • | • |
| 8 | TMMS8 | TMMDS8 | 11.5 | 12.1 | 18.4 | 31.8 | 6.9 | • | • |
| 9 | TMMS9 | TMMDS9 | 12.7 | 12.1 | 18.4 | 31.8 | 7.4 | • | • |
| 10 | TMMS10 | TMMDS10 | 14.0 | 13.2 | 18.4 | 31.8 | 7.4 | • | • |
| 11 | TMMS11 | TMMDS11 | 15.4 | 14.6 | 18.4 | 31.8 | 9.4 | • | • |
| 12 | TMMS12 | TMMDS12 | 16.5 | 15.6 | 18.4 | 31.8 | 9.4 | • | • |
| 13 | TMMS13 | TMMDS13 | 17.6 | 16.7 | 18.4 | 31.8 | 9.4 | • | • |
| 14 | TMMS14 | TMMDS14 | 18.8 | 17.8 | 18.4 | 31.8 | 9.7 | • | • |
| 15 | TMMS15 | TMMDS15 | 20.4 | 19.4 | 18.4 | 31.8 | 9.7 | • | • |

*Conventional hex

Sets shown include magnetic storage tray

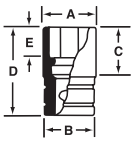
## Semi Deep, inches

Set Contains: 110TMSY / 110TMDSY

| | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 3/16 | TMS6* | TMDS6* | 5/16 | 15/32 | 29/32 | 1 1/4 | 7/32 | • | • |
| 7/32 | TMS7* | TMDS7* | 11/32 | 15/32 | 29/32 | 1 1/4 | 7/32 | • | • |
| 1/4 | TMS8 | TMDS8 | 3/8 | 15/32 | 29/32 | 1 1/4 | 1/4 | • | • |
| 9/32 | TMS9 | TMDS9 | 13/32 | 15/32 | 23/32 | 1 1/4 | 1/4 | • | • |
| 5/16 | TMS10 | TMDS10 | 15/32 | 15/32 | 23/32 | 1 1/4 | 9/32 | • | • |
| 11/32 | TMS11 | TMDS11 | 1/2 | 15/32 | 23/32 | 1 1/4 | 5/16 | • | • |
| 3/8 | TMS12 | TMDS12 | 9/16 | 1/2 | 23/32 | 1 1/4 | 5/16 | • | • |
| 7/16 | TMS14 | TMDS14 | 5/8 | 19/32 | 23/32 | 1 1/4 | 3/8 | • | • |
| 1/2 | TMS16 | TMDS16 | 11/16 | 21/32 | 23/32 | 1 1/4 | 3/8 | • | • |
| 9/16 | TMS18 | TMDS18 | 3/4 | 23/32 | 23/32 | 1 1/4 | 3/8 | • | • |

*Conventional hex *ASME* B107.1

Sets shown include magnetic storage tray






STMMD14



112STMMY

## Deep, mm

Set Contains: 112STMMY | 111STMMDY

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 4 | **STMM4*** | – | 6.7 | 12.1 | 42.2 | 50.8 | 4.6 | | |
| 4.5 | **STMM4.5*** | – | 7.2 | 12.1 | 42.2 | 50.8 | 4.6 | | |
| 5 | **STMM5*** | **STMMD5*** | 7.7 | 12.1 | 42.2 | 50.8 | 5.1 | • | • |
| 5.5 | **STMM5.5** | **STMMD5.5** | 8.3 | 12.1 | 42.2 | 50.8 | 5.3 | • | • |
| 6 | **STMM6** | **STMMD6** | 9.3 | 12.1 | 42.2 | 50.8 | 5.8 | • | • |
| 7 | **STMM7** | **STMMD7** | 10.5 | 12.1 | 42.2 | 50.8 | 6.1 | • | • |
| 8 | **STMM8** | **STMMD8** | 11.5 | 12.1 | 42.2 | 50.8 | 6.9 | • | • |
| 9 | **STMM9** | **STMMD9** | 12.7 | 12.1 | 38.1 | 50.8 | 7.4 | • | • |
| 10 | **STMM10** | **STMMD10** | 14.0 | 13.2 | 38.1 | 50.8 | 7.4 | • | • |
| 11 | **STMM11** | **STMMD11** | 15.2 | 14.6 | 38.1 | 50.8 | 9.4 | • | • |
| 12 | **STMM12** | **STMMD12** | 16.5 | 15.6 | 38.1 | 50.8 | 9.4 | • | • |
| 13 | **STMM13** | **STMMD13** | 17.6 | 16.7 | 38.1 | 50.8 | 9.4 | • | • |
| 14 | **STMM14** | **STMMD14** | 18.8 | 17.8 | 38.1 | 50.8 | 9.7 | • | • |
| 15 | **STMM15** | – | 20.4 | 19.4 | 38.1 | 50.8 | 9.1 | • | |

*Conventional hex

Sets shown include magnetic storage tray



STMD16



GSTMD14



110STMY

## Deep, inches

Set Contains: 110STMY | 110STMDY

| | 6 | 12 | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/8 | **STM04*** | – | – | – | 7/32 | 7/16 | 1 21/32 | 2 | 1/8 | | |
| 5/32 | **STM05*** | – | – | – | 1/4 | 15/32 | 1 21/32 | 2 | 3/16 | | |
| 3/16 | **STM6*** | **STMD6*** | **GSTM6** | **GSTMD6*** | 5/16 | 15/32 | 1 21/32 | 2 | 3/16 | • | • |
| 7/32 | **STM7*** | **STMD7*** | **GSTM7** | **GSTMD7*** | 11/32 | 15/32 | 1 21/32 | 2 | 7/32 | • | • |
| 1/4 | **STM8** | **STMD8** | **GSTM8** | **GSTMD8** | 3/8 | 15/32 | 1 32/32 | 2 | 7/32 | • | • |
| 9/32 | **STM9** | **STMD9** | **GSTM9** | **GSTMD9**** | 13/32 | 15/32 | 1 21/32 | 2 | 1/4 | • | • |
| 5/16 | **STM10** | **STMD10** | **GSTM10** | **GSTMD10**** | 15/32 | 15/32 | 1 21/32 | 2 | 7/32 | • | • |
| 11/32 | **STM11** | **STMD11** | **GSTM11** | **GSTMD11** | 1/2 | 15/32 | 1 21/32 | 2 | 9/32 | • | • |
| 3/8 | **STM12** | **STMD12** | **GSTM12** | **GSTMD12** | 17/32 | 9/16 | 1 21/32 | 2 | 9/32 | • | • |
| 7/16 | **STM14** | **STMD14** | **GSTM14** | **GSTMD14** | 5/8 | 9/16 | 1 21/32 | 2 | 3/8 | • | • |
| 1/2 | **STM16** | **STMD16** | **GSTM16** | **GSTMD16** | 11/16 | 21/32 | 1 21/32 | 2 | 3/8 | • | • |
| 9/16 | **STM18** | **STMD18** | – | **GSTMD18** | 3/4 | 23/32 | 1 21/32 | 2 | 3/8 | • | • |

*Conventional hex
**Larger bolt clearance diameter for servicing aerospace fastener

Sets shown include magnetic storage tray

## Long, mm

Set Contains: 102STMML

| mm | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 10 | **STMML10** | 14 | 13.2 | 33.0 | 101.6 | 7.4 | • |
| 11 | **STMML11** | 15.2 | 14.6 | 33.0 | 101.6 | 9.4 | • |

**Application:** For bumper cover bolts found on most European, Asian and US vehicles.

Set shown includes storage tray



102STMML

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SOCKETS



120STTM



124STTMM

## Shallow/Deep Combination Sets

**120STTM 6-Point Shallow/Deep Set**
- TM6–TM18 shallow sockets and STM6–STM18 deep sockets
- 20pc, 3/16"–9/16"
- Includes magnetic storage tray

**124STTMM Metric 6-Point Shallow/Deep Set**
- TMM5–TMM15 shallow sockets plus STMM5–STMM15 deep sockets
- 24pc, 5 mm–15 mm
- Includes magnetic storage tray

# *FLANK DRIVE* LOW-PROFILE SOCKETS



RTM9 RTSM14 RTSM15



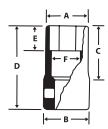
112RTM



110RTSMA



RT101






112RT



110RT

## Low Profile, mm

| mm | 6 | 12 | A | B | C | D | E | 6 (112RTSM) | 6 (110RTSMA) | 12 (112RTM) |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | RTSM5 | RTM5 | 7.7 | 12.1 | — | 20.2 | 2.2 | • | • | • |
| 5.5 | RTSM5.5 | RTM5.5 | 8.3 | 12.1 | — | 20.2 | 2.6 | • | • | • |
| 6 | RTSM6 | RTM6 | 9.3 | 12.1 | — | 19.3 | 2.7 | • | • | • |
| 7 | RTSM7 | RTM7 | 10.5 | 12.1 | — | 19.0 | 2.8 | • | • | • |
| 8 | RTSM8 | RTM8 | 11.5 | 12.1 | — | 19.0 | 3.6 | • | • | • |
| 9 | RTSM9 | RTM9 | 12.7 | 12.1 | 9.2 | 18.7 | 3.9 | • | • | • |
| 10 | RTSM10 | RTM10 | 14.0 | 12.1 | 9.4 | 19.0 | 4.7 | • | • | • |
| 11 | RTSM11 | RTM11 | 15.4 | 12.1 | 6.2 | 17.3 | 4.5 | • | • | • |
| 12 | RTSM12 | RTM12 | 16.5 | 12.1 | 6.1 | 17.8 | 4.9 | • | • | • |
| 13 | RTSM13 | RTM13 | 17.6 | 12.1 | 5.9 | 18.1 | 5.1 | • | • | • |
| 14 | RTSM14 | – | 18.7 | 12.1 | 6.4 | 19.3 | 5.8 | | | |
| 15 | RTSM15 | – | 20.3 | 12.1 | 6.3 | 20.3 | 6.4 | | | |
| | RAT72 | – | Low-Profile Ratchet | | | | | • | | • |
| | RTMBS8 | – | Low-Profile Magnetic Bit Holder | | | | | • | | • |

Set Contains: 112RTSM, 110RTSMA, 112RTM

Sets shown include storage tray

## Low Profile, inches

| | 12 | A | B | C | D | E | 12 (112RT) | 12 (110RT) |
|---|---|---|---|---|---|---|---|---|
| 3/16 | RT61 | 5/16 | 15/32 | 11/32 | 25/32 | 3/32 | • | • |
| 7/32 | RT71 | 11/32 | 15/32 | 3/8 | 13/16 | 3/32 | • | • |
| 1/4 | RT81 | 3/8 | 15/32 | 5/16 | 3/4 | 1/8 | • | • |
| 9/32 | RT91 | 13/32 | 15/32 | 5/16 | 3/4 | 1/8 | • | • |
| 5/16 | RT101 | 15/32 | 15/32 | 5/16 | 3/4 | 5/32 | • | • |
| 11/32 | RT111 | 1/2 | 15/32 | 13/32 | 9/32 | 3/16 | • | • |
| 3/8 | RT121 | 17/32 | 15/32 | 9/32 | 11/16 | 3/16 | • | • |
| 7/16 | RT141 | 19/32 | 15/32 | 1/4 | 11/16 | 3/16 | • | • |
| 1/2 | RT161 | 11/16 | 15/32 | 7/32 | 23/32 | 7/32 | • | • |
| 9/16 | RT181 | 3/4 | 15/32 | 1/4 | 3/4 | 1/4 | • | • |
| | RAT72 | Low-Profile Ratchet | | | | | • | |
| | RTMBS8 | Low-Profile Magnetic Bit Holder | | | | | • | |

Set Contains: 112RT, 110RT

Sets shown include storage tray



RTMBS8



SDMS17

## Stubby Bits and Bit Holder

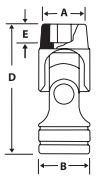
| | Stock No. | Size | Set Contains: SDMS17 |
|---|---|---|---|
| Flat Tip | SDMS213 | 1/4" | • |
| *Phillips* | SDMS222IR | #2 | • |
| Metric Hex | SDMSM3 | 3 mm | • |
| | SDMSM4 | 4 mm | • |
| | SDMSM5 | 5 mm | • |
| | SDMSM6 | 6 mm | • |
| | SDMSM8 | 8 mm | • |
| Inch Hex | SDMS8 | 1/8" | • |
| | SDMS9 | 9/64" | • |
| | SDMS10 | 5/32" | • |
| | SDMS12 | 3/16" | • |
| | SDMS16 | 1/4" | • |
| *Torx* | SDMST15 | T15 | • |
| | SDMST20 | T20 | • |
| | SDMST25 | T25 | • |
| | SDMST27 | T27 | • |
| | SDMST30 | T30 | • |

**RTMBS8 Low-Profile Magnetic Bit Holder**

- Magnetic Bit Holder for the Low-Profile RAT72 Ratcheting Wrench
- Special alloy steel provides the highest match of strength and durability
- Nickel-chrome plating provides corrosion resistance
- Holds any 1/4" shank bit: fractional and metric hex bits, TORX® and ball *TORX*, Phillips® and straight bits
- Fits in any 11 mm ratcheting wrench

**Applications:**
Perfect for tight and compact applications found on automotive, motorcycle, ATV and aviation. Automotive applications include: heater boxes and motor actuators in dash of vehicle, air conditioning work and on top of dashboard where the windshield meets the dash.

## *FLANK DRIVE* UNIVERSAL SOCKETS






TMUM8A



111TMUSMA

## Shallow Universal, mm

| mm | 6 | 12 | A | B | D | E | Set Contains: 111TMUSMA 6 | 106TMUSMA 6 |
|---|---|---|---|---|---|---|---|---|
| 5 | TMUSM5A* | TMUM5A* | 8.1 | 12.7 | 29.2 | 3.3 | | |
| 5.5 | TMUSM5.5A | – | 8.5 | 12.7 | 29.2 | 3.6 | • | |
| 6 | TMUSM6A | TMUM6A | 9.6 | 12.7 | 29.7 | 3.8 | • | |
| 7 | TMUSM7A | TMUM7A | 10.7 | 12.7 | 30.5 | 4.3 | • | |
| 8 | TMUSM8A | TMUM8A | 11.8 | 12.7 | 30.5 | 4.8 | • | • |
| 9 | TMUSM9A | TMUM9A | 12.7 | 12.7 | 31.2 | 4.8 | • | |
| 10 | TMUSM10A | TMUM10A | 14.0 | 12.7 | 32.5 | 5.8 | • | • |
| 11 | TMUSM11A | – | 15.4 | 12.7 | 33.0 | 6.6 | • | |
| 12 | TMUSM12A | TMUM12A | 16.5 | 12.7 | 34.5 | 6.9 | • | • |
| 13 | TMUSM13A | TMUM13A | 17.3 | 12.7 | 36.8 | 7.6 | • | • |
| 14 | TMUSM14A | – | 18.8 | 12.7 | 38.6 | 8.6 | • | • |
| 15 | TMUSM15A | – | 20.4 | 12.7 | 41.1 | 8.9 | • | • |

*Conventional hex

Sets shown include storage tray

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® UNIVERSAL SOCKETS



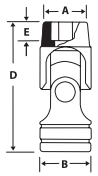
106TMUSA



TMUS161A



GTMU141A




## Shallow Universal, inches

| | 6 | 12 | 12 | A | B | D | E | Set Contains: 106TMUSA 6 | Set Contains: 106TMUA 12 |
|---|---|---|---|---|---|---|---|---|---|
| 3/16 | – | TMU61A* | – | 19/64 | 1/2 | 1 17/64 | 1/4 | | |
| 7/32 | – | TMU71A* | GTMU71A | 11/32 | 1/2 | 1 17/64 | 1/4 | | |
| 1/4 | TMUS81A | TMU81B | – | 3/8 | 1/2 | 1 17/64 | 1/4 | • | • |
| 9/32 | – | TMU91A | – | 27/64 | 1/2 | 1 5/16 | 9/32 | | |
| 5/16 | TMUS101A | TMU101A | – | 15/32 | 1/2 | 1 11/32 | 9/32 | • | • |
| 11/32 | – | TMU111A | – | 1/2 | 1/2 | 1 3/8 | 9/32 | | |
| 3/8 | TMUS121A | TMU121A | – | 17/32 | 1/2 | 1 27/64 | 9/32 | • | • |
| 7/16 | TMUS141A | TMU141A | GTMU141A | 19/32 | 1/2 | 1 29/64 | 13/32 | • | • |
| 1/2 | TMUS161A | TMU161A | – | 11/16 | 1/2 | 1 33/64 | 13/32 | • | • |
| 9/16 | TMUS181A | TMU181A | – | 3/4 | 1/2 | 1 35/64 | 13/32 | • | • |

*Conventional hex

Sets shown include storage tray



STMUM10A

## Deep Universal, mm

| mm | 12 | A | B | D | E |
|---|---|---|---|---|---|
| 10 | STMUM10A | 14.0 | 12.7 | 41.4 | 5.8 |



GSTMU101A

## Deep Universal, inches

| | 12 | A | B | D | E |
|---|---|---|---|---|---|
| 5/16 | GSTMU101A | 15/32 | 15/32 | 1 11/16 | 9/32 |

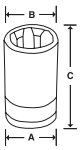
# TORX® SOCKETS



213AFLEY



STLE70




## *TORX*/Shallow

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E4 | TLE40A | 7/16 | 7/8 | 17/64 |
| E5 | TLE50A | 7/16 | 7/8 | 19/64 |
| E6 | TLE60A | 7/16 | 7/8 | 21/64 |
| E7 | TLE70A | 7/16 | 7/8 | 23/64 |
| E8 | TLE80A | 7/16 | 7/8 | 27/64 |
| E10 | TLE100A | 1/2 | 7/8 | 7/16 |

Note: Sets shown include magnetic storage tray

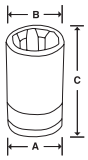
**213AFLEY Combination Drive Shallow *TORX* Set**
Includes 1/4" drive TLE40A–TLE100A, 3/8" drive FLE110A–FLE140A and 1/2" drive SLE160A–SLE240 (13pc) (E4 to E24).

**210AFLEY Combination Drive Shallow *TORX* Set**
1/4" drive TLE40A–TLE80A plus 3/8" drive FLE100A–FLE180A (except FLE110A) (10pc) (E4–E18).

## *TORX*/Deep

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E4 | STLE40 | 15/32 | 9/32 | 2 |
| E5 | STLE50 | 15/32 | 5/16 | 2 |
| E7 | STLE70 | 31/64 | 3/8 | 2 |
| E8 | STLE80 | 15/16 | 13/32 | 2 |

**STLE70 Deep *TORX* Socket**
- For removing and installing vacuum pumps on BMW® N63 V8 engines without removing the catalytic converter, saving technician an average of two hours





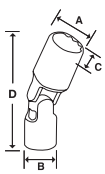

106RTLE

## Low-Profile Inverted *TORX*

Set Contains: 106RTLE

| # | Stock No. | A (mm) | B (mm) | C (mm) | |
|---|---|---|---|---|---|
| E4 | **RTLE40** | 12.1 | 6.7 | 16.5 | • |
| E5 | **RTLE50** | 12.1 | 7.7 | 16.5 | • |
| E6 | **RTLE60** | 12.1 | 8.4 | 16.5 | • |
| E7 | **RTLE70** | 12.1 | 9.3 | 16.5 | • |
| E8 | **RTLE80** | 12.1 | 10.5 | 16.6 | • |
| E10 | **RTLE100** | 12.1 | 12.1 | 17.4 | • |

Set shown includes storage tray






TSE120

## *TORX*/Universal

| # | Stock No. | A | B | D |
|---|---|---|---|---|
| E8 | **TSE80** | 1/2 | 13/32 | 1 3/8 |
| E10 | **TSE100** | 1/2 | 1/2 | 1 3/8 |
| E12 | **TSE120** | 1/2 | 1/2 | 1 3/8 |

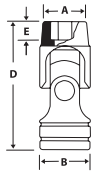
**TSE80 Universal *TORX* Socket**

**Applications:** Mercedes-Benz® turbo chargers, crankshaft position sensor, sensors and intake bolts, bell housing bolts and ignitions switch.

**TSE100 and TSE120 Universal *TORX* Socket**

**Applications:** *Mercedes-Benz* oil pan bolts, interior and engine fasteners, water pumps, power steering pumps and engine covers on newer models.

# FLANK DRIVE® HIGH-PERFORMANCE SOCKETS






TDHU101A

## Universal, inches

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the Snap-on® *Flank Drive* wrenching system.

| | 12 | A | B | D | E |
|---|---|---|---|---|---|
| 1/4 | **TDHU81A** | 3/8 | 1/2 | 1 15/64 | 1/4 |
| 5/16 | **TDHU101A** | 29/64 | 1/2 | 1 23/64 | 9/32 |
| 3/8 | **TDHU121A** | 17/32 | 1/2 | 1 15/32 | 11/32 |

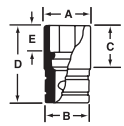
**WARNING**

• Do not use chrome or industrial finish hand tools with impact drivers
• Read safety precautions on pages W1 to W4

# SPLINE SOCKETS

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with AS954, Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.






209TFES



TES10B

## Shallow, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #7 | 7/32 | TES7B | 11/32 | 7/16 | 15/32 | 15/16 | 7/32 |
| #8 | 1/4 | TES8B | 3/8 | 7/16 | 15/32 | 15/16 | 9/32 |
| #9 | 9/32 | TES9B | 7/16 | 7/16 | — | 15/16 | — |
| #10 | 5/16 | TES10B | 15/32 | 15/32 | — | 15/16 | 11/32 |
| #12 | 3/8 | TES12 | 35/64 | 35/64 | 19/32 | 59/64 | 23/64 |
| #14 | 7/16 | TES14 | 5/8 | 39/64 | 23/32 | 1 3/64 | 7/16 |

**209TFES Shallow Spline Socket Set**
- Includes 1/4" drive TES7B–TES10B and 3/8" drive FES120B–FES200B Shallow Spline Sockets (9pc) (#7–#20, 7/32"–5/8") in magnetic socket tray



207TFEL



TEL10B

## Deep, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #7 | 7/32 | TEL7B | 11/32 | 7/16 | 1 17/32 | 2 | 7/32 |
| #8 | 1/4 | TEL8B | 3/8 | 7/16 | 1 17/32 | 2 | 9/32 |
| #10 | 5/16 | TEL10B | 15/32 | 15/32 | — | 2 | 11/32 |

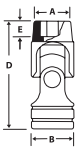
**207TFEL Deep Spline Socket Set**
- Includes 1/4" drive TEL7B–TEL10B and 3/8" drive FEL120B–FEL200B Deep Spline Sockets (7pc) (#7–#20, 7/32"–5/8") in magnetic socket tray

## Deep, mm

| | mm | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #7 | 7 | TELM7A | 10.4 | 10.9 | 36.3 | 50.8 | 7.3 |
| #8 | 8 | TELM8A | 11.7 | 11.7 | 36.3 | 50.8 | 8.8 |



TESU10



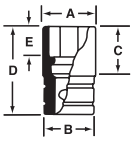

## Shallow Universal, inches

| | | Stock No. | A | B | D | E |
|---|---|---|---|---|---|---|
| #8 | 1/4 | TESU8 | 3/8 | 1/2 | 1 15/64 | 17/64 |
| #10 | 5/16 | TESU10 | 29/64 | 1/2 | 1 23/64 | 21/64 |

# SPECIAL APPLICATION SOCKETS



TM412

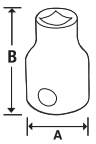



## Double Square

| | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1/4 | TM408 | 15/32 | 15/32 | 17/32 | 7/8 | 1/4 |
| 5/16 | TM410 | 9/16 | 17/32 | 17/32 | 7/8 | 9/32 |
| 3/8 | TM412 | 21/32 | 5/8 | 17/32 | 7/8 | 5/16 |



PMP303




## Metric Pipe Plug Socket

- Used to adjust the intake and exhaust valve rocker arms on Mercury Marine® four-stroke outboard motors
- Motor sizes: 10, 15, 20, 25 and 30 hp

| mm | Stock No. | A | B |
|---|---|---|---|
| 3 | PMP303 | 12.1 | 22.2 |



106FLIPSET



S6810

## 106FLIPSET Metric Flip Socket Set

- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- Double hex (12-point) allows socket to engage single hex fastener every 30° rather than every 60°, allowing for better access in restricted areas
- Great starter set for use with cordless screwdrivers

**Set includes these tools:**

**S6810 Flip Socket, 8 mm/10 mm:**

- 8 mm and 10 mm Flip Socket
- For removing and installing underbelly pans on various vehicles
- BMW® vehicles use 30 fasteners that are a combination of 8 mm and 10 mm that hold the under belly pans on various vehicles. You have the convenience of one tool to work on both sizes
- Lexus® vehicles use 10 mm fasteners
- Infiniti® and Mercedes® vehicles use 8 mm fasteners
- Splash shields on Chevrolet® Cruze® vehicles and Buick® Verano® vehicles use 8 mm fasteners
- Overall length 1.44"

**S6911 9 mm/11 mm Flip Socket:** use on 9 mm and 11 mm fasteners found in applications for European vehicles

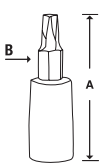
**S61214 12 mm/14 mm Flip Socket:** use on 12 mm and 14 mm fasteners found in numerous applications on Asian vehicles

**S61315 13 mm/15 mm Flip Socket:** use on 13 mm and 15 mm fasteners found in numerous applications on US vehicles

**GMB3042 Hex-to-Square Adaptor** (2" long)

**GMB3046 Hex-to-Square Adaptor** (6" long)

## TORX® BIT SOCKETS






212EFTXY



GTTX15E



105TUTX

### *TORX*/Standard

| # | Stock No. | Stock No. | A | B |
|---|---|---|---|---|
| T8 | **TTX8E** | **GTTX8E** | 1 9/16 | **TTX8E2** |
| T10 | **TTX10E** | **GTTX10E** | 1 9/16 | **TTX10E2** |
| T15 | **TTX15E** | **GTTX15E** | 1 9/16 | **TTX15E2** |
| T20 | **TTX20E** | **GTTX20E** | 1 9/16 | **TTX20E2** |
| T25 | **TTX25E** | **GTTX25E** | 1 9/16 | **TTX25E2** |
| T27 | **TTX27E** | – | 1 9/16 | **FTX27E2** |
| T30 | **TTX30E** | – | 1 9/16 | **FTX30E2** |
| T40 | **TTX40E** | – | 1 9/16 | **FTX40E2** |

Sets shown include storage tray

**212EFTXY Combination *TORX* Set**

- Includes 1/4" drive TTX8E–TTX25E *TORX* Drivers plus 3/8" drive FTX27E–FTX55E *TORX* Drivers and FTX47E GM® style Driver (12pc) (T8–T55 plus *GM* style T47) in storage tray

### *TORX*/Stubby Universal

| # | Stock No. | A | Set Contains: 105TUTX |
|---|---|---|---|
| T20 | **TUTX20E** | 1 3/4 | • |
| T25 | **TUTX25E** | 1 3/4 | • |
| T27 | **TUTX27E** | 1 3/4 | • |
| T30 | **TUTX30E** | 1 3/4 | • |
| T40 | **TUTX40E** | 1 3/4 | • |

Set shown includes storage tray

**105TUTX Applications:** T40 for Porsche® 2005 and newer 911, Boxster® and Cayenne® for ignition coil bolts. T30 for Volvo® turbo return lines. T30 for Honda® airbag control module inside passenger compartment of dashboard. T30 for pump alignment on Mitsubishi® F4A51 transmissions (97 and later). Numerous other applications for *Mercedes* that require a stubby *TORX* where a regular *TORX* bit socket will not fit in T20, T25 and T27.



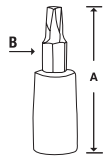
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# TORX® BIT SOCKETS



210EFTXL






209EFTXBY

## *TORX*/Long

| # | Stock No. | A | B |
|---|---|---|---|
| T8 | **TTXL8E** | 4 1/16 | **TTXL8E2** |
| T10 | **TTXL10E** | 4 1/16 | **TTXL10E2** |
| T15 | **TTXL15E** | 4 1/16 | **TTXL15E2** |
| T20 | **TTXL20E** | 4 1/16 | **TTXL20E2** |
| T25 | **TTXL25E** | 4 1/16 | **TTXL25E2** |

**210EFTXL Combination Long *TORX* Set**
- Includes 1/4" drive TTXL8E–TTX25LE *TORX* Drivers plus 3/8" drive FTXL27E–FTX55LE *TORX* Drivers (10 pcs) (T8–T55) in storage tray

## *TORX*/Heavy Duty Removal

| # | Stock No. | A | B |
|---|---|---|---|
| T15 | **TTXB15E** | 1 9/16 | **TTXB15E2** |
| T20 | **TTXB20E** | 1 9/16 | **TTXB20E2** |
| T25 | **TTXB25E** | 1 9/16 | **TTXB25E2** |

**209EFTXBY Heavy Duty Removal *TORX* Set**
- Includes 1/4" drive TTXB15E–TTXB25E *TORX* Drivers plus 3/8"drive FTXB27E–FTXB55E *TORX* Drivers (9 pcs) (T15–T55) in magnetic storage tray



210EFTXRY

## *TORX*/Tamper Resistant

| # | Stock No. | A | B |
|---|---|---|---|
| T8 | **TTXR8E** | 1 9/16 | **TTXR8E2** |
| T10 | **TTXR10E** | 1 9/16 | **TTXR10E2** |
| T15 | **TTXR15E** | 1 9/16 | **TTXR15E2** |
| T20 | **TTXR20E** | 1 9/16 | **TTXR20E2** |
| T25 | **TTXR25E** | 1 9/16 | **TTXR25E2** |
| T40 | **TTXR40E** | 2 1/8 | **TTXR40E2** |

**210EFTXRY Tamper Resistant Combination *TORX* Set**
- Includes 1/4" drive TTXR8E–TTXR25E *TORX* Drivers plus 3/8" drive FTXR27E–FTXR50E *TORX* Drivers (10 pcs) (T8–T50) in magnetic storage tray

## TORX Plus®

*TORX Plus* fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM® transmissions bell housing bolts and Ford® seat belt anchors. T27IP size can be used to service *Ford* Taurus and Sable vehicles front spring shields. Use of a standard *TORX* driver on *TORX Plus* fasteners may result in a rounded out fastener head or damaged driver.



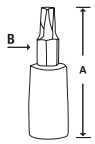
211EFTXTPY

| # | Stock No. | A | B |
|---|---|---|---|
| 8IP | **TTX8TPE** | 1 9/16 | **TTX8TPE2** |
| 10IP | **TTX10TPE** | 1 9/16 | **TTX10TPE2** |
| 15IP | **TTX15TPE** | 1 9/16 | **TTX15TPE2** |
| 20IP | **TTX20TPE** | 1 9/16 | **TTX20TPE2** |
| 25IP | **TTX25TPE** | 1 9/16 | **TTX25TPE2** |

**211EFTXTPY Combination Drive *TORX Plus* Set**
- Includes 1/4" drive TTX8TPE–TTX25TPE Drivers plus 3/8" drive FTX27TPE–FTX55TPE Drivers (11 pcs) (8IP–55IP) in magnetic storage tray. *TORX Plus* fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include *GM* transmission bell housing bolts and *Ford* seat belt anchors. Use of a standard *TORX* Driver on *TORX Plus* fasteners may result in a rounded out fastener head or damaged driver

## TORX Plus®/Tamper Resistant

Five-lobe configuration. Two-piece pinless design holds bit securely in socket while facilitating quick bit replacement. Cold formed socket delivers a strong, durable tool. Chrome plating resists corrosion and cleans easily.






211EFTXRTPY

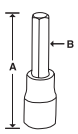
| # | Stock No. | A | B |
|---|---|---|---|
| 8IPR | TTXR8TPE | 1 9/16 | TTXR8TPE2 |
| 10IPR | TTXR10TPE | 1 9/16 | TTXR10TPE2 |
| 15IPR | TTXR15TPE | 1 9/16 | TTXR15TPE2 |
| 20IPR | TTXR20TPE | 1 9/16 | TTXR20TPE2 |
| 25IPR | TTXR25TPE | 1 9/16 | TTXR25TPE2 |

Set shown includes magnetic storage tray

**211EFTXRTPY Tamper Resistant Combination *TORX Plus* Set**

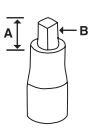
- Includes 1/4" drive TTXR8TPE–TTXR25TPE *TORX Plus* Drivers plus 3/8" drive FTXR27TPE–FTXR55TPE *TORX Plus* Drivers (11 pcs) (8IPR–55IPR). Applications for set include 2003 Ford® Mustang® transmissions, 2004 *Ford* F-150 transfer case, 2004 Porsche® Cayenne® turbo air sensor, Delphi® and Stanadyne® pumps, Cummins® B and C engine injection pumps and John Deere® diesel injector pumps

# METRIC HEX BIT SOCKETS






210EFTAMY






208EFTAMXSY

## Hex/Standard, mm

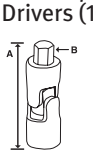
Set Contains: 106ETMAMY

| mm | | A | B | |
|---|---|---|---|---|
| 2 | TMAM2E | 47.8 | TMAM2E2A | • |
| 2.5 | TMAM2.5E | 47.8 | TMAM2.5E2 | • |
| 3 | TMAM3E | 47.8 | TMAM3E2 | • |
| 4 | TMAM4E | 47.8 | FAM4E2 | • |
| 5 | TMAM5E | 47.8 | FAM5E2 | • |
| 6 | TMAM6E | 47.8 | FAM6E2 | • |

Sets include magnetic storage tray

**210EFTAMY Combination Metric Standard Hex Set**

- Includes 1/4" drive TMAM2E–TMAM3E Standard Length Drivers plus 3/8" drive FAM4E–FAM10E Standard Length Drivers (10 pcs) (2 mm–10 mm)






TUAM6E

## Hex/Universal Stubby, mm

| mm | | A |
|---|---|---|
| 5 | TUAM5E | 38.1 |
| 6 | TUAM6E | 38.1 |

## Hex/Stubby, mm

| mm | | A | B |
|---|---|---|---|
| 3 | TMAMXS3E | 26.0 | TMAMXS3E2 |
| 4 | TMAMXS4E | 27.0 | TMAMXS4E2 |
| 5 | TMAMXS5E | 27.0 | TMAMXS5E2 |
| 6 | TMAMXS6E | 29.0 | TMAMXS6E2 |

Set includes magnetic storage tray

**208EFTAMXSY Metric Combination Stubby Hex Set**

- Includes 1/4" drive TMAMXS3E–TMAMXS6E Stubby Drivers plus 3/8" drive FAMXS7E–FAMXS10E Stubby Drivers (8 pcs) (3 mm–10 mm)



208EFTABMY

## Ball Hex/Standard, mm

| | | A | B |
|---|---|---|---|
| 3 | TMABM3E | 47.7 | TMABM3E2 |
| 4 | TMABM4E | 47.6 | TMABM4E2 |
| 5 | TMABM5E | 47.9 | TMABM5E2 |
| 6 | TMABM6E | 47.9 | TMABM6E2 |

Set includes magnetic storage tray

**208EFTABMY Metric Ball Hex Combination Set**

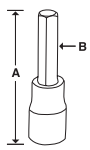
- Includes 1/4" drive TMABM3E–TMABM6E Standard Length Drivers plus 3/8" drive FABM7E–FABM10E Standard Length Drivers (8 pcs) (3 mm–10 mm)



**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# HEX BIT SOCKETS








GTMA8E



110ETMAY

## Hex/Standard, inches

| Set Contains: 110ETMAY | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | A | B | Length with Opt. Long Bit | Optional Long Bit | |
| 1/16 | TMA2E | – | 1 7/8 | TMA2E2 | 6 | TMAL2E2 | • |
| 5/64 | TMA2.5E | GTMA2.5E | 1 7/8 | TMA2.5E2 | 6 | TMAL2.5E2 | • |
| 3/32 | TMA3E | GTMA3E | 1 7/8 | TMA3E2 | 6 | TMAL3E2 | • |
| 7/64 | TMA3.5E | – | 1 7/8 | TMA3.5E2 | 6 | TMAL3.5E2 | • |
| 1/8 | TMA4E | GTMA4E | 1 7/8 | TMA4E2 | 6 | TMAL4E2 | • |
| 9/64 | TMA4.5E | – | 1 7/8 | TMA4.5E2 | 6 | TMAL4.5E2 | • |
| 5/32 | TMA5E | GTMA5E | 1 7/8 | FA5E2 | — | – | • |
| 3/16 | TMA6E | GTMA6E | 1 15/16 | FA6E2 | — | – | • |
| 7/32 | TMA7E | GTMA7E | 1 7/8 | FA7E2 | — | – | • |
| 1/4 | TMA8E | GTMA8E | 1 7/8 | FA8E2 | — | – | • |

NOTE: Optional long bits are not included in the listed sets. Sets shown include storage tray

**212EFTAY Combination Drive Standard Hex Set**
- Includes 1/4" drive TMA2E–TMA3.5E Hex Drivers plus 3/8" drive FA4E–FA12E Hex Drivers (12 pcs) (1/16"–3/8")



208EFTAXSY



208EFTABY

## Hex/Stubby, inches

| | | A | B |
|---|---|---|---|
| 3/32 | TMAXS3E | 1 1/32 | TMAXS3E2 |
| 1/8 | TMAXS4E | 1 1/32 | TMAXS4E2 |
| 9/64 | TMAXS4.5E | 1 1/16 | TMASX4.5E2 |
| 5/32 | TMAXS5E | 1 1/16 | TMAXS5E2 |
| 3/16 | TMAXS6E | 1 3/32 | TMAXS6E2 |

Set shown includes magnetic storage tray

**208EFTAXSY Combination Drive Stubby Hex Set**
- Includes 1/4" drive TMAXS4E–TMAXS6E Stubby Drivers plus 3/8" drive FAXS7E–FAXS12E Stubby Drivers (8 pcs) (1/8"–3/8")

**TMAXS3E Stubby Hex Socket Driver**
- For fasteners on Rolls-Royce® commercial aircraft V2500 engines. A stubby bit socket allows for a positive fit, giving more direct torque when removing or installing these fasteners

## Ball Hex/Standard, inches

| | | A | B |
|---|---|---|---|
| 1/8 | TMAB4E | 1 7/8 | TMAB4E2 |
| 9/64 | TMAB4.5E | 1 7/8 | TMAB4.5E2 |
| 5/32 | TMAB5E | 1 7/8 | TMAB5E2 |
| 3/16 | TMAB6E | 1 7/8 | TMAB6E2 |
| 7/32 | GTMAB7E | 1 7/8 | FAB7E2 |

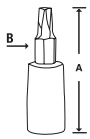
Sets shown include magnetic storage tray

**208EFTABY Combination Standard Ball Hex Set**
- Includes 1/4" drive TMAB4E–TMAB6E Ball Hex Drivers plus 3/8" drive FAB7E–FAB12E Ball Hex Drivers (8 pcs) (1/8"–3/8")

# SPECIAL APPLICATION BIT



PTMTS4SE




## MORTORQ®/Super Bit

| # | Stock No. | A | B |
|---|---|---|---|
| MTS-4 | PTMTS4SE | 1 11/16 | PTMTS4E2 |

**PTMTS4SE *MORTORQ* Stubby Bit Socket**

**Applications:**
- Connects the fuel cell to the electric motors and other systems on Hyundai® Tucson® IX Fuel Cell Vehicles

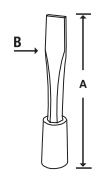
# FLAT TIP AND PHILLIPS® TIP BIT



TMC106E



TM82



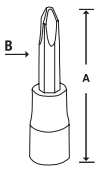

## — Flat Tip, inches

| | | Stock No. | A | B |
|---|---|---|---|---|
| Standard Length | 3/16 x .032 | TMC104E | 2 7/8 | TMC104E2A |
| | 1/4 x .032 | TMC105E | 2 15/16 | TMC105E2A |
| | 3/8 x .042 | TMC106E | 2 7/8 | TMC106E2A |
| Short | 1/4 x .036 | TM82 | 7/8 | TM82-2C |

# FLAT TIP AND PHILLIPS® TIP BIT SOCKETS

## *Phillips*/Standard

| | | Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|---|---|
| Standard Length | #1 | TMP12E | GTMP12E | 1 7/8 | TMP12E2 |
| | #2 | TMP22E | – | 1 7/8 | FP22E2 |
| Short | #2 | TMP21E | – | 1 1/4 | TMP21E2 |
| | #2 | TMP82 | – | 15/16 | TMP82-2B |
| Long | #2 | TMP23E | – | 3 1/16 | TMP23E2 |



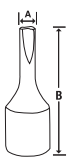



TMP22E GTMP12E TMP82 TMP23E

# CLUTCH BIT SOCKETS

## *Clutch*, Standard Length

| | | A | B |
|---|---|---|---|
| 3/16 | TM27E | 3/16 | 1 3/8 |
| 1/4 | TM30E | 1/4 | 1 3/8 |
| 5/32 | TM31E | 5/32 | 1 3/8 |






TM30E

# IMPACT ACCESSORIES





103ITMX

## Impact Extensions

- Features snap ring anvil for excellent socket to extension engagement
- Designed for use with most 1/4" cordless electric and air operated impact tools

Set Contains: 103ITMX

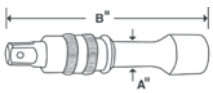
| Stock No. | Finish | A | B | |
|---|---|---|---|---|
| ITMX20 | Industrial Finish | 5/16 | 2 | • |
| ITMX40 | Industrial Finish | 5/16 | 4 | • |
| ITMX60 | Industrial Finish | 5/16 | 6 | • |

Set shown includes storage tray



105TMIXL

## Impact Locking



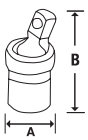

**Impact Locking Extensions**

- Quick release locking sleeve provides secure connection and easy socket removal
- Knurled release collar for easy one-hand operation, even with slippery hands
- Female drive end recessed to accommodate new style impact guns
- Positive pin lock retains socket securely
- Heavy duty shank for high torque applications

Set Contains: 105TMIXL

| Stock No. | A | B | |
|---|---|---|---|
| TMIXL32 | 11/32 | 2 7/8 | • |
| TMIXL62 | 11/32 | 5 7/8 | • |
| TMIXL122 | 11/32 | 11 7/8 | • |
| TMIXL182 | 11/32 | 17 3/4 | • |
| TMIXL242 | 11/32 | 23 3/4 | • |

Set includes storage tray






IPM80A



IPM800A

## Swivel Ball Universal Joint (Impact)

| Stock No. | Retention Type | A | B |
|---|---|---|---|
| IPM80A | Lock Button | 5/8 | 1 3/8 |
| IPM800A | Friction Ball | 5/8 | 1 3/8 |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS



112IMTMM

## Shallow, mm

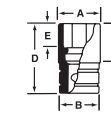
Set Contains: 112IMTMM

| mm | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 5 | IMTMM5 | 8.5 | 12.1 | 13.1 | 22.2 | 4.1 | • |
| 5.5 | IMTMM5.5 | 9.3 | 12.1 | 13.1 | 22.2 | 4.1 | • |
| 6 | IMTMM6 | 10.2 | 12.1 | 13.1 | 22.2 | 6.1 | • |
| 7 | IMTMM7 | 11.5 | 12.1 | 13.1 | 22.2 | 6.1 | • |
| 8 | IMTMM8 | 12.7 | 12.7 | 13.1 | 22.2 | 6.1 | • |
| 9 | IMTMM9 | 14.0 | 14.0 | 13.1 | 22.2 | 6.1 | • |
| 10 | IMTMM10 | 15.2 | 15.2 | 13.0 | 22.2 | 6.1 | • |
| 11 | IMTMM11 | 16.4 | 16.4 | 12.8 | 22.2 | 6.4 | • |
| 12 | IMTMM12 | 17.3 | 17.3 | 12.7 | 22.2 | 7.1 | • |
| 13 | IMTMM13 | 18.7 | 18.7 | 12.5 | 22.2 | 7.4 | • |
| 14 | IMTMM14 | 20.3 | 20.3 | 13.1 | 23.0 | 8.6 | • |
| 15 | IMTMM15 | 21.1 | 21.1 | 13.9 | 23.8 | 8.9 | • |

Set includes magnetic storage tray



112SIMTMM




## Deep, mm

Set Contains: 112SIMTMM

| mm | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 5 | SIMTMM5 | 8.5 | 12.1 | 41.9 | 50.8 | 4.1 | • |
| 5.5 | SIMTMM5.5 | 9.3 | 12.1 | 41.9 | 50.8 | 4.1 | • |
| 6 | SIMTMM6 | 10.2 | 12.1 | 41.9 | 50.8 | 6.1 | • |
| 7 | SIMTMM7 | 11.5 | 12.1 | 41.9 | 50.8 | 6.1 | • |
| 8 | SIMTMM8 | 12.7 | 12.7 | 41.9 | 50.8 | 6.1 | • |
| 9 | SIMTMM9 | 14.0 | 14.0 | 41.9 | 50.8 | 6.1 | • |
| 10 | SIMTMM10 | 15.2 | 15.2 | 41.9 | 50.8 | 6.1 | • |
| 11 | SIMTMM11 | 16.4 | 16.4 | 41.9 | 50.8 | 6.4 | • |
| 12 | SIMTMM12 | 17.3 | 17.3 | 41.9 | 50.8 | 7.1 | • |
| 13 | SIMTMM13 | 18.7 | 18.7 | 41.9 | 50.8 | 7.4 | • |
| 14 | SIMTMM14 | 20.3 | 20.3 | 41.9 | 50.8 | 8.6 | • |
| 15 | SIMTMM15 | 21.1 | 21.1 | 41.9 | 50.8 | 8.9 | • |

Set includes magnetic storage tray



106IMTM

## Shallow, inches

Set Contains: 106IMTM

| " | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 1/4 | IMTM8A | 13/32 | 1/2 | 17/32 | 7/8 | 1/4 | • |
| 5/16 | IMTM10A | 1/2 | 1/2 | 17/32 | 7/8 | 1/4 | • |
| 3/8 | IMTM12A | 9/16 | 1/2 | 17/32 | 7/8 | 1/4 | • |
| 7/16 | IMTM14A | 21/32 | 1/2 | 17/32 | 7/8 | 1/4 | • |
| 1/2 | IMTM16A | 23/32 | 1/2 | 17/32 | 7/8 | 9/32 | • |
| 9/16 | IMTM18A | 13/16 | 1/2 | 9/16 | 29/32 | 11/32 | • |



106SIMTM

## Deep, inches

Set Contains: 106SIMTM

| " | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 1/4 | SIMTM8 | 13/32 | 15/32 | 1 1/2 | 2 | 1/4 | • |
| 5/16 | SIMTM10 | 1/2 | 1/2 | 1 1/2 | 2 | 1/4 | • |
| 3/8 | SIMTM12 | 9/16 | 9/16 | 1 1/2 | 2 | 1/4 | • |
| 7/16 | SIMTM14 | 21/32 | 21/32 | 1 1/2 | 2 | 1/4 | • |
| 1/2 | SIMTM16 | 11/16 | 11/16 | 1 1/2 | 2 | 9/32 | • |
| 9/16 | SIMTM18 | 13/16 | 13/16 | 1 1/2 | 2 | 11/32 | • |

ASME®/ANSI® B107.2

Set includes magnetic storage tray

# *FLANK DRIVE* IMPACT SWIVEL SOCKETS



106IPTMM

## Shallow Swivel, mm

Set Contains: 106IPTMM

| mm | 6 | A | B | D | E | 6 |
|---|---|---|---|---|---|---|
| 5 | IPTMM5 | 8.6 | 15.4 | 35.4 | 4.1 | |
| 5.5 | IPTMM5.5 | 9.5 | 15.4 | 35.8 | 4.1 | |
| 6 | IPTMM6 | 10.7 | 15.4 | 36.2 | 4.1 | |
| 7 | IPTMM7 | 11.5 | 15.4 | 37.4 | 4.3 | |
| 8 | IPTMM8 | 12.7 | 15.4 | 38.6 | 4.8 | • |
| 9 | IPTMM9 | 13.9 | 15.4 | 39.7 | 5.3 | |
| 10 | IPTMM10 | 15.2 | 15.4 | 41.0 | 5.8 | • |
| 11 | IPTMM11 | 16.4 | 15.4 | 42.5 | 6.4 | |
| 12 | IPTMM12 | 17.3 | 17.9 | 44.9 | 6.9 | • |
| 13 | IPTMM13 | 18.7 | 17.9 | 46.1 | 7.4 | • |
| 14 | IPTMM14 | 20.4 | 17.9 | 47.6 | 7.8 | • |
| 15 | IPTMM15 | 21.1 | 17.9 | 48.1 | 7.8 | • |

Set includes storage tray (not magnetic)



106IPTM




## Shallow Swivel, inches

Set Contains: 106IPTM

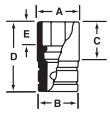
| " | 6 | A | B | C | D | 6 |
|---|---|---|---|---|---|---|
| 1/4 | IPTM8 | 27/64 | 39/64 | 1 27/64 | 5/32 | • |
| 5/16 | IPTM10 | 1/2 | 39/64 | 1 1/2 | 3/16 | • |
| 3/8 | IPTM12 | 35/64 | 39/64 | 1 13/16 | 7/32 | • |
| 7/16 | IPTM14 | 41/64 | 39/64 | 1 13/16 | 1/4 | • |
| 1/2 | IPTM16 | 45/64 | 46/64 | 1 13/16 | 19/64 | • |
| 9/16 | IPTM18 | 51/64 | 45/64 | 1 7/8 | 5/16 | • |

Set includes storage tray (not magnetic)

## Shallow 10 pt., mm

- 2009–Current Honda® Odyssey® and Pilot vehicles front seat tracks
- Two fasteners on each track. One each 8 mm and 10 mm
- Forged from tough alloy steel
- Heat treated to a lower hardness to add impact resistance and ductility

**DPTM8 Shallow Impact Socket, 8 mm, 10 pt.**
**DPTM10 Shallow Impact Socket, 10 mm, 10 pt.**






DPTM10



## Locking Power Adaptors

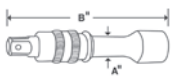
- Use with electric/cordless drills and screwdrivers that accept 1/4" shanks
- Manufactured from the highest quality proprietary steel, providing optimum strength and durability
- Knurled sleeve provides easy attachment and removal of sockets even with the greasiest hands
- One-handed lock mechanism with ball retention ensures socket retention and allows for faster socket attachment and removal
- Black oxide finish helps protect against corrosion for longer tool life



103TMLPA

| Stock No. | A | B | Set Contains: 103TMLPA |
|---|---|---|---|
| TMLPA2 | 1/4 | 2 | • |
| TMLPA4 | 1/4 | 4 | • |
| TMLPA6 | 1/4 | 6 | • |

Set includes storage tray



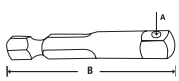

## Hex-To-Square Adaptors (Power)

- 1/4" hex size; 1" length of hex

| Stock No. | A | B |
|---|---|---|
| GM3042A | Lock Button | 2 |
| GM3043 | Lock Button | 4 |
| GM3046 | Lock Button | 6 |
| GM3048 | Lock Button | 8 |

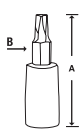


GM3042A




## TORX®/Power Drivers

| # | Stock No. | A | B |
|---|---|---|---|
| T20 | PTTX20E | 1 9/16 | TTX20E2 |
| T25 | PTTX25E | 1 9/16 | TTX25E2 |



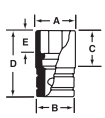



PTTX20E



## Shallow Magnetic, mm

- Magnetic sockets are perfect for installing and removing a fastener as the magnetic feature will hold the fastener in the socket, saving time and frustration
- Square drive side hole works with ball or pin type retention
- *Flank Drive* wrenching system grips the fastener on the socket flanks (flats) to deliver up to 15%–20% more turning power





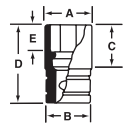

110MGMM

| mm | 6 | A | B | D | E | 6 Set Contains: 110MGMM |
|---|---|---|---|---|---|---|
| 5 | MGMM5 | 8.4 | 12.1 | 22.8 | 4.6 | • |
| 5.5 | MGMM5.5 | 9.3 | 12.1 | 22.8 | 5.1 | • |
| 6 | MGMM6 | 10.2 | 12.1 | 22.8 | 6.1 | • |
| 7 | MGMM7 | 11.5 | 12.1 | 22.8 | 6.1 | • |
| 8 | MGMM8 | 12.7 | 12.7 | 23.8 | 6.1 | • |
| 10 | MGMM10 | 15.2 | 15.2 | 23.8 | 6.1 | • |
| 12 | MGMM12 | 17.3 | 17.3 | 23.8 | 6.4 | • |
| 13 | MGMM13 | 18.9 | 18.9 | 23.8 | 7.9 | • |
| 14 | MGMM14 | 20.5 | 20.5 | 23.8 | 8.6 | • |
| 15 | MGMM15 | 21.3 | 21.3 | 23.8 | 8.6 | • |

**⚠WARNING**

- Do not use industrial finish power tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® MAGNETIC POWER SOCKETS






MGM8D



MGMMS11B



MGMS10A

## Shallow Magnetic, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 1/4 | MGM8D | 7/16 | 1/2 | 7/8 | 3/32 |
| 5/16 | MGM10C | 1/2 | 1/2 | 15/16 | 3/32 |
| 3/8 | MGM12C | 9/16 | 19/32 | 15/16 | 1/8 |
| 7/16 | MGM14C | 11/16 | 11/16 | 15/16 | 1/8 |

## Deep Magnetic, mm

| mm | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 7 | MGMMS7A | 10.7 | 12.4 | 50.8 | 5.8 |
| 8 | MGMMS8A | 11.8 | 12.4 | 50.8 | 5.8 |
| 10 | MGMMS10A | 14.1 | 14.1 | 50.8 | 6.4 |
| 11 | MGMMS11B | 15.6 | 15.6 | 50.8 | 6.4 |
| 12 | MGMMS12B | 17.3 | 17.3 | 50.8 | 7.1 |
| 13 | MGMMS13A | 18.1 | 18.1 | 50.8 | 7.6 |

## Deep Magnetic, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 1/4 | MGMS8A | 3/8 | 7/16 | 2 | 3/32 |
| 5/16 | MGMS10A | 3/8 | 15/32 | 2 | 5/16 |

# 1/8" DRIVE GENERAL SERVICE SET




1605TA

## 1605TA General Service Set 5 Tools, Includes:

| | 6-Point Sockets |
|---|---|
| 3/32" | T6 |
| 1/8" | T8 |
| 5/32" | T10 |
| 3/16" | T12 |
| 1/8" Drive Handle | T40A |

# GENERAL SERVICE SETS




107ATMPB

**107ATMPB Expandable General Service Set and Additions**
Start with the 107ATMPB General Service Set and add any of the suggested socket sets below to custom build exactly the 1/4" drive set you need. The storage case has a large enough cavity to accommodate two rows of sockets — standard, semi deep, deep, universal or any combination of these in fractional or metric sizes.

## Seven Tools, includes:

| | |
|---|---|
| T72 | High Strength Sealed Ratchet |
| TMU8B | Universal Joint |
| TMXK2 | 2" Knurled Extension |
| TMXK4 | 4" Knurled Extension |
| TMXK60 | 6" Knurled Extension |
| TM10G | Breaker Bar |
| SGT4BR | 1/4" Dr. Standard Shank Driver |

## Set (Add-on)

| | | |
|---|---|---|
| Suggested additions not included in set: | 110TMY | 6-Point Shallow Socket Set (10pc) |
| | 110STMY | 6-Point Deep Socket Set (10pc) |
| | 111TMMDY | 12-Point Metric Shallow Socket Set (11pc) |
| | 111STMMDY | 12-Point Metric Deep Socket Set (11pc) |
| | 106ETMAMY | Metric Hex Driver Set (6pc) |



131TMPB



117TMM

## 131TMPB 6-Point Metric Set

**31 Tools, Includes:**

| mm | 6-Point Shallow Sockets | 6-Point Deep Sockets |
|---|---|---|
| 5 | TMM5 | STMM5 |
| 5.5 | TMM5.5 | STMM5.5 |
| 6 | TMM6 | STMM6 |
| 7 | TMM7 | STMM7 |
| 8 | TMM8 | STMM8 |
| 9 | TMM9 | STMM9 |
| 10 | TMM10 | STMM10 |
| 11 | TMM11 | STMM11 |
| 12 | TMM12 | STMM12 |
| 13 | TMM13 | STMM13 |
| 14 | TMM14 | STMM14 |
| 15 | TMM15 | STMM15 |

| Also Includes: | | |
|---|---|---|
| | TMXK60 | 6" Knurled Extension |
| | SSDMR4B | Magnetic Ratcheting Screwdriver |
| | TMXK2 | 2" Knurled Extension |
| | T72 | High Strength Sealed Ratchet |
| | TM10G | Breaker Bar |
| | TMU8B | Universal Joint |
| | GMB3041 | Hex-To-Square Adaptor |

## 117TMM Metric 6-Point Starter Set

**17 Tools, Includes:**

| mm | 6-Point Shallow Sockets |
|---|---|
| 4 | TMM4 |
| 5 | TMM5 |
| 5.5 | TMM5.5 |
| 6 | TMM6 |
| 7 | TMM7 |
| 8 | TMM8 |
| 9 | TMM9 |
| 10 | TMM10 |
| 11 | TMM11 |
| 12 | TMM12 |
| 13 | TMM13 |
| 14 | TMM14 |
| 15 | TMM15 |

| Also Includes: | | |
|---|---|---|
| | T72 | High Strength Sealed Ratchet |
| | TMU8B | Universal Joint |
| | TMXK2 | 2" Knurled Extension |
| | TMXK4 | 4" Knurled Extension |



144TMPB

## 144TMPB 6-Point Metric/Fractional Set

**44 Tools, Includes:**

| Also Includes: | | |
|---|---|---|
| | T72 | High Strength Sealed Ratchet |
| | TMU8B | Universal Joint |
| | TMXK2 | 2" Knurled Extension |
| | TMXK60 | 6" Knurled Extension |
| | PB99A | Storage Box |

| mm | 6-Point Shallow Sockets | | 6-Point Shallow Sockets | mm | 6-Point Deep Sockets | | 6-Point Deep Sockets |
|---|---|---|---|---|---|---|---|
| 5.5 | TMM5.5 | 3/16 | TM6* | 5.5 | STMM5.5 | 3/16 | STM6 |
| 6 | TMM6 | 7/32 | TM7* | 6 | STMM6 | 7/32 | STM7 |
| 7 | TMM7 | 1/4 | TM8 | 7 | STMM7 | 1/4 | STM8 |
| 8 | TMM8 | 9/32 | TM9 | 8 | STMM8 | 9/32 | STM9 |
| 9 | TMM9 | 5/16 | TM10 | 9 | STMM9 | 5/16 | STM10 |
| 10 | TMM10 | 11/32 | TM11 | 10 | STMM10 | 11/32 | STM11 |
| 11 | TMM11 | 3/8 | TM12 | 11 | STMM11 | 3/8 | STM12 |
| 12 | TMM12 | 7/16 | TM14 | 12 | STMM12 | 7/16 | STM14 |
| 13 | TMM13 | 1/2 | TM16 | 13 | STMM13 | 1/2 | STM16 |
| 14 | TMM14 | 9/16 | TM18 | 14 | STMM14 | 9/16 | STM18 |

*Conventional hex

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS



114ATMP

## 114ATMP 6-Point Fractional Set

**14 Tools, Includes:**

| | 6-Point Shallow Sockets |
|---|---|
| 3/16 | TM6 |
| 7/32 | TM7 |
| 1/4 | TM8 |
| 9/32 | TM9 |
| 5/16 | TM10 |
| 11/32 | TM11 |
| 3/8 | TM12 |
| 7/16 | TM14 |
| 1/2 | TM16 |
| 9/16 | TM18 |

| Also Includes: | | |
|---|---|---|
| | T72 | High Strength Sealed Ratchet |
| | TMU8B | Universal Joint |
| | TMXK2 | 2" Knurled Extension |
| | TMXK4 | 4" Knurled Extension |



120DTMPB

## 120DTMPB 6-Point Fractional General Service

**20 Tools, Includes:**

| | 6-Point Shallow Sockets |
|---|---|
| 3/16 | TM6 |
| 7/32 | TM7 |
| 1/4 | TM8 |
| 9/32 | TM9 |
| 5/16 | TM10 |
| 11/32 | TM11 |
| 3/8 | TM12 |
| 7/16 | TM14 |
| 1/2 | TM16 |
| 9/16 | TM18 |

| Also Includes: | | |
|---|---|---|
| | TM4CSA | Handle |
| | TM10G | Breaker Bar |
| | TM408 | 1/4" Double Square Socket |
| | TM410 | 5/16" Double Square Socket |
| | TM412 | 3/8" Double Square Socket |
| | T72 | High Strength Sealed Ratchet |
| | TMU8B | Universal Joint |
| | TMXK2 | 2" Knurled Extension |
| | TMXK4 | 4" Knurled Extension |
| | TMXK60 | 6" Knurled Extension |



134ATMP

## 134ATMP 6-Point Fractional Set

**34 Tools, Includes:**

| | 6-Point Shallow Sockets | | 6-Point Deep Sockets |
|---|---|---|---|
| 3/16 | TM6 | 3/16 | STM6 |
| 7/32 | TM7 | 7/32 | STM7 |
| 1/4 | TM8 | 1/4 | STM8 |
| 9/32 | TM9 | 9/32 | STM9 |
| 5/16 | TM10 | 5/16 | STM10 |
| 11/32 | TM11 | 11/32 | STM11 |
| 3/8 | TM12 | 3/8 | STM12 |
| 7/16 | TM14 | 7/16 | STM14 |
| 1/2 | TM16 | 1/2 | STM16 |
| 9/16 | TM18 | 9/16 | STM18 |

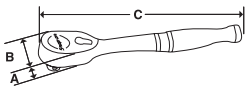
| Also Includes: | | |
|---|---|---|
| | T72 | High Strength Sealed Ratchet |
| | TMU8B | Universal Joint |
| | TMXK2 | 2" Knurled Extension |
| | TMXK4 | 4" Knurled Extension |
| | TMXK60 | 6" Knurled Extension |
| | SGT4BR | 1/4" Dr. Standard Shank Driver |
| | TM10G | Breaker Bar |
| | TM61A | 1/4" Dr. Flexible Extension, 6" long |
| | TM67A | Ratchet Adaptor |
| | TM82 | 1/4" x .036" Flat Tip Driver |
| | TM408 | 1/4" Double Square Socket |
| | TM410 | 5/16" Double Square Socket |
| | TM412 | 3/8" Double Square Socket |
| | TMS70A | Ratchet Spinner |



BPRTR936



BPRTR936SG




## Quick Release Ratchets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| BPRTR936 | Standard Handle | 36 | 10° | 15/32 | 31/32 | 5 5/8 | RKRBPRTR936 |
| BPRTR936SG | Soft Grip Handle | 36 | 10° | 15/32 | 31/32 | 5 5/8 | RKRBPRTR936 |

ASME®/ANSI® B107.10

**BPR703 Quick Release Ratchet Set**
1/4" drive BPRTR936, 3/8" drive BPRFR938 and 1/2" drive BPRSR940 Ratchets (3 pcs) in storage tray.

**BPR703SG Quick Release Ratchet Set**
1/4" drive BPRTR936SG, 3/8" drive BPRFR938SG and 1/2" drive BPRSR940SG Soft Grip Ratchets (3 pcs) in storage tray.



FSDR



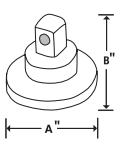
BLPSD14



FSD14



FSD38



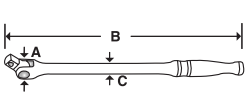

## Ratchet Spinners

| Stock No. | Square Drive, inches | Description | A | B |
|---|---|---|---|---|
| FSDR | 1/4 Male to 1/4 Female | Finger Ratchet | 1 1/8 | 1 7/16 |
| BLPSD14 | 3/8 Male to 1/4 Female | Ratchet Spinner | 7/8 | 27/32 |
| FSD14 | 3/8 Male to 1/4 Female | Spinner Adaptor | 1 | 1 1/2 |
| FSD38 | 1/4 Male to 3/8 Female | Spinner Adaptor | 1 | 1 1/2 |

*ASME/ANSI* B107.10

**FSD3KT Spinner Adaptor Set**
Includes FSD14 (3/8 male to 1/4 female), FSD38 (1/4 male to 3/8 female) and FSD1 (3/8 male to 3/8 male).

**FSDR Finger Ratchet**
Reversible, finger ratchet. Small size works great for extremely tight areas. Aluminum knurled outer ring for sure grip. 1/4" drive on one side and 1/4" hex drive on other side.






BLPBB146

## Breaker Bar

| Stock No. | Description | A | B | C |
|---|---|---|---|---|
| BLPBB146 | Standard Handle | 5/8 | 6 | 3/8 |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

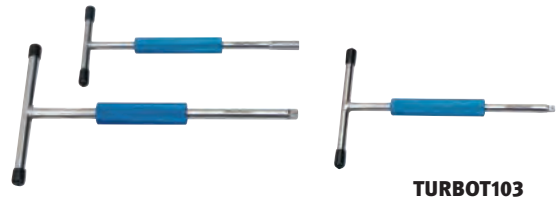
# RATCHETS, HANDLES AND ACCESSORIES Blue-Point®



BLPCGHD146

## Handled Driver

| Stock No. | Description | Length |
|---|---|---|
| BLPCGHD146 | Spinner Handle | 6 |



TURBOT103

## Turbo T-handle Speed Drivers

**TURBOT103 Turbo T-handle Set**

- T9TURBO (1/4" drive), TH10TURBO (1/4" hex) and F11TURBO (3/8" drive)
- 3 pcs in storage tray

| Stock No. | Description | Handle Type |
|---|---|---|
| T9TURBO | 1/4" Square Drive | Turbo T-Handle |
| TH10TURBO | 1/4" Hex | Turbo T-Handle |



BLPTXK3

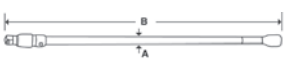



## Knurled

| Stock No. | B |
|---|---|
| BLPTXK1.5 | 1 9/16 |
| BLPTXK2 | 2 3/32 |
| BLPTXK3 | 2 15/16 |
| BLPTXK4 | 4 |
| BLPTXK6 | 6 |



103TMXLBP



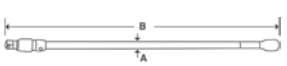

## Locking

| Stock No. | B | 103TMXLBP Set Contains: |
|---|---|---|
| TMXLBP4 | 4 | • |
| TMXLBP6 | 6 | • |
| TMXLBP10 | 10 | • |

Set shown includes storage tray



YA515A




## Locking (Set Screw)

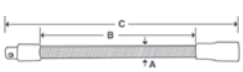
**YA515A Set Screw Locking Extension**

- Allows easy and secure tool stacking
- Securely connects breaker bar, extensions and ratchets to socket and socket drivers for overhead work
- Sliding sleeve for easy removal

| Stock No. | Finish | A | B |
|---|---|---|---|
| YA515A | Chrome | 1/2 | 1 11/16 |



BLPEXTF146

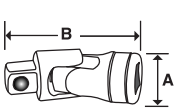



## Flexible Extension

| Stock No. | A | B | C |
|---|---|---|---|
| BLPEXTF146 | 5/16 | 3 5/8 | 6 |



BLPUJ14




## Universal Joint

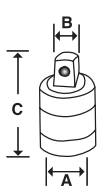
| Stock No. | A | B |
|---|---|---|
| BLPUJ14 | 5/8 | 1 1/2 |



BLPAFM3814



BLPAFM1438




## Adaptors

| Stock No. | Description | A | B |
|---|---|---|---|
| BLPAFM3814 | Square Drive Adaptor | 3/8 | 1/4 |
| BLPAFM1438 | Square Drive Adaptor | 1/4 | 3/8 |


BLPSM145


BLPSM149


BLPSM1412


BLPS1414


BLPS14716

## Shallow, mm

| mm | 6 | Length, mm |
|---|---|---|
| 4 | BLPSM144 | 24.8 |
| 4.5 | BLPSM144.5 | 24.8 |
| 5 | BLPSM145 | 24.8 |
| 5.5 | BLPSM145.5 | 24.8 |
| 6 | BLPSM146 | 24.8 |
| 7 | BLPSM147 | 24.8 |
| 8 | BLPSM148 | 24.8 |
| 9 | BLPSM149 | 24.8 |
| 10 | BLPSM1410 | 24.8 |
| 11 | BLPSM1411 | 24.8 |
| 12 | BLPSM1412 | 24.8 |
| 13 | BLPSM1413 | 24.8 |
| 14 | BLPSM1414 | 24.8 |

## Shallow, inches

| | 6 | Length, inches |
|---|---|---|
| 3/16 | BLPS14316 | 1 |
| 7/32 | BLPS14732 | 1 |
| 1/4 | BLPS1414 | 1 |
| 9/32 | BLPS14932 | 1 |
| 5/16 | BLPS14516 | 1 |
| 11/32 | BLPS141132 | 1 |
| 3/8 | BLPS1438 | 1 |
| 7/16 | BLPS14716 | 1 |
| 1/2 | BLPS1412 | 1 |
| 9/16 | BLPS14916 | 1 |
| 5/8 | BLPS1458 | 1 |


BLPLSM145


BLPLSM1412


BLPLS1414


BLPLS1412

## Deep, mm

| mm | 6 | Length, mm |
|---|---|---|
| 4 | BLPLSM144 | 50 |
| 5 | BLPLSM145 | 50 |
| 6 | BLPLSM146 | 50 |
| 7 | BLPLSM147 | 50 |
| 8 | BLPLSM148 | 50 |
| 9 | BLPLSM149 | 50 |
| 10 | BLPLSM1410 | 50 |
| 11 | BLPLSM1411 | 50 |
| 12 | BLPLSM1412 | 50 |
| 13 | BLPLSM1413 | 50 |
| 14 | BLPLSM1414 | 50 |

## Deep, inches

| | 6 | Length, inches |
|---|---|---|
| 3/16 | BLPLS14316 | 1 31/32 |
| 7/32 | BLPLS14732 | 1 31/32 |
| 1/4 | BLPLS1414 | 1 31/32 |
| 9/32 | BLPLS14932 | 1 31/32 |
| 5/16 | BLPLS14516 | 1 31/32 |
| 11/32 | BLPLS141132 | 1 31/32 |
| 3/8 | BLPLS1438 | 1 31/32 |
| 7/16 | BLPLS14716 | 1 31/32 |
| 1/2 | BLPLS1412 | 1 31/32 |
| 9/16 | BLPLS14916 | 1 31/32 |
| 5/8 | BLPLS1458 | 1 31/32 |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# SOCKETS Blue-Point®



BLPS81438

## Double Square

| | 8 | Length, inches |
|---|---|---|
| 1/4 | BLPS81414 | 1 |
| 5/16 | BLPS814516 | 1 |
| 3/8 | BLPS81438 | 1 |



TSTY70



122TSTY

## Twist Impact, inches (mm)

| # | Stock No. | Length, inches (mm) | 122TSTY Set Contains: |
|---|---|---|---|
| 4.50 mm | TSTY45 | 1 (25.4) | • |
| 4.75 mm and 3/16" | TSTY47 | 1 (25.4) | • |
| 5.00 mm | TSTY50 | 1 (25.4) | • |
| 5.25 mm | TSTY52 | 1 (25.4) | • |
| 5.50 mm | TSTY55 | 1 (25.4) | • |
| 5.75 mm | TSTY57 | 1 (25.4) | • |
| 6.00 mm | TSTY60 | 1 (25.4) | • |
| 6.25 mm and 1/4" | TSTY62 | 1 (25.4) | • |
| 6.50 mm | TSTY65 | 1 (25.4) | • |
| 6.75 mm | TSTY67 | 1 (25.4) | • |
| 7.00 mm | TSTY70 | 1 (25.4) | • |
| 7.25 mm and 9/32" | TSTY72 | 1 (25.4) | • |
| 7.50 mm | TSTY75 | 1 (25.4) | • |
| 7.75 mm | TSTY77 | 1 (25.4) | • |
| 8.00 mm and 5/16" | TSTY80 | 1 (25.4) | • |
| 8.25 mm | TSTY82 | 1 (25.4) | • |
| 8.50 mm | TSTY85 | 1 (25.4) | • |
| 8.75 mm and 11/32" | TSTY87 | 1 (25.4) | • |
| 9.00 mm | TSTY90 | 1 (25.4) | • |
| 9.25 mm | TSTY92 | 1 (25.4) | • |
| 9.50 mm and 3/8" | TSTY95 | 1 (25.4) | • |
| 10.00 mm | TSTY100 | 1 (25.4) | • |

**122TSTY Twist Impact Socket Set**

- Remove rounded or damaged fasteners with almost any head configuration (hex, round, square and more)
- Use on nuts and bolts from 2.3 mm to 6 mm and #2 to #10 sizes and studs from 4.5 mm to 10.00 mm (3/16" to 3/8")
- Other applications include oil pan drain plugs, corroded marine nuts and bolts, exhaust manifold nuts, and pipe nipples

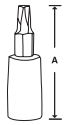
# TORX® SOCKETS *Blue-Point*



BLPTE145

## External *TORX*

| # | Stock No. | Length, inches |
|---|---|---|
| E4 | BLPTE144 | 1 |
| E5 | BLPTE145 | 1 |
| E6 | BLPTE146 | 1 |
| E7 | BLPTE147 | 1 |
| E8 | BLPTE148 | 1 |






## TORX/Standard

BLPT1415

| # | Stock No. | A |
|---|---|---|
| T6 | BLPT146 | 1 7/16 |
| T7 | BLPT147 | 1 7/16 |
| T8 | BLPT148 | 1 7/16 |
| T9 | BLPT149 | 1 7/16 |
| T10 | BLPT1410 | 1 7/16 |
| T15 | BLPT1415 | 1 7/16 |
| T20 | BLPT1420 | 1 7/16 |
| T25 | BLPT1425 | 1 7/16 |
| T27 | BLPT1427 | 1 7/16 |
| T30 | BLPT1430 | 1 7/16 |



## TORX/Long

BLPTL1410

| # | Stock No. | A |
|---|---|---|
| T6 | BLPTL146 | 3 15/16 |
| T7 | BLPTL147 | 3 15/16 |
| T8 | BLPTL148 | 3 15/16 |
| T9 | BLPTL149 | 3 15/16 |
| T10 | BLPTL1410 | 3 15/16 |
| T15 | BLPTL1415 | 3 15/16 |
| T20 | BLPTL1420 | 3 15/16 |
| T25 | BLPTL1425 | 3 15/16 |
| T27 | BLPTL1427 | 3 15/16 |
| T30 | BLPTL1430 | 3 15/16 |






BLPTORX1410

## TORX/Stubby

Set Contains: BLPTORX1410

| # | Stock No. | A | |
|---|---|---|---|
| T10 | BLPTS1410 | 3/4 | • |
| T15 | BLPTS1415 | 3/4 | • |
| T20 | BLPTS1420 | 3/4 | • |
| T25 | BLPTS1425 | 3/4 | • |
| T27 | BLPTS1427 | 3/4 | • |
| T30 | BLPTS1430 | 3/4 | • |
| T40 | BLPTS1440 | 3/4 | • |
| T45 | BLPTS1445 | 3/4 | • |
| T47 | BLPTS1447 | 3/4 | • |
| T50 | BLPTS1450 | 3/4 | • |

Set shown includes storage tray



BLPTS1425TP

## TORX/Tamper Resistant, Stubby

| # | Stock No. | A |
|---|---|---|
| TP8 | BLPTS148TP | 3/4 |
| TP10 | BLPTS1410TP | 3/4 |
| TP15 | BLPTS1415TP | 3/4 |
| TP20 | BLPTS1420TP | 3/4 |
| TP25 | BLPTS1425TP | 3/4 |
| TP27 | BLPTS1427TP | 3/4 |
| TP30 | BLPTS1430TP | 3/4 |
| TP40 | BLPTS1440TP | 3/4 |
| TP45 | BLPTS1445TP | 3/4 |
| TP50 | BLPTS1450TP | 3/4 |






BLPT1420TP

## TORX/Tamper Resistant, Standard

| # | Stock No. | A |
|---|---|---|
| T6 | BLPT146TP | 1 7/16 |
| T7 | BLPT147TP | 1 7/16 |
| T8 | BLPT148TP | 1 7/16 |
| T9 | BLPT149TP | 1 7/16 |
| T10 | BLPT1410TP | 1 7/16 |
| T15 | BLPT1415TP | 1 7/16 |
| T20 | BLPT1420TP | 1 7/16 |
| T25 | BLPT1425TP | 1 7/16 |
| T27 | BLPT1427TP | 1 7/16 |
| T30 | BLPT1430TP | 1 7/16 |



BLPTL1425TP

## TORX/Tamper Resistant, Long

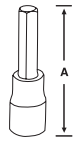
| # | Stock No. | A |
|---|---|---|
| T6 | BLPTL146TP | 3 15/16 |
| T7 | BLPTL147TP | 3 15/16 |
| T8 | BLPTL148TP | 3 15/16 |
| T9 | BLPTL149TP | 3 15/16 |
| T10 | BLPTL1410TP | 3 15/16 |
| T15 | BLPTL1415TP | 3 15/16 |
| T20 | BLPTL1420TP | 3 15/16 |
| T25 | BLPTL1425TP | 3 15/16 |
| T27 | BLPTL1427TP | 3 15/16 |
| T30 | BLPTL1430TP | 3 15/16 |



WARNING • Read safety precautions on pages W1 to W4

# METRIC HEX BIT SOCKETS Blue-Point®






**BLPHEXS1418**

## Hex/Stubby, mm

| mm | | A |
|---|---|---|
| 2 | **BLPHSM142** | 19.05 |
| 2.5 | **BLPHSM1425** | 19.05 |
| 3 | **BLPHSM143** | 19.05 |
| 4 | **BLPHSM144** | 19.05 |
| 5 | **BLPHSM145** | 19.05 |
| 6 | **BLPHSM146** | 19.05 |
| 7 | **BLPHSM147** | 19.05 |
| 8 | **BLPHSM148** | 19.05 |
| 9 | **BLPHSM149** | 19.05 |
| 10 | **BLPHSM1410** | 19.05 |

**BLPHEXS1418 Hex Driver Set**
Includes all BLPHSM metric bit sockets listed above plus all BLPHS fractional bit sockets.



**BLPH124**



**BLPHL145**

## Hex, mm

| mm | | Length, mm |
|---|---|---|
| 2.5 | **BLPH1425** | 34.9 |
| 3 | **BLPH123** | 60.3 |
| 4 | **BLPH124** | 60.3 |
| 5 | **BLPH125** | 60.3 |
| 6 | **BLPH126** | 60.3 |

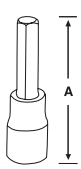
## Hex/Long, mm

| mm | | Length, mm |
|---|---|---|
| 4 | **BLPHL144** | 100 |
| 5 | **BLPHL145** | 100 |
| 6 | **BLPHL146** | 100 |

# HEX BIT SOCKETS *Blue-Point*



**BLPH1414**






**BLPHL14532**

## Hex Standard, inches

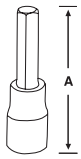
| | | A |
|---|---|---|
| 1/8 | **BLPH1418** | 1 7/16 |
| 9/64 | **BLPH14964** | 1 7/16 |
| 5/32 | **BLPH14532** | 1 7/16 |
| 3/16 | **BLPH14316** | 1 7/16 |
| 7/32 | **BLPH14732** | 1 7/16 |
| 1/4 | **BLPH1414** | 1 7/16 |
| 5/16 | **BLPH14516** | 1 7/16 |

## Hex/Long, inches

| | | Length, inches |
|---|---|---|
| 1/8 | **BLPHL1418** | 3 15/16 |
| 5/32 | **BLPHL14532** | 3 15/16 |
| 3/16 | **BLPHL14316** | 3 15/16 |

## Hex/Stubby, inches

| | | A |
|---|---|---|
| 5/64 | BLPHS14564 | 3/4 |
| 3/32 | BLPHS14332 | 3/4 |
| 7/64 | BLPHS14764 | 3/4 |
| 1/8 | BLPHS1418 | 3/4 |
| 5/32 | BLPHS14532 | 3/4 |
| 3/16 | BLPHS14316 | 3/4 |
| 7/32 | BLPHS14732 | 3/4 |
| 1/4 | BLPHS1414 | 3/4 |
| 5/16 | BLPHS14516 | 3/4 |
| 3/8 | BLPHS1438 | 3/4 |





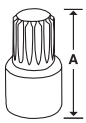

BLPHEXS1418

**BLPHEXS1418 Hex Driver Set**
Includes all BLPHS bit sockets listed above plus all BLPHSM metric bit sockets in storage tray.

## TRIPLE SQUARE BIT SOCKETS *Blue-Point*

### Triple Square/Stubby, mm

| mm | Stock No. | A |
|---|---|---|
| 4 | BLPXZN144 | 27 |
| 5 | BLPXZN145 | 27 |
| 6 | BLPXZN146 | 27 |
| 8 | BLPXZN148 | 27 |
| 10 | BLPXZN1410 | 27 |
| 12 | BLPXZN1412 | 27 |



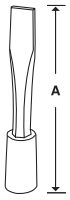



BLPXZN146

## FLAT TIP BIT SOCKETS *Blue-Point*

### Flat Tip, inches

| | | Stock No. | A |
|---|---|---|---|
| Standard Length | 5/32 | BLPFT14532 | 1 7/16 |
| | 7/32 | BLPFT14732 | 1 7/16 |
| | 9/32 | BLPFT14932 | 1 7/16 |
| Short | 1/4 | BLPFS1414 | 3/4 |
| | 3/8 | BLPFS1438 | 3/4 |






BLPFT14732

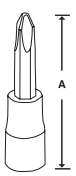


BLPFS1414

## PHILLIPS® TIP BIT SOCKETS *Blue-Point*

### *Phillips*

| | | Stock No. | A |
|---|---|---|---|
| Standard Length | #0 | BLPP140 | 1 7/16 |
| | #1 | BLPP141 | 1 7/16 |
| | #2 | BLPP142 | 1 7/16 |
| Stubby | #1 | BLPPS141 | 3/4 |
| | #2 | BLPPS142 | 3/4 |






BLPPS142



BLPP142

**WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# COMBINATION BIT SOCKET SETS Blue-Point®



BLPBSS40

## BLPBSS40 1/4" Drive Stubby Bit Socket Set (40pc)

**Set Components**

- Ten Metric Bit Sockets (2 mm–10 mm)
- Ten Fractional Bit Sockets (5/64"–3/8")
- Ten TORX® Tamper Resistant Bit Sockets (TP8–TP50)
- Six XZN Triple Square Bit Sockets (XZN4–XZN12)
- Two Phillips® Bit Sockets (#1, #2)
- Two Flat Tip Bit Sockets (1/4", 3/8")



BLPHSSC30

## Combination Socket Driver Set (30pc)

**BLPHSSC30 Hex Bit Socket Set**

**Set Components**

**(1/4" drive):**

- Five metric hex bit sockets (2.5 mm–6 mm)
- Six hex bit sockets (1/8"–1/4")

**(3/8" drive):**

- Five metric hex bit sockets (6 mm–10 mm)
- Five hex bit sockets (7/32"–7/16")

**(1/2" drive):**

- Five metric hex bit sockets (10 mm–19 mm)
- Four hex bit sockets (1/2"–3/4")



BLPTSSC43

## Combination *TORX*/Socket and Bit Socket Set (43pc)

**BLPTSSC43 *TORX* Sockets/*TORX* Bit Sockets Set**

**Set Components**

**(1/4" drive):**

- Five external *TORX* sockets (E4–E8)
- Ten tamper resistant *TORX* socket drivers (T6–T30)
- Ten tamper resistant long *TORX* socket drivers (T6–T30)

**(3/8" drive):**

- Four external *TORX* sockets (E10–E16)
- Three tamper resistant *TORX* socket drivers (T40, T45, T50)
- Three tamper resistant long *TORX* socket drivers (T40, T45, T50)

**(1/2" drive):**

- Four external *TORX* sockets (E18–E24)
- Two tamper resistant *TORX* socket drivers (T55, T60)
- Two tamper resistant long *TORX* socket drivers (T55, T60)

## BLPTHC87 TORX® Sockets/*TORX* and Hex Bit Sockets Set

**Set Components**

**(1/4" drive):**
- Five external *TORX* sockets (E4–E8)
- Ten *TORX* bit sockets (T6–T30)
- Ten long *TORX* bit sockets (T6–T30)
- Five metric hex bit sockets (2.5 mm–6 mm)
- Three long metric hex bit sockets (4 mm–6 mm)
- Six hex bit sockets (1/8"–1/4")
- Three long hex bit sockets (1/8"–3/16")

**(3/8" drive):**
- Four external *TORX* sockets (E10–E16)
- Three *TORX* bit sockets (T40–T50)
- Three long *TORX* bit sockets (T40–T50)
- Five metric hex bit sockets (6 mm–10 mm)
- Four long metric hex bit sockets (7 mm–10 mm)
- Four hex bit sockets (7/32"–3/8")
- Four long hex bit sockets (7/32"–3/8")

**(1/2" drive):**
- Four sxternal *TORX* sockets (E18–E24)
- Two *TORX* bit sockets (T55, T60)
- Two long *TORX* bit sockets (T55, T60)
- Two metric hex bit sockets (10 mm–19 mm)
- Five hex bit sockets (7/16"–3/4")



**BLPTHC87**

## GENERAL SERVICE SETS *Blue-Point*

### BLPGSS1427 General Service Set

**Components (all 1/4" drive):**
- 11 fractional (3/16"–5/8") six-point shallow sockets
- 11 fractional (3/16"–9/16") six-point deep sockets
- Three ratchet/socket accessories
- One quick release ratchet
- One spinner handle
- BLPGSS1427PB storage case



**BLPGSS1427**

### BLPGSSM1427 General Service Set

**Components (all 1/4" drive):**
- 11 metric (4 mm–14 mm) six-point shallow sockets
- 11 metric (4 mm–14 mm) six-point deep sockets
- Three ratchet/socket accessories
- One quick release ratchet
- One spinner handle
- BLPGSSM1427PB storage case

### BLPGSS1438 General Service Set

**Components (all 1/4" drive):**
- 11 fractional (3/16"–5/8") and 11 metric (4 mm–14 mm) six-point shallow sockets
- Four fractional hex bits (9/64", 3/16", 7/32", 1/4")
- Three flat tip bits (5/32", 3/16", 1/4")
- Two Phillips® tip bits (#1, #2)
- Five ratchet/socket accessories
- One quick release ratchet
- One spinner handle
- BLPGSS1438PB storage case



**BLPGSSM1427**



**BLPGSS1438**



**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS Blue-Point®



BLPGSS1451A

## BLPGSS1451A General Service Set

**Components (all 1/4" drive):**
- Ten fractional (3/16"–9/16") and 13 metric (4 mm–14 mm) standard sockets
- Three fractional (1/4", 5/16", 3/8") eight-point sockets
- Six TORX® socket drivers (T8–T27)
- Six fractional hex socket drivers (1/8"–5/16")
- Three flat tip socket drivers (5/32", 7/32", 9/32")
- Three Phillips® socket drivers (#0, #1, #2)
- Six ratchet/socket accessories
- One ratchet
- BLPGSS1451AC storage case



BLPGSS1462

## BLPGSS1462 General Service Set

**Components (all 1/4" drive):**
- 11 fractional (3/16"–5/8") and 11 metric (4 mm–14 mm) standard sockets
- 11 fractional (3/16"–5/8") and 11 metric (4 mm–14 mm) deep sockets
- One bit holder
- Four hex bits (9/64", 3/16", 7/32", 1/4")
- Three flat tip bits (5/32", 3/16", 1/4")
- Two *Phillips* bits (#1, #2)
- Seven ratchet/socket accessories
- One ratchet
- BLPGSS1462PB storage case



BLPGSSC100

## BLPGSSC100 General Service Set

**Components (1/4" drive):**
- Ten fractional (3/16"–9/16") and 13 metric (4 mm–14 mm) standard sockets
- Six ratchet/socket accessories
- One ratchet

**Components (3/8" drive):**
- 13 fractional (1/4"–1") and 19 metric (6 mm–24 mm)
- 11 external *TORX* sockets (E4–E20)
- Two spark plug sockets (5/8", 13/16")
- Five ratchet/socket accessories
- One ratchet

**Components (Combination Wrenches):**
- Nine fractional combination wrenches (1/4"–3/4")
- Ten metric combination wrenches (10 mm–19 mm)
- BLPGSSC100PB storage case



BLPGSSC155

## BLPGSSC155 General Service Set

**Components (1/4" drive):**
- Ten fractional (3/16"–9/16") and 13 metric (4 mm–14 mm) standard sockets
- Ten fractional (3/16"–9/16") and 11 metric (4 mm–14 mm) deep sockets
- 20 assorted 1/4" hex bits with bit holder
- Six ratchet/socket accessories
- One quick release ratchet components (3/8" Drive)
- 13 fractional (1/4"–1") and 19 metric (6 mm–24 mm) standard sockets
- 11 fractional (3/8"–1") and 15 metric (10 mm–24 mm) deep sockets
- 11 external *TORX* sockets (E4–E20)
- Two spark plug sockets (5/8", 13/16")
- Three metric hex socket drivers (7 mm, 8 mm, 10 mm)
- Four tamper resistant *TORX* socket drivers (T40, T45, T50, T55)
- Five ratchet/socket accessories
- One quick release ratchet
- BLPGSSC155PB storage case

# PERFORMANCE-DRIVEN DRIVE TOOLS.

When it comes to outstanding performance, our 3/8" drive tools deserve to take a bow. Day after day, year after year, and generation after generation, these tools are the right fit for almost any application. They're versatile, durable and dependable. When you need a tool with an impressive skill set, our Snap-on® 3/8" drive tools deliver.

**MATERIALS SECOND TO NONE.**

To make the best tools, you need the best materials. That's why each *Snap-on* ratchet is built with our proprietary alloy steel – and precision-crafted gears, springs and pawls.

**Dual 80® Technology** — Dual pawls and an 80-tooth gear provide more power in less lateral space. In combination with the compact head, the smaller ratcheting arc makes for smooth movement and the transfer of more torque.

**Full range** — Because you perform a wide range of tasks, we provide a wide range of tools. With Snap-on, you'll select from a broad range of ratchets, sockets and extensions that meet every application. We'll always have the right tool for your job.



# RATCHETS





F80


FL80


FLL80


FF80


GF80


FLF80


FBF80


FX80


FKF80

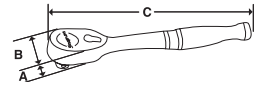

FK80

## Dual 80® Technology Ratchets

Stop, Turn and Listen. A smoother, stronger ratchet. Try them to believe them.

***Dual 80* Technology Ratchets Feature:**

- 80-tooth gear
- Seven teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth
- Sealed head keeps dirt and other contaminants out of the head mechanism




| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **F80** | Standard Handle | 80 | 4.5° | 9/16 | 1 1/4 | 7 7/16 | **RKRF80** |
| **FL80** | Long Handle | 80 | 4.5° | 9/16 | 1 1/4 | 10 5/16 | **RKRF80** |
| **FLL80** | Extra Long Handle | 80 | 4.5° | 3/4 | 1 5/8 | 17 1/2 | **RKRF80** |
| **FF80*** | Standard Handle Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 8 7/16 | **RKRF80** |
| **GF80** | Standard Handle, Black Industrial | 80 | 4.5° | 9/16 | 1 1/4 | 7 7/16 | **RKRF80** |
| **FLF80*** | Long Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 11 1/2 | **RKRF80** |
| **FBF80*** | Bent Handle Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 11 1/4 | **RKRF80** |
| **FX80**** | Locking Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 11 1/2 | **RKRF80** |
| **FKF80*** | Stubby Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 4 3/4 | **RKRF80** |
| **FK80***** | Stubby Handle | 80 | 4.5° | 9/16 | 1 1/4 | 4 3/16 | **RKRF80** |

ASME®/ANSI® B107.10
*Uses RKRF841JT Flex Joint Repair Kit.
**Uses RKRF841JT Flex Joint Repair Kit and RKRFX936ALM Locking Mechanism Repair Kit.
****ASME/ANSI* B107.10 with exception of the length.


FH80


FHL80

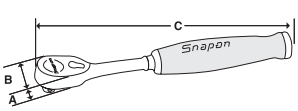

FHF80


FHLF80


FHBF80


FHOF80


FHX80




## Dual 80® Technology Ratchets with Soft Grip Handle

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **FH80** | Standard Handle | 80 | 4.5° | 9/16 | 1 1/4 | 9 9/16 | **RKRF80** |
| **FHL80** | Long Handle | 80 | 4.5° | 9/16 | 1 1/4 | 12 7/16 | **RKRF80** |
| **FHF80*** | Standard Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 9 5/8 | **RKRF80** |
| **FHLF80*** | Long Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 13 11/16 | **RKRF80** |
| **FHBF80*** | Bent Handle Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 13 5/16 | **RKRF80** |
| **FHOF80*** | Offset Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 9 15/16 | **RKRF80** |
| **FHX80**** | Locking Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 11 15/16 | **RKRF80** |

ASME®/ANSI® B107.10
*Uses RKRF841JT Flex Joint Repair Kit.
**Uses RKRF841JT Flex Joint Repair Kit and RKRFX936ALM Locking Mechanism Repair Kit.
FH936-12 Soft Grip Replacement Handle

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETS

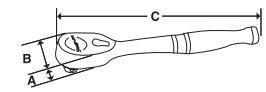


FC72



FCF72

## Dual 80® Based Technology Compact Head Ratchets




- Compact head design offers greater accessibility
- Swivel head ratchets provide a variety of ratcheting positions

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **FC72** | Compact Head | 72 | 5° | 7/16 | 15/16 | 4 7/16 | **RKRFC72** |
| **FCF72** | Compact Flex Head | 72 | 5° | 7/16 | 15/16 | 6 1/4 | **RKRFC72** |

ASME®/ANSI® B107.10



FR80



FHR80



FHRLF80



FRLF80

## *Dual 80* Technology Quick Release Ratchets

- Quick release button for rapid socket/accessory changes, even with greasy or oily hands
- Contoured handle for comfort and control
- Chrome finish for easy cleanup

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **FR80** | Standard Handle | 80 | 4.5° | 9/16 | 1 1/4 | 7 7/16 | **RKRFR80** |
| **FHR80** | Soft Grip Handle | 80 | 4.5° | 9/16 | 1 1/4 | 9 9/16 | **RKRFR80** |
| **FHRLF80*** | Soft Grip Long Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 13 11/16 | **RKRFR80** |
| **FRLF80*** | Standard Long Flex Head | 80 | 4.5° | 9/16 | 1 1/4 | 11 1/2 | **RKRFR80** |

*ASME/ANSI* B107.10
*Uses RKRF841JT Flex Joint Repair Kit
FH936-12 Soft Grip Replacement Handle




FHNF100



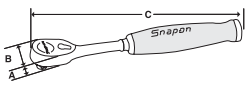
FN100



FHCNF72



FZERO

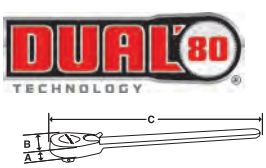



## Round Head Ratchets

The Snap-on® Round Head features up to 100 teeth to achieve the lowest possible swing arc.
Slim round head ratchets are perfect for the tightest of space constaints.

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **FHNF100** | Swivel Head | 100 | 3.6° | 11/16 | 1 3/4 | 12 1/2 | **RKRFHNF100** |
| **FN100** | Round Head | 100 | 3.6° | 11/16 | 1 3/4 | 7 7/8 | **RKRFHNF100** |
| **FHCNF72** | Compact Swivel Head | 72 | 5° | 7/16 | 1 1/4 | 6 7/8 | **RKRFHCNF72** |
| **FZERO** | Gearless | N/A | – | 5/8 | 1 1/2 | 7 1/2 | **RKRFZERO** |

ASME®/ANSI® B107.10
*FH936-12 Soft Grip Replacement Handle






RAF80

## Dual 80® Technology Low-Profile Ratchet

- Square drive design works with low-profile sockets to access restricted clearance areas without loss of strength
- Use with standard 3/8" drive sockets or other attachments
- Thin handle cross section allows for increased accessibility in tight quarters
- *Dual 80* Technology requires less arc to engage the next gear tooth
- Seven teeth in contact with gear to provide strength and durability

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **RAF80** | Low Profile | 80 | 4.5° | 7/16 | 1 1/4 | 7 1/2 | **RKRRAF80** |



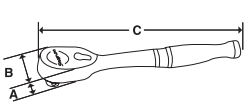
F80FOD



GF80FOD



GFL80FOD




## *Dual 80* Technology FOD (Foreign Object Damage) Ratchets

- Aviation and other critical applications where Foreign Object Damage prevention is crucial for success
- Designed to have the lowest profile and work with the shortest swing arc, providing better access to restricted areas

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C |
|---|---|---|---|---|---|---|
| **F80FOD** | Standard Handle | 80 | 4.5° | 9/16 | 1 1/4 | 7 7/16 |
| **GF80FOD** | Standard Handle, Industrial Finish | 80 | 4.5° | 9/16 | 1 1/4 | 7 7/16 |
| **GFL80FOD** | Long Handle, Industrial Finish | 80 | 4.5° | 9/16 | 1 1/4 | 10 5/16 |

*ASME/ANSI* B107.10

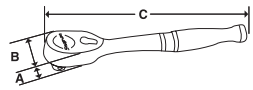
**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETS



FCY72




## Dual 80® Based Technology Hi-Lok® Ratchet

- Features a hole through the head and square drive so the fastener may be held steady with a hex wrench as the fastener's collar is tightened
- Snap-on® ratchets are put through rigorous testing to perform in the real world and provide trouble-free performance that stands the test of time
- *Snap-on* ratchets are designed to have the lowest profile and work with the shortest swing arc, providing better access to restricted areas
- *Dual 80* Ratchet Technology features dual pawls and a 72-tooth gear, providing more power in less lateral space
- Six teeth in full contact with gear to provide strength and durability
- 5° ratcheting arc means shorter movement between tooth engagement
- Sealed head keeps dirt and other contaminants out of the head mechanism
- For use with standard or *Hi-Lok* sockets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| FCY72 | Standard Handle | 72 | 5° | 7/16 | 15/16 | 4 5/8 | RKRFCY72 |

ASME®/ANSI® B107.10



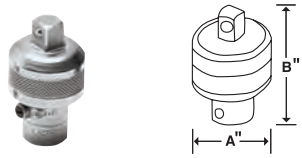
FZ936A



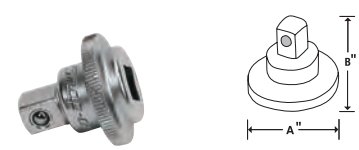

PALMRAT

## Special Application Ratchets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| FZ936A | Multi-Purpose | 36 | 10° | 5/8 | 1 3/16 | 3 1/4 | RKRF936 |
| PALMRAT | Palm Style | 20 | 18° | 1 3/16 | — | 2 5/8 | RKRPALMRAT |




F77




FRS70A

## Ratchet Adaptor

| Stock No. | Description | Gear Teeth | Swing Arc | A | B |
|---|---|---|---|---|---|
| F77 | Ratchet Adaptor | 20 | 18° | 13/16 | 2 3/16 |

*ASME/ANSI* B107.10

## Ratchet Spinner

| Stock No. | Description | A | B |
|---|---|---|---|
| FRS70A | Ratchet Spinner | 1 1/4 | 1 5/16 |

*ASME/ANSI* B107.10

# BREAKER BARS



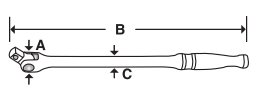
F10LC



F12LA



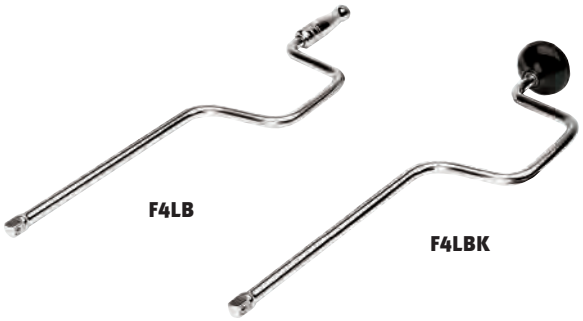

FHBB12

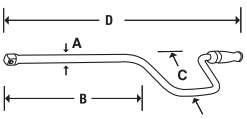



## Breaker Bars

| Stock No. | Description | A | B | C | Repair Kit |
|---|---|---|---|---|---|
| F10LC* | Standard Handle | 13/16 | 9 9/16 | 1/2 | RKBB2 |
| F12LA* | Long Handle | 13/16 | 11 9/16 | 1/2 | RKBB2 |
| FHBB12* | Soft Grip Handle | 13/16 | 13 | 1/2 | RKBB2 |

**ASME/ANSI* B107.10*

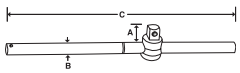



## Speeders

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| F4LB | 13/32 | 7 7/8 | 3 1/2 | 17 27/32 |
| F4LBK* | 13/32 | 7 7/8 | 3 1/2 | 16 5/8 |

*Speeder with knob



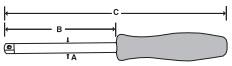




## Sliding T-handle

| Stock No. | A | B | C |
|---|---|---|---|
| F5L | 3/4 | 13/32 | 8 |







## Handled Drivers

| Stock No. | A | B | C |
|---|---|---|---|
| F40B | 1/2 | 1 | 5 5/16 |
| SGF50BR* | 1/2 | 3 3/32 | 8 |

*Instinct® Handle

# EXTENSIONS




## Knurled

Knurling at the drive end provides for easy fingertip turning.

| Stock No. | Industrial Stock No. | A | B | 208AFX | 206AFX |
|---|---|---|---|---|---|
| FX1* | GFX1 | 1/2 | 1 1/2 | • | • |
| FX2 | – | 31/64 | 2 | | |
| FXK3 | GFXK3 | 13/32 | 3 | • | • |
| FXK4 | – | 13/32 | 4 | • | • |
| FXK6 | GFXK6 | 13/32 | 6 | • | • |
| FXK8 | GFXK8 | 13/32 | 8 | • | • |
| FXK11 | GFXK11 | 13/32 | 11 | • | • |
| FX18 | – | 1/2 | 18 | • | |
| FX24A | – | 1/2 | 24 | • | |
| FX36 | – | 1/2 | 36 | | |

Set Contains:

*Not Knurled
Sets do not include industrial part number

Sets include storage tray










## Quick Release, Locking

- Releases socket from extension quickly and easily
- Knurling at drive end provides easy fingertip turning

| Stock No. | A | B | 204FXKLA |
|---|---|---|---|
| FXKL3A | 1/2 | 3 | • |
| FXKL6A | 1/2 | 6 | • |
| FXKL8A | 1/2 | 8 | |
| FXKL11A | 1/2 | 11 | • |
| FXKL12A | 1/2 | 12 | |
| FXKL24A | 1/2 | 24 | • |

Set Contains:

FXKLP Locking pins for FXKL Series Extensions; five-pack.
FXKLRK Repair kit for FXKL Series Extensions

Set shown includes storage tray




**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# EXTENSIONS



206AFXW






206AFXWP

## Wobble

- Wobble function provides 16° of additional accessibility
- Knurled shanks for easy fingertip turning

| Stock No. | A | B | 206AFXW Set Contains: |
|---|---|---|---|
| FXW1* | 1/2 | 1 1/2 | • |
| FXWK3 | 13/32 | 3 | • |
| FXWK4 | 13/32 | 4 | • |
| FXWK6 | 13/32 | 6 | • |
| FXWK8 | 13/32 | 8 | • |
| FXWK11 | 13/32 | 11 | • |

*Not Knurled

Set shown includes storage tray

## Wobble Plus

- Usable in wobble and rigid functionality
- Wobble function provides 16° additional accessibility
- Knurled shanks for easy fingertip turning

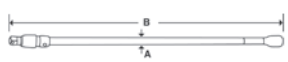
| Stock No. | A | B | 206AFXWP Set Contains: |
|---|---|---|---|
| FXWP1* | 1/2 | 1 1/2 | • |
| FXWP3 | 13/32 | 3 | • |
| FXWP4 | 13/32 | 4 | • |
| FXWP6 | 13/32 | 6 | • |
| FXWP8 | 13/32 | 8 | • |
| FXWP11 | 13/32 | 11 | • |

*Not Knurled

Set shown includes storage tray



203FXWKL




## Locking Wobble Set

- Provides 16° of additional accessibility
- Quick release locking sleeve provides secure connection and easy socket removal
- Knurled release collar for easy one-hand operation, even with slippery hands

| Stock No. | A | B | 203FXWKL Set Contains: |
|---|---|---|---|
| FXWKL3 | 1/2 | 3 | • |
| FXWKL6 | 1/2 | 6 | • |
| FXWKL11 | 1/2 | 11 | • |

Set shown includes storage tray



FZ1

## Connectors

**FZ1 Connector**

- 3/8" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches
- Connect one or more tools for a variety of ways to reach limited access fasteners
- Use in automotive, aircraft, marine, heavy truck, plumbing and manufacturing applications

**FZ2 Connector Set**

- Set of two FZ1

# RATCHET/SOCKET ACCESSORIES

## Adaptors

| Stock No. | Industrial Stock No. | A | B | C |
|---|---|---|---|---|
| — | GFAT1E | 3/8 | 1/4 | 1 1/4 |
| TA3 | GTA3 | 1/4 | 3/8 | 15/16 |
| A2A | GAF2A | 3/8 | 1/2 | 1 5/16 |
| — | GSAF1F | 1/2 | 3/8 | 1 13/16 |

**206EAU Adaptor/Extension Set**

- Includes GFAT1E and A2A adaptors; FU8A universal joint and FX1, FXK3 and FXK6extensions (6pc) in storage tray

**1206GS Combination Drive Adaptor Set**

- Includes 1/4" drive GFAT1E and TA3 adaptors, 3/8" drive A2A and GSAF1F adaptors and 1/2" drive GLA12B and GLAS1E adaptors (6pc) in storage tray



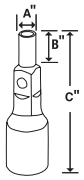
206EAU






1206GS

## Magnetic Adaptors



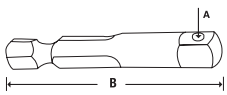

| Stock No. | A | B | C |
|---|---|---|---|
| FXM112 | 5/16 | 9/32 | 1 25/32 |
| FXM18 | 3/16 | 9/32 | 1 25/32 |



FXM18

## Hex-To-Square Adaptors

• 1/4" hex size; 1" length of hex

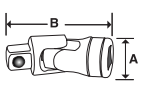



| Stock No. | A | B |
|---|---|---|
| AB3042 | Ball Detent | 2 |
| AB3044 | Ball Detent | 4 |
| AB3046 | Ball Detent | 6 |



AB3046

## Universal Joints




| Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|
| FUL8A | – | 3/4 | 3 |
| FU8A** | GFU8A | 3/4 | 2 1/16 |
| FU80B** | – | 11/16 | 1 11/16 |
| FUB8A* | – | 3/4 | 2 5/16 |

*Swivel Universal Joint **ASME®/ANSI® B107.10



FUL8A

**FUL8A Locking Pin**

• Locking pin for better socket retention

**103UFTS Combination Drive Universal Joint Set**

• Includes 1/4" drive TMU8B, 3/8" drive FU8A and 1/2" drive S8
• Universal joints in storage tray (3pc)



FU8A 103UFTS

## Non-marring Metric Socket Inserts

• Designed for use with Snap-on® 1/4" and 3/8" drive metric sockets
• Tough glass-reinforced nylon offers excellent strength yet will not damage soft metals, plated fasteners or powder-coated surfaces
• Large lip makes insert removal easy
• Set covers most popular metric sizes; inserts marked for easy identification
• Supplied on metal storage ring; avoid lost inserts
• Do not use socket inserts with impact tools

| Stock No. | Socket Size | Fastener Size | Working Torque, in-lb | Set Contains: PSCM600 |
|---|---|---|---|---|
| PSCM1208 | 12 mm | 8 mm | 80 | • |
| PSCM1410 | 14 mm | 10 mm | 155 | • |
| PSCM1612 | 16 mm | 12 mm | 240 | • |
| PSCM1713 | 17 mm | 13 mm | 400 | • |
| PSCM1915 | 19 mm | 15 mm | 450 | • |
| PSCM2217 | 22 mm | 17 mm | 700 | • |



PSCM600

**⚠WARNING**

• Do not use chrome or industrial finish hand tools with impact drivers
• Read safety precautions on pages W1 to W4

# FLANK DRIVE® SOCKETS



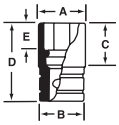
FM14



GFM9A



212FSMY




## Shallow, mm

| mm | 6 | 12 | 12 | A | B | C | D | E | Set Contains: 212FSMY 6 | 212FMY 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | FSM61 | – | – | 9.1 | 17.2 | 11.1 | 23.0 | 5.6 | | |
| 7 | FSM71 | – | – | 10.4 | 17.2 | 11.1 | 23.0 | 5.6 | | |
| 8 | FSM81 | FM8 | – | 11.6 | 17.2 | 11.1 | 23.0 | 6.4 | • | • |
| 9 | FSM91 | FM9 | GFM9A | 13.1 | 17.2 | 11.0 | 23.0 | 7.1 | • | • |
| 10 | FSM101 | FM10 | – | 14.3 | 17.2 | 11.0 | 23.0 | 7.1 | • | • |
| 11 | FSM111 | FM11 | – | 15.4 | 17.2 | 11.0 | 23.0 | 7.1 | • | • |
| 12 | FSM121 | FM12 | – | 16.5 | 17.2 | 11.9 | 23.8 | 8.1 | • | • |
| 13 | FSM131 | FM13 | – | 18.0 | 17.2 | 12.6 | 24.6 | 8.1 | • | • |
| 14 | FSM141 | FM14 | – | 19.6 | 18.6 | 13.2 | 26.2 | 9.1 | • | • |
| 15 | FSM151 | FM15 | – | 20.3 | 19.4 | 13.7 | 27.0 | 9.1 | • | • |
| 16 | FSM161 | FM16 | – | 21.1 | 20.2 | 15.0 | 27.8 | 10.4 | • | • |
| 17 | FSM171 | FM17 | – | 22.7 | 21.8 | 15.0 | 28.6 | 10.4 | • | • |
| 18 | FSM181 | FM18 | – | 24.3 | 23.2 | 15.7 | 28.6 | 10.9 | • | • |
| 19 | FSM191 | FM19 | – | 25.1 | 24.0 | 16.3 | 30.2 | 11.9 | • | • |
| 20 | FSM201 | FM20 | – | 26.3 | 25.3 | 16.6 | 30.9 | 12.4 | | |
| 21 | FSM211 | FM21 | – | 27.4 | 26.4 | 17.4 | 31.8 | 12.2 | | |
| 22 | FSM221 | FM22 | – | 28.3 | 27.2 | 17.4 | 32.5 | 13.2 | | |
| 23 | FSM231 | FM23 | – | 29.9 | 28.8 | 18.2 | 33.8 | 13.2 | | |
| 24 | FSM241 | FM24 | – | 31.5 | 30.5 | 19.0 | 35.0 | 14.4 | | |
| 25 | FSM251 | – | – | 32.3 | 31.3 | 19.8 | 35.3 | 14.5 | | |
| 26 | FSM261 | FM26 | – | 33.8 | 32.9 | 20.6 | 37.0 | 14.3 | | |

Sets shown include magnetic storage tray



F201



GF201

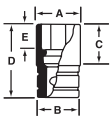


211FSY

## Shallow, inches

| | 6 | 12 | 6 | 12 | A | B | C | D | E | Set Contains: 214FSY 6 | 211FSY 6 | 211FY 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | FS081 | F081 | GFS081 | GF081 | 13/32 | 11/16 | 7/16 | 29/32 | 7/32 | • | • | • |
| 5/16 | FS101 | F101 | GFS101 | GF101 | 15/32 | 11/16 | 7/16 | 29/32 | 1/4 | • | • | • |
| 11/32 | FS111 | F111 | – | GF111 | 1/2 | 11/16 | 7/16 | 29/32 | 9/32 | • | | |
| 3/8 | FS121 | F121 | GFS121 | GF121 | 9/16 | 11/16 | 7/16 | 29/32 | 9/32 | • | • | • |
| 7/16 | FS141 | F141 | GFS141 | GF141 | 5/8 | 11/16 | 7/16 | 29/32 | 9/32 | • | • | • |
| 1/2 | FS161 | F161 | GFS161 | GF161 | 23/32 | 11/16 | 1/2 | 15/16 | 5/16 | • | • | • |
| 9/16 | FS181 | F181 | GFS181 | GF181 | 25/32 | 3/4 | 1/2 | 1 1/32 | 3/8 | • | • | • |
| 19/32 | – | – | – | GF191 | 13/16 | 25/32 | 9/16 | 1 1/16 | 3/8 | | | |
| 5/8 | FS201 | F201 | GFS201 | GF201 | 27/32 | 25/32 | 19/32 | 1 3/32 | 1/2 | • | • | • |
| 11/16 | FS221 | F221 | GFS221 | GF221 | 15/16 | 7/8 | 5/8 | 1 1/8 | 17/32 | • | • | • |
| 3/4 | FS241 | F241 | GFS241 | GF241 | 1 | 15/16 | 11/16 | 1 3/16 | 15/32 | • | • | • |
| 13/16 | FS261 | F261 | GFS261 | GF261 | 1 1/16 | 1 | 11/16 | 1 7/32 | 1/2 | • | • | • |
| 7/8 | FS281 | F281 | GFS281 | GF281 | 1 5/32 | 1 1/32 | 23/32 | 1 9/32 | 9/16 | • | • | • |
| 15/16 | FS301 | F301 | GFS301 | GF301 | 1 1/4 | 1 3/16 | 25/32 | 1 11/32 | 9/16 | • | | |
| 1 | FS321 | F321 | GFS321 | GF321 | 1 5/16 | 1 1/4 | 13/16 | 1 3/8 | 19/32 | • | | |

Sets shown include magnetic storage tray






FSMS14 212FSMSY

## Semi Deep, mm

Set Contains: 212FSMSY

| mm | 6 | 12 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|---|
| 8 | FSMS8 | FMS8 | 11.4 | 17.2 | 29.3 | 41.3 | 7.1 | • |
| 9 | FSMS9 | FMS9 | 12.8 | 17.2 | 29.3 | 41.3 | 7.1 | • |
| 10 | FSMS10 | FMS10 | 14.3 | 17.2 | 29.3 | 41.3 | 7.9 | • |
| 11 | FSMS11 | – | 15.7 | 17.2 | 29.3 | 41.3 | 9.7 | • |
| 12 | FSMS12 | FMS12 | 16.5 | 17.2 | 29.3 | 41.3 | 9.9 | • |
| 13 | FSMS13 | FMS13 | 17.9 | 17.2 | 23.2 | 41.3 | 10.7 | • |
| 14 | FSMS14 | FMS14 | 19.6 | 18.6 | 23.2 | 41.3 | 10.7 | • |
| 15 | FSMS15 | FMS15 | 20.3 | 19.4 | 23.2 | 41.3 | 10.7 | • |
| 16 | FSMS16 | FMS16 | 21.1 | 20.2 | 23 | 41.3 | 10.7 | • |
| 17 | FSMS17 | FMS17 | 22.6 | 21.8 | 23 | 41.3 | 11.2 | • |
| 18 | FSMS18 | FMS18 | 24.2 | 23.2 | 23.0 | 41.3 | 11.2 | • |
| 19 | FSMS19 | – | 25.1 | 24.0 | 22.7 | 41.3 | 11.7 | • |

Sets shown include magnetic storage tray



FSS201 211FSSY

## Semi Deep, inches, 6pt

Set Contains: 211FSSY

| | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 1/4 | FSS081 | 13/32 | 11/16 | 1 1/8 | 1 5/8 | 7/32 | • |
| 5/16 | FSS101 | 15/32 | 11/16 | 1 1/8 | 1 5/8 | 1/4 | • |
| 3/8 | FSS121 | 9/16 | 11/16 | 1 1/8 | 1 5/8 | 9/32 | • |
| 7/16 | FSS141 | 5/8 | 11/16 | 1 1/8 | 1 5/8 | 3/8 | • |
| 1/2 | FSS161 | 23/32 | 11/16 | 29/32 | 1 5/8 | 13/32 | • |
| 9/16 | FSS181 | 25/32 | 3/4 | 29/32 | 1 5/8 | 13/32 | • |
| 5/8 | FSS201 | 27/32 | 13/16 | 29/32 | 1 5/8 | 13/32 | • |
| 11/16 | FSS221 | 15/16 | 29/32 | 29/32 | 1 5/8 | 7/16 | • |
| 3/4 | FSS241 | 1 | 31/32 | 29/32 | 1 5/8 | 7/16 | • |
| 13/16 | FSS261 | 1 1/16 | 1 1/32 | 29/32 | 1 5/8 | 15/32 | • |
| 7/8 | FSS281 | 1 5/32 | 1 1/8 | 29/32 | 1 5/8 | 1/2 | • |

Sets shown include magnetic storage tray



FDS201

## Semi Deep, inches, 12pt

| | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1/4 | FDS081 | 13/32 | 11/16 | 1 1/8 | 1 5/8 | 7/32 |
| 9/32 | FDS091 | 7/16 | 11/16 | 3/4 | 1 1/4 | 7/32 |
| 5/16 | FDS101 | 15/32 | 11/16 | 3/4 | 1 1/4 | 1/4 |
| 3/8 | FDS121 | 9/16 | 11/16 | 1 | 1 1/2 | 9/32 |
| 7/16 | FDS141 | 5/8 | 11/16 | 29/32 | 1 1/2 | 3/8 |
| 1/2 | FDS161 | 23/32 | 11/16 | 29/32 | 1 5/8 | 13/32 |
| 9/16 | FDS181 | 25/32 | 3/4 | 7/8 | 1 5/8 | 13/32 |
| 5/8 | FDS201 | 27/32 | 13/16 | 29/32 | 1 5/8 | 15/32 |
| 11/16 | FDS221 | 15/16 | 29/32 | 29/32 | 1 5/8 | 1/2 |
| 3/4 | FDS241 | 1 | 31/32 | 1 1/16 | 1 5/8 | 19/32 |
| 25/32 | FDS251 | 1 1/16 | 1 1/32 | 1 1/16 | 1 5/8 | 5/8 |
| 13/16 | FDS261 | 1 1/16 | 1 1/32 | 1 1/16 | 1 5/8 | 21/32 |
| 15/16 | FDS301 | 1 1/4 | 1 7/32 | 1 3/16 | 1 3/4 | 23/32 |
| 1 | FDS321 | 1 5/16 | 1 9/32 | 1 1/4 | 1 3/4 | 3/4 |



SFSM9 SFM19 212SFSMY

## Deep, mm

Set Contains: 212SFSMY 212SFMY

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 6 | SFSM6 | SFM6 | 9.1 | 17.2 | 42.0 | 54.0 | 5.6 | | |
| 7 | SFSM7 | SFM7 | 10.5 | 17.2 | 42.0 | 54.0 | 5.6 | | |
| 8 | SFSM8 | SFM8 | 11.4 | 17.7 | 42.0 | 54.0 | 7.1 | • | • |
| 9 | SFSM9 | SFM9 | 12.8 | 17.2 | 42.0 | 54.0 | 7.1 | • | • |
| 10 | SFSM10 | SFM10 | 14.3 | 17.2 | 42.0 | 54.0 | 7.9 | • | • |
| 11 | SFSM11 | SFM11 | 15.7 | 17.2 | 42.0 | 54.0 | 9.7 | • | • |
| 12 | SFSM12 | SFM12 | 16.5 | 17.2 | 42.0 | 54.0 | 9.9 | • | • |
| 13 | SFSM13 | SFM13 | 18.0 | 17.2 | 42.0 | 54.0 | 10.7 | • | • |
| 14 | SFSM14 | SFM14 | 19.6 | 18.6 | 43.3 | 60.3 | 10.7 | • | • |
| 15 | SFSM15 | SFM15 | 20.3 | 19.4 | 43.3 | 60.3 | 10.7 | • | • |
| 16 | SFSM16 | SFM16 | 21.1 | 20.0 | 43.3 | 60.3 | 10.7 | • | • |
| 17 | SFSM17 | SFM17 | 22.7 | 21.8 | 43.6 | 66.7 | 11.2 | • | • |
| 18 | SFSM18 | SFM18 | 24.3 | 23.2 | 49.0 | 66.7 | 11.2 | • | • |
| 19 | SFSM19 | SFM19 | 25.1 | 24.0 | 49.0 | 66.7 | 15.5 | • | • |
| 20 | SFSM20 | – | 26.3 | 25.3 | 48.1 | 66.7 | 12.2 | | |
| 21 | SFSM21 | – | 27.5 | 26.4 | 47.6 | 66.7 | 12.4 | | |

Sets shown include magnetic storage tray



222SFFS



224SFFSM

## Shallow/Deep Combination Sets

**222SFFS 6-Point Shallow/Deep Set**
FS081–FS281 shallow sockets (except FS111) plus SFS081–SFS281 deep sockets (except SFS111) (1/4"–7/8") (22pc). Includes magnetic storage trays.

**224SFFSM Metric 6-Point Shallow/Deep Set**
FSM81–FSM191 shallow sockets plus SFSM8–SFSM19 deep sockets (24pc) (8 mm–19 mm). Includes magnetic storage trays.

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SOCKETS



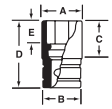
SFS201



GSF181



211SFSY




## Deep, inches

| | 6 | 12 | 6 | 12 | A | B | C | D | E | Set Contains: 211SFSY 6 | 214SFY 12 | 211SFY 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | SFS081 | SF081 | GSFS081 | GSF081 | 15/32 | 11/16 | 1 11/16 | 2 1/8 | 1/4 | • | • | • |
| 9/32 | – | SF091 | – | – | 7/16 | 11/16 | 1 5/8 | 2 1/8 | 7/32 | | | |
| 5/16 | SFS101 | SF101 | GSFS101 | GSF101 | 15/32 | 11/16 | 1 11/16 | 2 1/8 | 7/32 | • | • | • |
| 11/32 | SFS111 | SF111 | – | – | 1/2 | 11/16 | 1 11/16 | 2 1/8 | 9/32 | | | |
| 3/8 | SFS121 | SF121 | GSFS121 | GSF121 | 9/16 | 11/16 | 1 11/16 | 2 1/8 | 5/16 | • | • | • |
| 7/16 | SFS141 | SF141 | GSFS141 | GSF141 | 5/8 | 11/16 | 1 11/16 | 2 1/8 | 3/8 | • | • | • |
| 1/2 | SFS161 | SF161 | GSFS161 | GSF161 | 23/32 | 11/16 | 1 11/16 | 2 1/8 | 7/16 | • | • | • |
| 9/16 | SFS181 | SF181 | GSFS181 | GSF181 | 25/32 | 23/32 | 1 29/32 | 2 3/8 | 7/16 | • | • | • |
| 19/32 | – | SF191 | – | – | 13/16 | 25/32 | 1 29/32 | 2 3/8 | 7/16 | | • | |
| 5/8 | SFS201 | SF201 | GSFS201 | GSF201 | 27/32 | 13/16 | 1 29/32 | 2 3/8 | 15/32 | • | • | • |
| 11/16 | SFS221 | SF221 | GSFS221 | GSF221 | 15/16 | 7/8 | 2 3/16 | 2 5/8 | 1/2 | • | • | • |
| 3/4 | SFS241 | SF241 | GSFS241 | GSF241 | 1 | 1 | 2 3/16 | 2 5/8 | 5/8 | • | • | • |
| 25/32 | – | SF251 | – | – | 1 1/16 | 1 1/32 | 1 3/4 | 2 5/8 | 5/8 | | | |
| 13/16 | SFS261 | SF261 | GSFS261 | GSF261 | 1 1/16 | 1 | 2 1/4 | 2 3/4 | 5/8 | • | • | • |
| 7/8 | SFS281 | SF281 | GSFS281 | GSF281 | 1 5/32 | 1 1/8 | 2 1/4 | 2 3/4 | 23/32 | • | • | • |
| 15/16 | SFS301 | SF301 | GSFS301 | GSF301 | 1 1/4 | 1 3/16 | 2 1/4 | 2 3/4 | 23/32 | | • | |
| 1 | SFS321 | SF321 | GSFS321 | GSF321 | 1 5/16 | 1 1/4 | 2 1/4 | 2 3/4 | 13/16 | | • | |

ASME®/ANSI® B107.1

Sets shown include magnetic storage tray

# *FLANK DRIVE* LOW-PROFILE SOCKETS



RFM12



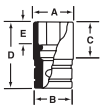
210RAFM

## Low-Profile, mm

| mm | 6 | 12 | A | B | C | D | E | Set Contains: 210RAFSM 6 | 210RAFM 12 | 209RFSM 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | RFSM8 | RFM8 | 11.6 | 16.5 | — | 16.8 | 3.8 | • | • | • |
| 9 | RFSM9 | RFM9 | 13.0 | 16.5 | — | 17.0 | 4.1 | | | |
| 10 | RFSM10 | RFM10 | 14.3 | 16.5 | — | 17.3 | 4.3 | • | • | • |
| 11 | RFSM11 | RFM11 | 16.0 | 16.5 | — | 17.7 | 4.8 | | | |
| 12 | RFSM12 | RFM12 | 17.2 | 16.5 | 9.8 | 18.1 | 5.1 | • | • | • |
| 13 | RFSM13 | RFM13 | 18.0 | 17.2 | 10.3 | 18.5 | 5.6 | • | • | • |
| 14 | RFSM14 | RFM14 | 19.6 | 18.8 | 10.5 | 18.7 | 6.1 | • | • | • |
| 15 | RFSM15 | RFM15 | 20.4 | 19.6 | 10.8 | 19.1 | 6.6 | • | • | • |
| 16 | RFSM16 | RFM16 | 21.1 | 20.4 | 11.4 | 19.6 | 7.1 | • | • | • |
| 17 | RFSM17 | RFM17 | 22.8 | 22.0 | 11.9 | 20.1 | 7.4 | • | • | • |
| 18 | RFSM18 | RFM18 | 24.3 | 23.6 | 12.5 | 20.8 | 7.9 | • | • | • |
| 19 | RFSM19 | RFM19 | 25.1 | 16.5 | 13.3 | 21.5 | 8.2 | | | |
| | RAF80 | Low-Profile Ratchet | | | | | | • | • | |

Sets shown include storage tray

# FLANK DRIVE® LOW-PROFILE SOCKETS




## Low-Profile, inches



RF181



210RARF

| Set Contains: | | | | | | | 210RARF | 209RF |
|---|---|---|---|---|---|---|---|---|
| | 12 | A | B | C | D | E | 12 | 12 |
| 1/4 | RF081 | .46 | .65 | — | .66 | .11 | • | • |
| 5/16 | RF101 | .46 | .65 | — | .66 | .15 | • | • |
| 11/32 | RF111 | .49 | .65 | — | .68 | .17 | | |
| 3/8 | RF121 | .56 | .65 | — | .69 | .18 | • | • |
| 7/16 | RF141 | .61 | .65 | — | .70 | .19 | • | • |
| 1/2 | RF161 | .71 | .69 | .39 | .72 | .21 | • | • |
| 9/16 | RF181 | .77 | .74 | .42 | .75 | .24 | • | • |
| 5/8 | RF201 | .83 | .80 | .47 | .79 | .28 | • | • |
| 11/16 | RF221 | .93 | .90 | .49 | .81 | .30 | • | • |
| 3/4 | RF241 | .99 | .96 | .50 | .82 | .31 | • | • |
| | RAF80 | Low-Profile Ratchet | | | | | • | |

Sets shown include storage tray

# *FLANK DRIVE* UNIVERSAL SOCKETS




## Shallow, mm



FUM18A



206FSUMA

| Set Contains: | | | | | | | 206FSUMA | 209FUMY |
|---|---|---|---|---|---|---|---|---|
| mm | 6 | 12 | A | B | D | E | 6 | 12 |
| 8 | FSUM8A | – | 11.9 | 17.2 | 43.1 | 6.4 | | |
| 10 | FSUM10A | FUM10A | 14.0 | 18.1 | 43.5 | 6.4 | • | • |
| 11 | FSUM11A | – | 15.3 | 18.1 | 43.5 | 7.1 | | |
| 12 | FSUM12A | FUM12A | 16.8 | 18.1 | 45.5 | 7.9 | • | • |
| 13 | FSUM13A | FUM13A | 18.1 | 18.1 | 45.5 | 7.9 | • | • |
| 14 | FSUM14A | FUM14A | 18.9 | 18.1 | 47.9 | 8.9 | • | • |
| 15 | FSUM15A | FUM15A | 20.5 | 18.1 | 47.9 | 8.9 | • | • |
| 16 | FSUM16A | FUM16A | 21.3 | 18.1 | 47.9 | 10.2 | | • |
| 17 | FSUM17A | FUM17A | 22.9 | 18.9 | 50.7 | 10.4 | • | • |
| 18 | FSUM18A | FUM18A | 24.5 | 18.9 | 50.7 | 10.7 | | • |
| 19 | FSUM19A | FUM19A | 25.3 | 18.9 | 52.5 | 11.7 | | • |
| 22 | FSUM22A | – | 28.4 | 18.9 | 53.9 | 13.0 | | |

Sets shown include storage tray

## Shallow, inches



FU16B



206AFSA

| Set Contains: | | | | | | | 206AFSA | 206FUA |
|---|---|---|---|---|---|---|---|---|
| | 6 | 12 | A | B | D | E | 6 | 12 |
| 5/16 | – | FU10B | 15/32 | 11/16 | 1 5/8 | 1/4 | | |
| 3/8 | FS12B | FU12B | 17/32 | 11/16 | 1 5/8 | 1/4 | | |
| 7/16 | FS14B | FU14B | 5/8 | 11/16 | 1 5/8 | 9/32 | • | • |
| 1/2 | FS16B | FU16B | 23/32 | 11/16 | 1 11/16 | 9/32 | • | • |
| 9/16 | FS18B | FU18B | 25/32 | 11/16 | 1 23/32 | 11/32 | • | • |
| 5/8 | FS20B | FU20B | 27/32 | 11/16 | 1 25/32 | 3/8 | • | • |
| 11/16 | FS22B | FU22B | 15/16 | 3/4 | 2 | 3/8 | • | • |
| 3/4 | FS24B | FU24B | 1 | 3/4 | 2 1/16 | 7/16 | • | • |
| 13/16 | – | FU26B | 1 3/32 | 3/4 | 2 3/32 | 15/32 | | |
| 7/8 | – | FU28B | 1 5/32 | 3/4 | 2 3/32 | 1/2 | | |
| 15/16 | – | FU30A | 1 1/4 | 3/4 | 2 9/32 | 9/16 | | |
| 1 | – | FU32A | 1 5/16 | 3/4 | 2 9/32 | 9/16 | | |

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® UNIVERSAL SOCKETS



SFSUM14



206SFSUM




## Deep, mm

Set Contains: 206SFSUM

| mm | 6 | A | B | D | E | 6 |
|---|---|---|---|---|---|---|
| 8 | SFSUM8 | 11.9 | 17.2 | 63.6 | 6.9 | |
| 10 | SFSUM10 | 14.4 | 18.1 | 63.6 | 7.4 | • |
| 11 | SFSUM11 | 15.6 | 18.1 | 63.6 | 7.6 | |
| 12 | SFSUM12 | 17.1 | 18.1 | 63.6 | 8.1 | • |
| 13 | SFSUM13 | 18.1 | 18.1 | 63.6 | 8.4 | • |
| 14 | SFSUM14 | 18.9 | 18.1 | 63.6 | 9.1 | • |
| 15 | SFSUM15 | 20.5 | 18.1 | 63.6 | 9.7 | • |
| 16 | SFSUM16 | 21.3 | 18.1 | 63.6 | 10.4 | |
| 17 | SFSUM17 | 22.9 | 18.9 | 63.6 | 10.9 | • |
| 18 | SFSUM18 | 24.5 | 18.9 | 63.6 | 10.9 | |
| 19 | SFSUM19 | 25.3 | 18.9 | 63.6 | 11.9 | |

Set shown includes storage tray



FDSU22



207FSU

## Deep, inches

Set Contains: 207FSU

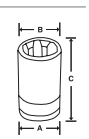
| 11 | 6 | 12 | A | B | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 3/8 | FSU12 | FDSU12 | 9/16 | 11/16 | 2 13/32 | 3/8 | • |
| 7/16 | FSU14 | FDSU14 | 5/8 | 11/16 | 2 13/32 | 7/16 | • |
| 1/2 | FSU16 | FDSU16 | 23/32 | 11/16 | 2 13/32 | 15/32 | • |
| 9/16 | FSU18 | FDSU18 | 25/32 | 11/16 | 2 13/32 | 17/32 | • |
| 5/8 | FSU20 | FDSU20 | 27/32 | 11/16 | 2 13/32 | 9/16 | • |
| 11/16 | FSU22 | FDSU22 | 15/16 | 3/4 | 2 15/32 | 9/16 | • |
| 3/4 | FSU24 | FDSU24 | 1 | 3/4 | 2 15/32 | 9/16 | • |

Set shown includes storage tray

# TORX® SOCKETS



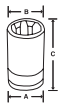
207RFLE




## Low-Profile Inverted *TORX*

Set Contains: 207RFLE

| # | Stock No. | A | B | C | |
|---|---|---|---|---|---|
| 8 | RFLE80 | 17.2 | 11.4 | 17.3 | • |
| 10 | RFLE100 | 17.2 | 12.8 | 20.6 | • |
| 11 | RFLE110 | 17.2 | 14.3 | 21.1 | • |
| 12 | RFLE120 | 17.2 | 15.6 | 21.7 | • |
| 14 | RFLE140 | 17.2 | 16.9 | 23.0 | • |
| 16 | RFLE160 | 17.9 | 18.7 | 24.3 | • |
| 18 | RFLE180 | 19.5 | 20.3 | 25.4 | • |





FLE160A

213AFLEY

## TORX/Shallow

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E8 | FLE80A | 15/32 | 11/16 | 1 5/32 |
| E10 | FLE100A | 1/2 | 11/16 | 1 5/32 |
| E11 | FLE110A | 9/16 | 11/16 | 1 5/32 |
| E12 | FLE120A | 9/16 | 11/16 | 1 5/32 |
| E14 | FLE140A | 5/8 | 11/16 | 1 5/32 |
| E16 | FLE160A | 3/4 | 11/16 | 1 1/4 |
| E18 | FLE180A | 13/16 | 25/32 | 1 5/16 |

**213AFLEY Combination Drive Shallow *TORX* Set**
Includes 1/4" drive TLE40A–TLE100A, 3/8" drive FLE110A to FLE140A and 1/2" drive SLE160A–SLE240 (13pc) (E4–E24).

**210AFLEY Combination Drive Shallow *TORX* Set**
1/4" drive TLE40A–TLE80A plus 3/8" drive FLE100A–FLE180A (except FLE110A) (10pc) (E4–E18).



FLCE120

## Shallow *TORX* with Countersink

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E12 | FLCE120 | 19/32 | 11/16 | 1 5/32 |
| E14 | FLCE140 | 11/16 | 5/8 | 1 5/32 |
| E16 | FLCE160 | 23/32 | 3/4 | 1 1/4 |
| E18 | FLCE180 | 25/32 | 13/16 | 1 5/16 |

**FLCE120 *TORX* Socket with Countersink**
- Use to remove/install fasteners that hold window regulators in place for BMW® 5 and 7 Series

**FLCE140 *TORX* Socket with Countersink**
- For connecting rod cap bolts on various Toyota® and Scion® vehicles
- The FLCE140 is similar to *Toyota* special tool number 09013-1C551

**FLCE160 *TORX* Socket with Countersink**
- For cam sprocket on 2.5L FB engine on 2011 and current Subaru Forester® vehicles
- Camshaft timing gear assembly on various 2012 *Toyota* vehicles
- Similar to *Toyota* special tool number 09013-1C560

**FLCE180 *TORX* Socket with Countersink**
- Spider gear in the rear differential on a 2010–current Chevrolet® Camaro® vehicles



FLEP180

## TORX Plus®

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| EP18 | FLEP180 | 3/4 | 13/16 | 1 5/16 |

**FLEP180 *TORX Plus* Socket**
Use to remove seat hold down nuts on 1999 and later GM® full-size pickup trucks. 3/8" square drive.



GFLEPL180



FLEPL140

## *TORX Plus* w/ Countersink

| Size | Stock No. | Industrial Stock No. | A | B | C |
|---|---|---|---|---|---|
| 8EP | FLEPL80 | GFLEPL80 | 7/16 | 11/16 | 1 5/32 |
| 10EP | FLEPL100 | GFLEPL100 | 1/2 | 11/16 | 1 5/32 |
| 12EP | FLEPL120 | GFLEPL120 | 19/32 | 11/16 | 1 5/32 |
| 14EP | FLEPL140 | GFLEPL140 | 5/8 | 11/16 | 1 5/32 |
| 16EP | FLEPL160 | GFLEPL160 | 3/4 | 23/32 | 1 1/4 |
| 18EP | FLEPL180 | GFLEPL180 | 13/16 | 25/32 | 1 5/16 |

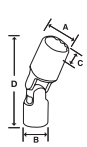


FLEL80

## Long *TORX* Socket

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E8 | FLEL80 | 19/32 | 7/16 | 5 |

**Application:** Fits Delco® alternator Model CS130 found on both *GM* passenger and light trucks.





FSE180

## *TORX*/Universal

| # | Stock No. | A | B | C | D |
|---|---|---|---|---|---|
| E8 | FSE80 | 3/8 | 11/16 | 9/32 | 1 5/8 |
| E10 | FSE100 | 15/32 | 11/16 | 5/16 | 1 11/16 |
| E12 | FSE120 | 9/16 | 11/16 | 11/32 | 1 25/32 |
| E14 | FSE140 | 5/8 | 11/16 | 13/32 | 1 7/8 |
| E16 | FSE160 | 23/32 | 3/4 | 15/32 | 2 1/16 |
| E18 | FSE180 | 13/16 | 3/4 | 1/2 | 2 1/16 |
| E20 | FSE200 | 15/16 | 3/4 | 9/16 | 2 1/8 |



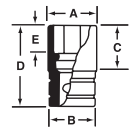
WARNING

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# SPLINE SOCKETS

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with AS954, Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.






**209TFES**

## Shallow, inches



**FES200B**

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #12 | 3/8 | FES120B | 17/32 | 21/32 | 15/32 | 1 1/16 | 11/32 |
| #14 | 7/16 | FES140B | 5/8 | 11/16 | 1/2 | 1 3/32 | 7/16 |
| #16 | 1/2 | FES160B | 23/32 | 23/32 | — | 1 3/32 | — |
| #18 | 9/16 | FES180B | 13/16 | 13/16 | — | 1 3/32 | 15/32 |
| #20 | 5/8 | FES200B | 7/8 | 7/8 | — | 2 3/8 | 9/16 |

**209TFES Shallow Spline Socket Set**

- Includes 1/4" drive TES7B–TES10B and 3/8" drive FES120B–FES200B Shallow Spline Sockets (9pc) (#7–#20, 7/32"–5/8") in magnetic socket tray

## Deep, mm



**FELM10A**

| | mm | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #10 | 10 | FELM10A | 14.5 | 16.8 | 40.4 | 54.0 | 10.0 |



**207TFEL**

## Deep, inches



**FEL200B**

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #12 | 3/8 | FEL120B | 17/32 | 21/32 | 1 17/32 | 2 1/8 | 11/32 |
| #14 | 7/16 | FEL140B | 5/8 | 11/16 | 1 17/32 | 2 1/8 | 7/16 |
| #18 | 9/16 | FEL180B | 13/16 | 13/16 | — | 2 3/8 | 15/32 |
| #20 | 5/8 | FEL200B | 7/8 | 7/8 | — | 2 3/8 | 9/16 |

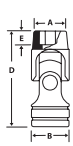
**207TFEL Deep Spline Socket Set**

- Includes 1/4" drive TEL7B–TEL10B and 3/8" drive FEL120B–FEL200B Deep Spline Sockets (7pc) (#7–#20, 7/32"–5/8") in magnetic socket tray

## Shallow Universal, inches



**FESU160**



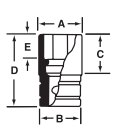

| | | Stock No. | A | B | D | E |
|---|---|---|---|---|---|---|
| #12 | 3/8 | FESU120 | 35/64 | 3/4 | 1 31/32 | 23/64 |
| #14 | 7/16 | FESU140 | 5/8 | 3/4 | 2 3/64 | 7/16 |
| #16 | 1/2 | FESU160 | 23/32 | 3/4 | 2 5/64 | 29/64 |
| #18 | 9/16 | FESU180 | 53/64 | 3/4 | 2 1/8 | 15/32 |

SAE Spec. MA1547A

## Impact, inches



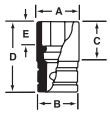
**IMFES14**




| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #14 | 7/16 | IMFES14 | 3/4 | 3/4 | 5/8 | 1 7/64 | 7/16 |

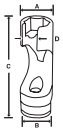
## Double Square, inches

| | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1/4 | F308 | 1/2 | 21/32 | 3/8 | 27/32 | 7/32 |
| 5/16 | F310 | 9/16 | 21/32 | 3/8 | 27/32 | 1/4 |
| 3/8 | F312 | 21/32 | 11/16 | 15/32 | 15/16 | 9/32 |
| 7/16 | F314 | 25/32 | 11/16 | 17/32 | 1 | 5/16 |
| 1/2 | F316 | 7/8 | 25/32 | 17/32 | 1 | 5/16 |
| 9/16 | F318 | 1 | 29/32 | 19/32 | 1 1/8 | 7/16 |
| 5/8 | F320 | 1 1/16 | 31/32 | 19/32 | 1 1/8 | 7/16 |






F318






210FRXM



207FRX

## Flank Drive® Flare Nut, mm

Set Contains: 210FRXM

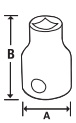
| mm | Stock No. | A | B | C | D | |
|---|---|---|---|---|---|---|
| 10 | FRXM10 | 16.9 | 18.3 | 53.3 | 7.2 | • |
| 11 | FRXM11 | 18.1 | 18.7 | 53.3 | 8.3 | • |
| 12 | FRXM12 | 19.3 | 18.3 | 53.3 | 8.8 | • |
| 13 | FRXM13 | 20.4 | 19.1 | 62.5 | 9.4 | • |
| 14 | FRXM14 | 22.0 | 20.5 | 62.5 | 10.4 | • |
| 15 | FRXM15 | 22.6 | 21.0 | 71.6 | 11.2 | • |
| 16 | FRXM16 | 23.5 | 21.9 | 71.6 | 11.7 | • |
| 17 | FRXM17 | 25.1 | 23.5 | 78.0 | 12.7 | • |
| 18 | FRXM18 | 25.9 | 24.3 | 83.8 | 13.5 | • |
| 19 | FRXM19 | 26.7 | 25.1 | 89.9 | 14.2 | • |

## *Flank Drive*/Flare Nut, inches

Set Contains: 207FRX

| | Stock No. | A | B | C | D | |
|---|---|---|---|---|---|---|
| 3/8 | FRX121 | 5/8 | 3/4 | 2 3/32 | 9/32 | • |
| 7/16 | FRX141 | 23/32 | 3/4 | 2 3/32 | 11/32 | • |
| 1/2 | FRX161 | 13/16 | 3/4 | 2 1/8 | 3/8 | • |
| 9/16 | FRX181 | 7/8 | 13/16 | 2 15/32 | 13/32 | • |
| 5/8 | FRX201 | 15/16 | 7/8 | 2 27/32 | 15/32 | • |
| 11/16 | FRX221 | 1 | 15/16 | 3 7/32 | 1/2 | • |
| 3/4 | FRX241 | 1 1/16 | 1 | 3 11/32 | 9/16 | • |

Set shown includes magnetic storage tray






PMM406



PMP406A

## Pipe Plug, mm

| mm | Stock No. | A | B | Stock No. | A | B |
|---|---|---|---|---|---|---|
| 6 | PMM406A | 16.4 | 31.0 | PMP406A | 17.2 | 25.8 |
| 8 | PMM408A | 17.2 | 31.0 | – | 17.2 | 31.0 |
| 10 | PMM410A | 17.2 | 28.4 | PMP410A | 18.8 | 25.4 |

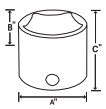


211PPPMY

## Pipe Plug, inches

| | Stock No. | B | Stock No. | B |
|---|---|---|---|---|
| 3/16 | PPM406A | 1 1/8 | – | 1 |
| 1/4 | PPM408A | 1 1/8 | PP408A | 1 |
| 9/32 | PPM409A | 1 1/8 | PP409A | 1 |
| 5/16 | PPM410A | 1 1/8 | PP410A | 1 |
| 11/32 | PPM411A | 1 1/8 | PP411A | 1 |
| 3/8 | PPM412A | 1 1/8 | PP412A | 1 |

**211PPPMY Internal/External Set**
PPM406–PPM412 external sockets plus PP408–PP412 internal sockets (11pc) (3/16"–3/8").



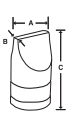



B2190

## *Flank Drive*/Pentagon (5-Point)

A specialty socket for servicing recessed five-point nuts found on tamper-resistant Buffalo covers used by gas, electric and some water companies to protect shutoff gates.

| Stock No. | A | B | C |
|---|---|---|---|
| B2190 | 1 1/8 | 1/2 | 1 1/16 |






GF22

## Drag Link

Applications include use on the engine oil fill cap on Kawasaki® UN1500, UN1600 and UN2000 motorcycles.

| Stock No. | A | B | C |
|---|---|---|---|
| GF22 | 11/16 | 7/64 | 1 1/4 |

**⚠WARNING**

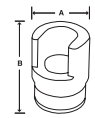
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# SPECIAL APPLICATION SOCKETS

## Weatherhead®



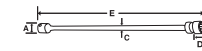
WH290




| Size, inches | Stock No. | A | B |
|---|---|---|---|
| 3/8 | FD120 | 11/16 | 1 1/4 |
| 7/16 | FD140 | 13/16 | 1 1/4 |
| 15/32 | FD150 | 7/8 | 1 1/4 |
| 1/2 | FD160 | 15/16 | 1 1/4 |
| 17/32 | FD170 | 1 | 1 1/4 |
| 9/16 | FD180 | 1 1/16 | 1 1/4 |
| 19/32 | FD190 | 1 1/16 | 1 1/4 |
| 21/32 | FD210 | 1 3/16 | 1 3/8 |
| 11/16 | FD220 | 1 3/16 | 1 3/8 |
| 3/4 | FD240 | 1 1/4 | 1 3/8 |
| 25/32 | FD250 | 1 1/4 | 1 3/8 |



206PFSXM




## Swivel Ball Extension, mm

Set Contains: 206PFSXM

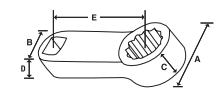
| mm | 6 | 12 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|---|
| 10 | PFSXM910B | – | 19.1 | 14.4 | 9.5 | 5.6 | 243.4 | • |
| 11 | PFSXM911B | – | 19.1 | 15.6 | 9.5 | 6.3 | 243.8 | • |
| 12 | PFSXM912B | – | 19.1 | 16.9 | 9.5 | 6.8 | 244.6 | • |
| 13 | PFSXM913B | – | 19.1 | 18.4 | 12.4 | 7.6 | 245.9 | • |
| 14 | PFSXM914B | – | 19.1 | 19.8 | 12.4 | 9.1 | 247.9 | • |
| 15 | PFSXM915B | – | 19.1 | 20.4 | 12.4 | 9.1 | 247.4 | • |
| 13 | – | PFLXM13B | 19.1 | 18.4 | 12.4 | 7.6 | 245.9 | |

**PFSXM910B and PFSXM912B**

**Applications:** Toyota® and Lexus® vehicles transmission pan bolts plus several underdash applications. Volvo® vehicle: removing intake faster and easier.

# TORQUE ADAPTORS

- Manufactured from special alloy steel
- Precision forged and heat treated for optimum strength and durability
- Double hex (12-point) configuration allows socket to engage single hex fastener every 30° rather than every 60°, allowing for better access in restricted areas
- Design features radius edges which will resist damage/nicks
- Center-to-center length on adaptor for easy torque calculations
- Larger sizes feature thicker construction for strength






208FRDHM



208FRDH

## Standard, mm

Set Contains: 208FRDHM

| Working Torque, in-lb | mm | 6 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|---|
| 420 | 10 | FRDHM10 | 17.1 | 18.8 | 7.8 | 11.0 | 50.8 | • |
| 690 | 12 | FRDHM12 | 18.8 | 18.8 | 8.2 | 11.0 | 50.8 | • |
| 720 | 13 | FRDHM13 | 21.0 | 18.8 | 7.8 | 11.0 | 50.8 | • |
| 1050 | 14 | FRDHM14 | 21.0 | 18.8 | 9.4 | 11.0 | 50.8 | • |
| 1,200 | 15 | FRDHM15 | 25.1 | 18.8 | 7.8 | 11.0 | 50.8 | • |
| 1,400 | 16 | FRDHM16 | 22.6 | 18.8 | 11.0 | 11.0 | 50.8 | • |
| 1,400 | 17 | FRDHM17 | 25.1 | 18.8 | 12.4 | 11.0 | 50.8 | |
| 1,400 | 18 | FRDHM18 | 22.4 | 18.8 | 13.3 | 11.0 | 50.8 | • |
| 1,400 | 19 | FRDHM19 | 27.4 | 18.8 | 13.3 | 11.0 | 50.8 | • |

## Standard, inches

Set Contains: 208FRDH

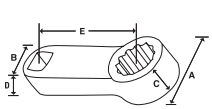
| Working Torque, in-lb | | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|---|
| 190 | 5/16 | FRDH101 | 0.475 | .750 | 1/4 | 7/16 | 2 | • |
| 420 | 3/8 | FRDH121 | 0.570 | .750 | 5/16 | 7/16 | 2 | • |
| 500 | 7/16 | FRDH141 | 0.655 | .750 | 11/32 | 7/16 | 2 | • |
| 710 | 1/2 | FRDH161 | 0.740 | .750 | 11/32 | 7/16 | 2 | • |
| 1,050 | 9/16 | FRDH181 | 0.825 | .750 | 3/8 | 7/16 | 2 | • |
| 1,400 | 5/8 | FRDH201 | 0.890 | .750 | 7/16 | 7/16 | 2 | • |
| 1,400 | 11/16 | FRDH221 | 0.989 | .750 | 1/2 | 7/16 | 2 | • |
| 1,400 | 3/4 | FRDH241 | 1.080 | .750 | 1/2 | 7/16 | 2 | • |
| 2,706 | 15/16 | FRDH301 | 1.374 | .750 | 7/16 | 7/16 | 2 | |

Conventional Hex

# SPLINE TORQUE ADAPTORS

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-89823. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.




## Low Profile, inches

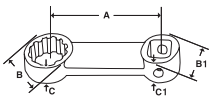
- Saves time by avoiding clearance issues when working on propeller assemblies.
- Works on Lycoming® and Continental® engines used in Piper®, Cessna® and Mooney® aircraft.

| | Stock No. | Working Torque, in-lb | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 3/4 | FRESL24 | 465 in-lb | 1 5/64 | 3/4 | 3/16 | 7/16 | 2 |
| 7/8 | FRESL28 | 605 in-lb | 1 1/4 | 3/4 | 3/16 | 7/16 | 2 |



FRESL24

# SPLINE TORQUE ADAPTORS



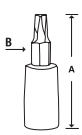

## Spline, inches

| # | | Stock No. | Working Torque, in-lb | A | B-B1 | C-C1 |
|---|---|---|---|---|---|---|
| #7 | 7/32 | **FRES7** | 140 | 2 | .375–.750 | 1/4–7/16 |
| #8 | 1/4 | **FRES8** | 195 | 2 | .400–.750 | 1/4–7/16 |
| #9 | 9/32 | **FRES9** | 220 | 2 | .445–.750 | 1/4–7/16 |
| #10 | 5/16 | **FRES10** | 250 | 2 | .490–.750 | 1/4–7/16 |
| #12 | 3/8 | **FRES12** | 515 | 2 | .590–.750 | 5/16–7/16 |
| #14 | 7/16 | **FRES14** | 875 | 2 | .680–.750 | 5/16–7/16 |
| #16 | 1/2 | **FRES16** | 1,575 | 2 | .745–.750 | 5/16–7/16 |
| #18 | 9/16 | **FRES18** | 1,750 | 2 | .825–.750 | 3/8–7/16 |
| #20 | 5/8 | **FRES20** | 1,750 | 2 | .895–.750 | 3/8–7/16 |
| #22 | 11/16 | **FRES22** | 1,750 | 2 | .997–.750 | 1/2–7/16 |
| #24 | 3/4 | **FRES24** | 1,750 | 2 | 1.08–.750 | 9/16–7/16 |



**FRES10**

# TORX® BIT SOCKETS






**GFTX45E**



**207EFTXY**

## *TORX*/Standard

Set Contains: 207EFTXY

| # | Stock No. | Stock No. | A | B | |
|---|---|---|---|---|---|
| T27 | **FTX27E** | **GFTX27E** | 1 3/4 | **FTX27E2** | • |
| T30 | **FTX30E** | **GFTX30E** | 1 3/4 | **FTX30E2** | • |
| T40 | **FTX40E** | **GFTX40E** | 1 3/4 | **FTX40E2** | • |
| T45 | **FTX45E** | **GFTX45E** | 2 1/16 | **FTX45E2** | • |
| T50 | **FTX50E** | **GFTX50E** | 2 1/16 | **FTX50E2** | • |
| T55 | **FTX55E** | **GFTX55E** | 2 1/32 | **FTX55E2** | • |
| T60 | **FTX60E** | – | 2 5/16 | **FTX60E2** | |

Sets shown include storage tray

**207EFTXY and 212EFTXY** sets also include the FTX47SE GM® Style *TORX* Socket Driver.

**212EFTXY Combination *TORX* Set** Includes 1/4" drive TTX8E–TTX25E *TORX* Drivers plus 3/8" drive FTX27E–FTX55E *TORX* Drivers and FTX47E *GM* style Driver (12pcs) (T8–T55 plus *GM* style T47) in storage tray.



**FTXL40E**

## *TORX*/Long

| # | Stock No. | A | B |
|---|---|---|---|
| T27 | **FTXL27E** | 4 1/4 | **FTXL27E2** |
| T30 | **FTXL30E** | 4 1/4 | **FTXL30E2** |
| T40 | **FTXL40E** | 4 1/4 | **FTXL40E2** |
| T45 | **FTXL45E** | 4 1/4 | **FTXL45E2** |
| T50 | **FTXL50E** | 4 1/4 | **FTXL50E2** |

**210EFTXL Combination Long *TORX* Set**
210EFTXY Combination Long *TORX* Set includes 1/4" drive TTXL8E–TTX25LE *TORX* Drivers plus 3/8" drive FTXL27E–FTX55LE *TORX* Drivers (10pcs) (T8–T55) in storage tray.



**207EFTXYSE**

## *TORX*/Stubby

Set Contains: 207EFTXYSE

| # | Stock No. | A | B | |
|---|---|---|---|---|
| T27 | **FTX27SE** | 1 13/32 | **FTX27SE2** | • |
| T30 | **FTX30SE** | 1 13/32 | **FTX30SE2** | • |
| T40 | **FTX40SE** | 1 13/32 | **FTX40SE2** | • |
| T45 | **FTX45SE** | 1 13/32 | **FTX45SE2** | • |
| T47 | **FTX47SE** | 1 13/32 | **FTX47SE2** | • |
| T50 | **FTX50SE** | 1 13/32 | **FTX50SE2** | • |
| T55 | **FTX55SE** | 1 7/16 | **FTX55SE2** | • |

Set shown includes magnetic storage tray

**207EFTXYSE Applications:**
BMW® under dash and sensors in engine compartment. Porsche® 911® and Cayenne® ignition coil bolts. Honda® airbag control module inside passenger compartment of dashboard. Cadillac® water pump and oil drain plugs. Various applications on motorcycles.



**FTXB40E**

## *TORX*/Heavy Duty Removal

| # | Stock No. | A | B |
|---|---|---|---|
| T27 | **FTXB27E** | 1 13/16 | **FTXB27E2** |
| T30 | **FTXB30E** | 1 13/16 | **FTXB30E2** |
| T40 | **FTXB40E** | 1 13/16 | **FTXB40E2** |
| T45 | **FTXB45E** | 2 1/16 | **FTXB45E2** |
| T50 | **FTXB50E** | 2 1/16 | **FTXB50E2** |
| T55 | **FTXB55E** | 2 1/64 | **FTXB55E2** |

Set shown includes magnetic storage tray

**209EFTXBY Heavy Duty Removal *TORX* Set**
Includes 1/4" drive TTXB15E–TXB25E *TORX* Drivers plus 3/8"drive FTXB27E–FTXB55E *TORX* Drivers (9pcs) (T15– T55) in magnetic storage tray.

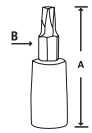
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# TORX® BIT SOCKETS

## *TORX*/Tamper Resistant






**FTXR50E**

| # | Stock No. | A | B |
|---|---|---|---|
| T27 | **FTXR27E** | 1 3/4 | **FTXR27E2** |
| T30 | **FTXR30E** | 1 3/4 | **FTXR30E2** |
| T40 | **FTXR40E** | 1 3/4 | **FTXR40E2** |
| T45 | **FTXR45E** | 2 1/16 | **FTXR45E2** |
| T50 | **FTXR50E** | 2 1/16 | **FTXR50E2** |

Set shown includes magnetic storage tray

**210EFTXRY Tamper-Resistant Combination *TORX* Set** Includes 1/4" drive TTXR8E–TTXR25E *TORX* Drivers plus 3/8" drive FTXR27E–FTXR50E *TORX* Drivers (10 pcs) (T8–T50) in magnetic storage tray.



**211EFTXRTPY**

## TORX Plus®/Tamper Resistant

Five-lobe configuration. Two-piece pinless design holds bit securely in socket while facilitating quick bit replacement. Cold formed socket delivers a strong, durable tool. Chrome plating resists corrosion and cleans easily.

| # | Stock No. | A | B |
|---|---|---|---|
| 27IPR | **FTXR27TPE** | 1 3/4 | **FTXR27TPE2** |
| 30IPR | **FTXR30TPE** | 1 3/4 | **FTXR30TPE2** |
| 40IPR | **FTXR40TPE** | 1 3/4 | **FTXR40TPE2** |
| 45IPR | **FTXR45TPE** | 2 1/32 | **FTXR45TPE2** |
| 50IPR | **FTXR50TPE** | 2 5/32 | **FTXR50TPE2** |
| 55IPR | **FTXR55TPE** | 2 11/32 | **FTXR55TPE2** |

Set shown includes magnetic storage tray

**FTXR40TPE *TORX Plus* Tamper-Resistant Socket Driver (40IPR)**

- Quickly removes and replaces the Reverse Idler Shaft on 2001/2002 *Ford* Mustang GT™ vehicles using the TREMEC3650 Manual Transmission
- Also use on the camshaft bolts on 2008 Toyota® Tundra with the 5.7L engine
- Five-lobe configuration
- Two-piece pinless design holds bit securely in socket while facilitating quick bit replacement
- Cold formed socket delivers a strong, durable tool
- Chrome plating resists corrosion and clean easily
- For sale to authorized technicians only

**211EFTXRTPY Tamper-Resistant Combination *TORX Plus* Set** Includes 1/4" drive TTXR8TPE–TTXR25TPE *TORX Plus* Drivers plus 3/8" drive FTXR27TPE–FTXR55TPE *TORX Plus* Drivers (11 pcs) (8IPR–55IPR).

**211EFTXRTPY Applications:** 2003 *Ford* Mustang® transmissions, 2004 *Ford* F150 transfer case, 2004 Porsche® Cayenne® turbo air sensor, Delphi® and Stanadyne® pumps, Cummins® B and C engine injection pumps and John Deere® diesel injector pumps.



**211EFTXTPY**

## *TORX Plus*

*TORX Plus* fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM® transmissions bell housing bolts and Ford® seat belt anchors. T27IP size can be used to service Taurus® and Sable® front spring shields. Use of a standard *TORX* driver on *TORX Plus* fasteners may result in a rounded out fastener head or damaged driver.

| # | Stock No. | A | B |
|---|---|---|---|
| 27IP | **FTX27TPE** | 1 3/4 | **FTX27TPE2** |
| 30IP | **FTX30TPE** | 1 3/4 | **FTX30TPE2** |
| 40IP | **FTX40TPE** | 1 3/4 | **FTX40TPE2** |
| 45IP | **FTX45TPE** | 2 1/8 | **FTX45TPE2** |
| 50IP | **FTX50TPE** | 2 1/8 | **FTX50TPE2** |
| 55IP | **FTX55TPE** | 2 5/16 | **FTX55TPE2** |

Set shown includes magnetic storage tray

**211EFTXTPY Combination Drive TORX Plus Set** Includes 1/4" drive TTX8TPE–TTX25TPE Drivers plus 3/8" drive FTX27TPE–FTX55TPE Drivers (11 pcs) (8IP–55IP) in magnetic storage tray.



**FTXEL45E**



**GFTX500E**

## Special Application *TORX*

| # | Stock No. | Description | A | B |
|---|---|---|---|---|
| T40 | **FTXEL40E** | Extra Long | 7 1/2 | **FTXEL40E2** |
| T47 | **FTX47E** | GM Style | 2 1/16 | **FTX47E2** |
| T45 | **FTXEL45E** | Extra Long | 7 11/16 | **FTXEL45E2** |
| 40IPR | **FTXR40TPE** | Tamper Resistant | 1 3/4 | **FTXR40TPE2** |
| T47 | **GFTX500E** | GM Style | 2 1/16 | **FTX500E2** |
| T30 | **FTXEL30TPE** | Extra Long | 5 | **FTXEL30TPE2** |

**FTXEL40E** Applications include service on intake manifold bolts on *Ford* 5.0 L engines with fuel injection, model years 1985–1990.

**FTX47E** For use on *GM* door strikers.

**FTXEL45E** Quickly and easily access intake bolts on *Cummins* N14 diesel engines without removing the air pump. Can also be used on older *Cummins* NH Big Cam four diesel engines. 3/8" square drive.

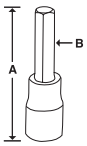
**GFTX500E** For use on *GM* door strikers and seat belt bolts.

**FTXEL30TPE** For removing the engine harness from the firewall on 2007 and newer. For Volvo® trucks with D16, MPT 8 and MPT 10 engines, *Cummins* ISX fuel timing and metering actuators.

## Hex/Standard, mm

| mm | | A | B | Set Contains: 211EFAMY | 207EFAMY |
|---|---|---|---|---|---|
| 2 | FAM2E | 47.8 | FAM2E2 | | |
| 2.5 | FAM2.5E | 47.8 | FAM2.5E2 | | |
| 3 | FAM3E | 47.8 | FAM3E2 | | |
| 4 | FAM4E | 52.3 | FAM4E2 | • | • |
| 5 | FAM5E | 52.6 | FAM5E2 | • | • |
| 6 | FAM6E | 52.6 | FAM6E2 | • | • |
| 7 | FAM7E | 52.6 | FAM7E2 | • | • |
| 8 | FAM8E | 52.6 | FAM8E2 | • | • |
| 9 | FAM9E | 52.6 | FAM9E2 | • | • |
| 10 | FAM10E | 52.6 | SAM10E2 | • | • |
| 11 | FAM11E | 69.9 | FAM11E2 | • | |
| 12 | FAM12E | 69.9 | FAM12E2 | • | |
| 13 | FAM13E | 69.9 | FAM13E2 | • | |
| 14 | FAM14E | 69.9 | FAM14E2 | • | |

Sets include magnetic storage tray






211EFAMY

**210EFTAMY Combination Metric Standard Hex Set** Includes 1/4" drive TMAM2E–TMAM3E Standard Length Drivers plus 3/8" drive FAM4E–FAM10E Standard Length Drivers (10 pcs) (2 mm–10 mm).

## Hex/Stubby, mm

| mm | | A | B |
|---|---|---|---|
| 7 | FAMXS7E | 34.7 | FAMXS7E2 |
| 8 | FAMXS8E | 35.7 | FAMXS8E2 |
| 9 | FAMXS9E | 36.7 | FAMXS9E2 |
| 10 | FAMXS10E | 37.7 | FAMXS10E2 |

Set includes magnetic storage tray



208EFTAMXSY

**208EFTAMXSY Metric Combination Stubby Hex Set** Includes 1/4" drive TMAMXS3E–TMAMXS6E Stubby Drivers plus 3/8" drive FAMXS7E–FAMXS10E Stubby Drivers (8 pcs) (3 mm–10 mm)

## Hex/Long, mm

| mm | | A | B | Set Contains: 206EFAML |
|---|---|---|---|---|
| 4 | FAML4E | 153.9 | FAML4E2 | • |
| 5 | FAML5E | 153.9 | FAML5E2 | • |
| 6 | FAML6E | 153.9 | FAML6E2 | • |
| 7 | FAML7E | 153.9 | FAML7E2 | • |
| 8 | FAML8E | 153.9 | FAML8E2 | • |
| 10 | FAML10E | 153.4 | FAML10E2 | • |

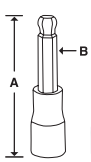


206EFAML

## Ball Hex/Standard, mm

| mm | | A | B |
|---|---|---|---|
| 7 | FABM7E | 52.5 | FABM7E2 |
| 8 | FABM8E | 52.5 | FABM8E2 |
| 9 | FABM9E | 52.5 | FABM9E2 |
| 10 | FABM10E | 52.5 | FABM10E2 |

Set includes magnetic storage tray






208EFTABMY

**208EFTABMY Metric Ball Hex Combination Set** Includes 1/4" drive TMABM3E–TMABM6E Standard Length Drivers plus 3/8" drive FABM7E–FABM10E Standard Length Drivers (8 pcs) (3 mm–10 mm)

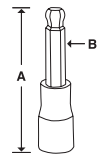
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# METRIC HEX BIT SOCKETS



206EFABLM




## Ball Hex/Long, mm

| mm | | A | B | Set Contains: 206EFABLM |
|---|---|---|---|---|
| 4 | FABLM4E | 129.3 | FABLM4E2 | • |
| 5 | FABLM5E | 128.5 | FABLM5E2 | • |
| 6 | FABLM6E | 128.5 | FABLM6E2 | • |
| 7 | FABLM7E | 128.5 | FABLM7E2 | • |
| 8 | FABLM8E | 127.3 | FABLM8E2 | • |
| 10 | FABLM10E | 128.3 | FABLM10E2 | • |

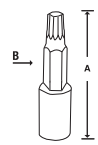
Set shown includes storage tray

## Double Hex, mm

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have 90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.



FADM8E




| mm | | A | B |
|---|---|---|---|
| 8 | FADM8E | 51.3 | FADM8E2 |
| 8 | FADM8LE | 121.9 | FADM8LE2 |

**FADM8E/FADM8LE Applications:** Removal/installation of head bolts on Toyota® Tercel 1995 and later, and Paseo (1992–1997).

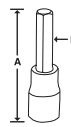
# HEX BIT SOCKETS



208EGFAY



212EFTAY






GFA10E

## Hex/Standard, inches

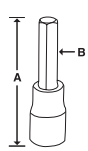
| | | | A | B | Fits These Cap Screws | Fits These Set Screws | Set Contains: 208EFAY | 208EGFAY |
|---|---|---|---|---|---|---|---|---|
| 1/8 | FA4E | GFA4E | 2 1/16 | TMA4E2 | — | 1/4 | • | • |
| 9/64 | FA4.5E | GFA4.5E | 2 1/16 | TMA4.5E2 | #8 | — | • | • |
| 5/32 | FA5E | GFA5E | 2 1/16 | FA5E2 | #10 | 5/16 | • | • |
| 3/16 | FA6E | GFA6E | 2 1/16 | FA6E2 | 1/4 | 3/8 | • | • |
| 7/32 | FA7E | GFA7E | 2 1/16 | FA7E2 | — | 7/16 | • | • |
| 1/4 | FA8E | GFA8E | 2 1/16 | FA8E2 | 5/16 | 1/2 | • | • |
| 5/16 | FA10E | GFA10E | 2 1/16 | FA10E2 | 3/8 | 5/8 | • | • |
| 3/8 | FA12E | GFA12E | 2 3/32 | FA12E2 | 7/16 and 1/2 | 3/4 | • | • |

Sets shown include storage tray

**212EFTAY Combination Drive Standard Hex Set** Includes 1/4" drive TMA2E–TMA3.5E Hex Drivers plus 3/8" drive FA4E–FA12E Hex Drivers (12 pcs) (1/16"–3/8").



208EFTAXSY




## Hex/Stubby, inches

| | | A | B | Fits These Cap Screws | Fits These Set Screws |
|---|---|---|---|---|---|
| 7/32 | FAXS7E | 1 5/16 | FAXS7E2 | — | — |
| 1/4 | FAXS8E | 1 11/32 | FAXS8E2 | 5/16" | 1/2" |
| 5/16 | FAXS10E | 1 13/32 | FAXS10E2 | 3/8" | 5/8" |
| 3/8 | FAXS12E | 1 15/32 | FAXS12E2 | 1/2" | 3/4" |

Set shown includes magnetic storage tray

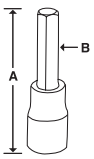
**208EFTAXSY Combination Drive Stubby Hex Set** Includes 1/4" drive TMAXS4E–TMAXS6E Stubby Drivers plus 3/8" drive FAXS7E–FAXS12E Stubby Drivers (8 pcs) (1/8"–3/8").

## Hex/Extra Long, inches

Set Contains: 206EFAL

| | | A | Fits These Cap Screws | Fits These Set Screws | B | |
|---|---|---|---|---|---|---|
| 5/32 | FA5LE | 6 1/16 | #10 | 5/16" | FA5LE2 | • |
| 3/16 | FA6LE | 6 1/8 | 1/4" | 3/8" | FA6LE2 | • |
| 7/32 | FA7LE | 6 1/8 | — | 7/16" | FA7LE2 | • |
| 1/4 | FA8LE | 6 1/8 | 5/16" | 1/2" | FA8LE2 | • |
| 5/16 | FA10LE | 6 1/16 | 3/8" | 5/8" | FA10LE2 | • |
| 3/8 | FA12LE | 6 1/16 | 1/4" | 3/4" | FA12LE2 | • |

Set shown includes storage tray



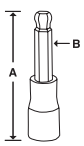



206EFAL

## Ball Hex/Standard, inches

| | | A | B |
|---|---|---|---|
| 7/32 | FAB7E | 2 3/32 | FAB7E2 |
| 1/4 | FAB8E | 2 3/32 | FAB8E2 |
| 5/16 | FAB10E | 2 3/32 | FAB10E2 |
| 3/8 | FAB12E | 2 3/32 | FAB12E2 |

Sets shown include magnetic storage tray






208EFTABY

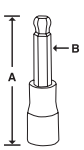
**208EFTABY Combination Standard Ball Hex Set** Includes 1/4" drive TMAB4E–TMAB6E Ball Hex Drivers plus 3/8" drive FAB7E–FAB12E Ball Hex Drivers (8 pcs) (1/8"–3/8").

## Ball Hex/Long, inches

Set Contains: 206EFABL

| | | A | B | |
|---|---|---|---|---|
| 5/32 | FABL5E | 5 1/16 | FABL5E2 | • |
| 3/16 | FABL6E | 5 1/16 | FABL6E2 | • |
| 7/32 | FABL7E | 5 1/16 | FABL7E2 | • |
| 1/4 | FABL8E | 5 1/16 | FABL8E2 | • |
| 5/16 | FABL10E | 5 1/16 | FABL10E2 | • |
| 3/8 | FABL12E | 5 1/16 | FABL12E2 | • |

Sets shown include storage tray





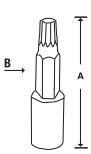

206EFABL



## Triple Square, mm

| | mm | Stock No. | A | B |
|---|---|---|---|---|
| Standard Length | 4 | FTSM4E | 48.5 | FTSM4E2 |
| | 5 | FTSM5E | 48.5 | FTSM5E2 |
| | 6 | FTSM6E | 48.5 | FTSM6E2 |
| | 8 | FTSM8E | 58 | FTSM8E2 |
| | 10 | FTSM10E | 67.8 | FTSM10E2 |
| Long | 8 | FTSM8LE | 84.6 | FTSM8LE2 |
| | 10 | FTSM10LE | 101.6 | FTSM10LE2 |

Set shown includes storage tray






FTSM8LE



TSS7KIT

**TSS7KIT Metric Set** Includes 3/8" drive FTSM6E–FTSM10E Triple Square Drivers plus 1/2" drive STSM12E–STSM18E Triple Square Drivers (7 pcs) (4 mm–18 mm).

**FTSM6E** Various applications on European vehicles.

**FTSM8E** Remove and install head and accessory bolts on Mercedes®, and remove and install axle shaft bolts on VW® and Audi® vehicles.

**FTSM10E** Used for cylinder head bolts and drive shaft bolts on *Mercedes*, and remove and install axle shaft bolts on *VW* and *Audi* vehicles.

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have 90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.



**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

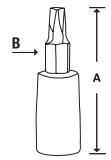
# SPECIAL APPLICATION BIT SOCKETS



PFMTS2E



PFMTS4E




## Mortorq®/Super Bit

| # | Stock No. | A | B |
|---|---|---|---|
| MTS-0 | PFMTS0E | 1 3/4 | PFMTS0E2 |
| MTS-1 | PFMTS1E | 1 3/4 | PFMTS1E2 |
| MTS-2 | PFMTS2E | 1 3/4 | PFMTS2E2 |
| MTS-3 | PFMTS3E | 2 1/8 | PFMTS3E2 |
| MTS-4 | PFMTS4E | 2 1/8 | PFMTS4E2 |

**PFMTS1E Bit Socket**
**Applications:** For seat tracks on 2009 Mazda 6®.
**Other seat applications:** Cadillac® CTS, Nissan® Maxima® and Altima.
**PFMTS4E Bit Socket**
**Applications:** Remove/install the bolts that secure the bell housing to the transmission on GM® 4L60 transmissions.

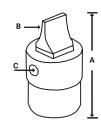
# FLAT TIP BIT SOCKETS

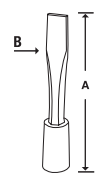


F23E



GF31E




## — Flat Tip, inches

| | # | Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|---|---|
| Standard Length | 5/16 x .046 | F23E | – | 3 | F23E2A |
| | 5/16 x .055 | F25E | GF25E | 3 | F25E2A |
| | 5/16 x .066 | F31E | GF31E | 3 7/16 | F31E2A |
| Short | 1/4 x .037 | F42E | – | 1 13/16 | F42E2 |
| | 5/16 x .057 | F52E | – | 1 13/16 | F52E2 |
| | 3/8 x .068 | F62E | GF62E | 1 27/32 | F62E2 |

# PHILLIPS® TIP BIT SOCKETS



GFP22E



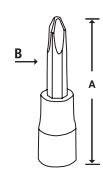
FPS32E



FP22E



FP34E




## ✚ *Phillips*

| | # | Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|---|---|
| Standard Length | #2 | FP22E | GFP22E | 2 1/16 | FP22E2 |
| | #3 | FP32E | – | 2 5/16 | FP32E2 |
| | #4 | FP41E | – | 1 21/32 | FP41E2 |
| Short | #3 | FPS32E | – | 1 29/32 | SP32E2 |
| Long | #2 | FP24E | – | 4 1/32 | FP24E2 |
| | #3 | FP34E | – | 4 1/32 | FP34E2 |
| | #4 | FP42E | – | 2 9/16 | FP42E2 |

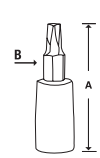
# POZIDRIV® AND CLUTCH BIT SOCKETS



FPD32E



F29E




## ✚ *Pozidriv*

| # | Stock No. | A | B |
|---|---|---|---|
| #2 | FPD22E | 2 1/16 | FPD22E2 |
| #3 | FPD32E | 2 | FPD32E2 |

## ⬬ Clutch, Standard Length

| | Stock No. | A | B |
|---|---|---|---|
| 3/8 | F29E | 3/8 | 1 3/4 |
| 5/16 | F30E | 19/64 | 1 3/4 |

## Impact Driver Sets

### 208EPIT Set. 8pc Includes:

| Stock No. | Description |
|---|---|
| PIT120 | Impact Driver |
| F42E | 1/4" Flat Tip Driver |
| F52E | 5/16" Flat Tip Driver |
| F62E | 3/8" Flat Tip Driver |
| FP22E | #2 PHILLIPS® Driver |
| FP32E | #3 *PHILLIPS* Driver |
| FP42E | #4 *PHILLIPS* Driver |
| FPD22E | #2 POZIDRIV® Driver |
| PB108A | Storage Case |



PIT120

**PIT120 Impact Driver**
Delivers cam action impact when struck with a hammer for loosening or tightening fasteners. Industrial finish.



208EPIT

### PIT2230E Set. 36pc Includes:

| Stock No. | Description |
|---|---|
| PIT120 | Impact Driver |
| FA6E | 3/16" Hex Driver w/ extra FA6E2 Bit |
| FA7E | 7/32" Hex Driver w/ extra FA7E2 Bit |
| FA8E | 1/4" Hex Driver w/ extra FA8E2 Bit |
| FA10E | 5/16" Hex Driver w/extra FA10E2 Bit |
| FA12E | 3/8" Hex Driver w/ extra FA12E2 Bit |
| F42E | 1/4" Flat Tip Driver w/ extra F42E2 Bit |
| F52E | 5/16" Flat Tip Driver w/ extra F52E2 Bit |
| F62E | 3/8" Flat Tip Driver w/ extra F62E2 Bit |
| FP22E | #2 *PHILLIPS* Driver w/ extra FP22E2 Bit |
| FP32E | #3 *PHILLIPS* Driver w/ extra FP32E2 Bit |
| FP41E | #4 *PHILLIPS* Driver w/ extra FP41E2 Bit |
| FP42E | #4 *PHILLIPS* Driver w/ extra FP42E2 Bit |
| F29E | 3/8" Clutch Socket Driver |
| F30E | 5/16" Clutch Socket Driver |
| FPD22E | #2 *POZIDRIV* Driver |
| IMF120A | 3/8" 6-point Impact Socket |
| IMF140A | 7/16" 6-point Impact Socket |
| IMF160 | 1/2" 6-point Impact Socket |
| IMF180 | 9/16" 6-point Impact Socket |
| IMF200 | 5/8" 6-point Impact Socket |
| IMF220 | 11/16" 6-point Impact Socket |
| IMF240 | 3/4" 6-point Impact Socket |
| GF22 | 11/16" Drag Link Socket |
| KRA142B | Metal Box |

**PIT2230E Impact Driver Set**
Includes PIT120 impact driver plus all sockets, screwdrivers and replacement bits (36pc) conveniently displayed in a storage tray that fits in the KRA142 metal box.



PIT2230E



WARNING • Read safety precautions on pages W1 to W4

# IMPACT ACCESSORIES



204IMXA



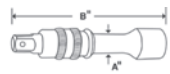
## Snap Ring Retention Device Extensions

| Stock No. | A | B | Set Contains: 204IMXA |
|---|---|---|---|
| IMX11 | 1/2 | 1 3/4 | • |
| IMX31 | 1/2 | 3 | • |
| IMX61 | 1/2 | 6 | • |
| IMX111 | 1/2 | 11 | • |

Includes storage tray



IMXL61



## Locking Extensions

- Quick release locking sleeve provides a secure connection plus easy socket removal
- Knurled release collar for easy one-hand operation, even with slippery hands

| Stock No. | A | B |
|---|---|---|
| IMXL31 | 1/2 | 3 |
| IMXL61 | 1/2 | 6 |
| IMXL111 | 1/2 | 11 |



IMSFXL24

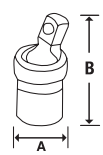
## Locking Adaptors

- Quick release locking sleeve at the 3/8" drive

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IMSFXL18 | 3/8 (locking) | 1/2 | 21/32 | 18 |
| IMSFXL24 | 3/8 (locking) | 1/2 | 21/32 | 24 |
| IMSFXL33 | 3/8 (locking) | 1/2 | 21/32 | 33 |



IPF80B

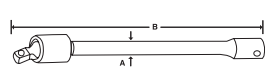



## Universal Joints (Impact)

| Stock No. | Socket Attachment | A | B |
|---|---|---|---|
| IPF80B | Pin Type | 1 | 2 1/8 |
| IPF800B | Ball Type | 1 | 2 1/8 |



202IPFX

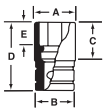


## Swivel Extensions

- Laser welded pivot pin allows smooth, full 30° swivel action for efficient power transfer
- Manufactured from special allond heat treated for optimum strength and durability
- Provides versatility for the technician as they can use any shallow, semieep, deep, 6-pt, 12-pt, metric or fractional impact socket – you are not limited to just one size

| Stock No. | Shank Dia., inches | Length, inches | Set Contains: 202IPFX |
|---|---|---|---|
| IPFX6 | 9/16 | 6 | • |
| IPFX9 | 9/16 | 9 | • |

Sets shown include magnetic storage tray




## Shallow, mm



IMDFM14



214IMFMYA

Set Contains: 214IMFMYA | 207IMDFMYA

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 8 | IMFM8A | IMDFM8A | 12.8 | 17.2 | 11.1 | 23.0 | 6.4 | • | |
| 9 | IMFM9A | – | 14.0 | 17.2 | 11.0 | 23.0 | 7.1 | • | |
| 10 | IMFM10A | IMDFM10A | 15.1 | 17.2 | 11.0 | 23.0 | 7.1 | • | • |
| 11 | IMFM11A | IMDFM11A | 16.7 | 18.8 | 11.6 | 23.8 | 7.1 | • | |
| 12 | IMFM12 | IMDFM12 | 18.8 | 18.0 | 11.6 | 23.8 | 7.1 | • | • |
| 13 | IMFM13 | IMDFM13 | 18.8 | 18.8 | 12.4 | 24.6 | 7.4 | • | • |
| 14 | IMFM14 | IMDFM14 | 20.4 | 20.4 | 13.5 | 27.0 | 9.1 | • | • |
| 15 | IMFM15 | IMDFM15 | 21.2 | 21.2 | 13.5 | 27.0 | 9.1 | • | • |
| 16 | IMFM16 | IMDFM16 | 22.7 | 22.7 | 14.1 | 27.8 | 10.4 | • | |
| 17 | IMFM17 | IMDFM17 | 24.3 | 24.3 | 14.4 | 28.2 | 10.2 | • | • |
| 18 | IMFM18 | IMDFM18 | 25.1 | 25.1 | 14.3 | 29.0 | 10.9 | • | • |
| 19 | IMFM19 | IMDFM19 | 26.7 | 26.7 | 15.6 | 30.6 | 11.7 | • | |
| 20 | IMFM20 | IMDFM20 | 28.3 | 28.3 | 16.5 | 30.9 | 12.2 | | |
| 21 | IMFM21 | IMDFM21 | 28.8 | 28.8 | 17.5 | 29.5 | 12.2 | • | |
| 22 | IMFM22 | IMDFM22 | 29.9 | 29.9 | 18.3 | 32.9 | 13.0 | | |
| 23 | IMFM23 | – | 31.5 | 31.5 | 19.3 | 31.5 | 13.2 | | |
| 24 | IMFM24 | – | 32.6 | 32.6 | 21.1 | 33.0 | 14.5 | • | |

Dimensions in ( ) apply to 12-point sockets only.

Sets shown include magnetic storage tray

## Shallow, inches



IMDF180



212IMFYA

Set Contains: 212IMFYA | 207IMDFY

| | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 5/16 | IMF100A | – | 1/2 | 11/16 | 3/8 | 7/8 | 1/4 | • | |
| 3/8 | IMF120A | IMDF120A | 9/16 | 11/16 | 7/16 | 7/8 | 3/16 | • | • |
| 7/16 | IMF140A | IMDF140A | 21/32 | 3/4 | 7/16 | 15/16 | 9/32 | • | • |
| 1/2 | IMF160 | IMDF160 | 3/4 | 3/4 | 7/16 | 15/16 | 9/32 | • | • |
| 9/16 | IMF180 | IMDF180 | 13/16 | 13/16 | 7/16 | 15/16 | 9/32 | • | • |
| 5/8 | IMF200 | IMDF200 | 29/32 | 29/32 | 7/16 | 15/16 | 9/32 | • | • |
| 11/16 | IMF220 | IMDF220 | 31/32 | 31/32 | 9/16 | 1 1/32 | 3/8 | • | • |
| 3/4 | IMF240 | IMDF240 | 1 1/16 | 1 1/16 | 9/16 | 1 3/32 | 13/32 | • | • |
| 13/16 | IMF260 | – | 1 1/8 | 1 1/8 | 11/16 | 1 3/16 | 1/2 | • | |
| 7/8 | IMF280 | – | 1 3/16 | 1 3/16 | 3/4 | 1 9/32 | 1/2 | • | |
| 15/16 | IMF300 | – | 1 9/32 | 1 9/32 | 13/16 | 1 5/16 | 17/32 | • | |
| 1 | IMF320 | – | 1 11/32 | 1 9/32 | 13/16 | 1 5/16 | 9/16 | • | |

## Semi Deep, mm



IMFMS12



212IMFMSYA

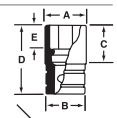
Set Contains: 212IMFMSYA

| mm | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 8 | IMFMS8A | 12.8 | 17.2 | 29.3 | 41.3 | 6.4 | • |
| 9 | IMFMS9A | 14.0 | 17.2 | 29.3 | 41.3 | 7.1 | • |
| 10 | IMFMS10A | 15.1 | 17.2 | 29.3 | 41.3 | 9.7 | • |
| 11 | IMFMS11A | 17.2 | 17.2 | 29.3 | 41.3 | 9.7 | • |
| 12 | IMFMS12 | 18.0 | 18.0 | 29.3 | 41.3 | 9.7 | • |
| 13 | IMFMS13 | 19.6 | 19.6 | 29.3 | 41.3 | 10.4 | • |
| 14 | IMFMS14 | 20.4 | 20.4 | 29.3 | 41.3 | 10.4 | • |
| 15 | IMFMS15 | 21.2 | 21.2 | 29.3 | 41.3 | 10.4 | • |
| 16 | IMFMS16 | 22.7 | 22.7 | 29.3 | 41.3 | 10.4 | • |
| 17 | IMFMS17 | 24.3 | 24.3 | 29.3 | 41.3 | 11.2 | • |
| 18 | IMFMS18 | 25.1 | 25.1 | 29.3 | 41.3 | 11.2 | • |
| 19 | IMFMS19 | 26.7 | 26.7 | 29.3 | 41.3 | 11.7 | • |
| 21 | IMFMS21 | 29.2 | 25.1 | 29.3 | 65.7 | 12.4 | |



⚠WARNING • Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS




## Semi Deep, inches


IMFS16


210IMFSYA

Set Contains: 210IMFSYA

| | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 5/16 | IMFS10A | 1/2 | 11/16 | 1 5/32 | 1 5/8 | 1/4 | • |
| 3/8 | IMFS12A | 9/16 | 11/16 | 1 5/32 | 1 5/8 | 9/32 | • |
| 7/16 | IMFS14A | 21/32 | 3/4 | 1 5/32 | 1 5/8 | 11/32 | • |
| 1/2 | IMFS16 | 3/4 | 3/4 | 1 5/32 | 1 5/8 | 13/32 | • |
| 9/16 | IMFS18 | 13/16 | 13/16 | 1 5/32 | 1 5/8 | 13/32 | • |
| 5/8 | IMFS20 | 29/32 | 29/32 | 1 5/32 | 1 5/8 | 13/32 | • |
| 11/16 | IMFS22 | 31/32 | 31/32 | 1 5/32 | 1 5/8 | 7/16 | • |
| 3/4 | IMFS24 | 1 1/16 | 1 1/16 | 1 5/32 | 1 5/8 | 15/32 | • |
| 13/16 | IMFS26 | 1 1/8 | 1 1/8 | 1 5/32 | 1 5/8 | 1/2 | • |
| 7/8 | IMFS28 | 1 3/16 | 1 3/16 | 1 5/32 | 1 5/8 | 17/32 | • |

Set shown includes magnetic storage tray

## Deep, mm


SIMDFM14


214SIMFMYA

Set Contains: 214SIMFMYA 214SIMDFMYA

| mm | 6 | 12 | A | B | C | D | E | 6 | 12 |
|---|---|---|---|---|---|---|---|---|---|
| 8 | SIMFM8A | SIMDFM8A | 12.8 | 17.2 | 38.1 | 54.0 | 6.4 | • | • |
| 9 | SIMFM9A | SIMDFM9A | 14.0 | 17.2 | 38.1 | 54.0 | 7.1 | • | • |
| 10 | SIMFM10A | SIMDFM10A | 15.1 | 17.2 | 38.1 | 54.0 | 9.7 | • | • |
| 11 | SIMFM11A | SIMDFM11A | 17.2 | 17.2 | 38.1 | 54.0 | 9.7 | • | • |
| 12 | SIMFM12 | SIMDFM12 | 18.0 | 18.0 | 38.1 | 54.0 | 9.7 | • | • |
| 13 | SIMFM13 | SIMDFM13 | 19.6 | 19.6 | 38.1 | 54.0 | 10.4 | • | • |
| 14 | SIMFM14 | SIMDFM14 | 20.4 | 20.4 | 42.7 | 60.3 | 10.4 | • | • |
| 15 | SIMFM15 | SIMDFM15 | 21.2 | 21.2 | 42.7 | 60.3 | 10.4 | • | • |
| 16 | SIMFM16 | SIMDFM16 | 22.7 | 22.7 | 42.7 | 60.3 | 10.4 | • | • |
| 17 | SIMFM17 | SIMDFM17 | 24.3 | 24.3 | 47.0 | 66.7 | 11.2 | • | • |
| 18 | SIMFM18 | SIMDFM18 | 25.1 | 25.1 | 47.0 | 66.7 | 11.2 | • | • |
| 19 | SIMFM19 | SIMDFM19 | 26.7 | 26.7 | 47.0 | 66.7 | 14.2 | • | • |
| 20 | SIMFM20 | – | 28.3 | 28.3 | 47.0 | 66.7 | 12.2 | | |
| 21 | SIMFM21 | SIMDFM21 | 28.9 | 28.9 | 47.0 | 66.7 | 12.4 | • | • |
| 22 | SIMFM22 | – | 29.9 | 29.9 | 51.6 | 73.0 | 13.0 | | |
| 23 | SIMFM23 | – | 31.5 | 31.5 | 51.6 | 73.0 | 13.0 | | |
| 24 | SIMFM24 | SIMDFM24 | 33.0 | 33.0 | 58.2 | 73.0 | 14.7 | • | • |

Sets shown include magnetic storage tray

## Deep, inches

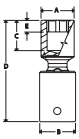

SIMF260


212SIMFYA

Set Contains: 207SIMFYA 212SIMFYA

| | 6 | A | B | C | D | E | 6 | 6 |
|---|---|---|---|---|---|---|---|---|
| 5/16 | SIMF100A | 1/2 | 11/16 | 1 1/2 | 2 1/8 | 3/16 | | • |
| 3/8 | SIMF120A | 9/16 | 11/16 | 1 1/2 | 2 1/8 | 9/32 | • | • |
| 7/16 | SIMF140A | 21/32 | 3/4 | 1 1/2 | 2 1/8 | 5/16 | • | • |
| 1/2 | SIMF160 | 3/4 | 3/4 | 1 1/2 | 2 1/8 | 3/8 | • | • |
| 9/16 | SIMF180 | 13/16 | 13/16 | 1 1/2 | 2 1/8 | 7/16 | • | • |
| 5/8 | SIMF200 | 29/32 | 29/32 | 1 1/2 | 2 3/8 | 7/16 | • | • |
| 11/16 | SIMF220 | 31/32 | 31/32 | 1 1/2 | 2 5/8 | 1/2 | • | • |
| 3/4 | SIMF240 | 1 1/16 | 1 1/16 | 1 1/2 | 2 5/8 | 9/16 | • | • |
| 13/16 | SIMF260 | 1 1/8 | 1 1/8 | 2 1/16 | 2 3/4 | 9/16 | | • |
| 7/8 | SIMF280 | 1 3/16 | 1 3/16 | 2 1/16 | 2 3/4 | 9/16 | | • |
| 15/16 | SIMF300 | 1 9/32 | 1 9/32 | 2 1/32 | 2 3/4 | 9/16 | | • |
| 1 | SIMF320 | 1 11/32 | 1 11/32 | 2 3/16 | 2 3/4 | 5/8 | | • |

Sets shown include magnetic storage tray





207IPFM



IPDFM12A

## Shallow, mm

| mm | 6 | 12 | A | B | D | E | Set Contains: 207IPFM 6 | 212IPFM 6 | 207IPDFM 12 |
|---|---|---|---|---|---|---|---|---|---|
| 8 | IPFM8C | – | 13.2 | 22.2 | 49.8 | 6.4 | | • | |
| 9 | IPFM9C | – | 14.0 | 25.1 | 52.1 | 6.4 | | | |
| 10 | IPFM10C | IPDFM10A | 15.4 | 22.2 | 50.8 | 7.1 | • | • | • |
| 11 | IPFM11C | – | 16.7 | 22.2 | 52.1 | 7.1 | | • | |
| 12 | IPFM12C | IPDFM12A | 18.1 | 22.2 | 55.4 | 7.1 | • | • | • |
| 13 | IPFM13C | IPDFM13A | 18.9 | 22.2 | 54.1 | 7.9 | • | • | • |
| 14 | IPFM14C | IPDFM14A | 20.5 | 22.2 | 55.4 | 7.9 | • | • | • |
| 15 | IPFM15C | IPDFM15A | 21.2 | 22.2 | 56.4 | 7.9 | • | • | • |
| 16 | IPFM16C | IPDFM16A | 22.6 | 22.2 | 57.4 | 8.6 | | • | |
| 17 | IPFM17C | IPDFM17A | 23.4 | 23.0 | 62.2 | 8.6 | • | • | • |
| 18 | IPFM18C | IPDFM18A | 25.1 | 23.0 | 64.0 | 9.7 | • | • | • |
| 19 | IPFM19C | – | 26.4 | 23.0 | 65.0 | 10.4 | | • | |
| 21 | IPFM21C | – | 29.2 | 25.1 | 65.7 | 12.4 | | • | |
| 22 | IPFM22C | – | 30.1 | 25.1 | 67.7 | 12.9 | | | |

Sets shown include storage tray



205IPF



IPF22C

## Shallow, inches

| | 6 | 12 | A | B | D | E | Set Contains: 205IPF 6 |
|---|---|---|---|---|---|---|---|
| 3/8 | IPF12C | IPDF12A | 9/16 | 7/8 | 1 31/32 | 1/4 | |
| 7/16 | IPF14C | – | 21/32 | 7/8 | 2 1/16 | 9/32 | • |
| 1/2 | IPF16C | – | 3/4 | 7/8 | 2 1/8 | 5/16 | • |
| 9/16 | IPF18C | – | 13/16 | 7/8 | 2 3/16 | 5/16 | • |
| 5/8 | IPF20C | – | 7/8 | 7/8 | 2 1/4 | 11/32 | • |
| 11/16 | IPF22C | – | 31/32 | 31/32 | 2 7/16 | 13/32 | |
| 3/4 | IPF24C | – | 1 1/16 | 29/32 | 2 19/32 | 7/16 | • |

Set shown includes storage tray



207IPSFM



IPSFM21A

## Semi Deep, mm

| mm | 6 | A | B | D | E | Set Contains: 207IPSFM 6 |
|---|---|---|---|---|---|---|
| 8 | IPSFM8A | 12.8 | 22.2 | 62.5 | 6.4 | |
| 10 | IPSFM10A | 15.1 | 22.2 | 64.1 | 9.7 | • |
| 11 | IPSFM11A | 17.2 | 22.2 | 65.6 | 9.7 | |
| 12 | IPSFM12A | 18.0 | 23.0 | 69.6 | 9.7 | • |
| 13 | IPSFM13A | 19.6 | 23.0 | 71.9 | 10.4 | • |
| 14 | IPSFM14A | 20.4 | 23.0 | 72.9 | 10.4 | • |
| 15 | IPSFM15A | 22.0 | 23.0 | 74.4 | 10.4 | • |
| 16 | IPSFM16A | 22.7 | 23.0 | 74.9 | 10.4 | |
| 17 | IPSFM17A | 24.3 | 23.0 | 76.0 | 11.2 | • |
| 18 | IPSFM18A | 25.1 | 23.0 | 77.5 | 11.2 | • |
| 19 | IPSFM19A | 26.7 | 23.0 | 79.0 | 14.2 | |
| 21 | IPSFM21A | 29.2 | 25.1 | 77.7 | 12.4 | |

Set includes magnetic tray



WARNING • Read safety precautions on pages W1 to W4

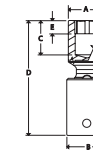
# FLANK DRIVE® Impact Swivel Sockets



IPLFM12B



207IPLFM




## Deep, mm

Set Contains: 207IPLFM

| mm | 6 | A | B | D | E | 6 |
|---|---|---|---|---|---|---|
| 8 | IPLFM8B | 15.8 | 24.9 | 70.1 | 9.1 | |
| 10 | IPLFM10B | 15.8 | 24.9 | 70.1 | 9.1 | • |
| 12 | IPLFM12B | 16.6 | 24.9 | 73.0 | 9.7 | • |
| 13 | IPLFM13A | 18.8 | 22.2 | 79.5 | 10.4 | • |
| 14 | IPLFM14A | 20.4 | 22.2 | 81.0 | 10.4 | • |
| 15 | IPLFM15A | 21.2 | 22.2 | 82.6 | 10.4 | • |
| 16 | IPLFM16A | 23.0 | 25.0 | 86.0 | 10.4 | |
| 17 | IPLFM17A | 23.4 | 23.0 | 88.3 | 10.2 | • |
| 18 | IPLFM18A | 25.1 | 23.0 | 90.1 | 10.7 | • |
| 19 | IPLFM19A | 26.7 | 23.0 | 91.2 | 14.2 | |
| 21 | IPLFM21A | 29.2 | 25.3 | 92.2 | 12.4 | |

Set includes magnetic tray



IPLF18B

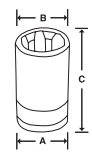
## Deep, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 3/8 | IPLF12B | 9/16 | 7/8 | 2 15/16 | 1/4 |
| 7/16 | IPLF14B | 21/32 | 7/8 | 2 3/4 | 9/32 |
| 1/2 | IPLF16B | 3/4 | 7/8 | 2 3/4 | 5/16 |
| 9/16 | IPLF18B | 13/16 | 7/8 | 3 3/16 | 5/16 |
| 5/8 | IPLF20B | 7/8 | 7/8 | 3 1/4 | 11/32 |

# SPECIAL APPLICATION SOCKETS



207IMFLE



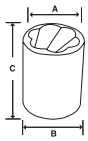

## TORX®

Various applications on heavy duty trucks with Mercedes-Benz® engines. Use E18 size for F550 brake rotor. Use E20 size for rear brake caliper bolts on BMW® X5 vehicles.

Set Contains: 207IMFLE

| # | Stock No. | A | B | C | |
|---|---|---|---|---|---|
| E8 | IMFLE80A | 15/32 | 11/16 | 1 5/32 | • |
| E10 | IMFLE100A | 1/2 | 11/16 | 1 5/32 | • |
| E12 | IMFLE120A | 19/32 | 11/16 | 1 5/32 | • |
| E14 | IMFLE140A | 5/8 | 11/16 | 1 5/32 | • |
| E16 | IMFLE160A | 3/4 | 3/4 | 1 1/4 | • |
| E18 | IMFLE180A | 25/32 | 25/32 | 1 5/16 | • |
| E20 | IMSLE200 | 15/16 | 15/16 | 1 1/2 | • |

Set shown includes magnetic storage tray






209TFSMYA

## Twist, Shallow, inches/mm

Twist sockets remove rounded/damaged fasteners

| Set Contains: | 209TFSMYA | 213TFSYA |
|---|---|---|

| 11 mm | 6 | A | B | C | 6 | 6 |
|---|---|---|---|---|---|---|
| 3/8" | **TFSY121A** | 11/16 (17.5) | 9/16 (14.3) | 1 1/4 (31.8) | | • |
| 7/16" (11) | **TFSY141A** | 11/16 (17.5) | 21/32 (16.7) | 1 1/4 (31.8) | • | • |
| 1/2" | **TFSY161A** | 3/4 (19.1) | 3/4 (19.1) | 1 1/4 (31.8) | | • |
| 9/16" | **TFSY181A** | 13/16 (20.6) | 13/16 (20.6) | 1 1/4 (31.8) | | • |
| 5/8" (16) | **TFSY201A** | 29/32 (23.0) | 29/32 (23.0) | 1 1/4 (31.8) | • | • |
| 11/16" | **TFSY221A** | 31/32 (24.6) | 31/32 (24.6) | 1 3/8 (35.0) | | • |
| 3/4" (19) | **TFSY241A** | 1 1/16 (27.0) | 1 1/16 (27.0) | 1 3/8 (35.0) | • | • |
| 10 | **TFSY10A** | 11/16 (17.5) | 19/32 (15.1) | 1 1/4 (31.8) | • | • |
| 12 | **TFSY12A** | 11/16 (17.5) | 11/16 (17.5) | 1 1/4 (31.8) | • | • |
| 13 | **TFSY13A** | 3/4 (19.1) | 3/4 (19.1) | 1 1/4 (31.8) | • | • |
| 14 | **TFSY14A** | 13/16 (20.6) | 13/16 (20.6) | 1 1/4 (31.8) | • | • |
| 15 | **TFSY15A** | 13/16 (20.6) | 27/32 (21.4) | 1 1/4 (31.8) | • | • |
| 17 | **TFSY17A** | 31/32 (24.6) | 31/32 (24.6) | 1 3/8 (35.0) | • | • |

Sets shown include storage tray



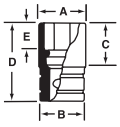
213TSFSYA

## Twist, Deep, inches/mm

| Set Contains: | 213TFSFSYA |
|---|---|

| 11 mm | 6 | A | B | C | 6 |
|---|---|---|---|---|---|
| 3/8" | **TSFSY121A** | 11/16 (17.5) | 9/16 (14.3) | 2 1/8 (54.0) | • |
| 7/16" (11) | **TSFSY141A** | 11/16 (17.5) | 21/32 (16.7) | 2 1/8 (54.0) | • |
| 1/2" | **TSFSY161A** | 3/4 (19.1) | 3/4 (19.1) | 2 1/8 (54.0) | • |
| 9/16" | **TSFSY181A** | 13/16 (20.6) | 13/16 (20.6) | 2 3/8 (60.3) | • |
| 5/8" (16) | **TSFSY201A** | 29/32 (23.0) | 29/32 (23.0) | 2 3/8 (60.3) | • |
| 11/16" | **TSFSY221A** | 31/32 (24.6) | 31/32 (24.6) | 2 5/8 (66.7) | • |
| 3/4" (19) | **TSFSY241A** | 1 1/16 (27.0) | 1 1/16 (27.0) | 2 5/8 (66.7) | • |
| 10 | **TSFSY10A** | 11/16 (17.5) | 19/32 (15.1) | 2 1/8 (54.0) | • |
| 12 | **TSFSY12A** | 11/16 (17.5) | 11/16 (17.5) | 2 1/8 (54.0) | • |
| 13 | **TSFSY13A** | 3/4 (19.1) | 3/4 (19.1) | 2 1/8 (54.0) | • |
| 14 | **TSFSY14A** | 13/16 (20.6) | 13/16 (20.6) | 2 3/8 (60.3) | • |
| 15 | **TSFSY15A** | 13/16 (20.6) | 27/32 (21.4) | 2 3/8 (60.3) | • |
| 17 | **TSFSY17A** | 31/32 (24.6) | 31/32 (24.6) | 2 5/8 (66.7) | • |

Set shown includes storage tray






DPFM12

## Shallow 10pt.

| mm | 10 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 12 | **DPFM12** | 18.3 | 18.3 | — | 26.9 | 7.1 |

**DPFM12 Shallow Impact Socket**

- The DPFM12 is for clutch pressure plate bolts found on the flywheel assembly on Mitsubishi® Eclipse® and Dodge® Stratus® vehicles
- Formed from tough alloy steel
- Heat treated to a lower hardness to add impact resistance and ductility

**⚠WARNING** • Read safety precautions on pages W1 to W4

# POWER ACCESSORIES



PF11A



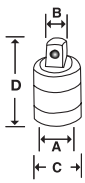
## Locking Button Extensions (Power)

Use with power or impact sockets with retention holes.

| Stock No. | A | B |
|---|---|---|
| PF3 | 1/2 | 3 |
| PF6 | 1/2 | 6 |
| PF11A | 1/2 | 11 |



PA4E

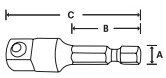



## Adaptors (Power)

| Stock No. | Socket Attachment | A | B | C | D |
|---|---|---|---|---|---|
| PA4E | Pin Type | 1/2 | 3/8 | 15/16 | 1 13/16 |
| PA2A | Pin Type | 3/8 | 1/2 | 3/4 | 1 5/16 |



A3042

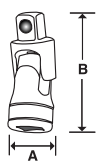



## Hex-To-Square Adaptors (Power)

| Stock No. | Socket Attachemnt | A | B | C |
|---|---|---|---|---|
| A3042 | Pin Type | 1/4 | 1 | 2 |
| A3044 | Pin Type | 1/4 | 1 | 4 |
| A3046 | Pin Type | 1/4 | 1 1/4 | 6 |
| A3017A | Pin Type | 7/16 | 1 1/4 | 1 3/4 |



PFU8A



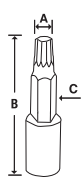

## Universal Joint (Power)

| Stock No. | Socket Attachment | A | B |
|---|---|---|---|
| PFU8A | Pin Type | 3/4 | 1 31/32 |

# POWER BIT SOCKETS



PFTX30E

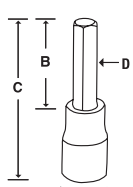



## TORX®/Power Drivers

| # | Stock No. | A | B |
|---|---|---|---|
| T27 | PFTX27E | 1 3/4 | FTX27E2 |
| T30 | PFTX30E | 1 3/4 | FTX30E2 |
| T40 | PFTX40E | 1 3/4 | FTX40E2 |



PFAM6E

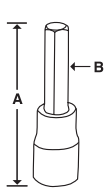



## Hex, mm (Power)

| mm | | A | B |
|---|---|---|---|
| 4 | PFAM4E | 52.3 | FAM4E2 |
| 5 | PFAM5E | 52.6 | FAM5E2 |
| 6 | PFAM6E | 52.6 | FAM6E2 |
| 7 | PFAM7E | 52.5 | FAM7E2 |
| 8 | PFAM8E | 52.1 | FAM8E2 |
| 9 | PFAM9E | 52.5 | FAM9E2 |
| 10 | PFAM10E | 52.5 | SAM10E2 |



PFA8E




## Hex, inches (Power)

| | | A | Fits These Cap Screws | Fits These Set Screws | B |
|---|---|---|---|---|---|
| 1/8 | PFA4E | 2 1/16 | — | 1/4" | TMA4E2 |
| 9/64 | PFA4.5E | 2 1/16 | #8 | — | TMA4.5E2 |
| 5/32 | PFA5E | 2 1/16 | #10 | 5/16" | FA5E2 |
| 3/16 | PFA6E | 2 1/16 | 1/4" | 3/8" | FA6E2 |
| 7/32 | PFA7E | 2 1/16 | — | 5/16" | FA7E2 |
| 1/4 | PFA8E | 2 1/16 | 7/16" | 1/2" | FA8E2 |
| 5/16 | PFA10E | 2 1/16 | 3/8" | 5/8" | FA10E2 |
| 3/8 | PFA12E | 2 1/16 | 1/4" and 1/2" | 3/4" | FA12E2 |

## Shallow Magnetic, mm

| mm | 6 | 12 | A | B | D | E |
|---|---|---|---|---|---|---|
| 10 | MFIMM10A | MFIMMD10 | 15.1 | 17.2 | 29.1 (28.6) | 4.7 (7.1) |
| 12 | MFIMM12 | – | 18.1 | 19.1 | 28.6 | 3.7 |
| 13 | MFIMM13 | – | 19.4 | 19.4 | 28.6 | 3.9 |
| 15 | MFIMM15 | – | 21.6 | 21.8 | 28.6 | 3.9 |

Dimensions in ( ) apply to 12 point sockets only





MFIMM15

**MFIMMD10 12-Point Metric Shallow Magnetic Socket**

- For use on Detroit Diesel® 60 series engines, the MFIMMD10 is used on the three camshaft gear thrust plate bolts located inside the camshaft gear cover within the front gear case on the engine
- Applies to 2002 and later 60 series *Detroit Diesel* engines with the compact gear case
- PLEASE NOTE: Earlier engines with the tall gear case have 13 mm six-point bolts. Please use MFIMM13 for this application

## Shallow Magnetic, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 5/16 | MFIM101 | 15/32 | 11/16 | 1 1/16 | 3/32 |
| 3/8 | MFIM121 | 17/32 | 11/16 | 1 1/16 | 1/8 |
| 7/16 | MFIM141 | 5/8 | 11/16 | 1 1/16 | 5/32 |
| 1/2 | MFIM161 | 25/32 | 25/32 | 1 1/16 | 5/32 |
| 9/16 | MFIM181 | 7/8 | 7/8 | 1 1/16 | 5/32 |



MFIM101

## Deep Magnetic Spring Loaded, mm

| mm | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 10 | SMFIMM10B | 15.1 | 17.2 | 50.8 | 7.1 |
| 12 | SMFIMM12B | 18.1 | 19.1 | 50.8 | 7.1 |
| 13 | SMFIMM13B | 19.4 | 19.4 | 50.8 | 7.6 |



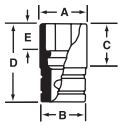
SMFIMM13B

## Surface Drive

Use in the industrial market for assembly line work. The lead in chamfer and special design of these sockets will engage with a fastener while rotating on a power nut runner.

## Deep, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 10 | DFSM10 | 14.5 | 17.2 | 42.5 | 54.0 | 8.4 |






DFSM10

## Deep, inches

| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 7/16 | DFS14 | 21/32 | 11/16 | 1 21/32 | 2 1/8 | 11/32 |



DFS14

## Surface Drive (M-Series)

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 8 | M2108 | 12.7 | 19.1 | 16.5 | 31.8 | 5.6 |
| 10 | M2110 | 16.5 | 19.1 | 16.5 | 31.8 | 7.4 |
| 10 | M2210 | 16.5 | 19.1 | 39.1 | 50.8 | 7.4 |
| 15 | M2115 | 22.2 | 22.2 | 25.4 | 38.1 | 11.4 |



M2115

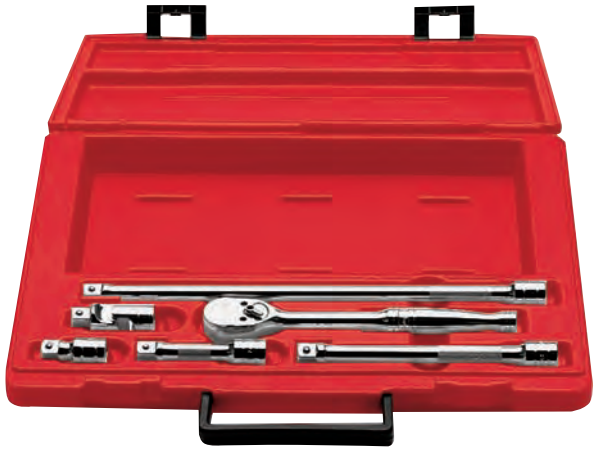
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS

## Build Your Own Set

The 206AFSP handle set is the foundation for the ideal basic general service set. Add any of the suggested socket sets or choose from various special purpose sockets available in fractional and metric sizes.



**206AFSP**

## 206AFSP Handle Set Includes:

- F80 sealed ratchet, FU8A universal joint, FX1 extension (1 1/2"), FXK3 knurled extension (3"), FXK6 knurled extension (6") and FXK11 knurled extension (11")
- 6pc in convenient PB16B storage case large enough to store four rows of standard length sockets, two rows of deep or universal sockets or a combination of the two

## Suggested additions not included in set:

| | Stock No. | mm | Stock No. |
|---|---|---|---|
| 6-Point Shallow Set | **211FSY** | 6-Point Shallow Set | **212FSMY** |
| 6-Point Deep Set | **211SFSY** | 6-Point Deep Set | **212SFSMY** |
| 12-Point Deep Set | **211SFY** | 12-Point Deep Set | **212SFMY** |
| 6-Point Deep Set | **207FSU** | 6-Point Semi Deep Set | **212FSMSY** |
| | | 12-Point Shallow Set | **212FMY** |



**218AFSP**

## 218AFSP 6-Point Fractional General Service Set 18 Tools, Includes:

| | 6-Point Shallow Sockets |
|---|---|
| 1/4 | **FS081** |
| 5/16 | **FS101** |
| 3/8 | **FS121** |
| 7/16 | **FS141** |
| 1/2 | **FS161** |
| 9/16 | **FS181** |
| 5/8 | **FS201** |
| 11/16 | **FS221** |
| 3/4 | **FS241** |
| 13/16 | **FS261** |
| 7/8 | **FS281** |

| Also Includes: | | |
|---|---|---|
| | **F80** | Standard Handle Sealed Ratchet |
| | **F4LB** | Speeder |
| | **F10LC** | Breaker Bar |
| | **FU8A** | Universal Joint |
| | **FXK3** | 3" Knurled Extension |
| | **FXK6** | 6" Knurled Extension |
| | **FXK11** | 11" Knurled Extension |



210AFSP

## 210AFSP 6-Point Fractional General Service Set 10 Tools, Includes:

| | 6-Point Shallow Sockets |
|---|---|
| 3/8 | FS121 |
| 7/16 | FS141 |
| 1/2 | FS161 |
| 9/16 | FS181 |
| 5/8 | FS201 |
| 11/16 | FS221 |
| 3/4 | FS241 |

| Also Includes: | | |
|---|---|---|
| | F80 | Standard Handle Sealed Ratchet |
| | FXK3 | 3" Knurled Extension |
| | FXK6 | 6" Knurled Extension |



222AFSP

## 222AFSP 6-Point Fractional General Service Set 22 Tools, Includes:

| | 6-Point Shallow Sockets | | 6-Point Deep Sockets |
|---|---|---|---|
| 3/8 | FS121 | 3/8 | SFS121 |
| 7/16 | FS141 | 7/16 | SFS141 |
| 1/2 | FS161 | 1/2 | SFS161 |
| 9/16 | FS181 | 9/16 | SFS181 |
| 5/8 | FS201 | 5/8 | SFS201 |
| 11/16 | FS221 | 11/16 | SFS221 |
| 3/4 | FS241 | 3/4 | SFS241 |

| Also Includes: | | |
|---|---|---|
| | F80 | Standard Handle Sealed Ratchet |
| | S9704KA | 13/16" Spark Plug Socket |
| | S9706KA | 5/8" Spark Plug Socket |
| | F10LC | Breaker Bar |
| | FU8A | Universal Joint |
| | FXK3 | 3" Knurled Extension |
| | FXK4 | 4" Knurled Extension |
| | FXK8 | 8" Knurled Extension |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS



218AFP

## 218AFP 12-Point Fractional General Service Set (Tools only) 18 Tools, Includes:

| | 12-Point Shallow Sockets |
|---|---|
| 1/4 | F081 |
| 5/16 | F101 |
| 3/8 | F121 |
| 7/16 | F141 |
| 1/2 | F161 |
| 9/16 | F181 |
| 5/8 | F201 |
| 11/16 | F221 |
| 3/4 | F241 |
| 13/16 | F261 |
| 7/8 | F281 |

| Also Includes: | | |
|---|---|---|
| | F80 | Standard Handle Sealed Ratchet |
| | F4LB | Speeder |
| | F10LC | Breaker Bar |
| | FU8A | Universal Joint |
| | FXK3 | 3" Knurled Extension |
| | FXK6 | 6" Knurled Extension |
| | FXK11 | 11" Knurled Extension |



248F

## 248F 12-Point Fractional General Service Set 48 Tools, Includes:

| 12-Point Shallow Sockets | | 12-Point Deep Sockets | | 12-Point Universal Sockets | |
|---|---|---|---|---|---|
| 1/4 | F081 | 1/4 | SF081 | 5/16 | FU10B |
| 5/16 | F101 | 5/16 | SF101 | 3/8 | FU12B |
| 3/8 | F121 | 3/8 | SF121 | 7/16 | FU14B |
| 7/16 | F141 | 7/16 | SF141 | 1/2 | FU16B |
| 1/2 | F161 | 1/2 | SF161 | 9/16 | FU18B |
| 9/16 | F181 | 9/16 | SF181 | 5/8 | FU20B |
| 5/8 | F201 | 5/8 | SF201 | 11/16 | FU22B |
| 11/16 | F221 | 11/16 | SF221 | 3/4 | FU24B |
| 3/4 | F241 | 3/4 | SF241 | 13/16 | FU26B |
| 13/16 | F261 | 13/16 | SF261 | 7/8 | FU28B |
| 7/8 | F281 | 7/8 | SF281 | 15/16 | FU30A |
| 15/16 | F301 | | | 1 | FU32A |

| Also Includes: | | |
|---|---|---|
| | F80 | Standard Handle Sealed Ratchet |
| | F40B | Plastic Handle Driver |
| | FXK4 | 4" Knurled Extension |
| | FRS70A | Ratchet Spinner |
| | FXK6 | 6" Knurled Extension |
| | F4LB | Speeder |
| | F77 | Ratchet Adaptor |
| | FXK11 | 11" Knurled Extension |
| | F5L | Sliding T-Handle |
| | FU8A | Universal Joint |
| | F10LC | Breaker Bar |
| | FXK3 | 3" Knurled Extension |
| | BLPEXTF388 | 8" Flexible Extension |



292F

## 292F 6-/12- Point Fractional General Service Set 92 Tools, Includes:

| | |
|---|---|
| **6-Point Shallow Set: 211FSY** | Shallow, 6-Point (11pc) ($^{1}/_{4}$"–$^{7}/_{8}$") |
| **6-Point Deep Set: 211SFSY** | Deep, 6-Point (11pc) ($^{1}/_{4}$"–$^{7}/_{8}$") |
| **12-Point Deep Set: 211SFY** | Deep, 12-Point (11pc) ($^{1}/_{4}$"–$^{7}/_{8}$") |
| **12-Point Shallow Set: 211FY** | Shallow, 12-Point (11pc) ($^{1}/_{4}$"–$^{7}/_{8}$") |
| **12-Point Shallow Universal Sockets:** | Universal, Shallow, 12-Point (12pc) ($^{5}/_{16}$"–1") |

| | | | | |
|---|---|---|---|---|
| **Also Includes:** | **F80** | Standard Handle Sealed Ratchet | **S9704KFUA** | $^{13}/_{16}$" Spark Plug Universal Socket |
| | **FLF80** | Sealed Flex Head Ratchet | **GF22** | Drag Link Socket |
| | **F4LB** | Speeder | **F23E** | $^{1}/_{4}$" Flat Tip Socket Driver |
| | **F5L** | Sliding T-Handle | **F25E** | $^{5}/_{16}$" Flat Tip Socket Driver |
| | **F10LC** | Breaker Bar | **F31E** | $^{3}/_{8}$" Flat Tip Socket Driver |
| | **F40B** | Short Shank Driver | **F29E** | $^{3}/_{8}$" Clutch Type Driver |
| | **FRS70A** | Ratchet Spinner | **F30E** | $^{5}/_{16}$" Clutch Type Driver |
| | **F77** | Ratchet Adaptor | **FA5E** | $^{5}/_{32}$" Hex Driver |
| | **FU8A** | Universal Joint | **FA6E** | $^{3}/_{16}$" Hex Driver |
| | **FX1** | 1 $^{1}/_{2}$" Extension | **FA7E** | $^{7}/_{32}$" Hex Driver |
| | **FXK3** | 3" Knurled Extension | **FA8E** | $^{1}/_{4}$" Hex Driver |
| | **FXK4** | 4" Knurled Extension | **FA10E** | $^{5}/_{16}$" Hex Driver |
| | **FXK6** | 6" Knurled Extension | **FA12E** | $^{3}/_{8}$" Hex Driver |
| | **FXK8** | 8" Knurled Extension | **PP409A** | $^{9}/_{32}$" Pipe Plug Socket |
| | **FXK11** | 11" Knurled Extension | **PP410A** | $^{5}/_{16}$" Pipe Plug Socket |
| | **FP22E** | #2 PHILLIPS® Driver | **PP412A** | $^{9}/_{32}$" Pipe Plug Socket |
| | **FP32E** | #3 *PHILLIPS* Driver | **BLPEXTF388** | 8" Flexible Extension |
| | **FP42E** | #4 *PHILLIPS* Driver | **F111** | $^{11}/_{32}$" Shallow Socket |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS



222AFSMP

## 222AFSMP 6-Point Metric General Service Set 22 Tools, Includes:

| mm | 6-Point Shallow Sockets: | mm | 6-Point Deep Sockets: |
|---|---|---|---|
| 10 | **FSM101** | 10 | **SFSM10** |
| 11 | **FSM111** | 11 | **SFSM11** |
| 13 | **FSM131** | 13 | **SFSM13** |
| 14 | **FSM141** | 14 | **SFSM14** |
| 15 | **FSM151** | 15 | **SFSM15** |
| 17 | **FSM171** | 17 | **SFSM17** |
| 19 | **FSM191** | 19 | **SFSM19** |

| Also Includes: | | |
|---|---|---|
| | **F80** | Standard Handle Sealed Ratchet |
| | **FU8A** | Universal Joint |
| | **F10LC** | Breaker Bar |
| | **FXK3** | 3" Knurled Extension |
| | **FXK4** | 4" Knurled Extension |
| | **FXK8** | 8" Knurled Extension |
| | **S9704KA** | $^{13}/_{16}$" Spark Plug Socket |
| | **S9706KA** | $^{5}/_{8}$" Spark Plug Socket |
| | **PB17B** | Storage Case |



262MFB

## 262MFB 6-/12-Point Metric General Service Set 61 Tools, Includes:

| mm | 6-Point Shallow Sockets | mm | 12-Point Shallow Sockets | mm | 12-Point Deep Sockets | mm | 6-Point Shallow Universal Sockets |
|---|---|---|---|---|---|---|---|
| 8 | **FSM81** | 9 | **FM9** | 8 | **SFM8** | 8 | **FSUM8A** |
| 9 | **FSM91** | 10 | **FM10** | 9 | **SFM9** | 10 | **FSUM10A** |
| 10 | **FSM101** | 11 | **FM11** | 10 | **SFM10** | 11 | **FSUM11A** |
| 11 | **FSM111** | 12 | **FM12** | 11 | **SFM11** | 12 | **FSUM12A** |
| 12 | **FSM121** | 13 | **FM13** | 12 | **SFM12** | 13 | **FSUM13A** |
| 13 | **FSM131** | 14 | **FM14** | 13 | **SFM13** | 14 | **FSUM14A** |
| 14 | **FSM141** | 15 | **FM15** | 14 | **SFM14** | 15 | **FSUM15A** |
| 15 | **FSM151** | 16 | **FM16** | 15 | **SFM15** | 16 | **FSUM16A** |
| 16 | **FSM161** | 17 | **FM17** | 16 | **SFM16** | 17 | **FSUM17A** |
| 17 | **FSM171** | 18 | **FM18** | 17 | **SFM17** | 18 | **FSUM18A** |
| 18 | **FSM181** | 19 | **FM19** | 18 | **SFM18** | 19 | **FSUM19A** |
| 19 | **FSM191** | | | 19 | **SFM19** | 22 | **FSUM22A** |

| Also Includes: | | |
|---|---|---|
| | **F80** | Standard Handle Sealed Ratchet |
| | **F4LB** | Speeder |
| | **F10LC** | Breaker Bar |
| | **F40B** | Plastic Handle Driver |
| | **FRS70A** | Ratchet Spinner |
| | **F77** | Ratchet Adaptor |
| | **FU8A** | Universal Joint |
| | **FXK3** | 3" Knurled Extension |
| | **FXK6** | 6" Knurled Extension |
| | **FXK11** | 11" Knurled Extension |
| | **S9704KR** | $^{13}/_{16}$" Spark Plug Socket |
| | **BLPEXTF388** | 8" Flexible Extension |
| | **S9706KA** | $^{5}/_{8}$" Spark Plug Socket |
| | **S9716KA** | $^{9}/_{16}$" Spark Plug Socket |
| | **KRA21G** | Metal Box |

## 6-Point Metric Starter Set

High strength sealed head ratchet built for strength, precision and durability

- Sockets feature Flank Drive® wrenching system which grips the fastener on the flanks/flats increasing torque by up to 15%–20%
- Nickel chrome plating provides a wear-resistant finish along with a mirror-like finish
- Universal joint helps increase access to hard-to-reach fasteners (STARTERSET3)

Highest quality steel on breaker bar provides strength and durability (STARTERSET5)
Wobble engagement on extensions provides 16° of additional accessibility (STARTERSET5)




**STARTERSET3**




**STARTERSET5**

### 17 pieces, Includes:

| mm | 6-Point Deep Sockets | mm | 6-Point Deep Sockets |
|---|---|---|---|
| 8 | **SFSM8** | 14 | **SFSM14** |
| 9 | **SFSM9** | 15 | **SFSM15** |
| 10 | **SFSM10** | 16 | **SFSM16** |
| 11 | **SFSM11** | 17 | **SFSM17** |
| 12 | **SFSM12** | 18 | **SFSM18** |
| 13 | **SFSM13** | 19 | **SFSM19** |

| Also Includes: | | |
|---|---|---|
| | **FL80** | 3/8" Dr. Long Handle Sealed Ratchet |
| | **FU8A** | Universal Joint |
| | **FXK3** | 3" Knurled Extension |
| | **FXK6** | 6" Knurled Extension |
| | **S9706KA** | 5/8" Spark Plug Socket |

### 17 pieces, Includes:

| mm | 6-Point Shallow Sockets | mm | 6-Point Shallow Sockets |
|---|---|---|---|
| 8 | **FSM81** | 14 | **FSM141** |
| 9 | **FSM91** | 15 | **FSM151** |
| 10 | **FSM101** | 16 | **FSM161** |
| 11 | **FSM111** | 17 | **FSM171** |
| 12 | **FSM121** | 18 | **FSM181** |
| 13 | **FSM131** | 19 | **FSM191** |

| Also Includes: | | |
|---|---|---|
| | **F12LA** | Breaker Bar |
| | **F80** | Standard Handle Sealed Ratchet |
| | **FXWP1** | 1 1/2" Wobble Plus Extension |
| | **FXWP3** | 3" Wobble Plus Extension |
| | **FXWP6** | 6" Wobble Plus Extension |

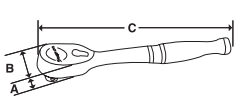
## RATCHETS Blue-Point®



**BPRFR938**



**BPRFR938SG**




### Quick Release Ratchets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **BPRFR938** | Standard Handle | 38 | 9.5° | 9/16 | 1 9/32 | 7 3/4 | **RKRBPRFR938** |
| **BPRFR938SG** | Soft Grip Handle | 38 | 9.5° | 9/16 | 1 9/32 | 7 3/4 | **RKRBPRFR938** |

ASME®/ANSI® B107.10

**BPR703 Quick Release Ratchet Set** 1/4" drive BPRTR936, 3/8" drive BPRFR938 and 1/2" drive BPRSR940 Ratchets (3pc) in storage tray.

**BPR703SG Quick Release Ratchet Set** 1/4" drive BPRTR936SG, 3/8" drive BPRFR938SG and 1/2" drive BPRSR940SG Soft Grip Ratchets (3pc) in storage tray.

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# HANDLES AND ACCESSORIES Blue-Point®



FSD3KT

## Ratchet Spinners

| Stock No. | Square Drive, inches | Description | FSD3KT Set Contains: |
|---|---|---|---|
| FSD1 | 3/8 Male to 3/8 Female | Spinner Adaptor | • |
| FSD14 | 3/8 Male to 1/4 Female | Spinner Adaptor | • |
| FSD38 | 1/4 Male to 3/8 Female | Spinner Adaptor | • |

ASME®/ANSI® B107.10

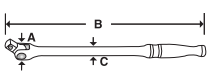


BLPBB3810



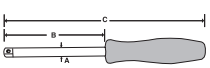
BLPCGHD388

## Breaker Bar




| Stock No. | Description | A | B | C |
|---|---|---|---|---|
| BLPBB3810 | Standard Handle | 7/8 | 9 31/32 | 1/2 |

## Handled Driver




| Stock No. | Description | C |
|---|---|---|
| BLPCGHD388 | Spinner Handle | 8 5/8 |



TURBOT103



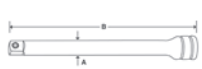
BLPEXTK386

## Turbo T-handle Speed Drivers

| Stock No. | Description | Handle Type |
|---|---|---|
| F11TURBO | 3/8" square drive | Turbo T-Handle |

**TURBOT103 Turbo T-handle Set**
- T9TURBO (1/4" drive), TH10TURBO (1/4" hex) and F11TURBO (3/8" drive)
- Three pieces in storage tray

## Knurled Extensions




| Stock No. | B |
|---|---|
| BLPEXTK383 | 2 31/32 |
| BLPEXTK386 | 5 29/32 |
| BLPEXTK3810 | 9 29/32 |





203FXLBP

## Locking Extensions

| Stock No. | A | B | Set Contains: 203FXLBP |
|---|---|---|---|
| FXLBP3 | 1/2 | 3 | • |
| FXLBP6 | 1/2 | 6 | • |
| FXLBP10 | 1/2 | 10 | • |

Set shown includes storage tray



BLPLLEXT203

## Extra Long Locking Extensions

- Smooth, durable chrome finish
- Made from tough 6130 steel
- Secure socket retention
- Lifetime warranty on individual extensions

| Stock No. | A | B | Set Contains: BLPLLEXT203 |
|---|---|---|---|
| BLPEXTL3812 | 1/2 | 12 | • |
| BLPEXTL3818 | 1/2 | 18 | • |
| BLPEXTL3824 | 1/2 | 24 | • |

Set shown includes storage tray



YA525A

## Locking (Set Screw) Extension

- Allows easy and secure tool stacking
- Securely connects breaker bar, extensions and ratchets to socket and socket driver for overhead work
- Sliding sleeve for easy removal

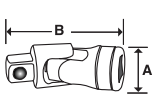
| Stock No. | A | B |
|---|---|---|
| YA525A | 3/4 | 2 1/8 |



BLPEXTF388

## Flexible Extension

| Stock No. | Finish | Length, inches |
|---|---|---|
| BLPEXTF388 | Chrome | 8 |

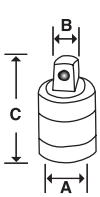





BLPUJ38

## Universal Joint

| Stock No. | A | B |
|---|---|---|
| BLPUJ38 | — | 2 1/32 |






BLPAFM3814



BLPAFM1438

## Adaptors

| Stock No. | Description | A | B |
|---|---|---|---|
| BLPAFM3814 | Square Drive Adaptor | 3/8 | 1/4 |
| BLPAFM1438 | Square Drive Adaptor | 1/4 | 3/8 |



WARNING

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# SOCKETS Blue-Point®



BLPLM3810



BLPLM3816



BLPLM3822

## Deep, mm

| mm | 12 | Length, mm |
|---|---|---|
| 6 | BLPLM386 | 64 |
| 7 | BLPLM387 | 64 |
| 8 | BLPLM388 | 64 |
| 9 | BLPLM389 | 64 |
| 10 | BLPLM3810 | 64 |
| 11 | BLPLM3811 | 64 |
| 12 | BLPLM3812 | 64 |
| 13 | BLPLM3813 | 64 |
| 14 | BLPLM3814 | 64 |
| 15 | BLPLM3815 | 64 |
| 16 | BLPLM3816 | 64 |
| 17 | BLPLM3817 | 64 |
| 18 | BLPLM3818 | 64 |
| 19 | BLPLM3819 | 64 |
| 20 | BLPLM3820 | 64 |
| 21 | BLPLM3821 | 64 |
| 22 | BLPLM3822 | 64 |
| 23 | BLPLM3823 | 64 |
| 24 | BLPLM3824 | 64 |



BLPSM389



BLPSM3815



BLPSM3822

## Shallow, mm

| mm | 6 | Length, mm |
|---|---|---|
| 6 | BLPSM386 | 25.5 |
| 7 | BLPSM387 | 25.5 |
| 8 | BLPSM388 | 25.5 |
| 9 | BLPSM389 | 25.5 |
| 10 | BLPSM3810 | 25.5 |
| 11 | BLPSM3811 | 25.5 |
| 12 | BLPSM3812 | 25.5 |
| 13 | BLPSM3813 | 25.5 |
| 14 | BLPSM3814 | 27 |
| 15 | BLPSM3815 | 27 |
| 16 | BLPSM3816 | 27 |
| 17 | BLPSM3817 | 27 |
| 18 | BLPSM3818 | 27 |
| 19 | BLPSM3819 | 29 |
| 20 | BLPSM3820 | 29 |
| 21 | BLPSM3821 | 29 |
| 22 | BLPSM3822 | 31 |
| 23 | BLPSM3823 | 31 |
| 24 | BLPSM3824 | 31 |



BLPL3838



BLPL3834

## Deep, inches

| | 12 | Length, inches |
|---|---|---|
| 1/4 | BLPL3814 | 2 17/32 |
| 5/16 | BLPL38516 | 2 17/32 |
| 3/8 | BLPL3838 | 2 17/32 |
| 7/16 | BLPL38716 | 2 17/32 |
| 1/2 | BLPL3812 | 2 17/32 |
| 9/16 | BLPL38916 | 2 17/32 |
| 5/8 | BLPL3858 | 2 17/32 |
| 11/16 | BLPL381116 | 2 17/32 |
| 3/4 | BLPL3834 | 2 17/32 |
| 13/16 | BLPL381316 | 2 17/32 |
| 7/8 | BLPL3878 | 2 17/32 |
| 15/16 | BLPL381516 | 2 17/32 |
| 1 | BLPL381 | 2 17/32 |



BLPS3838



BLPS3878

## Shallow, inches

| | 6 | Length, inches |
|---|---|---|
| 1/4 | BLPS3814 | 1 |
| 5/16 | BLPS38516 | 1 |
| 3/8 | BLPS3838 | 1 |
| 7/16 | BLPS38716 | 1 |
| 1/2 | BLPS3812 | 1 |
| 9/16 | BLPS38916 | 1 1/16 |
| 5/8 | BLPS3858 | 1 1/16 |
| 11/16 | BLPS381116 | 1 1/16 |
| 3/4 | BLPS3834 | 1 5/32 |
| 13/16 | BLPS381316 | 1 5/32 |
| 7/8 | BLPS3878 | 1 7/32 |
| 15/16 | BLPS381516 | 1 7/32 |
| 1 | BLPS381 | 1 7/32 |



BLPTE3810



BLPTE3818

## TORX®

| # | Stock No. | Length, inches |
|---|---|---|
| E4 | BLPTE384 | 1 7/32 |
| E5 | BLPTE385 | 1 7/32 |
| E6 | BLPTE386 | 1 7/32 |
| E7 | BLPTE387 | 1 7/32 |
| E8 | BLPTE388 | 1 7/32 |
| E10 | BLPTE3810 | 1 7/32 |
| E12 | BLPTE3812 | 1 7/32 |
| E14 | BLPTE3814 | 1 7/32 |
| E16 | BLPTE3816 | 1 7/32 |
| E18 | BLPTE3818 | 1 7/32 |
| E20 | BLPTE3820 | 1 7/32 |

# TORX® BIT SOCKETS Blue-Point®






BLPT3845

## TORX/Standard

| # | Stock No. | Length, inches |
|---|---|---|
| T40 | BLPT3840 | 2 |
| T45 | BLPT3845 | 2 |
| T50 | BLPT3850 | 2 |



BLPTL3845

## TORX/Long

| # | Stock No. | Length, inches |
|---|---|---|
| T40 | BLPTL3840 | 3 5/32 |
| T45 | BLPTL3845 | 3 5/32 |
| T50 | BLPTL3850 | 3 5/32 |



BLPT3845TP

## TORX/Tamper Resistant, Standard

| # | Stock No. | A |
|---|---|---|
| T10 | BLPT3810TP | 1 27/32 |
| T15 | BLPT3815TP | 1 27/32 |
| T20 | BLPT3820TP | 1 27/32 |
| T25 | BLPT3825TP | 1 27/32 |
| T27 | BLPT3827TP | 1 27/32 |
| T30 | BLPT3830TP | 1 27/32 |
| T40 | BLPT3840TP | 2 |
| T45 | BLPT3845TP | 2 |
| T50 | BLPT3850TP | 2 |
| T55 | BLPT3855TP | 2 |



BLPTL3845TP

## TORX/Tamper Resistant, Long

| # | Stock No. | A |
|---|---|---|
| T40 | BLPTL3840TP | 4 3/8 |
| T45 | BLPTL3845TP | 4 3/8 |
| T50 | BLPTL3850TP | 4 3/8 |

# METRIC HEX BIT SOCKETS *Blue-Point*



BLPH3810

## Hex, mm

| mm | ⬡ | Length, mm |
|---|---|---|
| 6 | BLPH386 | 47 |
| 7 | BLPH387 | 47 |
| 8 | BLPH388 | 50.5 |
| 9 | BLPH389 | 50.5 |
| 10 | BLPH3810 | 50.5 |



BLPHL389

## Hex Long, mm

| mm | ⬡ | Length, mm |
|---|---|---|
| 7 | BLPHL387 | 80.5 |
| 8 | BLPHL388 | 80.5 |
| 9 | BLPHL389 | 80.5 |
| 10 | BLPHL3810 | 80.5 |

# HEX BIT SOCKETS *Blue-Point*



BLPH3814

## Hex Standard, inches

| ⬡ | ⬡ | A |
|---|---|---|
| 7/32 | BLPH38732 | 1 15/16 |
| 1/4 | BLPH3814 | 1 15/16 |
| 5/16 | BLPH38516 | 1 15/16 |
| 3/8 | BLPH3838 | 1 15/16 |



BLPHL38516

## Hex Long, inches

| ⬡ | ⬡ | Length, inches |
|---|---|---|
| 7/32 | BLPHL38732 | 3 5/32 |
| 1/4 | BLPHL3814 | 3 5/32 |
| 5/16 | BLPHL38516 | 3 5/32 |
| 3/8 | BLPHL3838 | 3 5/32 |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# TRIPLE SQUARE SOCKET BIT SOCKETS Blue-Point®



BLPXZNM389

## Triple Square, mm

| mm | Stock No. | Set Contains: BLPXZNM389 |
|---|---|---|
| 4 | BLPXZNM384 | • |
| 5 | BLPXZNM385 | • |
| 6 | BLPXZNM386 | • |
| 8 | BLPXZNM388 | • |
| 10 | BLPXZNM3810 | • |
| 12 | BLPXZNM3812 | • |
| 14 | BLPXZNM3814 | • |
| 16 | BLPXZNM3816 | • |
| 18 | BLPXZNM3818 | • |

Set shown includes storage tray

# PHILLIPS® AND POZIDRIV® BIT SOCKETS *Blue-Point*

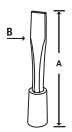


BLPP383



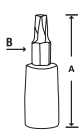
BLPPD383

## Phillips




| II | Stock No. | A |
|---|---|---|
| #3 | BLPP383 | 1 27/32 |
| #4 | BLPP384 | 1 27/32 |

## Pozidriv




| Size | Stock No. | A |
|---|---|---|
| #3 | BLPPD383 | 1 27/32 |
| #4 | BLPPD384 | 1 27/32 |

# COMBINATION BIT SOCKETS *Blue-Point*



BLPTSSC43

## BLPTSSC43 Set (43pc)

**BLPTSSC43 Combination TORX® Socket and Bit Socket Set**

| | Stock No. | Size | Drive Size, inches |
|---|---|---|---|
| *Torx* Tamper-Resistant Long Bit Sockets | BLPTL146TP | T6 | 1/4 |
| | BLPTL147TP | T7 | 1/4 |
| | BLPTL148TP | T8 | 1/4 |
| | BLPTL149TP | T9 | 1/4 |
| | BLPTL1410TP | T10 | 1/4 |
| | BLPTL1415TP | T15 | 1/4 |
| | BLPTL1420TP | T20 | 1/4 |
| | BLPTL1425TP | T25 | 1/4 |
| | BLPTL1427TP | T27 | 1/4 |
| | BLPTL1430TP | T30 | 1/4 |
| | BLPTL3840TP | T40 | 3/8 |
| | BLPTL3845TP | T45 | 3/8 |
| | BLPTL3850TP | T50 | 3/8 |
| | BLPTL1255TP | T55 | 1/2 |
| | BLPTL1260TP | T60 | 1/2 |
| | BLPTSSC43PB | Storage Case | |

| | Stock No. | Size | Drive Size, inches |
|---|---|---|---|
| External *Torx* Sockets | BLPTE144 | E4 | 1/4 |
| | BLPTE145 | E5 | 1/4 |
| | BLPTE146 | E6 | 1/4 |
| | BLPTE147 | E7 | 1/4 |
| | BLPTE148 | E8 | 1/4 |
| | BLPTE3810 | E10 | 3/8 |
| | BLPTE3812 | E12 | 3/8 |
| | BLPTE3814 | E14 | 3/8 |
| | BLPTE3816 | E16 | 3/8 |
| | BLPTE1218 | E18 | 1/2 |
| | BLPTE1220 | E20 | 1/2 |
| | BLPTE1222 | E22 | 1/2 |
| | BLPTE1224 | E24 | 1/2 |
| *Torx* Tamper-Resistant Bit Sockets | BLPT146TP | T6 | 1/4 |
| | BLPT147TP | T7 | 1/4 |
| | BLPT148TP | T8 | 1/4 |
| | BLPT149TP | T9 | 1/4 |
| | BLPT1410TP | T10 | 1/4 |
| | BLPT1415TP | T15 | 1/4 |
| | BLPT1420TP | T20 | 1/4 |
| | BLPT1425TP | T25 | 1/4 |
| | BLPT1427TP | T27 | 1/4 |
| | BLPT1430TP | T30 | 1/4 |
| | BLPT3840TP | T40 | 3/8 |
| | BLPT3845TP | T45 | 3/8 |
| | BLPT3850TP | T50 | 3/8 |
| | BLPT1255TP | T55 | 1/2 |
| | BLPT1260TP | T60 | 1/2 |

## BLPHSSC30 Set (30pc)

| | Stock No. | Size | Drive Size, inches | | Stock No. | Size | Drive Size, inches |
|---|---|---|---|---|---|---|---|
| Hex, inches | BLPH1418 | 1/8" | 1/4 | Hex, mm | BLPH1425 | 2.5 mm | 1/4 |
| | BLPH14964 | 9/64" | 1/4 | | BLPH386 | 6 mm | 3/8 |
| | BLPH14532 | 5/32" | 1/4 | | BLPH387 | 7 mm | 3/8 |
| | BLPH14316 | 3/16" | 1/4 | | BLPH388 | 8 mm | 3/8 |
| | BLPH14732 | 7/32" | 1/4 | | BLPH389 | 9 mm | 3/8 |
| | BLPH1414 | 1/4" | 1/4 | | BLPH3810 | 10 mm | 3/8 |
| | BLPH38732 | 7/32" | 3/8 | | BLPH123 | 3 mm | 1/2 |
| | BLPH3814 | 1/4" | 3/8 | | BLPH124 | 4 mm | 1/2 |
| | BLPH38516 | 5/16" | 3/8 | | BLPH125 | 5 mm | 1/2 |
| | BLPH3838 | 3/8" | 3/8 | | BLPH126 | 6 mm | 1/2 |
| | BLPH12716 | 7/16" | 1/2 | | BLPH1210 | 10 mm | 1/2 |
| | BLPH1212 | 1/2" | 1/2 | | BLPHM1212 | 12 mm | 1/2 |
| | BLPH12916 | 9/16" | 1/2 | | BLPH1214 | 14 mm | 1/2 |
| | BLPH1258 | 5/8" | 1/2 | | BLPH1217 | 17 mm | 1/2 |
| | BLPH1234 | 3/4" | 1/2 | | BLPH1219 | 19 mm | 1/2 |



BLPHSSC30

**BLPHSSC30 Hex Bit Socket Set**

## BLPTHC87 Set (87pc)

| | Stock No. | Size | Drive Size, inches | | Stock No. | Size | Drive Size, inches |
|---|---|---|---|---|---|---|---|
| External *Torx* Sockets | BLPTE144 | E4 | 1/4 | Metric Hex Bit Sockets | BLPH1425 | 2.5 mm | 1/4 |
| | BLPTE145 | E5 | 1/4 | | BLPH123 | 3 mm | 1/2 |
| | BLPTE146 | E6 | 1/4 | | BLPH124 | 4 mm | 1/2 |
| | BLPTE147 | E7 | 1/4 | | BLPH125 | 5 mm | 1/2 |
| | BLPTE148 | E8 | 1/4 | | BLPH126 | 6 mm | 1/2 |
| | BLPTE3810 | E10 | 3/8 | | BLPH386 | 6 mm | 3/8 |
| | BLPTE3812 | E12 | 3/8 | | BLPH387 | 7 mm | 3/8 |
| | BLPTE3814 | E14 | 3/8 | | BLPH388 | 8 mm | 3/8 |
| | BLPTE3816 | E16 | 3/8 | | BLPH389 | 9 mm | 3/8 |
| | BLPTE1218 | E18 | 1/2 | | BLPH3810 | 10 mm | 3/8 |
| | BLPTE1220 | E20 | 1/2 | | BLPH1210 | 10 mm | 1/2 |
| | BLPTE1222 | E22 | 1/2 | | BLPHM1212 | 12 mm | 1/2 |
| | BLPTE1224 | E24 | 1/2 | | BLPH1214 | 14 mm | 1/2 |
| *Torx* Bit Sockets | BLPT146 | T6 | 1/4 | | BLPH1217 | 17 mm | 1/2 |
| | BLPT147 | T7 | 1/4 | | BLPH1219 | 19 mm | 1/2 |
| | BLPT148 | T8 | 1/4 | Long Metric Hex Bit Sockets | BLPHL144 | 4 mm | 1/4 |
| | BLPT149 | T9 | 1/4 | | BLPHL145 | 5 mm | 1/4 |
| | BLPT1410 | T10 | 1/4 | | BLPHL146 | 6 mm | 1/4 |
| | BLPT1415 | T15 | 1/4 | | BLPHL387 | 7 mm | 3/8 |
| | BLPT1420 | T20 | 1/4 | | BLPHL388 | 8 mm | 3/8 |
| | BLPT1425 | T25 | 1/4 | | BLPHL389 | 9 mm | 3/8 |
| | BLPT1427 | T27 | 1/4 | | BLPHL3810 | 10 mm | 3/8 |
| | BLPT1430 | T30 | 1/4 | Fractional Hex Bit Sockets | BLPH1418 | 1/8" | 1/4 |
| | BLPT3840 | T40 | 3/8 | | BLPH14964 | 9/64" | 1/4 |
| | BLPT3845 | T45 | 3/8 | | BLPH14532 | 5/32" | 1/4 |
| | BLPT3850 | T50 | 3/8 | | BLPH14316 | 3/16" | 1/4 |
| | BLPT1255 | T55 | 1/2 | | BLPH14732 | 7/32" | 1/4 |
| | BLPT1260 | T60 | 1/2 | | BLPH1414 | 1/4" | 1/4 |
| Long *Torx* Bit Sockets | BLPTL146 | T6 | 1/4 | | BLPH38732 | 7/32" | 3/8 |
| | BLPTL147 | T7 | 1/4 | | BLPH3814 | 1/4" | 3/8 |
| | BLPTL148 | T8 | 1/4 | | BLPH38516 | 5/16" | 3/8 |
| | BLPTL149 | T9 | 1/4 | | BLPH3838 | 3/8" | 3/8 |
| | BLPTL1410 | T10 | 1/4 | | BLPH12716 | 7/16" | 1/2 |
| | BLPTL1415 | T15 | 1/4 | | BLPH1212 | 1/2" | 1/2 |
| | BLPTL1420 | T20 | 1/4 | | BLPH12916 | 9/16" | 1/2 |
| | BLPTL1425 | T25 | 1/4 | | BLPH1258 | 5/8" | 1/2 |
| | BLPTL1427 | T27 | 1/4 | | BLPH1234 | 3/4" | 1/2 |
| | BLPTL1430 | T30 | 1/4 | Long Fractional Hex Bit Sockets | BLPHL1418 | 1/8" | 1/4 |
| | BLPTL3840 | T40 | 3/8 | | BLPHL14532 | 5/32" | 1/4 |
| | BLPTL3845 | T45 | 3/8 | | BLPHL14316 | 3/16" | 1/4 |
| | BLPTL3850 | T50 | 3/8 | | BLPHL38732 | 7/32" | 3/8 |
| | BLPTL1255 | T55 | 1/2 | | BLPHL3814 | 1/4" | 3/8 |
| | BLPTL1260 | T60 | 1/2 | | BLPHL38516 | 5/16" | 3/8 |
| | | | | | BLPHL3838 | 3/8" | 3/8 |



BLPTHC87

**BLPTHC87 TORX® Sockets/*TORX* and Hex Bit Socket Set**

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS Blue-Point®



BLPPTEXT3



BLPPTA3438



BLPPTSM10



BPRFPT10



BLPPTSS3822

## Pass Thru Socket Set

| Size | Stock No. | External Hex, inches | Length, inches |
|---|---|---|---|
| 8 mm | BLPPTSM8 | 3/4 | 1 7/16 |
| 9 mm | BLPPTSM9 | 3/4 | 1 7/16 |
| 10 mm | BLPPTSM10 | 3/4 | 1 7/16 |
| 11 mm | BLPPTSM11 | 3/4 | 1 7/16 |
| 12 mm | BLPPTSM12 | 3/4 | 1 7/16 |
| 13 mm | BLPPTSM13 | 3/4 | 1 7/16 |
| 14 mm | BLPPTSM14 | 3/4 | 1 7/16 |
| 15 mm | BLPPTSM15 | 3/4 | 1 7/16 |
| 16 mm | BLPPTSM16 | 3/4 | 1 7/16 |
| 17 mm | BLPPTSM17 | 3/4 | 1 7/16 |
| 18 mm | BLPPTSM18 | 3/4 | 1 7/16 |
| 19 mm | BLPPTSM19 | 3/4 | 1 7/16 |
| 3/8" | BLPPTS38 | 3/4 | 1 7/16 |
| 7/16" | BLPPTS716 | 3/4 | 1 7/16 |
| 1/2" | BLPPTS12 | 3/4 | 1 7/16 |
| 9/16" | BLPPTS916 | 3/4 | 1 7/16 |
| 5/8" | BLPPTS58 | 3/4 | 1 7/16 |
| 11/16" | BLPPTS1116 | 3/4 | 1 7/16 |
| 3/4" | BLPPTS34 | 3/4 | 1 7/16 |

**BLPPTSS3822 Pass Thru Socket Set**

**Includes:** BLPPTS38 through BLPPTS34 (3/8"–3/4") sockets, BLPPTSM8 through BLPPTSM19 (8 mm–19 mm) metric sockets, BLPPTA3438 square drive adaptor, BLPPTEXT3 extension and BPRFPT10 ratchet (22pc) in BLPPTSS3822PB storage case.

**BPRFPT10 Ratchet**
- Flex head has seven locking positions
- 3/4" hex drive, 10" long

**BLPPTEXT3 Extension**
- 3" extension

**BLPPTA3438 Adaptor**
- 3/8" square drive adaptor, 1 1/4" long



BLPGSSC100

## BLPGSSC100 General Service Set

**Components (1/4" drive):**
- Ten fractional (3/16"–9/16") and 13 metric (4 mm–14 mm) standard sockets
- Six ratchet/socket accessories
- One ratchet

**Components (3/8" drive):**
- 13 fractional (1/4"–1") and 19 metric (6 mm–24 mm)
- 11 external TORX® sockets (E4–E20)
- Two spark plug sockets (5/8", 13/16")
- Five ratchet/socket accessories
- One ratchet

**Components (Combination Wrenches):**
- Nine fractional combination wrenches (1/4"–3/4")
- Ten metric combination wrenches (10 mm–19 mm)
- BLPGSSC100PB storage case

## BLPGSSC155 General Service Set

**Components (1/4" drive):**

- Ten fractional (3/16"–9/16") and 13 metric (4 mm–14 mm) standard sockets
- Ten fractional (3/16"–9/16") and 11 metric (4 mm–14 mm) deep sockets
- 20 assorted 1/4" hex bits with bit holder
- Six ratchet/socket accessories
- One quick release ratchet

**Components (3/8" Drive)**

- 13 fractional (1/4"–1") and 19 metric (6 mm–24 mm) standard sockets
- 11 fractional (3/8"–1") and 15 metric (10 mm–24 mm) deep sockets
- 11 external TORX sockets (E4–E20)
- Two spark plug sockets (5/8", 13/16")
- Three metric hex socket drivers (7 mm, 8 mm, 10 mm)
- Four tamper resistant *TORX* socket drivers (T40, T45, T50, T55)
- Five ratchet/socket accessories
- One quick release ratchet
- BLPGSSC155PB storage case
- One Spinner Handle



**BLPGSSC155**

## BLPGSS3837 General Service Set

**Components (3/8" Drive):**

- Eight fractional (5/16"–3/4") and 14 metric (6 mm–19 mm) standard six-point sockets
- Four fractional (5/16"–3/8", 7/16"–1/2", 9/16"–5/8", 11/16"–3/4") and 5 metric (10 mm–11 mm, 12 mm–13 mm, 14 mm–15 mm, 16 mm–17 mm, 18 mm–19 mm) double open end wrenches
- Two extensions: 3" and 6"
- One ratchet
- One universal joint
- Two adaptors: 1/4" f x 3/8" m, 3/8" f x 1/4" m
- BLPGSS3837PB storage box



**BLPGSS3837**

## BLPGSS3885 General Service Set

**Components (3/8" Drive):**

- 13 fractional (1/4"–1") and 14 metric (6 mm–19 mm) standard sockets
- 13 fractional (1/4"–1") and 14 metric (6 mm–19 mm) deep sockets
- 11 external *TORX* sockets (E4–E20)
- One Phillips® socket drivers (#3 and #4)
- Two Pozidriv® socket drivers (#3 and #4)
- Eight tamper-resistant *TORX* socket drivers (T10–T45)
- Two spark plug sockets (5/8", 13/16")
- Six ratchet/socket accessories
- One ratchet
- BLPGSS3885PB storage case



**BLPGSS3885**

## BLPGSS3849 General Service Set

**Components (3/8" Drive):**

- Eight fractional (5/16"–3/4") and 14 metric (6 mm–19 mm) standard 6-point sockets
- Eight fractional (5/16"–3/4") and 13 metric (7 mm–19 mm) deep 12-point sockets
- Two extensions (3" and 6")
- One universal joint
- 1 3/8"–1/4" adaptor
- 1 1/4"–3/8" adaptor
- One ratchet
- BLPGSS3849PB storage case



**BLPGSS3849**

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# ALWAYS READY FOR HEAVY-DUTY.

When your tools are asked to perform – under pressure, and on heavy-duty applications – you need them to answer the call. Every time, without fail, no questions asked. That's why we built Snap-on® 1/2" drive tools to rise to every big occasion no matter which type of heavy machinery you're working on – from agricultural tractors, to skip loaders, to pile drivers and more.

**GOING TO THE EXTREME.**

You want tough tools? We got 'em. *Snap-on* drive tools are put through rigorous testing under the most extreme conditions. And if they can perform under these circumstances, they'll perform for you.

**RATCHET UP YOUR CHOICES.**

At Snap-on, you can afford to be selective – because we offer the widest range of tools in the industry. With a ratchet line that includes flex-head and long handle.

**TOOLS FOR LIFE.**

All our tools are designed to fit, and built to last a lifetime. That's why we use cold-formed alloy steel in most of our drive tools: for strength and durability.



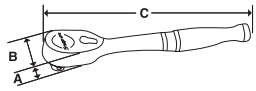



## Dual 80® Technology Ratchets

Stop, Turn and Listen. A smoother, stronger ratchet. Try them to believe them.

***Dual 80* Technology Ratchets Feature:**

- 80-tooth gear
- Seven teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth
- Sealed head keeps dirt and other contaminants out of the head mechanism




| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| S80A | Standard Handle | 80 | 4.5° | 3/4 | 1 5/8 | 10 5/16 | RKRS80A |
| GS80A | Industrial Finish | 80 | 4.5° | 3/4 | 1 5/8 | 10 5/16 | RKRS80A |
| SH80A | Soft Grip Handle | 80 | 4.5° | 3/4 | 1 5/8 | 12 | RKRS80A |
| SL80A | Long Handle | 80 | 4.5° | 3/4 | 1 5/8 | 15 | RKRS80A |
| SHL80A | Soft Grip Long Handle | 80 | 4.5° | 3/4 | 1 5/8 | 16 5/8 | RKRS80A |
| SF80A* | Standard Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 17 11/16 | RKRS80A |
| SHF80A* | Soft Grip Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 17 11/16 | RKRS80A |
| SLF80A* | Long Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 24 13/16 | RKRS80A |
| SHLF80A* | Soft Grip Long Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 25 3/4 | RKRS80A |
| SX80B** | Locking Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 17 5/8 | RKRS80A |
| SLX80A** | Long Locking Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 24 13/16 | RKRS80A |

ASME®/ANSI® B107.10
*Uses RKRSX936JT Flex Joint Repair Kit
**Uses RKRSX80AJT Flex Joint Repair Kit and RKRSX80ALM Locking Mechanism Repair Kit
SH936-12 Soft Grip Replacement Handle.

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

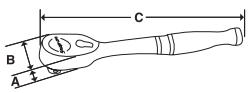
# RATCHETS




## Dual 80® Technology Ratchets

Stop, Turn and Listen. A smoother, stronger ratchet. Try them to believe them.

***Dual 80* Technology Ratchets Feature:**



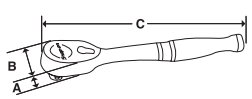

- 80-tooth gear
- Seven teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth
- Sealed head keeps dirt and other contaminants out of the head mechanism

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **SHX80B**** | Soft Grip Locking Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 18 1/2 | **RKRS80A** |
| **SHLX80A**** | Soft Grip Long Locking Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 25 3/4 | **RKRS80A** |
| **SKF80A*†** | Stubby Handle | 80 | 4.5° | 3/4 | 1 5/8 | 7 9/16 | **RKRS80A** |

ASME®/ANSI® B107.10
*Uses RKRSX936JT Flex Joint Repair Kit
**Uses RKRSX80AJT Flex Joint Repair Kit and RKRSX80ALM Locking Mechanism Repair Kit
SH936-12 Soft Grip Replacement Handle.
†*ASME/ANSI* B107.10 with exception of the length.




## *Dual 80* Technology Quick Release Ratchets



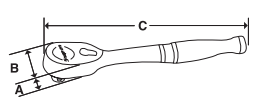

- Quick release button for rapid socket/accessory changes, even with greasy or oily hands
- Contoured handle for comfort and control
- Chrome finish for easy cleanup

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **SR80A** | Standard Handle | 80 | 4.5° | 3/4 | 1 5/8 | 10 5/16 | **RKRSR80A** |
| **SHR80A** | Soft Grip Handle | 80 | 4.5° | 3/4 | 1 5/8 | 10 5/16 | **RKRSR80A** |
| **SHRLF80A*** | Soft Grip Long Flex Head | 80 | 4.5° | 3/4 | 1 5/8 | 25 3/4 | **RKRSR80A** |

*ASME/ANSI* B107.10
*Uses RKRSX936JT Flex Joint Repair Kit.
SH936-12 Soft Grip Replacement Handle.



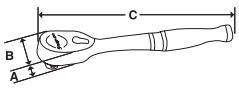

## *Dual 80* Technology FOD (Foreign Object Damage) Ratchet




- Designed to help prevent foreign object damage in sensitive work environments
- Coverplate and reverse lever permanently affixed to ratchet head with rivets to prevent chance of small parts debris

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C |
|---|---|---|---|---|---|---|
| **S80AFOD** | Standard Handle | 80 | 4.5° | 3/4 | 1 5/8 | 10 5/16 |

*ASME/ANSI* B107.10







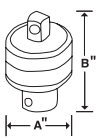



## Special Application Ratchets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| **SA936A** | Scaffold | 36 | 10° | 4 3/16 | 1 5/8 | 10 5/16 | **RKRSA936** |
| **GSP936** | Spud | 36 | 10° | 3/4 | 1 5/8 | 15 5/8 | **RKRGSP936-1** |

ASME®/ANSI® B107.10

**GSP936 Spud Ratchet**
The "spud" ratchet is ideal for lining up holes in scaffolding and other construction jobs. A long reverse lever provides easy reversing even while wearing heavy work gloves. Locking button retention. Taper diameter is 3/16"–7/8". Taper length is 8".



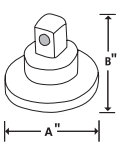




## Ratchet Adaptor

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | Repair Kit |
|---|---|---|---|---|---|---|
| **S77A** | Ratchet Adaptor | 20 | 18° | 1 5/8 | 3 | **RKRS77** |

*ASME/ANSI* B107.10







## Ratchet Spinner

| Stock No. | Description | A | B |
|---|---|---|---|
| **LRS70A** | Ratchet Spinner | 1 3/4 | 1 5/8 |

*ASME/ANSI* B107.10

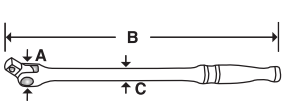














## Breaker Bars

| Stock No. | Description | A | B | C | Repair Kit |
|---|---|---|---|---|---|
| **SN15B** | Standard Handle | 1 1/8 | 15 | 11/16 | **RKBB3** |
| **SN18B** | Standard Handle | 1 1/8 | 18 | 11/16 | **RKBB3** |
| **GSN18B** | Standard Handle, Industrial Finish | 1 1/8 | 18 | 11/16 | **RKBB3** |
| **SN24C** | Standard Handle | 1 1/8 | 24 | 11/16 | **RKBB3** |

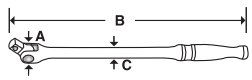
*ASME/ANSI* B107.10

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# BREAKER BARS



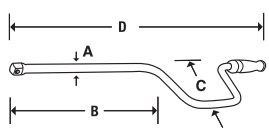

## Breaker Bars

| Stock No. | Description | A | B | C | Repair Kit |
|---|---|---|---|---|---|
| **SHBB24** | Standard Handle | 1 1/8 | 24 | 11/16 | **RKBB3** |
| **SN25A** | 45° Offset Square | 1 1/8 | 24 | 11/16 | **RKBB5** |
| **SN36** | Standard Handle | 1 1/4 | 36 | 3/4 | **RKBB4** |
| **SHN36** | Soft Grip Handle | 1 1/4 | 36 5/8 | 3/4 | **RKBB4** |

ASME®/ANSI® B107.10
SH936-12 Soft Grip Replacement Handle.

# DRIVE HANDLES



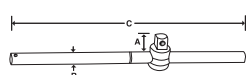

## Speeders

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| **S4** | 1/2 | 7 | 4 3/8 | 4 3/8 |
| **SN4B*** | 5/8 | 6 3/8 | 3 | 3 |
| **SL4** | 1/2 | 7 3/8 | 4 7/16 | 4 7/16 |
| **N8323** | 1/2 | 18 1/16 | 8 1/2 | 8 1/2 |

*ASME/ANSI* B107.10
*Uses RKBB3 Repair Kit.

**SL4 Locking Speeder**
• Sliding collar and locking pin for better socket retention




## Sliding T-Handle

| Stock No. | A | B | C |
|---|---|---|---|
| **S12L** | 1 11/16 | 5/8 | 12 |

*ASME/ANSI* B107.10



GSXK5





305ASX

## Extensions

Set Contains: 305ASX

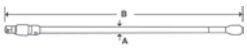
| Stock No. | Industrial Stock No. | A | B | |
|---|---|---|---|---|
| SX2 | – | 5/8 | 2 1/8 | • |
| SXK3 | GSXK3 | 5/8 | 3 1/2 | • |
| SXK5 | GSXK5 | 5/8 | 5 | • |
| SXK8 | – | 5/8 | 8 | • |
| SXK10 | – | 5/8 | 10 | |
| SXK11 | GSXK11 | 5/8 | 11 | • |
| SX15 | – | 5/8 | 15 | |
| SX20 | – | 5/8 | 20 | |
| SX24 | – | 5/8 | 24 | |
| SX36 | – | 5/8 | 36 | |

ASME®/ANSI® B107.10M

Set includes storage tray



303SXKL



## Quick Release (Locking)

Set Contains: 303SXKL

| Stock No. | A | B | |
|---|---|---|---|
| SXKL3 | 21/32 | 3 | • |
| SXKL5 | 21/32 | 5 | • |
| SXKL10 | 21/32 | 10 | • |

SXKLP Locking Pins (5pk)
SXKLRK FXKL Series Repair Kit



GSXWK5





305ASXW

## Wobble

- Provides 16° of additional accessibility
- Knurled shanks for easy fingertip turning

Set Contains: 305ASXW

| Stock No. | Industrial Stock No. | A | B | |
|---|---|---|---|---|
| SXW2* | GSXW2 | 5/8 | 2 | • |
| SXWK3 | – | 5/8 | 3 1/2 | • |
| SXWK5 | GSXWK5 | 5/8 | 5 | • |
| SXWK8 | – | 5/8 | 8 | • |
| SXWK11 | GSXWK11 | 5/8 | 11 | • |

*Not Knurled
*ASME/ANSI* B107.10

Set shown includes storage tray



305SXWP

## Wobble Plus

- Provides 16° of additional accessibility
- Usable in wobble and rigid functionality
- Knurled shanks for easy fingertip turning

Set Contains: 305SXWP

| Stock No. | A | B | |
|---|---|---|---|
| SXWP2* | 5/8 | 2 | • |
| SXWP3 | 5/8 | 3 | • |
| SXWP5 | 5/8 | 5 | • |
| SXWP8 | 5/8 | 8 | • |
| SXWP11 | 5/8 | 11 | • |

*Not Knurled
*ASME/ANSI* B107.10

Set shown includes storage tray

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# EXTENSIONS



303SXWKL




## Locking Wobble Set

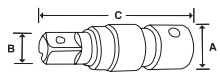
- Provides 16° of additional accessibility
- Quick release locking sleeve provides secure connection and easy socket removal
- Knurled release collar for easy one-hand operation, even with slippery hands

| Stock No. | A | B | Set Contains: 303SXWKL |
|---|---|---|---|
| SXWKL3 | 21/32 | 3 | • |
| SXWKL5 | 21/32 | 5 | • |
| SXWKL8 | 21/32 | 8 | • |

Set shown includes storage tray



GALX3




## Locking Adaptor

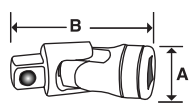
| Stock No. | A | B | C |
|---|---|---|---|
| GALX3 | 1/2 | 1/2 | 3 1/8 |

ASME®/ANSI® B107.10

# SOCKET/RATCHET ACCESSORIES



S8 GU8




## Universal Joints

| Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|
| S8 | GU8 | 15/16 | 2 11/16 |

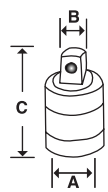
*ASME/ANSI* B107.10M

**103UFTS Combination Drive Universal Joint Set**

- Includes 1/4" drive TMU8B, 3/8" drive FU8A and 1/2" drive S8
- Three pieces in storage tray



A2A GLA12B




## Adaptors

| Stock No. | Industrial Stock No. | A | B | C |
|---|---|---|---|---|
| A2A | A2A | 3/8 | 1/2 | 1 5/16 |
| GSAF1F | GSAF1F | 1/2 | 3/8 | 1 13/16 |
| GAF2A | GAF2A | 3/8 | 1/2 | 1 5/16 |
| GLA12B | GLA12B | 1/2 | 3/4 | 1 7/8 |
| GLAS1F | GLAS1F | 3/4 | 1/2 | 2 7/16 |

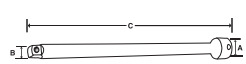
*ASME/ANSI* B107.10M

**1206GS Combination Drive Adaptor Set**

- Includes 1/4" drive GFAT1E and TA3 adaptors, 3/8" drive A2A and GSAF1F adaptors and 1/2" drive GLA12B and GLAS1E adaptors (six pieces) in storage tray



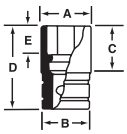
GAX12




## Extension Adaptors

| Stock No. | Retention Type | A | B | C |
|---|---|---|---|---|
| GAX5 | Ball Type | 1/2 | 3/8 | 5 |
| GAX12 | Ball Type | 1/2 | 3/8 | 12 |
| GAX24 | Ball Type | 1/2 | 3/8 | 23 1/4 |
| GAX36 | Ball Type | 1/2 | 3/8 | 36 |

*ASME/ANSI* B107.10M






SWM241



310TWMYA

## Shallow, mm

| Set Contains: | | | | | | | | 310TWMYA | 313TWMYA | 323TWM | 310SWMYA | 313SWMYA | 323SWM* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | 6 | 12 | A | B | C | D | E | 6 | 6 | 6 | 12 | 12 | 12 |
| 10 | TWM10A | SWM101A | 15.0 | 23.2 | 22.2 | 38.1 | 7.9 | • | | • | • | | • |
| 11 | TWM11A | SWM111A | 16.6 | 23.2 | 22.2 | 38.1 | 8.7 | • | | • | • | | • |
| 12 | TWM12A | SWM121A | 18.2 | 23.2 | 22.2 | 38.1 | 9.5 | • | • | • | • | • | • |
| 13 | TWM13A | SWM131A | 19.0 | 23.2 | 22.2 | 38.1 | 10.3 | • | • | • | • | • | • |
| 14 | TWM14A | SWM141A | 20.6 | 23.2 | 22.2 | 38.1 | 10.3 | • | • | • | • | • | • |
| 15 | TWM15A | SWM151A | 22.2 | 22.2 | 22.2 | 38.1 | 10.3 | • | • | • | • | • | • |
| 16 | TWM16 | SWM161 | 23.8 | 22.2 | 22.2 | 38.1 | 11.9 | • | • | • | • | • | • |
| 17 | TWM17 | SWM171 | 24.6 | 23.2 | 22.2 | 38.1 | 12.7 | • | • | • | • | • | • |
| 18 | TWM18 | SWM181 | 25.4 | 23.8 | 21.4 | 38.1 | 14.2 | • | • | • | • | • | • |
| 19 | TWM19 | SWM191 | 26.3 | 24.8 | 21.3 | 38.1 | 13.9 | • | • | • | • | • | • |
| 20 | TWM20 | SWM201 | 26.7 | 26.1 | 21.2 | 38.1 | 14.0 | | • | • | | • | • |
| 21 | TWM21 | SWM211 | 28.3 | 27.5 | 21.1 | 38.1 | 14.0 | | • | • | | • | • |
| 22 | TWM22 | SWM221 | 29.9 | 28.6 | 20.9 | 38.1 | 14.2 | | • | • | | • | • |
| 23 | TWM23 | SWM231 | 31.2 | 29.9 | 20.8 | 38.1 | 14.5 | | • | • | | • | • |
| 24 | TWM24 | SWM241 | 32.5 | 30.9 | 22.2 | 38.8 | 15.8 | | • | • | | • | • |
| 25 | TWM25 | SWM251 | 33.3 | 31.7 | 22.2 | 38.8 | 15.8 | | | • | | | • |
| 26 | TWM26 | SWM261 | 34.9 | 33.3 | 23.8 | 41.2 | 15.8 | | | • | | | • |
| 27 | TWM27 | SWM271 | 36.5 | 34.9 | 25.4 | 42.8 | 17.4 | | | • | | | • |
| 28 | TWM28 | SWM281 | 38.1 | 36.5 | 26.9 | 44.4 | 17.4 | | | • | | | • |
| 29 | TWM29 | SWM291 | 39.3 | 38.0 | 26.1 | 44.5 | 17.8 | | | • | | | • |
| 30 | TWM30 | SWM301 | 41.0 | 39.6 | 26.1 | 44.5 | 18.5 | | | • | | | • |
| 31 | TWM31 | SWM311 | 42.5 | 41.2 | 29.1 | 47.6 | 19.1 | | | • | | | • |
| 32 | TWM32 | SWM321 | 42.5 | 41.2 | 28.9 | 47.6 | 19.8 | | | • | | | • |

Sets shown include storage tray unless noted

*Does not include storage tray



SW241



313TWYA

## Shallow, inches

| Set Contains: | | | | | | | | | | | 313TWYA | 314GTWYA | 313SWYA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 12 | 6 | 12 | A | B | C | D | E | 6 | 6 | 12 |
| 3/8 | TW121A | SW121A | GTW121A | GSW121A | 19/32 | 29/32 | 7/8 | 1 1/2 | 5/16 | • | • | • |
| 7/16 | TW141A | SW141A | GTW141A | GSW141A | 11/16 | 29/32 | 7/8 | 1 1/2 | 11/32 | • | • | • |
| 1/2 | TW161A | SW161A | GTW161A | GSW161A | 3/4 | 29/32 | 7/8 | 1 1/2 | 13/32 | • | • | • |
| 9/16 | TW181A | SW181A | GTW181A | GSW181A | 13/16 | 29/32 | 7/8 | 1 1/2 | 13/32 | • | • | • |
| 5/8 | TW201 | SW201 | GTW201 | GSW201 | 15/16 | 7/8 | 7/8 | 1 1/2 | 15/32 | • | • | • |
| 11/16 | TW221 | SW221 | GTW221 | GSW221 | 31/32 | 29/32 | 7/8 | 1 1/2 | 1/2 | • | • | • |
| 3/4 | TW241 | SW241 | GTW241 | GSW241 | 1 1/32 | 31/32 | 7/8 | 1 1/2 | 9/16 | • | • | • |
| 13/16 | TW261 | SW261 | GTW261 | GSW261 | 1 1/8 | 1 1/16 | 7/8 | 1 1/2 | 9/16 | • | • | • |
| 7/8 | TW281 | SW281 | GTW281 | GSW281 | 1 3/16 | 1 1/8 | 7/8 | 1 1/2 | 25/32 | • | • | • |
| 15/16 | TW301 | SW301 | GTW301 | GSW301 | 1 9/32 | 1 7/32 | 27/32 | 1 17/32 | 3/4 | • | • | • |
| 1 | TW321 | SW321 | GTW321 | GSW321 | 1 11/32 | 1 9/32 | 7/8 | 1 9/16 | 3/4 | • | • | • |
| 1 1/16 | TW341 | SW341 | GTW341 | GSW341 | 1 7/16 | 1 3/8 | 1 1/16 | 1 11/16 | 3/4 | • | • | • |
| 1 1/8 | TW361 | SW361 | GTW361 | GSW361 | 1 1/2 | 1 7/16 | 1 31/32 | 1 3/4 | 1 3/16 | • | • | • |
| 1 3/16 | TW381 | SW381 | – | GSW381 | 1 5/8 | 1 9/16 | 1 1/8 | 1 3/4 | 3/4 | | | |
| 1 1/4 | TW401 | SW401 | GTW401 | GSW401 | 1 11/16 | 1 5/8 | 1 1/4 | 1 7/8 | 3/4 | | • | |
| 1 5/16 | TW421 | SW421 | – | GSW421 | 1 3/4 | 1 11/16 | 1 1/4 | 1 7/8 | 1 | | | |
| 1 3/8 | TW441 | SW441 | – | GSW441 | 1 13/16 | 1 3/4 | 1 7/16 | 2 1/16 | 1 | | | |
| 1 7/16 | TW461 | SW461 | – | – | 1 15/16 | 1 7/8 | 1 5/8 | 2 1/4 | 1 | | | |
| 1 1/2 | TW481 | SW481 | – | GSW481 | 2 | 1 15/16 | 1 5/8 | 2 1/4 | 1 | | | |

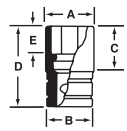
Sets shown include storage tray



**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SOCKETS






TSM20



313TSMYA

## Deep, mm

| mm | 6 | 12 | A | B | C | D | E | Set Contains: 313TSMYA 6 | 310TSM 6 | 313SMYA 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| 10 | TSM10A | SM10A | 15.0 | 23.2 | 66.7 | 82.6 | 7.9 | | • | |
| 11 | TSM11 | SM11A | 16.6 | 23.2 | 66.7 | 82.6 | 8.7 | | | |
| 12 | TSM12A | SM12B | 18.2 | 23.2 | 66.7 | 82.6 | 9.5 | • | • | • |
| 13 | TSM13A | SM13A | 19.0 | 23.2 | 66.7 | 82.6 | 10.3 | • | • | • |
| 14 | TSM14A | SM14A | 20.6 | 23.2 | 66.7 | 82.6 | 10.3 | • | • | • |
| 15 | TSM15A | SM15A | 22.2 | 22.2 | 66.7 | 82.6 | 10.3 | • | • | • |
| 16 | TSM16 | SM16 | 23.8 | 22.2 | 51.0 | 82.6 | 11.9 | • | • | • |
| 17 | TSM17 | SM17 | 24.6 | 23.2 | 51.0 | 82.6 | 12.7 | • | • | • |
| 18 | TSM18 | SM18 | 25.4 | 23.8 | 51.0 | 82.6 | 14.3 | • | • | • |
| 19 | TSM19 | SM19 | 26.3 | 24.6 | 52.5 | 82.6 | 14.2 | • | • | • |
| 20 | TSM20 | SM20 | 26.7 | 26.1 | 58.5 | 82.6 | 14.0 | • | • | • |
| 21 | TSM21 | SM21 | 28.3 | 27.5 | 58.5 | 82.6 | 14.0 | • | | • |
| 22 | TSM22 | SM22 | 29.9 | 28.6 | 58.5 | 82.6 | 14.2 | • | | • |
| 23 | TSM23 | SM23 | 31.2 | 29.9 | 58.0 | 82.6 | 14.5 | • | | • |
| 24 | TSM24 | SM24 | 32.5 | 30.9 | 50.0 | 82.6 | 15.8 | • | | • |
| 25 | TSM25 | SM25 | 33.3 | 31.7 | 50.0 | 82.6 | 15.8 | | | |
| 26 | TSM26 | SM26 | 34.9 | 33.3 | 50.0 | 82.6 | 15.8 | | | |
| 27 | TSM27 | SM27 | 36.2 | 34.9 | 50.0 | 82.6 | 17.5 | | | |
| 28 | TSM28 | SM28 | 37.8 | 36.5 | 50.0 | 82.6 | 17.5 | | | |
| 29 | TSM29 | SM29 | 39.3 | 38.0 | 64.3 | 82.6 | 17.8 | | | |
| 30 | TSM30 | SM30 | 41.0 | 39.6 | 64.0 | 82.6 | 18.5 | | | |
| 31 | TSM31 | SM31 | 42.5 | 41.2 | 64.0 | 82.6 | 19.1 | | | |
| 32 | TSM32 | SM32 | 42.5 | 41.2 | 63.8 | 82.6 | 19.8 | | | |

Sets shown include storage tray



S241



GS201



313TSYA

## Deep, inches

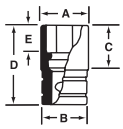
| | 6 | 12 | 6 | 12 | A | B | C | D | E | Set Contains: 313TSYA 6 | 313GTSYA 6 | 313SYA 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | TS121A | S121A | GTS121A | – | 19/32 | 29/32 | 2 5/8 | 3 1/4 | 5/16 | • | • | • |
| 7/16 | TS141A | S141A | GTS141A | – | 3/4 | 29/32 | 2 5/8 | 3 1/4 | 11/32 | • | • | • |
| 1/2 | TS161A | S161A | GTS161A | GS161A | 3/4 | 29/32 | 2 5/8 | 3 1/4 | 13/32 | • | • | • |
| 9/16 | TS181A | S181A | GTS181A | GS181A | 13/16 | 29/32 | 2 5/8 | 3 1/4 | 13/32 | • | • | • |
| 5/8 | TS201 | S201 | GTS201 | GS201 | 15/16 | 7/8 | 1 31/32 | 3 1/4 | 15/32 | • | • | • |
| 11/16 | TS221 | S221 | GTS221 | GS221 | 31/32 | 29/32 | 1 31/32 | 3 1/4 | 1/2 | • | • | • |
| 3/4 | TS241 | S241 | GTS241 | GS241 | 1 1/32 | 31/32 | 2 5/8 | 3 1/4 | 9/16 | • | • | • |
| 25/32 | – | S251 | – | – | 1 1/16 | 1 1/32 | 2 1/8 | 3 1/4 | 5/8 | | | |
| 13/16 | TS261 | S261 | GTS261 | GS261 | 1 1/8 | 1 1/16 | 2 5/8 | 3 1/4 | 9/16 | • | • | • |
| 7/8 | TS281 | S281 | GTS281 | GS281 | 1 3/16 | 1 1/8 | 2 5/8 | 3 1/4 | 9/16 | • | • | • |
| 15/16 | TS301 | S301 | GTS301 | GS301 | 1 9/32 | 1 7/32 | 1 31/32 | 3 1/4 | 3/4 | • | • | • |
| 1 | TS321 | S321 | GTS321 | GS321 | 1 11/32 | 1 9/32 | 1 31/32 | 3 1/4 | 3/4 | • | • | • |
| 1 1/16 | TS341 | S341 | GTS341 | GS341 | 1 7/16 | 1 3/8 | 1 31/32 | 3 1/4 | 3/4 | • | • | • |
| 1 1/8 | TS361 | S361 | GTS361 | GS361 | 1 1/2 | 1 7/16 | 1 31/32 | 3 1/4 | 1 3/16 | • | • | • |
| 1 3/16 | TS381 | S381 | GTS381 | GS381 | 1 5/8 | 1 9/16 | 2 5/8 | 3 1/4 | 1 3/16 | | | |
| 1 1/4 | TS401 | S401 | GTS401 | GS401 | 1 11/16 | 1 5/8 | 2 5/8 | 3 1/4 | 1 | | | |
| 1 5/16 | TS421 | S421 | – | – | 1 3/4 | 1 11/16 | 2 9/16 | 3 1/4 | 1 | | | |
| 1 3/8 | TS441 | S441 | – | – | 1 13/16 | 1 3/4 | 2 9/16 | 3 1/4 | 1 | | | |
| 1 7/16 | TS461 | S461 | – | – | 1 15/16 | 1 7/8 | 2 5/8 | 3 1/4 | 1 | | | |
| 1 1/2 | TS481 | S481 | – | – | 2 | 1 15/16 | 2 5/8 | 3 1/4 | 1 1/16 | | | |

ASME®/ANSI® B107.1

Sets shown include storage tray

## Semi Deep, inches

| | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/8 | SDH121 | 19/32 | 7/8 | 13/16 | 1 1/2 | 9/32 |
| 7/16 | SDH141 | 11/16 | 29/32 | 13/16 | 1 1/2 | 11/32 |
| 1/2 | SDH161 | 3/4 | 29/32 | 13/16 | 1 1/2 | 3/8 |
| 9/16 | SDH181 | 27/32 | 29/32 | 13/16 | 1 1/2 | 13/32 |
| 5/8 | SDH201 | 29/32 | 7/8 | 13/16 | 1 1/2 | 15/32 |
| 11/16 | SDH221 | 31/32 | 15/16 | 1 1/16 | 1 3/4 | 1/2 |
| 3/4 | SDH241 | 1 1/16 | 1 1/32 | 1 1/16 | 1 3/4 | 19/32 |
| 13/16 | SDH261 | 1 1/8 | 1 3/32 | 1 1/16 | 1 3/4 | 21/32 |
| 7/8 | SDH281 | 1 3/16 | 1 5/32 | 1 1/8 | 1 3/4 | 23/32 |
| 15/16 | SDH301 | 1 9/32 | 1 1/8 | 1 5/32 | 1 13/16 | 23/32 |
| 1 | SDH321 | 1 11/32 | 1 5/16 | 1 7/32 | 1 7/8 | 3/4 |
| 1 1/16 | SDH341 | 1 7/16 | 1 13/32 | 1 7/32 | 1 15/16 | 3/4 |
| 1 1/8 | SDH361 | 1 1/2 | 1 15/32 | 1 1/4 | 1 31/32 | 25/32 |
| 1 3/16 | SDH381 | 1 9/16 | 1 17/32 | 1 5/16 | 2 | 25/32 |
| 1 1/4 | SDH401 | 1 9/16 | 1 17/32 | 1 9/32 | 2 1/32 | 13/16 |
| 1 5/16 | SDH421 | 1 21/32 | 1 5/8 | 1 5/16 | 2 1/32 | 27/32 |






SDH201



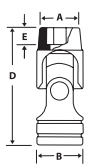
320TSWMA

**320TSWMA Metric 6-Point Shallow/Deep Set**
Includes TWM10A–TWM19 shallow sockets and TSM10A–TSM20 deep sockets (20pc) (10 mm–20 mm).

## Universal, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 9/16 | SU18 | 27/32 | 15/16 | 2 7/16 | 11/32 |
| 5/8 | SU20 | 15/16 | 15/16 | 2 15/32 | 3/8 |
| 11/16 | SU22 | 1 1/16 | 1 1/16 | 2 9/16 | 7/16 |
| 13/16 | SU26 | 1 3/16 | 1 1/8 | 2 15/16 | 9/16 |
| 3/4 | SU24 | 1 1/8 | 1 1/8 | 2 7/8 | 1/2 |
| 7/8 | SU28 | 1 1/4 | 1 1/8 | 2 15/16 | 9/16 |
| 15/16 | SU30 | 1 5/16 | 1 1/8 | 3 | 9/16 |

ASME®/ANSI® B107.10M



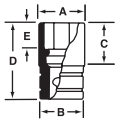



SU24

## TORX® SOCKETS

## ✸ *TORX*/Shallow

| # | Stock No. | A | B | D |
|---|---|---|---|---|
| E14 | SLE140 | 21/32 | 7/8 | 1 1/2 |
| E16 | SLE160A | 23/32 | 27/32 | 1 1/2 |
| E18 | SLE180A | 27/32 | 7/8 | 1 1/2 |
| E20 | SLE200A | 15/16 | 7/8 | 1 1/2 |
| E24 | SLE240 | 1 1/16 | 1 | 1 1/2 |






213AFLEY

**213AFLEY Combination Drive Shallow *TORX* Set**
Includes 1/4" drive TLE40A–LE100A, 3/8" drive FLE110A–FLE140A and 1/2" drive SLE160A–SLE240 (13pc) (E4–E24).

## ✸ TORX Plus® with Countersink

- SLEPL series of *TORX Plus* sockets with shallow countersink are designed for use on external *TORX Plus* low-profile head fasteners so the user can fully engage the fastener head
- For removal and installation of low profile drive plate and flywheel bolts on QR25 Nissan® motors with automatic transmissions
- It is similar to the J-45816 *Nissan* specialty tool
- For flywheel bolts on QR25 *Nissan* motors with manual transmissions, use the 3/8" drive FTX50TPE male T50 *TORX Plus* Socket

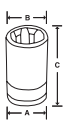


SLEPL200



GSLEPL200

| # | Stock No. | Industrial Stock No. | A | B | C |
|---|---|---|---|---|---|
| 20EP | SLEPL200 | GSLEPL200 | 15/16 | 11/16 | 1 1/2 |




**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

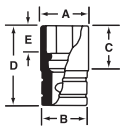
# SPLINE SOCKETS

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.



SES181



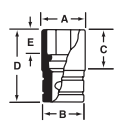

## Shallow, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #16 | 1/2 | SES161 | 23/32 | 55/64 | 5/8 | 1 19/64 | 29/64 |
| #18 | 9/16 | SES181 | 53/64 | 55/64 | 5/8 | 1 19/64 | 15/32 |
| #20 | 5/8 | SES201 | 57/64 | 57/64 | 55/64 | 1 35/64 | 35/64 |
| #22 | 11/16 | SES221 | 31/32 | 31/32 | 27/32 | 1 35/64 | 37/64 |
| #24 | 3/4 | SES241 | 1 3/64 | 31/32 | 53/64 | 1 35/64 | 37/64 |
| #26 | 13/16 | SES261 | 1 1/8 | 1 1/8 | 13/16 | 1 35/64 | 37/64 |
| #28 | 7/8 | SES281 | 1 3/16 | 1 1/8 | 51/64 | 1 35/64 | 37/64 |
| #30 | 15/16 | SES301 | 1 17/64 | 1 17/64 | 49/64 | 1 35/64 | 37/64 |

# SPECIAL APPLICATION SOCKETS



SW420




## Double Square, inches

| | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/8 | SW412 | 23/32 | 7/8 | 7/8 | 1 1/2 | 5/16 |
| 7/16 | SW414 | 51/64 | 7/8 | 7/8 | 1 1/2 | 3/8 |
| 1/2 | SW416 | 29/32 | 7/8 | 7/8 | 1 1/2 | 13/32 |
| 9/16 | SW418 | 31/32 | 29/32 | 7/8 | 1 1/2 | 7/16 |
| 5/8 | SW420 | 1 1/16 | 1 | 7/8 | 1 1/2 | 1/2 |
| 11/16 | SW422 | 1 3/16 | 1 1/8 | 7/8 | 1 1/2 | 1/2 |
| 3/4 | SW424 | 1 9/32 | 1 3/16 | 7/8 | 1 1/2 | 9/16 |
| 13/16 | SW426 | 1 7/16 | 1 3/8 | 1 | 1 5/8 | 5/8 |
| 7/8 | SW428 | 1 1/2 | 1 7/16 | 1 1/8 | 1 3/4 | 5/8 |
| 15/16 | SW430 | 1 5/8 | 1 9/16 | 1 1/8 | 1 13/16 | 11/16 |
| 1 | SW432 | 1 11/16 | 1 5/8 | 1 1/4 | 1 7/8 | 11/16 |

ASME®/ANSI® B107.1



WH290

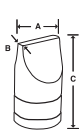



## Weatherhead®, inches

| | Stock No. | A | B |
|---|---|---|---|
| 7/8 | WH280 | 1 3/8 | 1 13/16 |
| 29/32 | WH290 | 1 7/16 | 1 13/16 |
| 15/16 | WH300 | 1 1/2 | 1 13/16 |



A26A

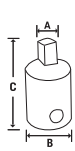



## Drag Link

| Stock No. | A | B | C |
|---|---|---|---|
| A26A | 3/4 | .109 | 1 11/16 |
| A17A | 15/16 | .150 | 1 11/16 |
| A15A | 1 3/16 | .150 | 1 11/16 |



PPM516A

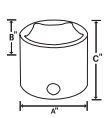



## Pipe Plug, inches

| Stock No. | A | B | C |
|---|---|---|---|
| PPM516A | 1/2 | 15/16 | 1 7/16 |



B2191




## *Flank Drive* Pentagon

| Stock No. | A | B | C |
|---|---|---|---|
| B2191 | 1 1/8 | 1/2 | 1 1/16 |

**B2191 Pentagon Socket**
Services recessed five-point nuts found on tamper-resistant Buffalo covers used by gas, electric and water companies to protect shutoff gates.

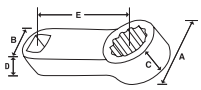
# TORQUE ADAPTORS

## Standard, inches

- Manufactured from special alloy steel
- Precision forged and heat treated for optimum strength and durability
- Double hex (12-point) configuration allows socket to engage single hex fastener every 30° rather than every 60°, allowing for better access in restricted areas
- Design features radius edges which will resist damage/nicks
- Center-to-center length on adaptor for easy torque calculations
- Larger sizes feature thicker construction for strength

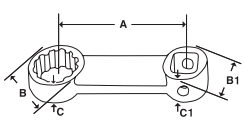


**SRDH341**




| Working Torque, in-lb | | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 4,312 | 1 | **SRDH321** | 1.458 | 1.040 | 19/32 | 19/32 | 3 |
| 3,564 | 1 1/16 | **SRDH341** | 1.563 | 1.032 | 19/32 | 19/32 | 2 |
| 5,192 | 1 1/8 | **SRDH361** | 1.641 | 1.040 | 19/32 | 19/32 | 3 |
| 5,600 | 1 1/4 | **SRDH401** | 1.823 | 1.040 | 19/32 | 19/32 | 3 |
| 5,600 | 1 3/8 | **SRDH441** | 2.00 | 1.040 | 19/32 | 19/32 | 3 |

# SPLINE TORQUE ADAPTORS




Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool. Chrome tools comply with Military Spec. MS-33787 and MIL-W-89823. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.

## Spline, inches

| # | | Stock No. | Working Torque, in-lb | A | B-B1 | C-C1 | SRES306 |
|---|---|---|---|---|---|---|---|
| #18 | 9/16 | **SRES18** | 2,275 | 3 | .818–1.04 | 13/32–1/2 | • |
| #20 | 5/8 | **SRES20** | 2,450 | 3 | .900–1.04 | 1/2–1/2 | • |
| #22 | 11/16 | **SRES22** | 2,975 | 3 | .989–1.04 | 1/2–1/2 | • |
| #24 | 3/4 | **SRES24** | 3,500 | 3 | 1.08–1.04 | 1/2–1/2 | • |
| #26 | 13/16 | **SRES26** | 4,410 | 3 | 1.16–1.04 | 1/2–1/2 | • |
| #28 | 7/8 | **SRES28** | 4,900 | 3 | 1.26–1.04 | 1/2–1/2 | • |
| #30 | 15/16 | **SRES30A** | 6,000 | 3 | 1.26–1.04 | 37/64–37/64 | |



**SRES306**

# TORX® BIT SOCKETS

TORX Plus® fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM® transmissions bell housing bolts and Ford® seat belt anchors. Use of a standard *TORX* driver on *TORX Plus* fasteners may result in a rounded out fastener head or damaged driver.






**STX70E**



**STXL55E**



**K1820A**



**STX60TPE**

## *TORX*/Standard

| # | Stock No. | A | B |
|---|---|---|---|
| T55 | **STX55E** | 2 9/16 | **FTX55E2** |
| T60 | **STX60E** | 3 11/32 | **STX60E2** |
| T70 | **STX70E** | 3 1/2 | **STX70E2** |

## *TORX*/Long

| | Stock No. | A | B |
|---|---|---|---|
| T50 | **STXL50E** | 4 5/8 | **STXL50E2** |
| T55 | **STXL55E** | 4 5/8 | **STXL55E2** |
| T60 | **STXL60E** | 4 5/8 | **STXL60E2** |
| T70 | **K1820A** | 5 3/8 | **K1820A2** |

## *TORX Plus*

| # | Stock No. | A | B |
|---|---|---|---|
| 45IP | **STX45TPE** | 2 9/16 | **FTX45TPE2** |
| 45IP | **STX50TPE** | 2 43/64 | **STX50TPE2** |
| 55IP | **STX55TPE** | 2 3/4 | **FTX55TPE2** |
| 60IP | **STX60TPE** | 3 9/32 | **STX60TPE2** |

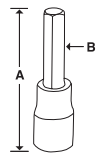
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# METRIC HEX BIT SOCKETS



307ESAMY




## Hex/Standard, mm

| mm | | A | B | Set Contains: 307ESAMY |
|---|---|---|---|---|
| 6 | SAM6E | 60.5 | FAM6E2 | • |
| 8 | SAM8E | 62.0 | FAM8E2 | • |
| 10 | SAM10E | 62.8 | SAM10E2 | • |
| 12 | SAM12E | 81.0 | SAM12E2 | • |
| 14 | SAM14E | 81.0 | SAM14E2 | • |
| 16 | SAM16E | 95.2 | SAM16E2 | |
| 17 | SAM17E | 93.7 | SAM17E2 | • |
| 19 | SAM19E | 103.1 | SAM19E2 | • |

Set includes magnetic storage tray



SAM12LE

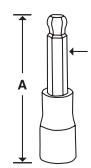
## Hex/Long, mm

| mm | | A | B |
|---|---|---|---|
| 10 | SAM10LE | 152.4 | SAM10LE2 |
| 12 | SAM12LE | 98.0 | SAM12LE2 |

**SAM12LE Applications:** Essential for removal or installation of bolt found on the lower forks of 2006 and newer Harley-Davidson® Dyna series. Used when servicing the internal parts of the fork.



SABLM12E

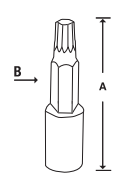



## Ball Hex/Long, mm

| mm | | A | B |
|---|---|---|---|
| 12 | SABLM12E | 137.1 | SABLM12E2 |



SADMI0E




## Double Hex, mm

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have 90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.

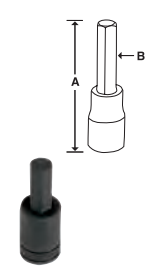
| mm | | A | B |
|---|---|---|---|
| 10 | SADM10E | 100.0 | SADM10E2 |

**SADM10E Applications:** Removal/installation of head bolts on Toyota® Highlander®, 4Runner®, Camry®, Matrix®, Corolla® and Lexus® IS300, GS300, SC300 vehicles.

# HEX BIT SOCKETS



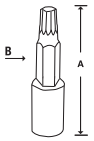
307ESAY




GSA10E

## Hex/Standard, inches

| | | | A | B | Set Contains: 307ESAY |
|---|---|---|---|---|---|
| 5/16 | SA10E | GSA10E | 2 3/8 | FA10E2 | • |
| 3/8 | SA12E | GSA12E | 2 1/2 | SA12E2 | • |
| 7/16 | SA14E | GSA14E | 2 7/8 | SA14E2 | • |
| 1/2 | SA16E | GSA16E | 3 1/16 | SA16E2 | • |
| 9/16 | SA18E | GSA18E | 3 3/16 | SA18E2 | • |
| 5/8 | SA20E | GSA20E | 3 11/32 | LAW120E2 | • |
| 3/4 | SA24E | GSA24E | 4 1/16 | LAW124E2 | • |




Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have 90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.



**TSS7KIT**



**STSM10LE**

## Triple Square, mm

| mm | | Stock No. | A | B | Set Contains: TSS7KIT |
|---|---|---|---|---|---|
| Standard Length | 10 | STSM10E | 88.9 | STSM10E2 | • |
| | 12 | STSM12E | 109.5 | STSM12E2 | • |
| | 14 | STSM14E | 108.0 | STSM14E2 | • |
| | 16 | STSM16E* | 108.0 | STSM16E2 | • |
| | 18 | STSM18E | 108.0 | STSM18E2 | • |
| Long | 10 | STSM10LE | 156.3 | STSM10LE2 | |
| | 12 | STSM12LE | 147.6 | STSM12LE2 | |

*Tamper resistant

Set shown includes storage tray

### Applications:

**STSM12E Metric Triple Square Driver**
(12 mm, 1/2" drive) Remove and install cylinder head bolts on Mercedes®, rear toe adjustment on 1999 and newer Audi® A6®, and axle shaft bolts on new VW® vehicles.

**STSM14E Metric Triple Square Driver**
Applications include 2003 and later *VW* Touareg front axle bolts, 2003 and later Porsche® Cayenne® front axle bolts, various *Audi*/*VW* axle bolts plus *Audi* TT differential mount bolts and transmission drain plugs.

**STSM18E Metric Triple Square Driver**
Applications include removing and installing rear axle bolts of 2006 *VW* Jetta® and Golf® vehicles.

**STSM16E Metric Triple Square Driver**
Applications include *Audi* TT Clutch and Belly Pan, various *VW*/*Audi* transmission drain plugs (tamper resistant), 2003 and later *VW* Touareg® front and rear brake caliper bolts, 2003 and later *Porsche Cayenne* brake caliper bolts, plus Detroit Diesel® flywheel bolts and front crank pulley on 900 and 4000 engines and head bolts on 900 engines.

**STSM10LE Metric Triple Square Driver Applications**
- *Audi* TT Axle Bolts
- Use on head bolts of these *Audi* engines, 2004 to present:

–V6 2.8L (two valves per cylinder) – V8 4.2L
–V6 2.7L (five valves per cylinder) –1.8L Turbo



**305STSMSE**

## Triple Square/Stubby, mm

| mm | Stock No. | A | B | Set Contains: 305STSMSE |
|---|---|---|---|---|
| 10 | STSM10SE | 59.4 | STSM10SE2 | • |
| 12 | STSM12SE | 59.4 | STSM12SE2 | • |
| 14 | STSM14SE | 63.2 | STSM14SE2 | • |
| 16 | STSM16SE | 68.1 | STSM16SE2 | • |
| 18 | STSM18SE | 69.8 | STSM18SE2 | • |

**STSM10SE** Used for cylinder head bolts, drive shaft bolts and various other applications on *VW*, *Audi* and *Mercedes* vehicles.

**STSM12SE** Access exhaust manifold bolts on DD15 and *Mercedes* 900/4000 engines. Also for the back of the turbo and some oil pans. Head bolts and axle shaft bolts on *VW*, *Audi* and *Mercedes* vehicles.

**STSM14SE** Brake caliper bolts on *VW*, *Jetta*, Rabbit®, Passat®, EOS® and Tiquan. There is limited room due to the control arm in the way when backing out the fastener.

**STSM16SE** *VW* and *Audi* transmission and differential plug. *Porsche Cayenne* brake caliper bolts.

**STSM18SE** Rear axle bolts on *Volkswagen Jetta* and *Golf* vehicles.

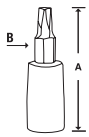
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# SPECIAL APPLICATION BIT SOCKETS



SPDL10E




## Polydrive Head Bolt, mm

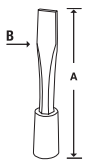
| mm | Stock No. | Description | A | B |
|---|---|---|---|---|
| 10 | **SPDL10E** | #10 Polydrive Head Bolt Socket Driver | 159 | **SPDL10E2** |

**SPDL10E Bit Socket**
Use to remove and install #10 Polydrive cylinder head bolts on 1998 and later VW®/Audi® vehicles with five-valve motors.

# FLAT TIP AND PHILLIPS® TIP BIT SOCKETS



SW32E

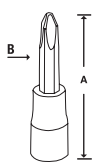



## — Flat Tip / Standard

| | Stock No. | A | B |
|---|---|---|---|
| 7/16 x .050 | **SW28E** | 3 1/16 | **SW28E2A** |
| 1/2 x .075 | **SW32E** | 3 1/16 | **SW32E2A** |
| 5/8 x .093 | **SW40E** | 3 1/4 | **SW40E2A** |



SP32E




## ✚ *Phillips*/Standard

| | Stock No. | A | B |
|---|---|---|---|
| #3 | **SP32E** | 2 3/16 | **SP32E2** |
| #4 | **SP42E** | 2 5/16 | **SP42E2** |

# IMPACT DRIVERS AND SETS



PIT3120EB



PIT160

## Impact Driver Set

Includes:

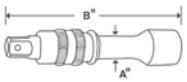
| Stock No. | Description |
|---|---|
| **PIT160** | Impact Driver |
| **A26A** | Drag Link Socket |
| **SA10E** | 5/16" Hex Head Driver |
| **SA12E** | 1/2" Drive, 3/8" Hex Driver |
| **SA14E** | 1/2" Drive, 7/16" Hex Driver |
| **SA16E** | 1/2" Hex Head Driver |
| **SA18E** | 9/16" Hex Head Driver |
| **SA20E** | 5/8" Hex Head Driver |
| **SP32E** | *PHILLIPS* Driver |
| **SP42E** | *PHILLIPS* Driver |
| **SW28E** | 7/16" x .05" Socket Driver |
| **SW32E** | 1/2" x .075" Socket Driver |
| **KRA142B** | Metal Box |

**PIT160** This 1/2" drive unit delivers cam action impact when struck with a hammer.

**PIT3120EB Impact Driver Set**
PIT160 impact driver plus sockets and socket drivers (12pc) in KRA142B metal box.

## Locking Extensions

- Ideal for use on transmission bellhousing bolts, transaxle and suspension service
- Pull back collar for fast and easy attachment and removal of sockets
- Knurled release collar also provides for easy one-hand operation
- Single body construction for maximum strength and locking mechanism specifically for impact use
- Female drive end recessed to accommodate newer style impact guns




| Stock No. | A | B | Set Contains: 303IMXL | 303AIMXL |
|---|---|---|---|---|
| IMXL32 | 5/8 | 3 1/2 | • | |
| IMXL52 | 5/8 | 5 | • | |
| IMXL102 | 5/8 | 10 | • | |
| IMXL182 | 5/8 | 18 | | • |
| IMXL242 | 5/8 | 24 | | • |
| IMXL312 | 5/8 | 31 | | • |

Sets include storage tray



303IMXL




## Impact Extensions–Snap Ring Retention

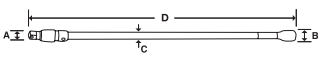
| Stock No. | A | B |
|---|---|---|
| IMX32B | 5/8 | 3 |
| IMX52 | 21/32 | 5 3/32 |
| IMX112 | 21/32 | 11 1/4 |

**304IMX Impact Extension Set**

- Includes IMX32B, IMX52 and IMX112 Extensions (3", 5 3/32", 11 1/4") plus IP80D Universal Joint (four pieces) in storage tray



304IMX



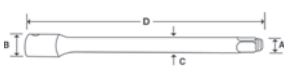

## Locking Adaptors

- Quick release locking sleeve at 3/8" drive end provides a secure connection plus easy socket removal

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IMSFXL18 | 3/8 | 1/2 | 21/32 | 18 |
| IMSFXL24 | 3/8 | 1/2 | 21/32 | 24 |
| IMSFXL33 | 3/8 | 1/2 | 21/32 | 33 |



IMSFXL18

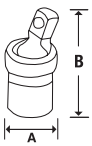



## Adaptor

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IMXA42 | 3/8 | 1/2 | 1/2 | 4 |



IMXA42




## Universal Joints (Impact)

| Stock No. | Socket Attachment | A | B |
|---|---|---|---|
| IP80D | Pin Type | 1 1/4 | 2 3/4 |
| IP800 | Ball Type | 1 1/4 | 2 3/4 |

**202IP Combination Universal Joint Set** Set includes storage tray

Includes IPF800B (3/8" drive) and IP80D (1/2" drive) Impact Swivel Universal Joints.

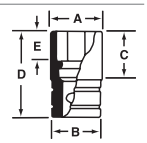


202IP

**⚠WARNING**

- Do not use chrome plated tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS






IMDM150A



315IMMYA

## Shallow, mm

| mm | 6 | 12 | A | B | C | D | E | Set Contains: 315IMMYA 6 | 312IMM 6 | 310IMMYA 6 | 315IMDMYA 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | IMM100A | IMDM100A | 15.0 | 22.6 | 22.2 | 38.1 | 7.9 | • | | • | • |
| 11 | IMM110A | IMDM110A | 18.2 | 22.6 | 22.2 | 38.1 | 8.7 | • | | • | • |
| 12 | IMM120A | IMDM120A | 19.0 | 24.3 | 22.2 | 38.1 | 9.5 | • | | • | • |
| 13 | IMM130A | IMDM130A | 20.6 | 24.3 | 22.2 | 38.1 | 10.3 | • | | • | • |
| 14 | IMM140A | IMDM140A | 22.2 | 24.3 | 22.2 | 38.1 | 10.3 | • | | • | • |
| 15 | IMM150A | IMDM150A | 23.8 | 26.4 | 22.2 | 38.1 | 10.3 | • | • | • | • |
| 16 | IMM160A | IMDM160A | 24.6 | 26.4 | 22.2 | 38.1 | 11.9 | • | • | • | • |
| 17 | IMM170A | IMDM170A | 25.4 | 26.7 | 22.2 | 38.1 | 12.7 | • | • | • | • |
| 18 | IMM180 | IMDM180 | 26.7 | 26.7 | 19.1 | 38.1 | 12.7 | • | • | • | • |
| 19 | IMM190 | IMDM190 | 28.3 | 28.3 | 21.3 | 38.1 | 12.7 | • | • | • | • |
| 20 | IMM200 | IMDM200 | 29.9 | 29.9 | 21.1 | 38.1 | 14.2 | • | • | | • |
| 21 | IMM210 | IMDM210 | 31.5 | 31.5 | 21.0 | 38.1 | 14.2 | • | • | | • |
| 22 | IMM220 | IMDM220 | 33.3 | 33.3 | 21.4 | 38.1 | 15.9 | • | • | | • |
| 23 | IMM230 | IMDM230 | 34.1 | 34.1 | 27.8 | 44.5 | 15.9 | • | • | | • |
| 24 | IMM240 | IMDM240 | 34.9 | 34.9 | 27.8 | 44.5 | 15.9 | • | • | | • |
| 25 | IMM250 | – | 29.8 | 29.8 | 27.0 | 44.5 | 15.9 | | • | | |
| 26 | IMM260 | – | 38.1 | 38.1 | 33.3 | 50.8 | 15.9 | | | | |
| 27 | IMM270 | IMDM270 | 39.4 | 39.4 | 27.1 | 50.8 | 20.3 | | • | | |
| 29 | IMM290 | – | 41.1 | 41.1 | 33.3 | 50.8 | 21.1 | | | | |
| 30 | IMM300 | – | 42.7 | 42.7 | 32.1 | 50.8 | 21.6 | | | | |
| 32 | IMM320 | IMDM320 | 45.8 (45.7) | 45.8 (45.7) | 32.1 (36.8) | 50.8 | 22.4 (20.6) | | | | |
| 34 | IMM340 | – | 47.6 | 42.9 | 40.5 | 52.4 | 22.4 | | | | |
| 36 | IMM360 | IMDM360 | 50.5 (50.8) | 45.8 (46.0) | 40.5 (41.3) | 57.2 | 22.4 (22.2) | | | | |
| 39 | – | IMDM390 | 53.8 | 39.6 | 36.8 | 50.8 | 22.3 | | | | |
| 41 | – | IMDM410 | 55.6 | 40.5 | 31.8 | 51.6 | 22.2 | | | | |
| 46 | IMM460 | – | 64.8 | 47.6 | 50.3 | 69.9 | 29.7 | | | | |

Dimensions in () apply to 12-point sockets only.

Sets include storage tray

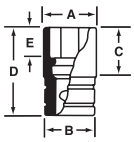
**IMDM270 Applications:** Use for servicing Inner Rack and Pinion Nuts on BMW® X5® and X6® vehicles

**IMDM320 Applications:** Service axle nuts on Mercedes-Benz® W140 chassis 1992–1999 SC and SL Class, Porsche® Boxster®, Cayenne® and 944 plus *BMW* X3®, *X5* and *X6* Series 2007 vehicles and later. Other uses include drive shaft nuts on VW® Touareg® vehicles 2003 and later.

**IMDM360 Applications:** Use to remove pinion nuts on 2003 GM® and 2004 Dodge® trucks with 11.5 AAM axles. Other used include Duramax® diesel front crankshaft bolts and late model *BMW* axle shafts.

**IMDM390 Applications:** Use on front axle hub of 2007 Toyota® Tundra.

**IMDM410 Applications:** For removing and installing the lower ball joint on 2013 to current *BMW* 5 and 7 series vehicles.






311IMYA



IMD200

## Shallow, inches

| Set Contains: | | | | | | | | 311IMYA | 313IMD | 307IMDYA |
|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 6 | 12 | A | B | C | D | E | 6 | 12 | 12 |
| 3/8 | IM120A | IMD120A | 19/32 | 29/32 | 7/8 | 1 1/2 | 5/16 | • | • | • |
| 7/16 | IM140A | IMD140A | 23/32 | 29/32 | 7/8 | 1 1/2 | 11/32 | • | • | • |
| 1/2 | IM160A | IMD160A | 13/16 | 29/32 | 7/8 | 1 1/2 | 13/32 | • | • | • |
| 9/16 | IM180A | IMD180A | 7/8 | 29/32 | 7/8 | 1 1/2 | 13/32 | • | • | • |
| 5/8 | IM200 | IMD200 | 15/16 | 1 | 7/8 | 1 1/2 | 15/32 | • | • | • |
| 11/16 | IM220 | IMD220 | 1 1/16 | 1 1/16 | 3/4 | 1 1/2 | 1/2 | • | • | • |
| 3/4 | IM240 | IMD240 | 1 1/8 | 1 1/8 | 3/4 | 1 1/2 | 1/2 | • | • | • |
| 13/16 | IM260 | IMD260 | 1 1/4 | 1 1/4 | 3/4 | 1 1/2 | 1/2 | • | • | |
| 7/8 | IM280 | IMD280 | 1 5/16 | 1 5/16 | 13/16 | 1 1/2 | 9/16 | • | • | |
| 15/16 | IM300 | IMD300 | 1 3/8 | 1 3/8 | 1 1/16 | 1 3/4 | 3/4 | • | • | |
| 1 | IM320 | IMD320 | 1 7/16 | 1 7/16 | 1 1/16 | 1 3/4 | 3/4 | • | • | |
| 1 1/16 | IM340 | – | 1 9/16 | 1 9/16 | 1 | 2 | 13/16 | | | |
| 1 1/8 | IM360 | IMD360 | 1 5/8 | 1 5/8 | 1 | 2 | 13/16 | | • | |
| 1 3/16 | IM380 | – | 1 11/16 | 1 1/2 | 1 3/32 | 2 | 13/16 | | | |
| 1 1/4 | IM400 | IMD400 | 1 3/4 | 1 1/2 | 1 5/32 | 2 | 13/16 | | • | |
| 1 5/16 | IM420H | – | 1 7/8 | 1 1/2 | 1 3/8 | 2 | 7/8 | | | |
| 1 3/8 | IM440 | – | 1 15/16 | 1 1/2 | 1 3/8 | 2 | 7/8 | | | |
| 1 7/16 | IM460 | – | 2 | 1 1/2 | 1 3/8 | 2 | 15/16 | | | |
| 1 1/2 | IM480 | – | 2 1/8 | 1 9/16 | 1 3/8 | 2 | 15/16 | | | |
| 1 9/16 | IM500 | – | 2 1/4 | 1 5/8 | 1 11/16 | 2 5/16 | 15/16 | | | |

Sets shown include storage tray



312IMMS



IMMS240

## Semi Deep, mm

| Set Contains: | | | | | | 312IMMS |
|---|---|---|---|---|---|---|
| mm | 6 | A | B | D | E | 6 |
| 15 | IMMS150 | 23.7 | 23.7 | 55.9 | 10.7 | • |
| 16 | IMMS160 | 24.4 | 24.4 | 55.9 | 11.9 | • |
| 17 | IMMS170 | 25.3 | 25.3 | 55.9 | 11.2 | • |
| 18 | IMMS180 | 26.8 | 26.8 | 55.9 | 12.7 | • |
| 19 | IMMS190 | 28.5 | 28.5 | 55.9 | 14.2 | • |
| 20 | IMMS200 | 30.0 | 30.0 | 55.9 | 14.2 | • |
| 21 | IMMS210 | 31.6 | 31.6 | 55.9 | 14.2 | • |
| 22 | IMMS220 | 33.2 | 33.2 | 60.4 | 14.2 | • |
| 23 | IMMS230 | 34.0 | 34.0 | 60.4 | 16.2 | • |
| 24 | IMMS240 | 34.9 | 34.9 | 60.4 | 15.5 | • |
| 25 | IMMS250 | 36.3 | 36.3 | 60.4 | 16.2 | • |
| 27 | IMMS270 | 39.6 | 39.6 | 60.4 | 20.3 | • |

Set shown includes storage tray



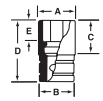
**⚠WARNING**

• Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS



315SIMMYA




## Deep, mm

| Set Contains: | 305SIMMY | 310SIMMYA | 310SIMMADDON | 312SIMM | 315SIMMYA | 325SIMM | 312SIMDM |
|---|---|---|---|---|---|---|---|
| mm | 6 | 6 | 6 | 6 | 6 | 6 | 12 |

| mm | 6 | 12 | A | B | C | D | E | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | SIMM100A | SIMDM100 | 15.0 | 23.2 | 66.7 | 82.6 | 7.9 | | • | | | • | • | |
| 11 | SIMM110A | SIMDM110 | 18.2 | 23.2 | 66.7 | 82.6 | 8.7 | | • | | | • | • | |
| 12 | SIMM120A | SIMDM120 | 19.0 | 23.2 | 66.7 | 82.6 | 9.5 | | • | | | • | • | |
| 13 | SIMM130A | SIMDM130 | 20.6 | 23.2 | 66.7 | 82.6 | 10.3 | | • | | | • | • | |
| 14 | SIMM140A | SIMDM140 | 22.2 | 23.2 | 66.7 | 82.6 | 10.3 | | • | | | • | • | |
| 15 | SIMM150A | SIMDM150 | 23.8 | 23.8 | 50.0 | 82.6 | 10.3 | | • | | • | • | • | • |
| 16 | SIMM160A | SIMDM160 | 24.6 | 24.6 | 50.0 | 82.6 | 11.9 | | • | | • | • | • | • |
| 17 | SIMM170 | SIMDM170 | 25.1 | 25.1 | 57.9 | 82.6 | 11.2 | | • | | • | • | • | • |
| 18 | SIMM180 | SIMDM180 | 26.7 | 26.7 | 61.0 | 82.6 | 12.7 | | • | | • | • | • | • |
| 19 | SIMM190 | SIMDM190 | 28.3 | 28.3 | 61.0 | 82.6 | 14.2 | | • | | • | • | • | • |
| 20 | SIMM200 | SIMDM200 | 29.9 | 29.9 | 61.0 | 82.6 | 14.2 | | | | • | • | • | • |
| 21 | SIMM210 | SIMDM210 | 31.5 | 31.5 | 61.0 | 82.6 | 14.2 | | | | • | • | • | • |
| 22 | SIMM220 | SIMDM220 | 33.1 | 33.1 | 71.6 | 88.9 | 15.7 | | | | • | • | • | • |
| 23 | SIMM230 | SIMDM230 | 33.1 | 33.1 | 64.3 | 88.9 | 15.9 | | | | • | • | • | • |
| 24 | SIMM240 | SIMDM240 | 34.9 | 34.9 | 63.5 | 88.9 | 15.9 | | | | • | • | • | • |
| 25 | SIMM250 | SIMDM250 | 36.3 | 36.3 | 63.5 | 88.9 | 15.9 | | | • | • | | • | • |
| 26 | SIMM260 | – | 37.9 | 37.9 | 71.0 | 88.9 | 19.8 | | | • | | | • | |
| 27 | SIMM270 | SIMDM270 | 39.4 | 39.4 | 71.0 | 88.9 | 20.3 | | | • | • | | • | • |
| 28 | SIMM280A | – | 41.0 | 41.0 | 71.0 | 88.9 | 20.8 | | | | | | | |
| 29 | SIMM290 | SIMDM290 | 41.3 | 41.3 | 71.6 | 88.9 | 21.3 | • | | • | | | • | |
| 30 | SIMM300 | SIMDM300 | 42.9 | 42.9 | 71.6 | 88.9 | 21.6 | • | | • | | | • | |
| 32 | SIMM320 | SIMDM320 | 45.8 | 45.8 | 71.6 | 88.9 | 22.4 | | | • | | | • | |
| 33 | SIMM330 | SIMDM330 | 46.0 | 46.0 | 72.8 | 88.9 | 22.4 | | | • | | | • | |
| 34 | SIMM340 | SIMDM340 | 49.3 | 49.3 | 72.8 | 88.9 | 22.6 | • | | • | | | • | |
| 35 | SIMM350 | SIMDM350 | 50.8 | 50.8 | 72.8 | 88.9 | 22.9 | • | | • | | | • | |
| 36 | SIMM360 | SIMDM360 | 50.8 | 50.8 | 72.8 | 88.9 | 22.9 | • | | • | | | • | |

Sets shown include storage tray



313SIMA

## Deep, inches

| Set Contains: | 309SIMYA | 313SIMA | 320SIM* | 313SIMD |
|---|---|---|---|---|
| 11 | 6 | 6 | 6 | 12 |

| 11 | 6 | 12 | A | B | C | D | E | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | SIM120A | – | 19/32 | 29/32 | 2 5/8 | 3 1/4 | 5/16 | | | • | |
| 7/16 | SIM140A | – | 23/32 | 29/32 | 2 5/8 | 3 1/4 | 11/32 | | | • | |
| 1/2 | SIM160A | SIMD160A | 13/16 | 29/32 | 2 5/8 | 3 1/4 | 3/8 | • | • | • | • |
| 9/16 | SIM180A | SIMD180A | 7/8 | 29/32 | 2 5/8 | 3 1/4 | 13/32 | • | • | • | • |
| 5/8 | SIM200 | SIMD200A | 31/32 | 29/32 | 2 5/8 | 3 1/4 | 15/32 | • | • | • | • |
| 11/16 | SIM220 | SIMD220A | 1 1/16 | 1 1/16 | 2 5/8 | 3 1/4 | 1/2 | • | • | • | • |
| 3/4 | SIM240 | SIMD240A | 1 1/8 | 1 1/8 | 2 5/8 | 3 1/4 | 9/16 | • | • | • | • |
| 13/16 | SIM260 | SIMD260A | 1 1/4 | 1 1/4 | 2 5/8 | 3 1/4 | 19/32 | • | • | • | • |
| 7/8 | SIM280 | SIMD280A | 1 5/16 | 1 5/16 | 2 3/32 | 3 1/2 | 9/16 | • | • | • | • |
| 15/16 | SIM300 | SIMD300A | 1 3/8 | 1 3/8 | 2 3/32 | 3 1/2 | 3/4 | • | • | • | • |
| 1 | SIM320 | SIMD320A | 1 7/16 | 1 7/16 | 2 7/8 | 3 1/2 | 3/4 | • | • | • | • |
| 1 1/16 | SIM340 | SIMD340A | 1 9/16 | 1 9/16 | 2 11/16 | 3 1/2 | 25/32 | | • | • | • |
| 1 1/8 | SIM360 | SIMD360A | 1 5/8 | 1 5/8 | 2 11/16 | 3 1/2 | 25/32 | | • | • | • |
| 1 3/16 | SIM380 | SIMD380A | 1 11/16 | 1 1/2 | 2 11/16 | 3 1/2 | 25/32 | | • | • | • |
| 1 1/4 | SIM400 | SIMD400A | 1 3/4 | 1 1/2 | 2 11/16 | 3 1/2 | 1 | | • | • | • |
| 1 5/16 | SIM420H | – | 1 7/8 | 1 1/2 | 2 11/16 | 3 1/2 | 15/16 | | | • | |
| 1 3/8 | SIM440 | – | 2 | 1 1/2 | 2 11/16 | 3 1/2 | 15/16 | | | • | |
| 1 7/16 | SIM460 | – | 2 | 1 1/2 | 2 21/32 | 3 1/2 | 15/16 | | | • | |
| 1 1/2 | SIM480 | – | 2 1/8 | 1 9/16 | 2 5/8 | 3 1/2 | 15/16 | | | • | |
| 1 9/16 | SIM500 | – | 2 1/4 | 1 5/8 | 2 5/8 | 3 1/2 | 15/16 | | | • | |
| 1 5/8 | SIM520 | – | 2 3/8 | 1 3/4 | 2 7/8 | 3 1/2 | 15/16 | | | | |

Sets shown include storage tray unless noted
*Does not include storage tray




## Shallow Thin Wall, inches



311IMFSY

Set Contains: 311IMFSY

| | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 3/8 | IMFS120 | 19/32 | 7/8 | 3/8 | 1 1/2 | 7/32 | • |
| 7/16 | IMFS140 | 11/16 | 7/8 | 9/16 | 1 1/2 | 11/32 | • |
| 1/2 | IMFS160 | 3/4 | 7/8 | 5/8 | 1 1/2 | 3/8 | • |
| 9/16 | IMFS180 | 13/16 | 7/8 | 11/16 | 1 1/2 | 13/32 | • |
| 5/8 | IMFS200 | 29/32 | 29/32 | 3/4 | 1 1/2 | 15/32 | • |
| 11/16 | IMFS220 | 1 | 1 | 13/16 | 1 1/2 | 1/2 | • |
| 3/4 | IMFS240 | 1 1/16 | 1 1/16 | 13/16 | 1 1/2 | 1/2 | • |
| 13/16 | IMFS260 | 1 1/8 | 1 1/8 | 25/32 | 1 1/2 | 1/2 | • |
| 7/8 | IMFS280 | 1 7/32 | 1 7/32 | 29/32 | 1 1/2 | 9/16 | • |
| 15/16 | IMFS300 | 1 5/16 | 1 5/16 | 1 3/16 | 1 17/32 | 3/4 | • |
| 1 | IMFS320 | 1 3/8 | 1 3/8 | 1 3/16 | 1 9/16 | 3/4 | • |
| 1 1/16 | IMFS340 | 1 7/16 | 1 7/16 | 1 1/4 | 1 11/16 | 13/16 | |
| 1 1/8 | IMFS360 | 1 1/2 | 1 1/2 | 1 1/4 | 1 3/4 | 13/16 | |
| 1 3/16 | IMFS380 | 1 5/8 | 1 5/8 | 1 1/4 | 1 3/4 | 13/16 | |
| 1 1/4 | IMFS400 | 1 11/16 | 1 11/16 | 1 1/4 | 1 7/8 | 13/16 | |
| 1 5/16 | IMFS420 | 1 3/4 | 1 3/4 | 1 1/4 | 1 7/8 | 13/16 | |
| 1 3/8 | IMFS440 | 1 13/16 | 1 13/16 | 1 1/4 | 2 1/16 | 13/16 | |
| 1 7/16 | IMFS460 | 1 29/32 | 1 29/32 | 1 3/8 | 2 1/16 | 13/16 | |
| 1 1/2 | IMFS480 | 2 | 2 | 1 3/8 | 2 1/16 | 13/16 | |

Set shown includes storage tray

## Extra Deep, mm

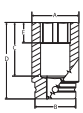


SIMML180

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 15 | SIMML150 | 23.2 | 26.4 | 110.2 | 127.0 | 10.7 |
| 18 | SIMML180 | 26.8 | 26.8 | 54.8 | 127.0 | 12.7 |
| 21 | SIMML210 | 31.6 | 31.6 | 108.0 | 127.0 | 14.2 |

### SIMML180 6-Point Metric Extra Deep Impact Socket

- Remove and install the fuel tank hold down strap on International® 4400 chassis. The fuel tank must be removed to replace the fuel sending unit
- 5" long to reach through the frame to access the fastener without the need of an extension



## Deep Thin Wall, mm



SIMM360TW

| mm | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 36 | SIMM360TW | 47.2 | 44.5 | 70.4 | 88.9 | 22.9 |

### SIMM360TW Axle Nut Socket

- Thin wall design provides the extra room needed to remove and install the axle nut on a Chevrolet® Sonic vehicles



SIML200

## Extra Deep, inches

- Use for removing or replacing fuel tank retaining strap nuts
- Also has applications on emergency brake adjustment nuts and stabilizer retainers

| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1/2 | SIML160* | 25/32 | 15/16 | 4 1/4 | 5 | 3/8 |
| 9/16 | SIML180 | 7/8 | 15/16 | 4 1/4 | 5 | 13/32 |
| 5/8 | SIML200 | 31/32 | 1 | 4 1/4 | 5 | 15/32 |
| 11/16 | SIML220 | 1 1/16 | 1 1/16 | 4 1/4 | 5 | 1/2 |
| 3/4 | SIML240 | 1 1/8 | 1 1/8 | 4 1/4 | 5 | 9/16 |
| 13/16 | SIML260 | 1 1/4 | 1 1/4 | 4 1/4 | 5 | 19/32 |
| 7/8 | SIML280 | 1 5/16 | 1 5/16 | 4 1/4 | 5 | 21/32 |
| 15/16 | SIML300 | 1 3/8 | 1 3/8 | 4 1/4 | 5 | 23/32 |
| 1 | SIML320 | 1 7/16 | 1 7/16 | 4 3/8 | 5 | 3/4 |
| 1 1/16 | SIML340 | 1 9/16 | 1 9/16 | 4 3/8 | 5 | 25/32 |
| 1 1/8 | SIML360 | 1 5/8 | 1 5/8 | 4 3/8 | 5 | 25/32 |

*ASME®/ANSI® B107.2



SIMMF21A

## Extra Deep/Thin Wall, mm

Sockets are 34% thinner than a standard thin wall socket. Use to access nut on long studs and other hard-to-reach areas. Ideal for wheel lugs.

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 14 | SIMMF14A | 20.6 | 23.8 | 50.8 | 76.2 | 25.4 |
| 17 | SIMMF17A | 23.8 | 23.8 | 50.8 | 76.2 | 25.4 |
| 19 | SIMMF19A | 25.4 | 25.4 | 50.8 | 76.2 | 25.4 |
| 21 | SIMMF21A | 28.6 | 28.6 | 50.8 | 76.2 | 25.4 |
| 22 | SIMMF22A | 30.2 | 30.2 | 50.8 | 76.2 | 25.4 |

**⚠WARNING**

• Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SWIVEL SOCKETS



307IPLMY



IPDLM12

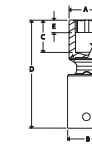
## Shallow Swivel, mm

| mm | 6 | 12 | A | B | D | E | 307IPLMY Set Contains: 6 | 312IPLM Set Contains: 6 |
|---|---|---|---|---|---|---|---|---|
| 10 | IPLM10C | – | 15.6 | 23.8 | 73.7 | 9.7 | | • |
| 11 | IPLM11C | – | 17.8 | 23.8 | 73.7 | 9.7 | | • |
| 12 | IPLM12C | IPDLM12 | 18.9 | 23.8 | 73.7 | 9.7 | | • |
| 13 | IPLM13C | IPDLM13A | 19.7 | 23.8 | 73.7 | 8.6 | | • |
| 14 | IPLM14C | – | 21.3 | 23.8 | 73.7 | 8.6 | • | • |
| 15 | IPLM15C | – | 22.6 | 23.8 | 73.7 | 8.6 | • | • |
| 16 | IPLM16C | IPDLM16A | 24.1 | 30.2 | 77.8 | 10.4 | | • |
| 17 | IPLM17C | IPDLM17A | 25.6 | 30.2 | 77.7 | 10.4 | • | • |
| 18 | IPLM18C | IPDLM18A | 26.7 | 30.2 | 77.7 | 10.4 | • | • |
| 19 | IPLM19C | – | 28.3 | 30.2 | 77.7 | 11.2 | • | • |
| 21 | IPLM21C | – | 31.5 | 30.2 | 77.7 | 12.7 | • | • |
| 22 | IPLM22C | – | 33.1 | 30.2 | 77.8 | 14.2 | | |
| 24 | IPLM24C | – | 34.8 | 30.2 | 81.0 | 15.0 | • | • |

Sets shown include storage tray



307IPLY



## Shallow Swivel, Inches

| | 6 | 12 | A | B | D | E | 307IPLY Set Contains: 6 | 312IPL Set Contains: 6 |
|---|---|---|---|---|---|---|---|---|
| 1/2 | IPL16C | IPDL16 | 25/32 | 1 1/16 | 2 29/32 | 11/32 | | • |
| 9/16 | IPL18C | – | 7/8 | 1 1/16 | 2 29/32 | 11/32 | • | • |
| 5/8 | IPL20C | IPDL20 | 31/32 | 1 1/16 | 2 31/32 | 11/32 | • | • |
| 11/16 | IPL22C | – | 1 1/16 | 1 1/4 | 3 1/16 | 7/16 | • | • |
| 3/4 | IPL24C | – | 1 1/8 | 1 1/4 | 3 1/16 | 15/32 | • | • |
| 13/16 | IPL26C | – | 1 3/16 | 1 1/4 | 3 1/16 | 1/2 | | • |
| 7/8 | IPL28C | – | 1 9/32 | 1 1/4 | 3 7/32 | 9/16 | • | • |
| 15/16 | IPL30C | – | 1 11/32 | 1 1/4 | 3 7/32 | 5/8 | • | • |
| 1 | IPL32C | – | 1 11/32 | 1 1/4 | 3 3/16 | 11/16 | | • |
| 1 1/16 | IPL34C | – | 1 7/16 | 1 1/4 | 3 7/32 | 23/32 | | • |
| 1 1/8 | IPL36C | – | 1 9/16 | 1 1/4 | 3 11/32 | 3/4 | • | • |
| 1 3/16 | IPL38C | – | 1 9/16 | 1 1/4 | 3 3/8 | 3/4 | | • |
| 1 1/4 | IPL40C | – | 1 5/8 | 1 1/4 | 3 7/16 | 13/16 | | |
| 1 5/16 | IPL42C | – | 1 3/4 | 1 1/4 | 3 7/16 | 7/8 | | |

Sets shown include storage tray



IPSM21

## Semi Deep Swivel, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 15 | IPSM15 | 23.0 | 25.1 | — | 86.4 | 12.4 |
| 18 | IPSM18 | 26.5 | 31.5 | — | 89.1 | 12.7 |
| 21 | IPSM21 | 30.0 | 31.5 | 33.8 | 89.2 | 12.7 |
| 22 | IPSM22 | 32.4 | 31.5 | — | 89.1 | 12.7 |

**IPSM21 Metric Semi Deep Impact Swivel Socket**
Designed for GM® and Ford® upper control arm bolts. Welded pivot pin reinforces socket wall and allows full 30° of uninterrupted smooth action for efficient power transfer at any angle.



SIP18A

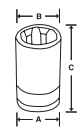
## Deep Swivel, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 9/16 | SIP18A | 13/16 | 1 3/16 | 3 13/16 | 11/32 |
| 3/4 | SIP24A | 1 1/32 | 1 3/16 | 4 1/4 | 7/16 |

# SPECIAL APPLICATION IMPACT SOCKETS



IMSLE240



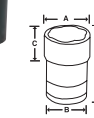
## TORX®, Impact

| # | Stock No. | A | B | D |
|---|---|---|---|---|
| E18 | IMSLE180 | 29/32 | 29/32 | 1 1/2 |
| E20 | IMSLE200 | 15/16 | 15/16 | 1 1/2 |
| E24 | IMSLE240 | 1 1/16 | 1 1/16 | 1 1/2 |

**IMSLE240 *TORX* Impact Socket**
- Front axle nut on M, C, E and S class Mercedes® vehicles



305TTWYA



## Twist/Shallow, inches

Removes rounded/damaged fasteners

| | Stock No. | A | B | C | D |
|---|---|---|---|---|---|
| 3/4 | TTWY241A | 1 1/32 | 1 | 1 | 1 5/8 |
| 13/16 | TTWY261A | 1 1/8 | 1 | 1 | 1 5/8 |
| 7/8 | TTWY281A | 1 3/16 | 1 1/16 | 1 | 1 5/8 |
| 15/16 | TTWY301A | 1 1/4 | 1 3/16 | 1 | 1 5/8 |
| 1 | TTWY321A | 1 5/16 | 1 1/4 | 1 | 1 5/8 |

**305TTWYA Shallow Twist Set**
TTWY241A–TTWY321A (5pc) (3/4"–1").

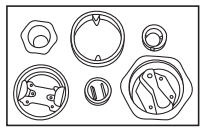


SPS10

## Shackle Pin

Designed with an oval configuration to service shackle pins on International Harvester® and Kenworth® semi trucks.

**SPS10** 41/64" x 1 3/32" x 1 3/4" long.
**SPS11** 21/32" x 1 17/32" x 1 3/4" long.

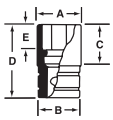




A172A

## Drum Plug Socket

**A172A** One socket removes virtually all screw-in drum plugs or caps large or small. Spring loaded inner wrench handles smaller plugs and recesses automatically when removing large plugs. Use with a 1/2" drive ratchet or impact wrench.






DPSM16

## Shallow 10 pt., mm

| mm | 10 | A | B | D | E |
|---|---|---|---|---|---|
| 16 | DPSM16 | 24.6 | 24.6 | 38.1 | 11.9 |

**DPSM16 Shallow Impact Socket**

- The DPSM16 is for removing the rear lower control arm bolts on 2001 and newer Honda® Civic® and Acura® RSX vehicles
- Forged from tough alloy steel
- Heat treated to a lower hardness to add impact resistance and ductility



S6324

## Crank Shaft Bolt Impact Socket, mm

**S6324 Crank Shaft Bolt Socket**

- For removing and installing crank shaft bolts on Audi® A4®, A6® and A8® vehicles
- Socket is 1/2" drive 24 mm and overall length is 2" which is critical to the crank shaft bolt application
- Manufactured from special alloy steel
- Precision forged and heat treated for optimum strength and durability
- Flank Drive® wrenching system grips fastener on the flanks/flats increasing torque by 15%–20% while preventing the fastener from rounding and increasing the life of the socket

# POWER ACCESSORIES

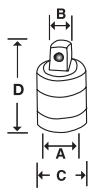





PS2

## Lock Button Retention Extensions

| Stock No. | A | B |
|---|---|---|
| PS2 | 5/8 | 2 |
| PS3 | 5/8 | 3 1/2 |
| PS5 | 5/8 | 5 |
| PS10 | 5/8 | 10 |

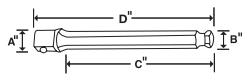





PA2A

## Adaptors (Power)

| Stock No. | Socket Attachment | A | B | C | D |
|---|---|---|---|---|---|
| PA2A | Pin Type | 3/8 | 1/2 | 3/4 | 1 5/16 |
| PA4E | Pin Type | 1/2 | 3/8 | 15/16 | 1 13/16 |






A3011A

## Hex Shank (Power)

| Stock No. | Socket Attachment | A | B | C | D |
|---|---|---|---|---|---|
| A3011A | Pin Type | 1/2 | 7/16 | 1 1/4 | 2 3/4 |

**⚠WARNING**

- Do not use chrome or industrial finish power tools with impact drivers
- Do not use industrial finish power tools with impact drivers
- Read safety precautions on pages W1 to W4

# POWER SOCKETS



SPM19



P412



SIPR426

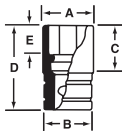


SIPRL436



MPK121A

## Flank Drive® Deep, mm




| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 17 | SPM17 | 24.6 | 24.6 | 66.6 | 82.6 | 12.7 |
| 19 | SPM19 | 26.4 | 26.4 | 64.8 | 82.6 | 11.9 |
| 21 | SPM21 | 28.3 | 28.3 | 64.8 | 82.6 | 12.3 |

## Shallow Double Square, inches

| | 8 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/8 | P412 | 13/32 | 7/8 | 7/8 | 1 1/2 | 5/16 |
| 7/16 | P414 | 13/16 | 15/16 | 7/8 | 1 1/2 | 3/8 |
| 1/2 | P416 | 29/32 | 1 | 7/8 | 1 1/2 | 5/16 |
| 9/16 | P418 | 1 | 1 1/8 | 7/8 | 1 1/2 | 1/2 |
| 5/8 | P420 | 1 3/32 | 1 3/16 | 7/8 | 1 1/2 | 1/2 |
| 11/16 | P422 | 1 7/32 | 1 1/4 | 7/8 | 1 1/2 | 13/32 |
| 3/4 | P424 | 1 5/16 | 1 3/8 | 7/8 | 1 1/2 | 9/16 |
| 13/16 | P426 | 1 7/16 | 1 7/16 | 7/8 | 1 1/2 | 5/8 |
| 7/8 | P428 | 1 1/2 | 1 1/2 | 1 1/32 | 1 3/4 | 5/8 |
| 1 | P432 | 1 23/32 | 1 3/4 | 1 1/8 | 1 3/4 | 3/4 |

## Deep Double Square, inches

| | 8 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 13/16 | SIPR426 | 1 7/16 | 1 3/8 | 2 9/16 | 3 1/4 | 5/8 |
| 1 | SIPR432 | 1 3/4 | 1 1/2 | 2 11/16 | 3 1/2 | 3/4 |
| 1 1/8 | SIPR436 | 1 15/16 | 1 51/64 | 2 23/32 | 3 1/2 | 27/32 |

## Extra Deep Double Square, inches

| | 8 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 1/8 | SIPRL436 | 1 15/16 | 1 1/2 | 4 13/32 | 5 | 27/32 |

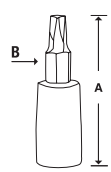
## *Flank Drive*/Magnetic, inches

| | 6 | A | B | D | E |
|---|---|---|---|---|---|
| 3/8 | MPK121A | 19/32 | 7/8 | 1 1/2 | 1/8 |
| 7/16 | MPK141A | 11/16 | 7/8 | 1 1/2 | 5/32 |
| 1/2 | MPK161A | 25/32 | 15/16 | 1 1/2 | 5/32 |
| 9/16 | MPK181A | 7/8 | 15/16 | 1 1/2 | 5/32 |

# POWER BIT SOCKETS



PFTX50E



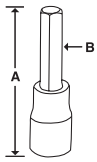

## TORX®/Power Drivers

| # | Stock No. | A | B |
|---|---|---|---|
| T45 | PSTX45E | 2 7/16 | FTX45E2 |
| T50 | PSTX50E | 2 7/16 | FTX50E2 |
| T50 | PSTX500E* | 2 7/16 | FTX500E2 |
| T55 | PSTX55E | 2 7/16 | FTX55E2 |

*GM® Style

## Hex, inches (Power)

| | | A | B |
|---|---|---|---|
| 5/16 | PSA10E | 2 7/16 | FA10E2 |
| 3/8 | PSA12E | 2 9/16 | SA12E2 |
| 7/16 | PSA14E | 2 7/8 | SA14E2 |
| 1/2 | PSA16E | 3 1/16 | SA16E2 |
| 9/16 | PSA18E | 3 1/8 | SA18E2 |
| 5/8 | PSA20E | 3 7/16 | LAW120E2 |
| 3/4 | PSA24E | 4 1/16 | LAW124E2 |



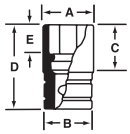



PSA10E

## SURFACE DRIVE SOCKETS

## Surface Drive Shallow, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 15 | DTM15A | 22.3 | 22.9 | 21.3 | 38.1 | 10.7 |






DTM15A

## Surface Drive Deep, mm

Surface drive sockets will engage with a fastener while rotating on a power nut runner.

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 13 | DTSM13A | 19.3 | 21.8 | 65.8 | 82.6 | 10.2 |
| 15 | DTSM15A | 22.3 | 21.8 | 65.8 | 82.6 | 10.7 |



DTSM13A

## Surface Drive Deep, inches

| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1/2 | DTS16A | 3/4 | 29/32 | 2 19/32 | 3 1/4 | 13/32 |
| 9/16 | DTS18A | 13/16 | 29/32 | 2 19/32 | 3 1/4 | 13/32 |



DTS16A

## Surface Drive (M-Series)

- Snap-on® M-Series sockets offer a precise fit, optimum hardness and durability, and ring-groove and pin hole for use on a variety of industrial fastening applications
- M-Series sockets also feature surface drive technology to ensure a long service life

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 11 | M3111 | 16.6 | 23.6 | 19.1 | 38.1 | 8.1 |
| 13 | M3113 | 22.0 | 23.6 | 19.1 | 38.1 | 9.7 |
| 15 | M3115 | 23.6 | 23.6 | 21.3 | 38.1 | 12.4 |
| 15 | M3215 | 23.6 | 23.6 | 40.4 | 57.2 | 12.4 |
| 18 | M3118 | 28.4 | 28.4 | 21.3 | 38.1 | 11.2 |



M3115



**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# GENERAL SERVICE SETS



344AMB

## 344AMB Fractional Chrome General Service Set 44 pcs, Includes:

| 12-Point Shallow Sockets | | 12-Point Deep Sockets | |
|---|---|---|---|
| 3/8 | SW121A | 1/2 | S161A |
| 7/16 | SW141A | 9/16 | S181A |
| 1/2 | SW161A | 5/8 | S201 |
| 9/16 | SW181A | 11/16 | S221 |
| 5/8 | SW201 | 3/4 | S241 |
| 11/16 | SW221 | 13/16 | S261 |
| 3/4 | SW241 | 7/8 | S281 |
| 13/16 | SW261 | 15/16 | S301 |
| 7/8 | SW281 | 1 | S321 |
| 15/16 | SW301 | 1 1/16 | S341 |
| 1 | SW321 | 1 1/8 | S361 |
| 1 1/16 | SW341 | | |
| 1 1/8 | SW361 | | |
| 1 3/16 | SW381 | | |
| 1 1/4 | SW401 | | |
| 1 5/16 | SW421 | | |

| 6-Point Universal Sockets Set | 307SUY | 9/16"–15/16" (7 pcs) |
|---|---|---|
| Also Includes: | LRS70A | 1 19/32" Ratchet Spinner |
| | S4 | 18 7/8" Speeder |
| | S8 | 2 11/16" Universal Joint |
| | S12L | 12" Sliding T-Handle |
| | S77A | Ratcheting Adaptor |
| | S80A | Sealed Ratchet |
| | SN18B | 18" Breaker Bar |
| | SX2 | 2" Extension |
| | SXK5 | 5" Knurled Extension |
| | SXK11 | 11" Knurled Extension |



360MB

## 360MB Fractional Chrome General Service Set in KRA21G Metal Box 59 pcs, Includes:

| 12-Point Shallow Sockets | | 6-Point Deep Sockets | | 12-Point Deep Sockets | |
|---|---|---|---|---|---|
| 3/8 | SW121A | 1/2 | TS161A | 1/2 | S161A |
| 7/16 | SW141A | 9/16 | TS181A | 9/16 | S181A |
| 1/2 | SW161A | 5/8 | TS201 | 5/8 | S201 |
| 9/16 | SW181A | 11/16 | TS221 | 11/16 | S221 |
| 5/8 | SW201 | 3/4 | TS241 | 3/4 | S241 |
| 11/16 | SW221 | 13/16 | TS261 | 13/16 | S261 |
| 3/4 | SW241 | 7/8 | TS281 | 7/8 | S281 |
| 13/16 | SW261 | 15/16 | TS301 | 15/16 | S301 |
| 7/8 | SW281 | 1 | TS321 | 1 | S321 |
| 15/16 | SW301 | 1 1/16 | TS341 | 1 1/16 | S341 |
| 1 | SW321 | 1 1/8 | TS361 | | |
| 1 1/16 | SW341 | | | | |
| 1 1/8 | SW361 | | | | |
| 1 3/16 | SW381 | | | | |
| 1 1/4 | SW401 | | | | |
| 1 5/16 | SW421 | | | | |

| 6-Point Universal Sockets Set | 307SUY | 9/16"–15/16" (7 pcs) |
|---|---|---|
| Also Includes: | S12L | 12" Sliding T-Handle |
| | S77A | Ratcheting Adaptor |
| | SN18B | 18" Breaker Bar |
| | SX2 | 2" Extension |
| | SXK3 | 3 1/2" Extension |
| | SXK5 | 5" Knurled Extension |
| | SXK11 | 11" Knurled Extension |
| | A80A | 1/4"–1/2" Capacity Stud Remover |
| | LRS70A | 1 19/32" Ratchet Spinner |
| | S80A | Sealed Ratchet |
| | S4 | 18 7/8" Speeder |
| | S8 | 2 11/16" Universal Joint |



345MMB

## 345MMB Chrome Metric General Service Set 45 pcs, Includes:

| mm | 12 Point Socket Sets |
|---|---|
| (23pc) (10 mm–32 mm) | **323SWM** Metric 12-Point Shallow Set |
| (13pc) (12 mm–24 mm) | **313SMYA** Metric 12-Point Deep Set |

| Also Includes: | | |
|---|---|---|
| | **S4** | 18 7/8" Speeder |
| | **S8** | 2 11/16" Universal Joint |
| | **S12L** | 12" Sliding T-Handle |
| | **S77A** | Ratcheting Adaptor |
| | **S80A** | Sealed Ratchet |
| | **SN18B** | 18" Breaker Bar |
| | **SXK3** | 3 1/2" Extension |
| | **SXK5** | 5" Knurled Extension |
| | **SXK11** | 11" Knurled Extension |



317MSPC

## 317MSPC Fractional 6-Point General Service Set 17 pcs, Includes:

| | 6-Point Shallow Sockets |
|---|---|
| 3/8 | **TW121A** |
| 7/16 | **TW141A** |
| 1/2 | **TW161A** |
| 9/16 | **TW181A** |
| 5/8 | **TW201** |
| 11/16 | **TW221** |
| 3/4 | **TW241** |
| 13/16 | **TW261** |
| 7/8 | **TW281** |
| 15/16 | **TW301** |
| 1 | **TW321** |
| 1 1/16 | **TW341** |
| 1 1/8 | **TW361** |

| Also Includes: | | |
|---|---|---|
| | **S80A** | Sealed Ratchet |
| | **SXK5** | 5" Knurled Extension |
| | **SXK11** | 11" Knurled Extension |
| | **SN18B** | 18" Breaker Bar |



317AMMPC

## 317AMMPC Metric 6-Point General Service Set 17 pcs, Includes:

| mm | 6-Point Shallow Sockets |
|---|---|
| 12 | **TWM12A** |
| 13 | **TWM13A** |
| 14 | **TWM14A** |
| 15 | **TWM15A** |
| 16 | **TWM16** |
| 17 | **TWM17** |
| 18 | **TWM18** |
| 19 | **TWM19** |
| 20 | **TWM20** |
| 21 | **TWM21** |
| 22 | **TWM22** |
| 23 | **TWM23** |
| 24 | **TWM24** |

| Also Includes: | | |
|---|---|---|
| | **S80A** | Sealed Ratchet |
| | **SXK5** | 5" Knurled Extension |
| | **SXK11** | 11" Knurled Extension |
| | **SN18B** | 18" Breaker Bar |

**⚠WARNING**

• Do not use "cheater bars" on handles
• Read safety precautions on pages W1 to W4

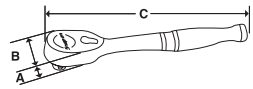
# RATCHETS, HANDLES AND ACESSORIES Blue-Point®



BPRSR940



BPRSR940SG




## Quick Release Ratchets

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| BPRSR940 | Standard Handle | 40 | 9° | 23/32 | 1 23/32 | 9 7/8 | RKRBPRSR940 |
| BPRSR940SG | Soft Grip Handle | 40 | 9° | 23/32 | 1 23/32 | 9 7/8 | RKRBPRSR940 |

ASME®/ANSI® B107.10

**BPR703 Quick Release Ratchet Set**
1/4" drive BPRTR936, 3/8" drive BPRFR938 and 1/2" drive BPRSR940 Ratchets (3pc) in storage tray.

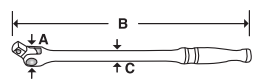
**BPR703SG Quick Release Ratchet Set**
1/4" drive BPRTR936SG, 3/8" drive BPRFR938SG and 1/2" drive BPRSR940SG Soft Grip Ratchets (3pc) in storage tray.



BLPBB1215



BLPBB1224




## Breaker Bars

| Stock No. | Description | A | B | C |
|---|---|---|---|---|
| BLPBB1215 | Standard Handle | 1 1/8 | 15 | 3/4 |
| BLPBB1224 | Telescoping Handle | 1 1/16 | 12-24 | 5/8-7/8 |



S13TURBO

## Turbo T-handle Speed

| Name | Description | Handle Type |
|---|---|---|
| S13TURBO | 1/2" square drive | Turbo T-Handle |

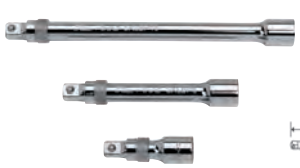


BLPEXTK123

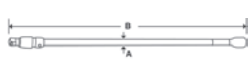



## Knurled Extensions

| Stock No. | B |
|---|---|
| BLPEXTK123 | 3 |
| BLPEXTK126 | 6 |
| BLPEXTK1210 | 10 |



303SXLBP



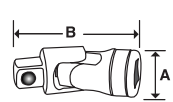

## Locking/Knurled Extensions

| Stock No. | A | B | 303SXLBP Set Contains: |
|---|---|---|---|
| SXLBP3 | .65" | 3 | • |
| SXLBP6 | .65" | 6 | • |
| SXLBP10 | .65" | 10 | • |

Set shown includes storage tray



BLPUJ12




## Universal Joint

| Stock No. | B |
|---|---|
| BLPUJ12 | 2 3/4 |



BLPSM1216

## Shallow, mm

| mm | 6 | Length |
|---|---|---|
| 12 | BLPSM1212 | 38.1 |
| 13 | BLPSM1213 | 38.1 |
| 14 | BLPSM1214 | 38.1 |
| 15 | BLPSM1215 | 38.1 |
| 16 | BLPSM1216 | 38.1 |
| 17 | BLPSM1217 | 38.1 |
| 18 | BLPSM1218 | 38.1 |
| 19 | BLPSM1219 | 38.1 |
| 20 | BLPSM1220 | 38.1 |
| 21 | BLPSM1221 | 38.1 |
| 22 | BLPSM1222 | 38.1 |
| 24 | BLPSM1224 | 38.1 |



BLPS1234

## Shallow, inches

| | 6 | Length |
|---|---|---|
| 3/8 | BLPS1238 | 1 1/2 |
| 7/16 | BLPS12716 | 1 1/2 |
| 1/2 | BLPS1212 | 1 1/2 |
| 9/16 | BLPS12916 | 1 1/2 |
| 5/8 | BLPS1258 | 1 1/2 |
| 11/16 | BLPS121116 | 1 1/2 |
| 3/4 | BLPS1234 | 1 1/2 |
| 13/16 | BLPS121316 | 1 1/2 |
| 7/8 | BLPS1278 | 1 1/2 |
| 15/16 | BLPS121516 | 1 9/16 |
| 1 | BLPS121 | 1 9/16 |
| 1 1/16 | BLPSB121116 | 1 9/16 |
| 1 1/8 | BLPSB12118 | 1 3/4 |
| 1 3/16 | BLPSB121316 | 1 3/4 |
| 1 1/4 | BLPSB12114 | 1 3/4 |

## TORX®/External

| # | Stock No. | Length, inches |
|---|---|---|
| E18 | BLPTE1218 | 1 1/2 |
| E20 | BLPTE1220 | 1 1/2 |
| E22 | BLPTE1222 | 1 1/2 |
| E24 | BLPTE1224 | 1 1/2 |



BLPTE1220







BLPTL1255



BLPTL1255TP



## *TORX*

BLPT1255

| | # | Stock No. | Length, inches |
|---|---|---|---|
| Standard | T55 | BLPT1255 | 2 3/4 |
| | T60 | BLPT1260 | 2 3/4 |
| Long | T55 | BLPTL1255 | 4 3/4 |
| | T60 | BLPTL1260 | 4 3/4 |

## *TORX*/Tamper Resistant

BLPT1255TP

| | # | Stock No. | Length, inches |
|---|---|---|---|
| Standard | T55 | BLPT1255TP | 2 5/16 |
| | T60 | BLPT1260TP | 2 5/16 |
| Long | T55 | BLPTL1255TP | 4 5/8 |
| | T60 | BLPTL1260TP | 4 5/8 |





BLPH1214

## Hex, mm

| mm | | Length, mm |
|---|---|---|
| 10 | BLPH1210 | 60.3 |
| 12 | BLPHM1212 | 60.3 |
| 14 | BLPH1214 | 60.3 |
| 17 | BLPH1217 | 60.3 |
| 19 | BLPH1219 | 60.3 |



BLPH12916

## Hex Standard, inches

| | | Length, inches |
|---|---|---|
| 7/16 | BLPH12716 | 2 7/16 |
| 1/2 | BLPH1212 | 2 7/16 |
| 9/16 | BLPH12916 | 2 7/16 |
| 5/8 | BLPH1258 | 2 7/16 |
| 3/4 | BLPH1234 | 2 7/16 |

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

## COMBINATION BIT SOCKET SETS Blue-Point®



### Combination TORX® Socket / *Torx* Bit Socket Set (43pc)

**BLPTSSC43**

**BLPTSSC43 *TORX* Sockets/*TORX* Bit Sockets Set**

**Set Components**

**(1/4" drive):**
- Five external *TORX* sockets (E4–E8)
- 10 tamper resistant *TORX* socket drivers (T6–T30)

**(3/8" drive):**
- Four external *TORX* Sockets (E10–E16)
- Three tamper-resistant *TORX* socket drivers (T40, T45, T50)
- Three tamper-resistant long *TORX* socket drivers (T40, T45, T50)

**(1/2" drive):**
- Four external *TORX* sockets (E18–E24)
- Two tamper-resistant *TORX* socket drivers (T55, T60)
- Two tamper-resistant long *TORX* socket drivers (T55, T60)



### Combination Socket Driver Set (30pc)

**BLPHSSC30**

**BLPHSSC30 Hex Bit Socket Set**

**Set Components**

**(1/4" drive):**
- Five metric hex bit sockets (2.5 mm–6 mm)
- Six hex bit sockets (1/8"–1/4")

**(3/8" drive):**
- Five metric hex bit sockets (6 mm–10 mm)
- Five hex bit sockets (7/32"–7/16")

**(1/2" drive):**
- Five metric hex bit sockets (10 mm–19 mm)
- Four hex bit sockets (1/2"–3/4")



### *TORX* Sockets/ *TORX* and Hex Bit Sockets Set (87pc)

**BLPTHC87**

**BLPTHC87 *TORX* Sockets/*TORX* and Hex Bit Sockets Set**

**Set Components**

**(1/4" drive):**
- Five external *TORX* sockets (E4–E8)
- 10 *TORX* bit sockets (T6–T30)
- 10 long *TORX* bit sockets (T6–T30)
- Five metric hex bit sockets (2.5 mm–6 mm)
- Three long metric hex bit sockets (4 mm–6 mm)
- Six hex bit sockets (1/8"–1/4")
- Three long hex bit sockets (1/8"–3/16")

**(3/8" drive):**
- Four external *TORX* sockets (E10–E16)
- Three *TORX* bit sockets (T40–T50)
- Three long *TORX* bit sockets (T40–T50)
- Five metric hex bit sockets (6 mm–10 mm)
- Four long metric hex bit sockets (7 mm–10 mm)
- Four hex bit sockets (7/32"–3/8")
- Four long hex bit sockets (7/32"–3/8")

**(1/2" drive):**
- Four external *TORX* sockets (E18–E24)
- Two *TORX* bit sockets (T55, T60)
- Two long *TORX* bit sockets (T55, T60)
- Five metric hex bit sockets (10 mm–19 mm)
- Five hex bit sockets (7/16"–3/4")

## GENERAL SERVICE SETS



**BLPGSS1233**

**BLPGSS1233 1/2" Drive General Service Set**

**Set Components:**
- 15 fractional (3/8"–1 1/4") and 12 metric (12 mm–24 mm) standard sockets
- One breaker bar
- One universal joint
- One quick release ratchet
- Three extensions (3", 6" and 10")

# WHEN THE GOING GETS TOUGH, TECHS GO TO SNAP-ON.

Sometimes – particularly when it comes to heavy-duty machinery and vehicles – the bigger they are, the harder the job. That's why, for the tough tasks, Snap-on designed tough tools.

**OUR STRONG SUIT.**

At Snap-on, we're experts at making strong tools – and our 3/4" drive tools are no exception. Made with alloy-content steel, these tools are stronger, more durable and built to tackle any job.

**DESIGNED FOR PERFORMANCE.**

These tools aren't just for show. Uniform wall thickness provides greater access and improved performance where you need it most.



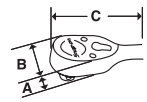
# RATCHET HEADS/HANDLES



L872



GL872



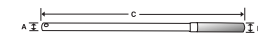



L872H L872RM L872RJ

## Heads

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| L872 | Sealed | 32 | 11° | 1 1/4 | 2 1/2 | 5 15/16 | RKRQC4 |
| GL872 | Sealed Industrial Finish | 32 | 11° | 1 1/4 | 2 1/2 | 5 15/16 | RKRQC4 |

## Handles




| Stock No. | Description | A | B | C |
|---|---|---|---|---|
| L872H | Plain w/ locking button | 13/16 | 19 1/4 | 15/16 |
| L872RM | Knurled | 15/16 | 36 | 1 1/8 |
| L872RJ | Knurled | 15/16 | 19 1/4 | 1 1/8 |

## Head and Handle Combinations

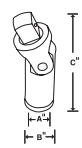
| | Heads using 13/16" (small) diameter handle holes | Heads using 15/16" (large) diameter handle holes | |
|---|---|---|---|
| | **L52B** Sliding T-Handle Head | **L872** Ratchet Head | **L8112A** Breaker Bar Head |
| Short 19 1/4" Handle (Lock Button Both Ends) | **L872H** | – | **L872H** |
| Short 19 1/4" Handle (Lock Button End/Knurled End) | – | **L872RJ** | **L872RJ** |
| Long 36" Handle (Lock Button End/Knurled End) | – | **L872RM** | **L872RM** |

ASME®/ANSI® B107.10

# DRIVE HANDLES



L8112A

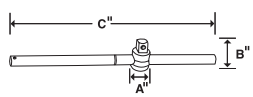



## Breaker Bar/Breaker Bar Head

| Head Only | A | B | C | Use with Handle |
|---|---|---|---|---|
| L8112A | 15/16 | 1 9/16 | 3 11/16 | L872RM or L872RJ |



L52B




## Sliding T-Handle

- Designed for heavier applications
- Spring and friction ball hold head in position

| Stock No. | A | B |
|---|---|---|
| L52B | 1 1/2 | 2 5/16 |

Use L52B with L872H handle.

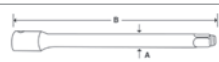
# SOCKET/RATCHET ACCESSORIES



L32



GL42




## Extensions with Locking Button

| Stock No. | Industrial Stock No. | A | B |
|---|---|---|---|
| L32 | GL32 | 15/16 | 3 |
| L42 | GL42 | 15/16 | 5 |
| L62 | GL62 | 15/16 | 8 |
| L122 | GL122 | 15/16 | 16 |

## Universal Joint

| Stock No. | A | B |
|---|---|---|
| L82A | 1 9/16 | 3 7/8 |

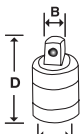





L82A

## Adaptors

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| GLA12B | 1/2 | 3/4 | 1 1/8 | 1 7/8 |
| GLAS1F | 3/4 | 1/2 | 1 7/16 | 2 7/16 |
| GLA72A | 3/4 | 1 | 1 7/16 | 2 5/8 |
| GLA124A | 1 | 3/4 | 1 13/16 | 2 3/4 |



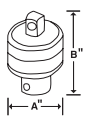



GLAS1F

## Ratchet Adaptor

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | Repair Kit |
|---|---|---|---|---|---|---|
| L672B | Ratchet Adaptor | 44 | 8.2° | 2 1/2 | 3 15/16 | RKR881B |

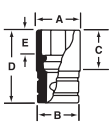
ASME®/ANSI® B107.10






L672B

# FLANK DRIVE® SOCKETS






LDH482



LDHM382

## Shallow, inches

| | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/4 | LDH242 | 1 1/8 | 1 7/16 | 1 1/4 | 2 | 17/32 |
| 13/16 | LDH262 | 1 7/32 | 1 7/16 | 1 1/4 | 2 | 11/16 |
| 7/8 | LDH282 | 1 5/16 | 1 7/16 | 1 1/4 | 2 | 11/16 |
| 15/16 | LDH302 | 1 3/8 | 1 7/16 | 1 1/4 | 2 | 23/32 |
| 31/32 | LDH312 | 1 13/32 | 1 7/16 | 1 1/4 | 2 | 23/32 |
| 1 | LDH322 | 1 15/32 | 1 1/2 | 1 5/16 | 2 1/16 | 3/4 |
| 1 1/16 | LDH342 | 1 9/16 | 1 1/2 | 1 3/8 | 2 1/8 | 3/4 |
| 1 1/8 | LDH362 | 1 5/8 | 1 1/2 | 1 7/16 | 2 3/16 | 13/16 |
| 1 3/16 | LDH382 | 1 11/16 | 1 1/2 | 1 1/2 | 2 1/4 | 7/8 |
| 1 1/4 | LDH402 | 1 3/4 | 1 1/2 | 1 1/2 | 2 1/4 | 15/16 |
| 1 5/16 | LDH422A | 1 7/8 | 1 3/4 | 1 9/16 | 2 1/2 | 7/8 |
| 1 3/8 | LDH442 | 1 15/16 | 1 3/4 | 1 9/16 | 2 1/2 | 15/16 |
| 1 7/16 | LDH462 | 2 | 1 3/4 | 1 5/8 | 2 1/2 | 15/16 |
| 1 1/2 | LDH482 | 2 1/8 | 1 3/4 | 1 11/16 | 2 1/2 | 1 1/16 |
| 1 9/16 | LDH502 | 2 3/16 | 1 3/4 | 1 7/8 | 2 5/8 | 1 5/32 |
| 1 5/8 | LDH522 | 2 1/4 | 1 3/4 | 1 7/8 | 2 5/8 | 1 5/32 |
| 1 11/16 | LDH542 | 2 3/8 | 1 3/4 | 2 | 2 3/4 | 1 3/16 |
| 1 3/4 | LDH562 | 2 7/16 | 1 3/4 | 2 | 2 3/4 | 1 3/16 |
| 1 13/16 | LDH582 | 2 1/2 | 1 3/4 | 2 1/8 | 2 7/8 | 1 1/4 |
| 1 7/8 | LDH602 | 2 9/16 | 1 3/4 | 2 1/4 | 3 | 1 5/16 |
| 2 | LDH642 | 2 3/4 | 1 3/4 | 2 3/8 | 3 1/8 | 1 3/8 |
| 2 1/16 | LDH662 | 2 15/16 | 1 3/4 | 2 3/8 | 3 1/8 | 1 3/8 |
| 2 1/8 | LDH682 | 2 15/16 | 1 3/4 | 2 1/2 | 3 1/4 | 1 7/16 |
| 2 3/16 | LDH702 | 2 15/16 | 1 3/4 | 2 1/2 | 3 1/4 | 1 1/2 |
| 2 1/4 | LDH722 | 3 1/8 | 1 3/4 | 2 5/8 | 3 3/8 | 1 1/2 |
| 2 3/8 | LDH762 | 3 1/4 | 1 3/4 | 2 7/8 | 3 5/8 | 1 3/4 |

*ASME/ANSI* B107.1

## Shallow, mm

| mm | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 22 | LDHM222 | 31.1 | 34.6 | 30.2 | 50.8 | 17.1 |
| 24 | LDHM242 | 33.4 | 34.6 | 31.8 | 50.8 | 17.9 |
| 27 | LDHM272 | 37.3 | 39.5 | 31.8 | 54.0 | 19.9 |
| 30 | LDHM302 | 41.0 | 39.8 | 34.0 | 57.2 | 21.8 |
| 36 | LDHM362 | 49.3 | 41.2 | 35.1 | 58.7 | 22.1 |
| 41 | LDHM412 | 55.1 | 44.5 | 42.9 | 66.5 | 26.7 |



LS342

## Deep, inches

| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 1/16 | LS342 | 1 9/16 | 1 1/2 | 2 3/4 | 3 1/2 | 1 |

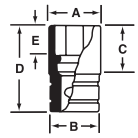
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

## SPLINE SOCKETS

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.






LES302

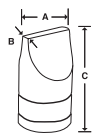
### Shallow, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #24 | 3/4 | LES242 | 1 3/64 | 1 3/8 | 1 | 1 51/64 | 41/64 |
| #30 | 15/16 | LES302 | 1 3/8 | 1 3/8 | 1 7/64 | 1 59/64 | 51/64 |
| #34 | 1 1/16 | LES342 | 1 35/64 | 1 19/32 | 1 | 2 3/64 | 57/64 |
| #36 | 1 1/8 | LES362 | 1 5/8 | 1 1/2 | 1 3/16 | 2 3/16 | 15/16 |

## SPECIAL APPLICATION SOCKETS



GLD139




### Drag Link, inches

| Stock No. | B x A | A | B | C |
|---|---|---|---|---|
| GLD138 | 13/64 x 1 3/8 | 1 3/8 | 13/64 | 2 3/16 |
| GLD139 | 1/4 x 1 11/16 | 1 11/16 | 1/4 | 2 3/16 |

### Military Vehicle Repair Socket

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 30 | IM382CD | 47.6 | 41.2 | 36.5 | 53.9 | 19.0 |

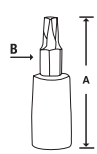
**IM382CD 6-Point Metric Shallow Impact Socket**

- Assault Breacher Vehicle
- Utility Truck (Tamen: D00347K)
- Abrams M-1 Tank
- Bridge Launcher Carrier
- M1A2 Heavy Assault Bridge (hab)/Wolverine, 5420-01-430-4227
- Armored Vehicle Launch Bridge (M60A1 & M48A5)
- Combat Tank, Ft, 120 mm gun (M1A1)

## TORX® BIT SOCKETS



T902E



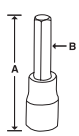

### *TORX*/Standard

| # | Stock No. | A | B |
|---|---|---|---|
| T80 | T802E | 4 3/8 | T802E2 |
| T90 | T902E | 4 3/8 | T902E2 |

## HEX BIT SOCKETS



LAWM19E

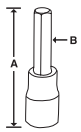



### Hex/Standard, mm

| mm | | A | B |
|---|---|---|---|
| 17 | LAWM17E | 104.7 | SAM17E2 |
| 19 | LAWM19E | 111.9 | SAM19E2 |

## Hex/Standard, inches

| | | A | B |
|---|---|---|---|
| 5/8 | LAW120E | 3 3/4 | LAW120E2 |
| 3/4 | LAW124E | 4 3/8 | LAW124E2 |






LAW120E



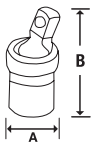





IM122B

## Extensions

| Stock No. | A | B |
|---|---|---|
| IM132A | 1 | 3 |
| IM62B | 1 | 7 |
| IM92B | 1 | 10 |
| IM122B | 1 | 13 |



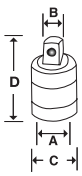



IP82

## Swivel Ball Universal Joint

- Maximum accessibility design
- No internal spring used

| Stock No. | A | B |
|---|---|---|
| IP82 | 1 3/4 | 3 5/32 |






IM124B

## Adaptors

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IM72 | 3/4 | 1 with Pin Hole | 1 5/8 | 2 9/16 |
| IM124B | 1 | 3/4 with Pin Hole | 2 3/8 | 2 13/16 |



IM243R



IM243P

## 3/4" Locking Rings and Pins

| Stock No. | Description | Use with |
|---|---|---|
| IM182R | Rubber Locking Ring | All 3/4" Drive Sockets/Accessories |
| IM182P | Steel Locking Pin | All 3/4" Drive Sockets/Accessories |
| IMR2 | Socket Retainer | All 3/4" Drive Sockets/Accessories |
| **Use the following for the IM124B Adaptor:** | | |
| IM243R | Rubber Locking Ring (Use with IM243P) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) plus IM124 Adaptor |
| IM243P | Steel Locking Pin (Use with IM243R) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) |

For use on SIM, IM, IMM and SIMM sockets and other accessories on this page.



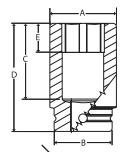
**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS



IMM302




## Shallow, mm

| mm | 6 | 12 | A | B | C | D | E | Set Contains: 425IMM 6 |
|---|---|---|---|---|---|---|---|---|
| 17 | IMM172A | – | 29.2 | 41.1 | 27.2 | 50.8 | 13.7 | • |
| 18 | IMM182A | – | 31.6 | 41.1 | 27.2 | 50.8 | 12.7 | • |
| 19 | IMM192A | – | 31.8 | 41.1 | 27.2 | 50.8 | 13.7 | • |
| 20 | IMM202A | IMMD202B | 35.1 | 41.1 | 27.2 | 50.8 | 14.0 | • |
| 21 | IMM212A | – | 34.9 | 41.1 | 27.2 | 50.8 | 15.2 | • |
| 22 | IMM222A | – | 38.1 | 41.1 | 27.2 | 50.8 | 15.2 | • |
| 23 | IMM232A | – | 36.3 | 41.1 | 27.2 | 50.8 | 16.5 | • |
| 24 | IMM242A | – | 39.5 | 41.1 | 26.4 | 50.8 | 16.5 | • |
| 25 | IMM252A | – | 39.6 | 41.1 | 26.4 | 50.8 | 16.3 | • |
| 26 | IMM262A | – | 39.6 | 41.1 | 26.4 | 50.8 | 17.5 | • |
| 27 | IMM272A | – | 42.6 | 41.1 | 26.4 | 50.8 | 19.0 | • |
| 28 | IMM282 | – | 44.7 | 41.1 | 32.8 | 57.2 | 17.5 | • |
| 29 | IMM292 | – | 46.0 | 41.1 | 32.8 | 57.2 | 18.0 | • |
| 30 | IMM302 | – | 47.0 | 44.5 | 32.8 | 57.2 | 19.1 | • |

| mm | 6 | 12 | A | B | C | D | E | Set Contains: 425IMM 6 |
|---|---|---|---|---|---|---|---|---|
| 31 | IMM312 | – | 49.2 | 44.5 | 32.8 | 57.2 | 19.1 | • |
| 32 | IMM322 | – | 50.8 | 44.5 | 32.8 | 57.2 | 20.6 | • |
| 33 | IMM332 | – | 50.8 | 44.5 | 32.8 | 57.2 | 20.3 | • |
| 34 | IMM342 | – | 50.8 | 44.5 | 32.8 | 57.2 | 22.4 | • |
| 35 | IMM352 | – | 54.0 | 44.5 | 32.8 | 57.2 | 22.4 | • |
| 36 | IMM362 | – | 54.0 | 44.5 | 32.8 | 57.2 | 22.4 | • |
| 38 | IMM382 | – | 57.2 | 44.5 | 32.8 | 57.2 | 23.9 | • |
| 40 | IMM402 | – | 59.7 | 44.5 | 45.5 | 69.9 | 28.4 | • |
| 41 | IMM412 | – | 60.5 | 44.5 | 33.5 | 57.2 | 26.2 | • |
| 42 | IMM422A | – | 63.1 | 44.5 | 46.9 | 66.9 | 28.6 | |
| 46 | IMM462 | – | 66.7 | 44.5 | 45.5 | 69.9 | 29.0 | • |
| 50 | IMM502 | – | 71.4 | 44.5 | 52.6 | 76.2 | 31.0 | • |

**IMMD202B 12-Point Metric Shallow Impact Socket**
Specific applications include removing the head bolts on Caterpillar® C7, C8, C9 and C10 engines.



IM402



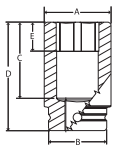
IMD302A

## Shallow, inches

| 11 | 6 | 12 | A | B | C | D | E | Set Contains: 429IM 6 | 417IM 6 | 418IM 6 | 429IMD 12 | 417IMD 12 | 418IMD 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/16 | IM182A | IMD182A | 1 | 1 5/8 | 1 | 1 3/4 | 7/16 | • | | | • | | |
| 5/8 | IM202A | IMD202A* | 1 3/32 | 1 5/8 | 1 | 1 3/4 | 1/2 | • | | | • | | |
| 11/16 | IM222A | IMD222A | 1 5/32 | 1 5/8 | 1 | 1 3/4 | 9/16 | • | | | • | | |
| 3/4 | IM242A | IMD242A | 1 1/4 | 1 5/8 | 1 | 1 3/4 | 9/16 | • | • | | • | • | |
| 13/16 | IM262A | IMD262A | 1 3/8 | 1 5/8 | 1 1/8 | 1 7/8 | 5/8 | • | • | | • | • | |
| 7/8 | IM282A | IMD282A | 1 1/2 | 1 5/8 | 1 1/8 | 1 7/8 | 5/8 | • | • | | • | • | |
| 15/16 | IM302A | IMD302A* | 1 9/16 | 1 5/8 | 1 1/8 | 1 7/8 | 3/4 | • | • | | • | • | |
| 1 | IM322A | IMD322A* | 1 5/8 | 1 5/8 | 1 1/4 | 2 | 3/4 | • | • | | • | • | |
| 1 1/16 | IM342A | IMD342A | 1 11/16 | 1 5/8 | 1 1/4 | 2 | 3/4 | • | • | | • | • | |
| 1 1/8 | IM362 | IMD362A | 1 7/8 | 1 5/8 | 1 3/8 | 2 1/8 | 3/4 | • | • | | • | • | |
| 1 3/16 | IM382 | IMD382 | 1 7/8 | 1 5/8 | 1 5/16 | 2 1/8 | 3/4 | • | • | | • | • | |
| 1 1/4 | IM402 | IMD402 | 2 | 1 3/4 | 1 3/8 | 2 1/8 | 13/16 | • | • | • | • | • | • |
| 1 5/16 | IM422 | IMD422 | 2 1/8 | 1 3/4 | 1 1/2 | 2 1/4 | 7/8 | • | • | • | • | • | • |
| 1 3/8 | IM442 | IMD442 | 2 1/8 | 1 3/4 | 1 1/2 | 2 1/4 | 7/8 | • | • | • | • | • | • |
| 1 7/16 | IM462 | IMD462 | 2 1/4 | 1 3/4 | 1 1/2 | 2 1/4 | 7/8 | • | • | • | • | • | • |
| 1 1/2 | IM482 | IMD482 | 2 1/4 | 1 3/4 | 1 1/2 | 2 1/4 | 15/16 | • | • | • | • | • | • |
| 1 9/16 | IM502 | IMD502 | 2 7/16 | 1 3/4 | 1 9/16 | 2 3/8 | 15/16 | • | • | • | • | • | • |
| 1 5/8 | IM522 | IMD522 | 2 7/16 | 1 3/4 | 1 5/8 | 2 3/8 | 7/8 | • | • | • | • | • | • |
| 1 11/16 | IM542 | IMD542 | 2 1/2 | 1 3/4 | 1 13/16 | 2 9/16 | 1 | • | • | • | • | • | • |
| 1 3/4 | IM562 | IMD562 | 2 1/2 | 1 3/4 | 1 13/16 | 2 9/16 | 1 | • | • | • | • | • | • |
| 1 13/16 | IM582 | IMD582 | 2 5/8 | 1 3/4 | 1 5/8 | 2 5/8 | 1 1/4 | • | | • | • | | • |
| 1 7/8 | IM602 | IMD602 | 2 5/8 | 1 3/4 | 1 3/4 | 2 3/4 | 1 1/8 | • | | • | • | | • |
| 1 15/16 | IM622A | IMD622 | 2 3/4 | 1 3/4 | 1 9/16 | 2 27/32 | 1 3/32 | • | | • | • | | • |
| 2 | IM642A | IMD642 | 2 7/8 | 1 3/4 | 1 15/16 | 2 7/8 | 1 1/8 | • | | • | • | | • |
| 2 1/16 | IM662A | IMD662 | 3 | 1 3/4 | 1 7/8 | 2 7/8 | 1 3/16 | • | | • | • | | • |
| 2 1/8 | IM682A | IMD682 | 3 | 1 3/4 | 1 3/4 | 3 | 1 1/4 | • | | • | • | | • |
| 2 3/16 | IM702A | IMD702 | 3 1/4 | 1 3/4 | 2 3/16 | 3 3/16 | 1 5/16 | • | | • | • | | • |
| 2 1/4 | IM722A | IMD722 | 3 1/4 | 1 3/4 | 2 3/16 | 3 3/16 | 1 3/8 | • | | • | • | | • |
| 2 3/8 | IM762A | IMD762 | 3 1/2 | 1 3/4 | 2 3/8 | 3 1/2 | 1 7/16 | • | | • | • | | • |

*Applications include repair of heavy duty trucks and off-road equipment, most diesel engines including *Caterpillar* and Cummins® plus head bolts and bearing cap bolts.

**IMD242A Applications:** Most *Caterpillar* head bolts, Detroit Diesel® main bearing cap bolts, K19 *Cummins* head bolts.






SIMDM212

## Deep, mm

| mm | 6 | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 17 | SIMM172 | – | 28.9 | 41.1 | 52.6 | 76.2 | 12.7 |
| 18 | SIMM182 | – | 31.7 | 41.3 | 76.2 | 101.6 | 12.7 |
| 19 | SIMM192 | – | 32.4 | 41.1 | 51.8 | 76.2 | 14.2 |
| 21 | SIMM212 | SIMDM212 | 34.2 (33.3) | 41.1 (41.3) | 37.4 (19) | 76.2 | 14.2 (18.3) |
| 22 | SIMM222 | – | 35.8 | 41.1 | 37.4 | 76.2 | 14.2 |
| 23 | SIMM232 | – | 35.8 | 41.1 | 37.2 | 76.2 | 16.3 |
| 24 | SIMM242 | – | 37.7 | 41.1 | 37.0 | 76.2 | 16.5 |
| 26 | SIMM262 | – | 39.6 | 41.1 | 36.7 | 76.2 | 16.3 |
| 27 | SIMM272 | – | 42.8 | 41.1 | 38.4 | 76.2 | 19.1 |
| 30 | SIMM302 | – | 46.8 | 41.1 | 58.2 | 82.6 | 18.5 |
| 32 | SIMM322 | – | 50.8 | 44.5 | 58.9 | 82.6 | 19.1 |
| 33 | SIMM332 | – | 52.4 | 44.5 | 57.4 | 82.6 | 22.4 |
| 35 | SIMM352 | – | 52.7 | 44.5 | 57.2 | 82.6 | 21.6 |
| 36 | SIMM362 | – | 54.0 | 44.5 | 62.5 | 88.9 | 22.9 |
| 38 | SIMM382 | – | 57.2 | 44.5 | 65.3 | 88.9 | 23.8 |
| 41 | SIMM412* | – | 55.1 | 44.5 | 74.9 | 100.1 | 26.7 |
| 46 | SIMM462 | – | 76.7 | 44.5 | 72.4 | 101.6 | 29.1 |

*Applications include usage on stud piloted, budd style wheels.

Dimensions in ( ) apply to 12-point sockets only.

**SIMDM212 Application:** Flywheel bolts on Cummins® ISX engines.



423SIM

## Deep, inches

| Set Contains: 423SIM | | | | | | | |
|---|---|---|---|---|---|---|---|
| in | 6 | A | B | C | D | E | 6 |
| 9/16 | SIM182 | 1 | 1 5/8 | 2 1/16 | 3 | 9/16 | • |
| 5/8 | SIM202 | 1 1/16 | 1 5/8 | 2 1/16 | 3 | 9/16 | • |
| 11/16 | SIM222 | 1 1/8 | 1 5/8 | 2 1/16 | 3 | 9/16 | • |
| 3/4 | SIM242 | 1 1/4 | 1 5/8 | 2 | 3 | 9/16 | • |
| 13/16 | SIM262 | 1 3/8 | 1 5/8 | 2 | 3 | 5/8 | • |
| 7/8 | SIM282 | 1 1/2 | 1 5/8 | 2 | 3 | 5/8 | • |
| 15/16 | SIM302 | 1 5/8 | 1 5/8 | 2 | 3 | 5/8 | • |
| 1 | SIM322 | 1 5/8 | 1 5/8 | 2 | 3 | 11/16 | • |
| 1 1/16 | SIM342 | 1 3/4 | 1 5/8 | 2 | 3 | 11/16 | • |
| 1 1/8 | SIM362 | 1 3/4 | 1 5/8 | 2 | 3 | 3/4 | • |
| 1 3/16 | SIM382 | 2 | 1 3/4 | 2 1/4 | 3 1/4 | 3/4 | • |
| 1 1/4 | SIM402 | 2 | 1 3/4 | 2 1/4 | 3 1/4 | 7/8 | • |
| 1 5/16 | SIM422 | 2 1/8 | 1 3/4 | 2 9/16 | 3 1/4 | 7/8 | • |
| 1 3/8 | SIM442 | 2 1/8 | 1 3/4 | 2 1/4 | 3 1/4 | 7/8 | • |
| 1 7/16 | SIM462 | 2 3/16 | 1 3/4 | 2 1/2 | 3 1/2 | 7/8 | • |
| 1 1/2 | SIM482 | 2 1/4 | 1 3/4 | 2 1/2 | 3 1/2 | 15/16 | • |
| 1 9/16 | SIM502 | 2 5/16 | 1 3/4 | 2 1/2 | 3 1/2 | 15/16 | • |
| 1 5/8 | SIM522 | 2 7/16 | 1 3/4 | 2 1/2 | 3 1/2 | 15/16 | • |
| 1 11/16 | SIM542 | 2 1/2 | 1 3/4 | 2 1/2 | 3 1/2 | 1 | • |
| 1 3/4 | SIM562 | 2 1/2 | 1 3/4 | 2 1/2 | 3 1/2 | 1 | • |
| 1 13/16 | SIM582 | 2 5/8 | 1 3/4 | 2 3/4 | 3 3/4 | 1 1/16 | • |
| 1 7/8 | SIM602 | 2 11/16 | 1 3/4 | 2 3/4 | 3 3/4 | 1 1/8 | • |
| 2 | SIM642A | 2 13/16 | 1 3/4 | 2 3/4 | 3 3/4 | 1 1/8 | • |

Larger sizes available on special order.



WARNING • Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS



SIMML242



## Extra Deep, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 24 | SIMML242 | 39.5 | 38.1 | 101.6 | 127 | 16.5 |

**SIMML242 6-Point Metric Extra Deep Impact Socket**
- For removing and installing the head bolts on Cummins® ISX engines



IMM503TW



IMFS482A

## Shallow Thin Wall, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 50 | IMM503TW | 65 | 57.2 | 49 | 82.6 | 3.71 |
| 55 | IMM553TW | 75.9 | 60.5 | 53.8 | 88.9 | 34.8 |

## Shallow Thin Wall, inches

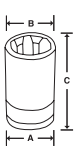
| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 1/2 | IMFS482A | 54 | 44.4 | 36.6 | 63.5 | 24.1 |



IMFDL242



IMSLE242A



## Deep Thin Wall, inches

| | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/4 | IMFDL242 | 1 3/8 | 1 5/8 | 4 3/4 | 5 3/4 | 1/2 |

Larger sizes available on special order.

**IMFDL242 Deep Thin Wall Impact Socket**
- Designed to remove the head bolts on Caterpillar® C12, C15, C16 and 3406ES vehicles where the front two and back two head bolts are positioned under the valve covers where thin walled long sockets are required
- Additional applications include Detroit Diesel® main bearing cap bolts and 19 mm head bolts on Mercedes-Benz® MBE904/MBE906 EGR engines (2007 and later)
- 3/4" wrench size, 3/4" drive, 5 3/4" long

## Inverted TORX®

| # | Stock No. | A | B | C |
|---|---|---|---|---|
| E24 | IMSLE242A | 1 5/8 | 1 5/8 | 3 3/4 |

**IMSLE242A Inverted *TORX* Impact Socket**
- For removing and installing head bolts on MaxxForce® 11 and 13 engines found on D15 International® Trucks from 2010–current
- Used for installation of shear type E24 bolts during alignment of suspensions on Hendrickson® and Dayton® trailers
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability



434HDC



414AHD

## 434HDC 12-Point Fractional General Service Set 35 Tools, includes:

| | 12-Point Shallow Sockets |
|---|---|
| 3/4 | LDH242 |
| 13/16 | LDH262 |
| 7/8 | LDH282 |
| 15/16 | LDH302 |
| 31/32 | LDH312 |
| 1 | LDH322 |
| 1 1/16 | LDH342 |
| 1 1/8 | LDH362 |
| 1 3/16 | LDH382 |
| 1 1/4 | LDH402 |
| 15/16 | LDH422A |
| 1 3/8 | LDH442 |
| 1 7/16 | LDH462 |
| 1 1/2 | LDH482 |
| 1 9/16 | LDH502 |
| 1 5/8 | LDH522 |
| 1 11/16 | LDH542 |
| 1 3/4 | LDH562 |
| 1 13/16 | LDH582 |
| 1 7/8 | LDH602 |
| 2 | LDH642 |
| 2 1/16 | LDH662 |
| 2 1/8 | LDH682 |
| 2 3/16 | LDH702 |
| 2 1/4 | LDH722 |
| 2 3/8 | LDH762 |

| Also Includes: | | |
|---|---|---|
| | L32 | 3" Extension |
| | L62 | 8" Extension |
| | L122 | 16" Extension |
| | L52B | Sliding Head |
| | L872 | Ratchet Head |
| | L82A | Universal Joint |
| | L8112A | Breaker Bar Head |
| | L672B | Ratchet Adaptor |
| | L872H | 19 1/4" Handle |
| | PB434HD | Storage Case w/ Foam |

## 414AHD 12-Point Fractional General Service Set (Tools with Storage Tray) 15 Tools, Includes:

| | 12-Point Shallow Sockets |
|---|---|
| 1 1/16 | LDH342 |
| 1 1/8 | LDH362 |
| 1 1/4 | LDH402 |
| 1 5/16 | LDH422A |
| 1 3/8 | LDH442 |
| 1 7/16 | LDH462 |
| 1 1/2 | LDH482 |
| 1 5/8 | LDH522 |
| 1 3/4 | LDH562 |
| 1 7/8 | LDH602 |

| Also Includes: | | |
|---|---|---|
| | L62 | 8" Extension |
| | L122 | 16" Extension |
| | L872 | Ratchet Head |
| | L872RJ | 19 1/4" Handle |
| | L8112A | Breaker Bar Head |

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# TOOLS THAT FLEX THEIR MUSCLE.

Big jobs call for real muscle. That's why, when techs are in need of some serious brawn, they reach for our 1" – 2 1/2" drive tools. When you've got a docket full of heavy-duty operations ahead of you – work on semis, construction equipment, hydraulics or other heavy metal – Snap-on® drive tools provide just the right might. Going mano-a-mano against some big jobs? Hey – we've got your back.

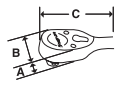
**Flank Drive® —** Our *Flank Drive* wrenching system grabs fasteners on the flats, increasing torque and preventing fastener corners from rounding off.

**Impact Sockets —** Made with a blend of alloy steel, our impact sockets possess a lower heat-treated hardness than hand sockets. They're built to withstand the repeated cycle loads of pneumatic and cordless impact wrenches. And, Snap-on *Flank Drive* impact sockets exceed ANSI performance standards.

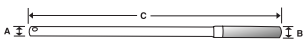


## Heads

| Stock No. | Description | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| L873 | Sealed | 30 | 12° | 1 1/2 | 3 1/8 | 7 7/8 | RKRQC5 |
| GL873 | Sealed Industrial Finish | 30 | 12° | 1 1/2 | 3 1/8 | 7 7/8 | RKRQC5 |




## 1" Handle/Handle Extension




**L53HB Handle**
- Plain handle with locking buttons at both ends
- Use on 1" drive ratchet heads, breaker bar heads and sliding T-heads

**L853HA1 Handle Extension**
- Knurled grip extension handle attaches to L53HB handle for added leverage
- Only used with L53HB handle; L853HA1 will not connect directly to L873 ratchet head



L873



GL873

| Stock No. | A | B |
|---|---|---|
| L53HB | 1 1/8 | 29 |
| L853HA1 | 1 3/8 | 36 |



L53HB



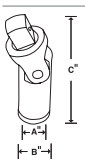
L853HA1

## Head and Handle Combinations

| Stock No. | Description | Required Handle | Optional Handle Extension |
|---|---|---|---|
| L873 | Ratchet Head | L53HB | L853HA1 |
| L113H | Breaker Bar Head | L53HB | – |
| L53A | Sliding T-handle Head | L53HB | – |

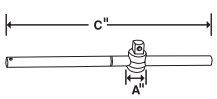
ASME®/ANSI® B107.10








L113H






L53

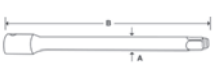
## Breaker Bar/Breaker Bar Head

| Handle w/ Head | Length | Head Only | A | B | C | Handle Only |
|---|---|---|---|---|---|---|
| L113H | 32 5/32 | L113 | 15/16 | 2 1/8 | 4 29/32 | L53HB |

## Sliding T-Handle

| Stock No. | C | Sliding Head Only Stock No. | A | Handle Stock No. |
|---|---|---|---|---|
| L53 | 29 | L53A | 2 | L53HB |



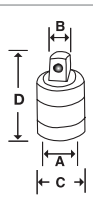





L63

## Extension with Locking Button

| Stock No. | A | B |
|---|---|---|
| L63 | 1 1/4 | 8 |





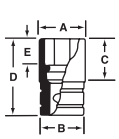

GLA72A

## Adaptors

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| GLA72A | 3/4 | 1 | 1 7/16 | 2 5/8 |
| GLA124A | 1 | 3/4 | 1 13/16 | 2 3/4 |

*ASME/ANSI* B107.10






Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool. Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.

## Shallow, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #32 | 1 | LES323 | 1 29/64 | 1 55/64 | 1 35/64 | 2 7/16 | 53/64 |
| #34 | 1 1/16 | LES343 | 1 35/64 | 1 55/64 | 1 37/64 | 2 35/64 | 57/64 |
| #38 | 1 3/16 | LES383 | 1 23/64 | 1 63/64 | 1 25/32 | 2 51/64 | 1 1/64 |



LES323

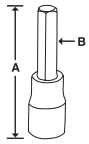
**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# HEX BIT SOCKETS



IMA283




## Hex Standard, inches

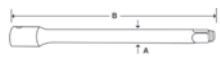
| | | A | B |
|---|---|---|---|
| 7/8 | IMA283 | 5 5/8 | IMA238-2 |
| 1 | IMA323 | 5 5/8 | IMA323-2 |

# IMPACT ACCESSORIES



IM133

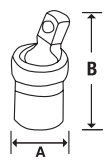
## Extensions with Pin Hole



| Stock No. | A | B |
|---|---|---|
| IM133 | 1 | 3 |
| IM63B | 1 1/8 | 7 1/8 |
| IM123 | 1 3/8 | 13 1/8 |



IP83

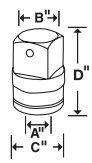



## Swivel Universal Joint with Pin Hole

| Stock No. | A | B |
|---|---|---|
| IP83 | 2 1/2 | 4 3/16 |



IM35




## Adaptors with Pin Hole

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IM72 | 3/4 | 1 with Pin Hole | 1 5/8 | 2 9/16 |
| IM124B | 1 | 3/4 | 2 3/8 | 2 13/16 |
| IM35 | 1 | 1 1/2 | 2 1/4 | 3 1/2 |
| IM53 | 1 1/2 | 1 | 3 1/4 | 4 1/4 |



IM243R



IM243P

## 1" Drive Locking Rings and Pins

| Stock No. | Description | Use with |
|---|---|---|
| IM483R | Rubber Locking Pin (Use with IM483P) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |
| IM243R | Rubber Locking Ring (Use with IM243P) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) plus IM124 Adaptor |
| IM243P | Steel Locking Pin, (Use with IM243R) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) |
| IMR3 | Socket Retainer | All 1" Drive Sockets/Accessories, All #5 Spline Drive Sockets/Accessories |
| IM483P | Steel Locking Pin (Use with IM483R) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |



## Shallow, mm



IMM503

| mm | 6 | A | B | C | D | E | Set Contains: 516IMM 6 |
|---|---|---|---|---|---|---|---|
| 27 | IMM273 | 44.5 | 53.8 | 27.0 | 57.2 | 17.5 | • |
| 30 | IMM303 | 47.8 | 53.8 | 27.0 | 57.2 | 17.5 | • |
| 32 | IMM323 | 50.8 | 53.8 | 33.3 | 63.5 | 19.1 | • |
| 33 | IMM333 | 52.3 | 53.8 | 33.3 | 63.5 | 22.4 | • |
| 35 | IMM353 | 53.8 | 53.8 | 33.5 | 63.5 | 22.4 | • |
| 36 | IMM363 | 57.2 | 57.2 | 34.3 | 63.5 | 22.4 | • |
| 38 | IMM383 | 59.7 | 57.2 | 40.1 | 69.9 | 23.6 | • |
| 41 | IMM413A | 59.9 | 57.2 | 39.6 | 69.9 | 26.4 | • |
| 46 | IMM463 | 69.9 | 60.5 | 44.2 | 76.2 | 30.0 | • |
| 50 | IMM503 | 69.9 | 60.5 | 49.3 | 82.6 | 31.2 | • |
| 55 | IMM553 | 82.6 | 60.3 | 46.7 | 82.6 | 31.8 | • |
| 60 | IMM603 | 88.9 | 57.2 | 51.6 | 88.9 | 38.1 | • |
| 65 | IMM653 | 92.1 | 60.5 | 63.8 | 101.6 | 45.7 | • |
| 70 | IMM703 | 95.3 | 60.5 | 62.2 | 101.6 | 45.7 | • |
| 75 | IMM753 | 104.8 | 60.5 | 67.1 | 108.0 | 51.6 | • |
| 80 | IMM803 | 108.7 | 61.1 | 65.9 | 108.7 | 47.6 | • |

## Shallow, inches



IM703

| 11 | 6 | A | B | C | D | E | Set Contains: 521IM | 516IM | 522IM |
|---|---|---|---|---|---|---|---|---|---|
| 3/4 | IM243 | 1 7/16 | 2 1/8 | 1 | 2 1/8 | 11/16 | • | | |
| 13/16 | IM263 | 1 7/16 | 2 1/8 | 1 | 2 1/8 | 11/16 | • | | |
| 7/8 | IM283 | 1 1/2 | 2 1/8 | 1 | 2 1/8 | 11/16 | • | | |
| 15/16 | IM303 | 1 19/32 | 2 1/8 | 1 | 2 1/8 | 11/16 | • | | |
| 1 | IM323 | 1 11/16 | 2 1/8 | 1 1/16 | 2 1/4 | 11/16 | • | | |
| 1 1/16 | IM343 | 1 3/4 | 2 1/8 | 1 1/16 | 2 1/4 | 11/16 | • | | |
| 1 1/8 | IM363 | 1 7/8 | 2 1/8 | 1 1/16 | 2 1/4 | 11/16 | • | | |
| 1 3/16 | IM383 | 1 7/8 | 2 1/8 | 1 1/16 | 2 1/4 | 11/16 | • | | |
| 1 1/4 | IM403 | 2 | 2 1/8 | 1 3/16 | 2 3/8 | 3/4 | • | | |
| 1 5/16 | IM423 | 2 1/16 | 2 1/8 | 1 15/16 | 2 1/2 | 7/8 | • | | |
| 1 3/8 | IM443 | 2 1/8 | 2 1/8 | 1 15/16 | 2 1/2 | 7/8 | • | | |
| 1 7/16 | IM463 | 2 1/4 | 2 1/4 | 1 7/16 | 2 1/2 | 15/16 | • | | |
| 1 1/2 | IM483B | 2 3/8 | 2 1/4 | 1 7/16 | 2 5/8 | 15/16 | • | | |
| 1 9/16 | IM503A | 2 3/8 | 2 1/4 | 1 7/16 | 2 5/8 | 15/16 | • | | |
| 1 5/8 | IM523A | 2 3/8 | 2 1/4 | 1 5/8 | 2 3/4 | 1 1/16 | • | | |
| 1 11/16 | IM543 | 2 9/16 | 2 3/8 | 1 5/8 | 2 3/4 | 1 1/16 | • | | |
| 1 3/4 | IM563 | 2 5/8 | 2 3/8 | 1 23/32 | 2 7/8 | 1 5/32 | • | | |
| 1 13/16 | IM583 | 2 3/4 | 2 3/8 | 1 23/32 | 2 15/16 | 1 3/16 | • | | |
| 1 7/8 | IM603 | 2 3/4 | 2 3/8 | 1 23/32 | 2 15/16 | 1 3/16 | • | | |
| 1 15/16 | IM623 | 2 3/4 | 2 3/8 | 1 23/32 | 2 15/16 | 1 3/16 | • | | |
| 2 | IM643 | 3 | 2 3/8 | 1 31/32 | 3 1/8 | 1 9/32 | • | | |
| 2 1/16 | IM663 | 3 | 2 3/8 | 1 31/32 | 3 1/8 | 1 9/32 | | • | |
| 2 1/8 | IM683 | 3 1/8 | 2 3/8 | 2 3/32 | 3 1/4 | 1 9/32 | | • | |
| 2 3/16 | IM703 | 3 1/4 | 2 3/8 | 2 5/32 | 3 11/32 | 1 7/16 | | • | |
| 2 1/4 | IM723 | 3 1/4 | 2 3/8 | 2 5/32 | 3 11/32 | 1 7/16 | | • | |
| 2 5/16 | IM743 | 3 3/8 | 2 3/8 | 2 5/32 | 3 1/2 | 1 1/2 | | • | |
| 2 3/8 | IM763 | 3 1/2 | 2 3/8 | 2 5/32 | 3 1/2 | 1 1/2 | | • | |
| 2 7/16 | IM783 | 3 1/2 | 2 3/8 | 2 5/32 | 3 1/2 | 1 1/2 | | • | |
| 2 1/2 | IM803 | 3 1/2 | 2 3/8 | 2 1/8 | 3 5/8 | 1 5/8 | | • | |
| 2 9/16 | IM823 | 3 5/8 | 2 3/8 | 2 1/8 | 3 5/8 | 1 5/8 | | • | |
| 2 5/8 | IM843 | 3 3/4 | 2 3/8 | 2 5/16 | 3 3/4 | 1 5/8 | | • | |
| 2 11/16 | IM863 | 3 3/4 | 2 3/8 | 2 1/2 | 4 | 1 13/16 | | • | |

| 11 | 6 | A | B | C | D | E | Set Contains: 521IM | 516IM | 522IM |
|---|---|---|---|---|---|---|---|---|---|
| 2 3/4 | IM883 | 3 3/4 | 2 3/8 | 2 7/16 | 4 | 1 13/16 | | • | |
| 2 13/16 | IM903 | 4 | 2 3/8 | 2 7/16 | 4 | 1 13/16 | | • | |
| 2 7/8 | IM923 | 4 | 2 3/8 | 2 7/16 | 4 | 1 13/16 | | • | |
| 2 15/16 | IM943 | 4 1/8 | 2 3/8 | 2 5/8 | 4 1/4 | 2 | | • | |
| 3 | IM963 | 4 1/4 | 2 3/8 | 2 5/8 | 4 1/4 | 2 1/16 | | • | |
| 3 1/8 | IM1003 | 4 1/4 | 2 3/8 | 2 9/16 | 4 1/4 | 2 1/16 | | • | |
| 3 1/4 | IM1043 | 4 1/2 | 2 3/8 | 2 9/16 | 4 1/4 | 2 1/16 | | • | |
| 3 3/8 | IM1083 | 4 5/8 | 2 3/8 | 2 3/4 | 4 1/2 | 2 1/4 | | • | |
| 3 1/2 | IM1123 | 4 3/4 | 2 3/8 | 3 | 4 3/4 | 2 1/4 | | • | |
| 3 5/8 | IM1163 | 5 | 2 3/8 | 2 15/16 | 4 3/4 | 2 5/16 | | | • |
| 3 11/16 | IM1183 | 5 5/16 | 2 3/8 | 3 3/16 | 5 | 2 7/16 | | | • |
| 3 3/4 | IM1203 | 5 1/8 | 2 3/8 | 2 7/8 | 4 3/4 | 2 3/8 | | | • |
| 3 13/16 | IM1223 | 5 3/8 | 2 3/8 | 3 1/8 | 5 | 2 1/2 | | | • |
| 3 7/8 | IM1243 | 5 1/4 | 2 3/8 | 3 1/8 | 5 | 2 9/16 | | | • |
| 3 15/16 | IM1263 | 5 3/8 | 2 3/8 | 3 3/8 | 5 1/4 | 2 9/16 | | | • |
| 4 | IM1283 | 5 1/2 | 2 3/8 | 3 1/16 | 5 | 2 9/16 | | | • |
| 4 1/16 | IM1303 | 5 1/2 | 2 3/8 | 3 1/16 | 5 | 2 9/16 | | | • |
| 4 1/8 | IM1323 | 5 9/16 | 2 3/8 | 3 1/16 | 5 | 2 9/16 | | | • |
| 4 3/16 | IM1343 | 6 | 2 3/8 | 3 | 5 | 2 9/16 | | | • |
| 4 1/4 | IM1363 | 5 3/4 | 2 3/8 | 3 1/4 | 5 1/4 | 2 5/8 | | | • |
| 4 5/16 | IM1383 | 5 25/32 | 2 3/8 | 3 7/16 | 5 1/2 | 2 5/8 | | | • |
| 4 3/8 | IM1403 | 5 13/16 | 2 3/8 | 3 3/16 | 5 1/4 | 2 5/8 | | | • |
| 4 7/16 | IM1423 | 6 | 2 3/8 | 3 3/16 | 5 1/4 | 2 11/16 | | | • |
| 4 1/2 | IM1443 | 6 | 2 3/8 | 3 3/16 | 5 1/4 | 2 5/8 | | | • |
| 4 9/16 | IM1463 | 6 1/2 | 2 3/8 | 3 7/16 | 5 1/2 | 2 3/4 | | | • |
| 4 5/8 | IM1483 | 6 7/16 | 2 3/8 | 3 7/8 | 6 | 3 1/16 | | | • |
| 4 3/4 | IM1523 | 6 5/8 | 2 3/8 | 3 5/8 | 5 3/4 | 2 7/8 | | | • |
| 4 7/8 | IM1563 | 7 | 2 3/8 | 3 9/16 | 5 3/4 | 3 | | | • |
| 5 | IM1603 | 7 | 2 3/8 | 3 1/2 | 5 3/4 | 3 | | | • |
| 5 3/8 | IM1723 | 7 1/2 | 2 3/8 | 4 7/16 | 6 3/4 | 3 9/16 | | | • |
| 5 3/4 | IM1843 | 8 1/4 | 2 3/8 | 4 5/16 | 6 3/4 | 3 9/16 | | | • |

**⚠WARNING** • Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS





SIM563

## Deep, inches

| 11 | 6 | A | B | C | D | E | Set Contains: 519SIM | 520SIM | 517SIM |
|---|---|---|---|---|---|---|---|---|---|
| 7/8 | SIM283 | 1 19/32 | 2 1/8 | 1 13/16 | 3 | 5/8 | • | | |
| 15/16 | SIM303 | 1 19/32 | 2 1/8 | 1 13/16 | 3 | 11/16 | • | | |
| 1 | SIM323 | 1 19/32 | 2 1/8 | 1 13/16 | 3 | 3/4 | • | | |
| 1 1/16 | SIM343 | 1 3/4 | 2 1/8 | 1 13/16 | 3 | 3/4 | • | | |
| 1 1/8 | SIM363 | 1 13/16 | 2 1/8 | 1 13/16 | 3 | 3/4 | • | | |
| 1 3/16 | SIM383 | 1 13/16 | 2 1/8 | 1 13/16 | 3 | 3/4 | • | | |
| 1 1/4 | SIM403 | 2 1/16 | 2 1/8 | 2 1/16 | 3 1/4 | 7/8 | • | | |
| 1 5/16 | SIM423* | 2 1/16 | 2 1/8 | 2 1/16 | 3 1/4 | 7/8 | • | | |
| 1 3/8 | SIM443 | 2 1/16 | 2 1/8 | 2 1/16 | 3 1/4 | 7/8 | • | | |
| 1 7/16 | SIM463A | 2 1/4 | 2 1/8 | 2 3/32 | 3 1/4 | 29/32 | • | | |
| 1 1/2 | SIM483B** | 2 3/8 | 2 1/4 | 2 11/32 | 3 1/2 | 1 | • | | |
| 1 9/16 | SIM503A | 2 3/8 | 2 1/4 | 2 11/32 | 3 1/2 | 1 | • | | |
| 1 5/8 | SIM523B | 2 3/8 | 2 1/4 | 2 1/2 | 3 5/8 | 1 | • | | |
| 1 11/16 | SIM543 | 2 1/2 | 2 3/8 | 2 7/16 | 3 5/8 | 1 1/8 | • | | |
| 1 3/4 | SIM563 | 2 3/4 | 2 3/8 | 2 11/16 | 3 7/8 | 1 1/8 | • | | |
| 1 13/16 | SIM583 | 2 3/4 | 2 3/8 | 2 11/16 | 3 7/8 | 1 3/16 | • | | |
| 1 7/8 | SIM603 | 2 3/4 | 2 3/8 | 2 11/16 | 3 7/8 | 1 3/16 | • | | |
| 1 15/16 | SIM623 | 3 | 2 3/8 | 2 15/16 | 4 1/8 | 1 1/4 | • | | |
| 2 | SIM643 | 3 | 2 3/8 | 2 15/16 | 4 1/8 | 1 5/16 | • | | |
| 2 1/16 | SIM663 | 3 | 2 1/4 | 2 15/16 | 4 1/4 | 1 5/16 | | • | |
| 2 1/8 | SIM683 | 3 1/8 | 2 1/4 | 2 7/8 | 4 1/4 | 1 5/16 | | • | |
| 2 3/16 | SIM703 | 3 1/4 | 2 1/4 | 3 1/8 | 4 1/2 | 1 1/2 | | • | |
| 2 1/4 | SIM723 | 3 1/4 | 2 3/8 | 3 1/8 | 4 1/2 | 1 1/2 | | • | |
| 2 5/16 | SIM743 | 3 3/8 | 2 3/8 | 3 1/16 | 4 1/2 | 1 1/2 | | • | |
| 2 3/8 | SIM763 | 3 1/2 | 2 3/8 | 3 1/16 | 4 1/2 | 1 1/2 | | • | |
| 2 7/16 | SIM783 | 3 1/2 | 2 3/8 | 3 1/16 | 4 1/2 | 1 1/2 | | • | |
| 2 1/2 | SIM803 | 3 1/2 | 2 3/8 | 3 1/4 | 4 3/4 | 1 5/8 | | • | |
| 2 9/16 | SIM823 | 3 5/8 | 2 3/8 | 3 1/4 | 4 3/4 | 1 5/8 | | • | |
| 2 5/8 | SIM843 | 3 3/4 | 2 3/8 | 3 1/4 | 4 3/4 | 1 5/8 | | • | |
| 2 11/16 | SIM863 | 3 3/4 | 2 3/8 | 3 1/2 | 5 | 1 13/16 | | • | |
| 2 3/4 | SIM883 | 3 3/4 | 2 3/8 | 3 7/16 | 5 | 1 13/16 | | • | |
| 2 13/16 | SIM903 | 4 | 2 3/8 | 3 7/16 | 5 | 1 3/4 | | • | |
| 2 7/8 | SIM923 | 4 | 2 3/8 | 3 7/16 | 5 | 1 3/4 | | • | |
| 2 15/16 | SIM943 | 4 1/8 | 2 3/8 | 3 3/8 | 5 | 1 3/4 | | • | |
| 3 | SIM963 | 4 1/4 | 2 3/8 | 3 5/8 | 5 1/4 | 1 3/4 | | • | |
| 3 1/8 | SIM1003 | 4 1/4 | 2 3/8 | 3 9/16 | 5 1/4 | 1 7/8 | | • | |
| 3 1/4 | SIM1043 | 4 1/2 | 2 3/8 | 3 9/16 | 5 1/4 | 1 7/8 | | • | |
| 3 3/8 | SIM1083 | 4 1/2 | 2 3/8 | 4 | 5 3/4 | 2 1/4 | | • | |
| 3 1/2 | SIM1123 | 4 3/4 | 2 3/8 | 4 | 5 3/4 | 2 1/4 | | • | |
| 3 5/8 | SIM1163 | 5 | 2 3/8 | 3 15/16 | 5 3/4 | 2 1/4 | | | • |
| 3 11/16 | SIM1183 | 5 5/16 | 2 3/8 | 3 15/16 | 5 3/4 | 2 7/16 | | | • |
| 3 3/4 | SIM1203 | 5 1/8 | 2 3/8 | 3 7/8 | 5 3/4 | 2 1/4 | | | • |
| 3 13/16 | SIM1223 | 5 3/8 | 2 3/8 | 4 1/8 | 6 | 2 1/2 | | | • |
| 3 7/8 | SIM1243 | 5 1/4 | 2 3/8 | 4 3/8 | 6 1/4 | 2 9/16 | | | • |
| 3 15/16 | SIM1263 | 5 1/2 | 2 3/8 | 4 3/8 | 6 1/4 | 2 3/8 | | | • |
| 4 | SIM1283 | 5 1/2 | 2 3/8 | 4 5/16 | 6 1/4 | 2 9/16 | | | • |
| 4 1/16 | SIM1303 | 5 1/2 | 2 3/8 | 4 5/16 | 6 1/4 | 2 1/2 | | | • |
| 4 1/8 | SIM1323 | 5 9/16 | 2 3/8 | 4 5/16 | 6 1/4 | 2 9/16 | | | • |
| 4 3/16 | SIM1343 | 6 | 2 3/8 | 4 1/4 | 6 1/4 | 2 1/2 | | | • |
| 4 7/16 | SIM1423 | 6 | 2 3/8 | 4 3/16 | 6 1/4 | 2 11/16 | | | • |
| 4 1/2 | SIM1443 | 6 | 2 3/8 | 4 7/16 | 6 1/2 | 2 3/4 | | | • |
| 4 9/16 | SIM1463 | 6 1/2 | 2 3/8 | 4 7/16 | 6 1/2 | 2 3/4 | | | • |
| 4 5/8 | SIM1483 | 6 5/8 | 2 3/8 | 4 3/8 | 6 1/2 | 2 13/16 | | | • |
| 4 3/4 | SIM1523 | 6 5/8 | 2 3/8 | 4 5/8 | 6 3/4 | 2 7/8 | | | • |
| 4 7/8 | SIM1563 | 7 | 2 3/8 | 4 9/16 | 6 3/4 | 3 | | | • |
| 5 | SIM1603 | 7 | 2 3/8 | 4 1/2 | 6 3/4 | 3 | | | • |
| 5 3/8 | SIM1723 | 7 1/2 | 2 3/8 | 5 7/16 | 7 3/4 | 3 9/16 | | | |
| 5 3/4 | SIM1843 | 8 1/4 | 2 3/8 | 5 5/16 | 7 3/4 | 3 9/16 | | | |

*Applications include use on heavy duty wheel lug nuts.
**Applications include use on wheel lug nuts on stud piloted/budd style wheel systems.

# FLANK DRIVE® IMPACT SOCKETS



## Deep, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 30 | **SIMM303** | 46.0 | 53.7 | 46.0 | 76.2 | 19.1 |
| 32 | **SIMM323** | 52.3 | 53.7 | 76.2 | 82.6 | 22.4 |
| 33 | **SIMM333*** | 52.3 | 53.7 | 53.3 | 82.5 | 22.4 |
| 38 | **SIMM383** | 60.3 | 57.2 | 59.7 | 88.9 | 25.4 |

*Applications include use on wheel lug nuts on Hub Piloted wheel systems.



**SIMM323**

## Shallow Thin Wall, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 70 | **IMM705TW** | 91.2 | 82.6 | 67.5 | 114.3 | 44.3 |



**IMM705TW**

# SPECIAL APPLICATION IMPACT SOCKETS



## Shallow Single Square, inches

| 11 | 4 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/4 | **IM724** | 1 15/16 | 2 1/8 | 31/32 | 2 1/8 | 21/32 |
| 13/16 | **IM726** | 1 15/16 | 2 1/8 | 31/32 | 2 1/8 | 21/32 |
| 7/8 | **IM728** | 2 1/16 | 2 1/8 | 31/32 | 2 1/8 | 21/32 |
| 15/16 | **IM730** | 2 1/16 | 2 1/8 | 15/16 | 2 1/8 | 5/8 |
| 1 | **IM732** | 2 1/8 | 2 1/8 | 1 3/32 | 2 1/4 | 25/32 |
| 1 1/8 | **IM736** | 2 1/4 | 2 1/4 | 1 3/32 | 2 1/4 | 25/32 |



**IM724**

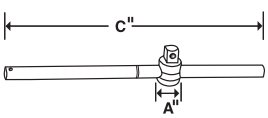
## Shallow Double Square, inches

| 11 | 8 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 1/4 | **IM740** | 2 3/8 | 2 3/8 | 1 1/8 | 2 3/8 | 13/16 |



**IM740**

# 1 1/2" DRIVE HANDLES






**L55**

## Sliding T-handle

| Stock No. | C | Sliding Head Only Stock No. | A | Handle Stock No. |
|---|---|---|---|---|
| **L55** | 36 | **L55-2** | 2 7/8 | **L55-1** |

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# 1 1/2" AND #5 SPLINE DRIVE IMPACT ACCESSORIES



IM105



## Extensions with Pin Hole

| Stock No. | A | B |
|---|---|---|
| IM105 | 2 | 10 |
| IM155 | 2 | 15 |
| IM205 | 2 | 20 |



IP85

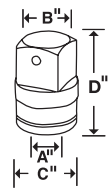



## Swivel Universal Joint

| Stock No. | Retention Type | A | B |
|---|---|---|---|
| IP85 | Pin Hole | 3 5/8 | 6 1/16 |



IM53

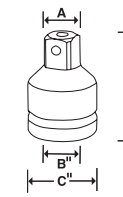



## Square Drive Adaptors

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IM35 | 1 | 1 1/2 | 2 1/4 | 3 1/2 |
| IM53 | 1 1/2 | 1 | 3 1/4 | 4 1/4 |
| IM59 | 1 1/2 | 2 1/2 | 3 1/4 | 4 3/4 |
| IM95 | 2 1/2 | 1 1/2 | 5 | 6 3/8 |



IMSA3




## Spline-to-Square Adaptor

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| IMSA3 | 1" Square | No. 5, 14 Tooth | 2 3/8 | 3 3/8 |



IM243R



IM243P



IMR3

## Ring and Pin Chart for 1", 1 1/2" and 5 Spline Drive Impact Sockets and Accessories

The following are required for tool use:

| Stock No. | Description | Use with |
|---|---|---|
| IM243R | Rubber Locking Ring (Use with IM243P) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) plus IM124 Adaptor |
| IM243P | Steel Locking Pin, use with IM243R | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) |
| IMR3 | Socket Retainer | All 1" Drive Sockets/Accessories, All #5 Spline Drive Sockets/Accessories |
| IM483R | Rubber Locking Pin (Use with IM483P) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |
| IM483P | Steel Locking Pin (Use with IM483R) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |
| IM445R | Synthetic Rubber Locking Ring, for IM105, IM205, IM59, IP85 and "IGE Series" sockets | All 1 1/2" Drive Sockets/Accessories |

# FLANK DRIVE® IMPACT SOCKETS





IMM365

## Shallow, mm

| mm | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 36 | IMM365 | 73.0 | 82.6 | 34.5 | 76.2 | 25.4 |
| 38 | IMM385 | 73.0 | 82.6 | 34.5 | 76.2 | 25.4 |
| 41 | IMM415 | 73.0 | 82.6 | 34.5 | 76.2 | 27.7 |
| 46 | IMM465 | 79.4 | 82.6 | 40.9 | 82.6 | 29.7 |
| 50 | IMM505 | 79.4 | 82.6 | 47.2 | 88.9 | 31.8 |
| 55 | IMM555 | 88.9 | 82.6 | 47.2 | 88.9 | 35.6 |
| 60 | IMM605 | 94.5 | 82.6 | 58.2 | 101.6 | 38.6 |
| 65 | IMM655 | 99.2 | 82.6 | 56.6 | 101.6 | 41.4 |
| 70 | IMM705 | 105.6 | 82.6 | 61.7 | 108.0 | 45.7 |
| 75 | IMM755 | 111.1 | 82.6 | 66.5 | 114.3 | 47.2 |
| 80 | IMM805 | 116.6 | 82.6 | 77.2 | 127 | 50.7 |

## Shallow, inches

| 11 | 6 | A | B | C | D | E | Set Contains: 619IME | 616IM | 618IM | 609IM |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 3/8 | IM445 | 2 7/8 | 3 1/4 | 1 3/8 | 3 | 1 | • | | | |
| 1 7/16 | IM465 | 2 7/8 | 3 1/4 | 1 3/8 | 3 | 1 | • | | | |
| 1 1/2 | IM485 | 3 | 3 1/4 | 1 3/8 | 3 | 1 | • | | | |
| 1 9/16 | IM505 | 3 | 3 1/4 | 1 3/8 | 3 | 1 | • | | | |
| 1 5/8 | IM525 | 2 7/8 | 3 1/4 | 1 3/8 | 3 | 1 1/16 | • | | | |
| 1 11/16 | IM545 | 3 | 3 1/4 | 1 3/8 | 3 | 1 1/16 | • | | | |
| 1 3/4 | IM565 | 3 1/8 | 3 1/4 | 1 5/8 | 3 1/4 | 1 1/8 | • | | | |
| 1 13/16 | IM585 | 3 1/8 | 3 1/4 | 1 5/8 | 3 1/4 | 1 3/16 | • | | | |
| 1 7/8 | IM605 | 3 1/8 | 3 1/4 | 1 7/8 | 3 1/2 | 1 3/16 | • | | | |
| 1 15/16 | IM625A | 3 1/8 | 3 1/4 | 1 7/8 | 3 1/2 | 1 1/4 | • | | | |
| 2 | IM645 | 3 1/2 | 3 1/4 | 1 7/8 | 3 1/2 | 1 1/4 | • | | | |
| 2 1/16 | IM665 | 3 1/2 | 3 1/4 | 1 7/8 | 3 1/2 | 1 7/16 | • | | | |
| 2 1/8 | IM685 | 3 1/2 | 3 1/4 | 1 7/8 | 3 1/2 | 1 7/16 | • | | | |
| 2 3/16 | IM705 | 3 1/2 | 3 1/4 | 1 7/8 | 3 1/2 | 1 1/2 | • | | | |
| 2 1/4 | IM725A | 3 3/4 | 3 1/4 | 2 1/8 | 3 3/4 | 1 7/16 | • | | | |
| 2 5/16 | IM745 | 3 3/4 | 3 1/4 | 2 | 3 3/4 | 1 1/2 | • | | | |
| 2 3/8 | IM765 | 3 7/8 | 3 1/4 | 2 1/4 | 4 | 1 1/2 | • | | | |
| 2 7/16 | IM785 | 3 7/8 | 3 1/4 | 2 1/4 | 4 | 1 9/16 | • | | | |
| 2 1/2 | IM805 | 3 7/8 | 3 1/4 | 2 1/4 | 4 | 1 5/8 | • | | | |
| 2 9/16 | IM825 | 3 7/8 | 3 1/4 | 2 1/4 | 4 | 1 5/8 | | • | | |
| 2 5/8 | IM845 | 4 1/16 | 3 1/4 | 2 1/2 | 4 1/4 | 1 11/16 | | • | | |
| 2 11/16 | IM865 | 4 1/8 | 3 1/4 | 2 1/2 | 4 1/4 | 1 11/16 | | • | | |
| 2 3/4 | IM885 | 4 1/4 | 3 1/4 | 2 3/8 | 4 1/4 | 1 13/16 | | • | | |
| 2 13/16 | IM905 | 4 3/8 | 3 1/4 | 2 3/8 | 4 1/4 | 1 13/16 | | • | | |
| 2 7/8 | IM925 | 4 3/8 | 3 1/4 | 2 3/8 | 4 1/4 | 1 13/16 | | • | | |
| 2 15/16 | IM945 | 4 3/8 | 3 1/4 | 2 5/8 | 4 1/2 | 1 15/16 | | • | | |
| 3 | IM965 | 4 7/16 | 3 1/4 | 2 5/8 | 4 1/2 | 1 15/16 | | • | | |
| 3 1/16 | IM985 | 4 11/16 | 3 1/4 | 2 5/8 | 4 1/2 | 1 15/16 | | • | | |
| 3 1/8 | IM1005 | 4 3/4 | 3 1/4 | 2 7/8 | 4 3/4 | 2 | | • | | |
| 3 3/16 | IM1025 | 4 3/4 | 3 1/4 | 2 1/2 | 4 1/2 | 2 | | • | | |
| 3 1/4 | IM1045 | 4 3/4 | 3 1/4 | 2 3/4 | 4 3/4 | 2 1/8 | | • | | |
| 3 5/16 | IM1065 | 5 | 3 1/4 | 2 3/4 | 4 3/4 | 2 1/8 | | • | | |
| 3 3/8 | IM1085 | 5 | 3 1/4 | 2 3/4 | 4 3/4 | 2 1/4 | | • | | |
| 3 7/16 | IM1105 | 5 | 3 1/4 | 3 | 5 | 2 1/4 | | • | | |
| 3 1/2 | IM1125 | 5 1/8 | 3 1/4 | 3 | 5 | 2 1/4 | | • | | |
| 3 9/16 | IM1145 | 5 1/8 | 3 1/4 | 2 7/8 | 5 | 2 1/4 | | | • | |
| 3 5/8 | IM1165 | 5 1/8 | 3 1/4 | 2 7/8 | 5 | 2 5/16 | | | • | |
| 3 11/16 | IM1185 | 5 1/4 | 3 1/4 | 3 1/8 | 5 1/4 | 2 3/8 | | | • | |
| 3 3/4 | IM1205 | 5 3/8 | 3 1/4 | 3 1/8 | 5 1/4 | 2 1/2 | | | • | |
| 3 13/16 | IM1225 | 5 3/8 | 3 1/4 | 3 1/8 | 5 1/4 | 2 1/2 | | | • | |
| 3 7/8 | IM1245 | 5 1/2 | 3 1/4 | 3 1/8 | 5 1/4 | 2 9/16 | | | • | |
| 3 15/16 | IM1265 | 5 1/2 | 3 1/4 | 3 1/8 | 5 1/4 | 2 9/16 | | | • | |
| 4 | IM1285 | 5 5/8 | 3 1/4 | 3 1/4 | 5 1/2 | 2 5/8 | | | • | |
| 4 1/16 | IM1305 | 5 3/4 | 3 1/4 | 3 1/4 | 5 1/2 | 2 11/16 | | | • | |
| 4 1/8 | IM1325 | 5 13/16 | 3 1/4 | 3 1/4 | 5 1/2 | 2 3/4 | | | • | |
| 4 1/4 | IM1365 | 6 | 3 1/4 | 3 1/2 | 5 3/4 | 2 3/4 | | | • | |
| 4 5/16 | IM1385 | 6 1/4 | 3 1/4 | 3 1/2 | 5 3/4 | 2 7/8 | | | • | |
| 4 3/8 | IM1405 | 6 1/4 | 3 1/4 | 3 3/8 | 5 3/4 | 2 15/16 | | | • | |
| 4 7/16 | IM1425 | 6 1/4 | 3 1/4 | 3 3/8 | 5 3/4 | 3 | | | • | |
| 4 1/2 | IM1445 | 6 1/4 | 3 1/4 | 3 5/8 | 6 | 3 1/8 | | | • | |
| 4 5/8 | IM1485 | 6 1/2 | 3 1/4 | 3 7/8 | 6 1/4 | 3 1/8 | | | • | |
| 4 3/4 | IM1525 | 6 9/16 | 3 1/4 | 3 7/8 | 6 1/4 | 3 1/8 | | | • | |
| 4 7/8 | IM1565 | 6 11/16 | 3 1/4 | 3 3/4 | 6 1/4 | 3 3/16 | | | • | |
| 5 | IM1605 | 6 7/8 | 3 1/4 | 3 3/4 | 6 1/4 | 3 3/16 | | | | • |
| 5 3/8 | IM1725 | 7 5/16 | 3 1/4 | 3 5/8 | 6 1/4 | 3 7/16 | | | | • |
| 5 3/4 | IM1845 | 7 11/16 | 3 1/4 | 4 1/2 | 7 1/4 | 3 11/16 | | | | • |
| 6 1/8 | IM1965 | 8 | 3 1/4 | 4 3/8 | 7 1/4 | 3 15/16 | | | | • |
| 6 1/2 | IM2085 | 8 3/8 | 3 1/4 | 5 | 8 | 4 3/16 | | | | • |
| 6 7/8 | IM2205 | 8 13/16 | 3 1/4 | 4 7/8 | 8 | 4 3/8 | | | | • |
| 7 1/4 | IM2325 | 9 3/16 | 3 1/4 | 6 1/8 | 9 1/4 | 4 5/8 | | | | • |
| 7 5/8 | IM2445 | 9 1/2 | 3 1/4 | 6 1/4 | 9 1/2 | 4 7/8 | | | | • |
| 8 | IM2565 | 10 | 3 1/4 | 6 5/8 | 10 | 5 1/8 | | | | • |





IM445



WARNING • Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS





SIM485

## Deep, inches

| | 6 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 3/16 | SIM445 | 2 7/8 | 3 1/4 | 2 5/8 | 4 1/4 | 1 |
| 1 7/16 | SIM465 | 2 7/8 | 3 1/4 | 2 5/8 | 4 1/4 | 1 |
| 1 1/2 | SIM485 | 2 7/8 | 3 1/4 | 2 5/8 | 4 1/4 | 1 |
| 1 5/8 | SIM525 | 2 7/8 | 3 1/4 | 2 5/8 | 4 1/4 | 1 1/8 |
| 1 11/16 | SIM545 | 3 | 3 1/4 | 2 5/8 | 4 1/4 | 1 1/8 |
| 2 | SIM645 | 3 3/8 | 3 1/4 | 3 1/8 | 4 3/4 | 1 1/4 |
| 2 1/16 | SIM665 | 3 7/16 | 3 1/4 | 3 1/8 | 4 3/4 | 1 5/16 |
| 2 3/16 | SIM705 | 3 1/2 | 3 1/4 | 3 3/8 | 5 | 1 3/8 |
| 2 1/4 | SIM725 | 3 9/16 | 3 1/4 | 3 5/8 | 5 1/4 | 1 1/2 |
| 2 5/16 | SIM745 | 3 5/8 | 3 1/4 | 3 1/2 | 5 1/4 | 1 9/16 |
| 2 3/8 | SIM765 | 3 3/4 | 3 1/4 | 3 1/2 | 5 1/4 | 1 9/16 |
| 2 7/16 | SIM785 | 3 3/4 | 3 1/4 | 3 1/2 | 5 1/4 | 1 9/16 |
| 2 1/2 | SIM805 | 3 7/8 | 3 1/4 | 3 1/2 | 5 1/4 | 1 5/8 |
| 2 9/16 | SIM825 | 3 7/8 | 3 1/4 | 3 3/4 | 5 1/2 | 1 5/8 |
| 2 5/8 | SIM845 | 4 | 3 1/4 | 3 3/4 | 5 1/2 | 1 11/16 |
| 2 11/16 | SIM865 | 4 1/8 | 3 1/4 | 3 3/4 | 5 1/2 | 1 3/4 |
| 2 3/4 | SIM885 | 4 1/8 | 3 1/4 | 3 5/8 | 5 1/2 | 1 13/16 |
| 2 13/16 | SIM905 | 4 1/4 | 3 1/4 | 3 7/8 | 5 3/4 | 1 13/16 |
| 2 7/8 | SIM925 | 4 5/16 | 3 1/4 | 3 7/8 | 5 3/4 | 1 7/8 |
| 2 15/16 | SIM945 | 4 3/8 | 3 1/4 | 3 7/8 | 5 3/4 | 1 15/16 |
| 3 | SIM965 | 4 7/16 | 3 1/4 | 4 1/8 | 6 | 1 15/16 |
| 3 1/16 | SIM985 | 4 9/16 | 3 1/4 | 4 1/8 | 6 | 2 |
| 3 1/8 | SIM1005 | 4 5/8 | 3 1/4 | 4 1/8 | 6 | 2 1/16 |
| 3 3/16 | SIM1025 | 4 11/16 | 3 1/4 | 4 1/4 | 6 1/4 | 2 1/8 |
| 3 1/4 | SIM1045 | 4 3/4 | 3 1/4 | 4 1/4 | 6 1/4 | 2 1/8 |
| 3 5/16 | SIM1065 | 4 7/8 | 3 1/4 | 4 1/4 | 6 1/4 | 2 3/16 |
| 3 3/8 | SIM1085 | 4 15/16 | 3 1/4 | 4 1/4 | 6 1/4 | 2 1/4 |
| 3 7/16 | SIM1105 | 5 | 3 1/4 | 4 1/2 | 6 1/2 | 2 1/4 |
| 3 1/2 | SIM1125 | 5 1/16 | 3 1/4 | 4 1/2 | 6 1/2 | 2 5/16 |
| 3 9/16 | SIM1145 | 5 1/8 | 3 1/4 | 4 3/8 | 6 1/2 | 2 3/8 |
| 3 5/8 | SIM1165 | 5 1/4 | 3 1/4 | 4 5/8 | 6 3/4 | 2 7/16 |
| 3 11/16 | SIM1185 | 5 5/16 | 3 1/4 | 4 5/8 | 6 3/4 | 2 7/16 |
| 3 3/4 | SIM1205 | 5 3/8 | 3 1/4 | 4 5/8 | 6 3/4 | 2 1/2 |
| 3 13/16 | SIM1225 | 5 7/16 | 3 1/4 | 4 7/8 | 7 | 2 1/2 |
| 3 7/8 | SIM1245 | 5 1/2 | 3 1/4 | 4 7/8 | 7 | 2 9/16 |
| 3 15/16 | SIM1265 | 5 5/8 | 3 1/4 | 5 1/8 | 7 1/4 | 2 9/16 |
| 4 | SIM1285 | 5 5/8 | 3 1/4 | 5 | 7 1/4 | 2 5/8 |
| 4 1/16 | SIM1305 | 5 3/4 | 3 1/4 | 5 1/4 | 7 1/2 | 2 11/16 |
| 4 1/8 | SIM1325 | 5 13/16 | 3 1/4 | 5 1/4 | 7 1/2 | 2 3/4 |
| 4 1/4 | SIM1365 | 6 | 3 1/4 | 5 1/2 | 7 3/4 | 2 13/16 |
| 4 5/16 | SIM1385 | 6 1/4 | 3 1/4 | 5 1/2 | 7 3/4 | 3 |
| 4 3/8 | SIM1405 | 6 1/4 | 3 1/4 | 5 3/8 | 7 3/4 | 3 |
| 4 1/2 | SIM1445 | 6 1/4 | 3 1/4 | 5 5/8 | 8 | 3 |
| 4 5/8 | SIM1485 | 6 3/8 | 3 1/4 | 5 5/8 | 8 | 3 1/16 |
| 4 3/4 | SIM1525 | 6 1/2 | 3 1/4 | 5 5/8 | 8 | 3 1/16 |



IM243P



IM243R

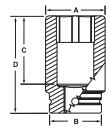
## Locking Rings and Pins for 1 1/2" Extensions, Adaptors, Impact Sockets and 2 1/2" Impact Sockets

| Stock No. | Description | Use with |
|---|---|---|
| IM243R | Rubber Locking Ring (Use with IM243P) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) plus IM124 Adaptor |
| IM243P | Steel Locking Pin, (Use with IM243R) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) |
| IM445R | Synthetic Rubber Locking Ring, for IM105, IM205, IM59, IP85 and "IGE Series" sockets | All 1 1/2" Drive Sockets/Accessories |
| IM729P | Steel Locking Pin | All 2 1/2" Drive Sockets/Accessories |

# FLANK DRIVE® IMPACT SOCKETS

## Shallow, inches

| | | | | | | Set Contains: | 716IM | 713IM | 714IM | 711IM |
|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | A | B | C | D | | 6 | 6 | 6 | 6 |
| 2 | IM649 | 3 7/16 | 5 | 2 31/32 | 5 1/2 | | • | | | |
| 2 3/16 | IM709 | 3 21/32 | 5 | 3 7/32 | 5 3/4 | | • | | | |
| 2 1/4 | IM729 | 3 23/32 | 5 | 3 7/32 | 5 3/4 | | • | | | |
| 2 3/8 | IM769 | 3 7/8 | 5 | 3 15/32 | 6 | | • | | | |
| 2 1/2 | IM809 | 4 | 5 | 3 15/32 | 6 | | • | | | |
| 2 9/16 | IM829 | 4 3/32 | 5 | 3 15/32 | 6 | | • | | | |
| 2 5/8 | IM849 | 4 5/32 | 5 | 3 15/32 | 6 | | • | | | |
| 2 3/4 | IM889 | 4 5/16 | 5 | 3 23/32 | 6 1/4 | | • | | | |
| 2 7/8 | IM929 | 4 7/16 | 5 | 3 23/32 | 6 1/4 | | • | | | |
| 2 15/16 | IM949 | 4 17/32 | 5 | 3 23/32 | 6 1/4 | | • | | | |
| 3 | IM969 | 4 19/32 | 5 | 3 23/32 | 6 1/4 | | • | | | |
| 3 1/8 | IM1009 | 4 3/4 | 5 | 3 31/32 | 6 1/2 | | • | | | |
| 3 1/4 | IM1049 | 5 | 5 | 3 31/32 | 6 1/2 | | • | | | |
| 3 3/8 | IM1089 | 5 | 5 | 3 31/32 | 6 1/2 | | • | | | |
| 3 7/16 | IM1109 | 5 | 5 | 4 7/32 | 6 3/4 | | • | | | |
| 3 1/2 | IM1129 | 5 3/16 | 5 | 4 7/32 | 6 3/4 | | • | | | |
| 3 5/8 | IM1169 | 5 5/16 | 5 | 4 7/32 | 6 3/4 | | | • | | |
| 3 3/4 | IM1209 | 5 15/32 | 5 | 4 15/32 | 7 | | | • | | |
| 3 7/8 | IM1249 | 5 5/8 | 5 | 4 15/32 | 7 | | | • | | |
| 4 | IM1289 | 5 3/4 | 5 | 4 15/32 | 7 | | | • | | |
| 4 1/16 | IM1309 | 5 27/32 | 5 | 4 15/32 | 7 | | | • | | |
| 4 1/8 | IM1329 | 5 29/32 | 5 | 4 23/32 | 7 1/4 | | | • | | |
| 4 1/4 | IM1369 | 6 1/16 | 5 | 4 23/32 | 7 1/4 | | | • | | |
| 4 3/8 | IM1409 | 6 7/32 | 5 | 4 23/32 | 7 1/4 | | | • | | |
| 4 1/2 | IM1449 | 6 11/32 | 5 | 4 31/32 | 7 1/2 | | | • | | |
| 4 5/8 | IM1489 | 6 1/2 | 5 | 4 31/32 | 7 1/2 | | | • | | |
| 4 3/4 | IM1529 | 6 21/32 | 5 | 4 31/32 | 7 1/2 | | | • | | |
| 4 7/8 | IM1569 | 6 25/32 | 5 | 5 7/32 | 7 3/4 | | | • | | |
| 5 | IM1609 | 6 15/16 | 5 | 5 7/32 | 7 3/4 | | | • | | |
| 5 1/8 | IM1649 | 7 3/32 | 5 | 5 7/32 | 7 3/4 | | | | • | |
| 5 1/4 | IM1689 | 7 7/32 | 5 | 5 15/32 | 8 | | | | • | |
| 5 3/8 | IM1729 | 7 3/8 | 5 | 5 15/32 | 8 | | | | • | |
| 5 7/16 | IM1749 | 7 7/16 | 5 | 5 3/8 | 8 | | | | • | |
| 5 1/2 | IM1769 | 7 17/32 | 5 | 5 5/8 | 8 1/4 | | | | • | |
| 5 5/8 | IM1809 | 7 21/32 | 5 | 5 19/32 | 8 1/4 | | | | • | |
| 5 3/4 | IM1849 | 7 13/16 | 5 | 5 19/32 | 8 1/4 | | | | • | |
| 5 7/8 | IM1889 | 7 31/32 | 5 | 5 13/16 | 8 1/2 | | | | • | |
| 6 | IM1929 | 8 3/32 | 5 | 5 3/4 | 8 1/2 | | | | • | |
| 6 1/8 | IM1969 | 8 1/4 | 5 | 5 3/4 | 8 1/2 | | | | • | |
| 6 1/4 | IM20099 | 8 13/32 | 5 | 5 31/32 | 8 3/4 | | | | • | |
| 6 3/8 | IM2049 | 8 17/32 | 5 | 5 15/16 | 8 3/4 | | | | • | |
| 6 1/2 | IM2089 | 8 11/16 | 5 | 5 15/16 | 8 3/4 | | | | • | |
| 6 5/8 | IM2129 | 8 27/32 | 5 | 6 5/32 | 9 | | | | • | |
| 6 3/4 | IM2169 | 8 31/32 | 5 | 6 1/8 | 9 | | | | | • |
| 6 7/8 | IM2209 | 9 1/8 | 5 | 6 1/8 | 9 | | | | | • |
| 7 | IM2249 | 9 9/32 | 5 | 6 5/16 | 9 1/4 | | | | | • |
| 7 1/8 | IM2289 | 9 13/32 | 5 | 6 5/16 | 9 1/4 | | | | | • |
| 7 1/4 | IM2329 | 9 9/16 | 5 | 6 17/32 | 9 1/2 | | | | | • |
| 7 3/8 | IM2369 | 9 23/32 | 5 | 6 1/2 | 9 1/2 | | | | | • |
| 7 1/2 | IM2409 | 9 7/8 | 5 | 6 1/2 | 9 1/2 | | | | | • |
| 7 5/8 | IM2449 | 10 | 5 | 6 23/32 | 9 3/4 | | | | | • |
| 7 3/4 | IM2489 | 10 5/32 | 5 | 6 11/16 | 9 3/4 | | | | | • |
| 7 7/8 | IM2529 | 10 5/16 | 5 | 6 11/16 | 9 3/4 | | | | | • |
| 8 | IM2569 | 10 7/16 | 5 | 6 7/8 | 10 | | | | | • |



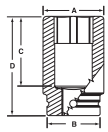



IM2209



WARNING • Read safety precautions on pages W1 to W4

# FLANK DRIVE® IMPACT SOCKETS






IMM1159

## Shallow, mm

| mm | 6 | A | B | C | D | Set Contains: 713IMM | 710IMM | 709IMM |
|---|---|---|---|---|---|---|---|---|
| 60 | IMM609 | 97.6 | 127 | 88.1 | 152.4 | • | | |
| 65 | IMM659 | 104.0 | 127 | 88.1 | 152.4 | • | | |
| 67 | IMM679 | 105.6 | 127 | 88.1 | 152.4 | • | | |
| 70 | IMM709 | 109.5 | 127 | 94.5 | 158.8 | • | | |
| 71 | IMM719 | 110.3 | 127 | 94.5 | 158.8 | • | | |
| 75 | IMM759 | 115.1 | 127 | 94.5 | 158.8 | • | | |
| 80 | IMM809 | 121.4 | 127 | 100.8 | 165.1 | • | | |
| 85 | IMM859 | 127.0 | 127 | 100.8 | 165.1 | • | | |
| 86 | IMM869 | 127.0 | 127 | 100.8 | 165.1 | • | | |
| 90 | IMM909 | 132.6 | 127 | 107.2 | 171.5 | • | | |
| 95 | IMM959 | 138.9 | 127 | 107.2 | 171.5 | • | | |
| 98 | IMM989 | 142.1 | 127 | 113.5 | 177.8 | • | | |
| 100 | IMM1009 | 144.5 | 127 | 113.5 | 177.8 | • | | |
| 105 | IMM1059 | 150.8 | 127 | 119.9 | 184.2 | | • | |
| 110 | IMM1109 | 156.4 | 127 | 119.9 | 184.2 | | • | |
| 115 | IMM1159 | 161.9 | 127 | 126.2 | 190.5 | | • | |
| 120 | IMM1209 | 168.3 | 127 | 126.2 | 190.5 | | • | |
| 125 | IMM1259 | 173.8 | 127 | 132.6 | 196.9 | | • | |
| 130 | IMM1309 | 179.4 | 127 | 132.6 | 196.9 | | • | |
| 135 | IMM1359 | 185.7 | 127 | 138.9 | 203.2 | | • | |
| 140 | IMM1409 | 191.3 | 127 | 142.9 | 209.6 | | • | |
| 145 | IMM1459 | 196.9 | 127 | 142.1 | 209.6 | | • | |
| 150 | IMM1509 | 203.2 | 127 | 147.6 | 215.9 | | • | |
| 155 | IMM1559 | 208.8 | 127 | 146.1 | 215.9 | | | • |
| 160 | IMM1609 | 215.1 | 127 | 151.6 | 222.3 | | | • |
| 165 | IMM1659 | 215.1 | 127 | 150.8 | 222.3 | | | • |
| 170 | IMM1709 | 226.2 | 127 | 156.4 | 228.6 | | | • |
| 175 | IMM1759 | 232.6 | 127 | 161.9 | 235.0 | | | • |
| 180 | IMM1809 | 238.1 | 127 | 160.3 | 235.0 | | | • |
| 185 | IMM1859 | 243.7 | 127 | 165.9 | 241.3 | | | • |
| 190 | IMM1909 | 250.0 | 127 | 165.1 | 241.3 | | | • |
| 200 | IMM2009 | 261.9 | 127 | 169.9 | 247.7 | | | • |



IM243R



IM243P



IMR3

## Master Ring and Pin Chart for Impact Sockets and Accessories

The following are required for tool use:

| Stock No. | Description | Used With |
|---|---|---|
| IM182R | Rubber Locking Ring | All 3/4" Drive Sockets/Accessories |
| IMR2 | Socket Retainer | All 3/4" Drive Sockets/Accessories |
| IM243R | Rubber Locking Ring (Use with IM243P) | 1" Drive Sockets/Accessories Up to 1 3/8" (35 mm) plus IM124 Adaptor |
| IM243P | Steel Locking Pin, use with IM243R | 1" Drive Sockets/Accessories Up to 1 3/8" and up to 35 mm |
| IMR3 | Socket Retainer | All 1" Drive Sockets/Accessories, All #5 Spline Drive Sockets/Accessories |
| IM483R | Rubber Locking Pin (Use with IM483P) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |
| IM483P | Steel Locking Pin (Use with IM483R) | All Spline Drive Sockets/Accessories plus 1" Drive Sockets from 1 7/16" (35 mm) |
| IM445R | Synthetic Rubber Locking Ring, for IM105, IM205, IM59, IP85 and "IGE Series" sockets | All 1 1/2" Drive Sockets/Accessories |
| IM729P | Steel Locking Pin | All 2 1/2" Drive Sockets/Accessories |

# NO BETTER WRENCHES. NO MATTER WHERE YOU TURN.

The entire wrench line is top-of-the-line. Snap-on® wrenches are manufactured with special alloy steel, precision-forged, and heat-treated for optimum strength and durability. Nickel chrome finishing helps protect against corrosion and makes it easy to wipe clean. Longer-length handles provide increased leverage and better access to those hard to reach areas.

**FLANK DRIVE® PLUS**

The *Flank Drive* Plus design "bites" into the fastener for additional flat-to-flat contact and prevents slipping and rounding of the fastener. This design delivers up to 62% more turning power than conventional open-end wrenches. And, the *Flank Drive* box-end wrenching system grips the fastener flats and provides up to 15-20% more turning power.

**STANDARD BOX END**

The box end is rotated 7.5° away from the handle so the wrench can be flipped to get a new grip in tight situations.

Set at a 15° angle for knuckle clearance and increased access in any space.

**RATCHETING BOX END**

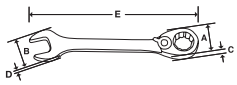
Up to 80 gear teeth let the wrench move easier with less swing arc.

Reversible, dual-pawl, ratcheting box end yields smoother operation with greater strength.



# FLANK DRIVE® PLUS REVERSIBLE RATCHETING COMBINATION

- *Flank Drive* Plus profile on open end delivers up to 62% more turning power than conventional wrenches
- Longer overall length increases leverage to let the wrench do the work
- Box end utilizes the *Flank Drive* profile, the proven design for turning fasteners
- Ratcheting gear features up to 80 teeth, minimizing swing arc in tight spaces
- Low-profile, easy-action, reverse lever won't get in your way






**SOEXRM710**

## Ratcheting Combination, Standard Handle, mm

Set Contains: SOEXRM710

| mm | 12 | A | B | C | D | E | Reverse Lever Repair Kit | 12 |
|---|---|---|---|---|---|---|---|---|
| 6 | SOEXRM6 | 16.3 | 13.8 | 6.7 | 3.7 | 125.5 | RKW12 | |
| 7 | SOEXRM7 | 16.8 | 15.1 | 6.9 | 3.9 | 137.4 | RKW1 | |
| 8 | SOEXRM8 | 17.8 | 17.0 | 7.1 | 4.3 | 149 | RKW1 | |
| 9 | SOEXRM9 | 19.6 | 19.2 | 7.9 | 4.7 | 164 | RKW2 | |
| 10 | SOEXRM10 | 21.5 | 21.1 | 8.3 | 5.1 | 179 | RKW3 | • |
| 11 | SOEXRM11 | 22.0 | 23.4 | 8.6 | 5.5 | 194 | RKW3 | • |
| 12 | SOEXRM12 | 23.5 | 25.1 | 9.3 | 5.9 | 207 | RKW4 | • |
| 13 | SOEXRM13 | 25.0 | 27.2 | 10.2 | 6.3 | 221 | RKW5 | • |
| 14 | SOEXRM14 | 27.0 | 29.2 | 10.2 | 6.7 | 235 | RKW6 | • |
| 15 | SOEXRM15 | 28.5 | 31.2 | 11.1 | 7.1 | 249 | RKW7 | • |
| 16 | SOEXRM16 | 30.5 | 33.0 | 11.1 | 7.4 | 261 | RKW8 | • |
| 17 | SOEXRM17 | 32.0 | 35.1 | 12.0 | 7.8 | 277 | RKW9 | • |
| 18 | SOEXRM18 | 34.5 | 37.1 | 12.0 | 8.2 | 291 | RKW10 | • |
| 19 | SOEXRM19 | 36.5 | 39.4 | 12.9 | 8.6 | 305 | RKW11 | • |

ASME® B107.100

Set includes storage tray



**SOEXR707**

## Ratcheting Combination, Standard Handle, inches

Set Contains: SOEXR707

| 11 | 12 | A | B | C | D | E | Reverse Lever Repair Kit | 12 |
|---|---|---|---|---|---|---|---|---|
| 1/4 | SOEXR8 | 21/32 | 9/16 | 9/32 | 5/32 | 4 15/16 | RKW12 | |
| 5/16 | SOEXR10 | 27/32 | 11/16 | 9/32 | 3/16 | 5 29/32 | RKW1 | |
| 3/8 | SOEXR12 | 27/32 | 27/32 | 5/16 | 3/16 | 7 | RKW3 | • |
| 7/16 | SOEXR14 | 7/8 | 29/32 | 11/32 | 7/32 | 7 5/8 | RKW3 | • |
| 1/2 | SOEXR16 | 31/32 | 1 1/16 | 13/32 | 1/4 | 8 11/16 | RKW5 | • |
| 9/16 | SOEXR18 | 1 1/16 | 1 5/32 | 13/32 | 1/4 | 9 1/4 | RKW6 | • |
| 5/8 | SOEXR20 | 1 3/16 | 1 5/16 | 7/16 | 9/32 | 10 1/4 | RKW8 | • |
| 11/16 | SOEXR22 | 1 1/4 | 1 3/8 | 15/32 | 5/16 | 10 7/8 | RKW9 | • |
| 3/4 | SOEXR24 | 1 7/16 | 1 9/16 | 1/2 | 11/32 | 12 | RKW11 | • |

*ASME* B107.100

Set includes storage tray

# *FLANK DRIVE* RATCHETING COMBINATION

- Open end features a patented geometry, providing a quick, ratchet-like action when turning fasteners
- *Flank Drive* wrenching system on box end provides up to 15%–20% more turning power, limiting the risk of tool or fastener damage
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- Ratcheting gear features up to 80 teeth, minimizing swing arc in tight spaces
- Box ends are offset 15° for knuckle clearance
- Sized for optimum comfort and balance
- Nickel-chrome plating helps protect against corrosion and makes cleaning easy



**SRXRM710**

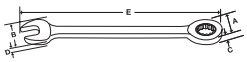
## Reversible Ratcheting Box/Speed Open End, mm

Set Contains: SRXRM710

| mm | 12 | A | B | C | D | E | Gear Teeth | 12 |
|---|---|---|---|---|---|---|---|---|
| 10 | SRXRM10 | 21.5 | 19.1 | 8.3 | 5.1 | 179 | 72 | • |
| 11 | SRXRM11 | 22.0 | 21.0 | 8.6 | 5.6 | 194 | 72 | • |
| 12 | SRXRM12 | 23.5 | 22.9 | 9.3 | 5.9 | 207 | 80 | • |
| 13 | SRXRM13 | 25.0 | 24.8 | 10.2 | 6.4 | 221 | 80 | • |
| 14 | SRXRM14 | 27.0 | 26.7 | 10.2 | 6.6 | 235 | 80 | • |
| 15 | SRXRM15 | 28.5 | 28.6 | 11.1 | 7.4 | 249 | 80 | • |
| 16 | SRXRM16 | 30.5 | 30.5 | 11.1 | 7.4 | 261 | 80 | • |
| 17 | SRXRM17 | 32.0 | 32.4 | 12.0 | 7.9 | 277 | 80 | • |
| 18 | SRXRM18 | 34.5 | 34.3 | 12.0 | 8.2 | 291 | 80 | • |
| 19 | SRXRM19 | 36.5 | 36.2 | 12.9 | 8.6 | 305 | 80 | • |

*ASME* B107.100

Set includes storage tray





OEXRM710

## Ratcheting Combination, Standard Handle, mm

Set Contains: OEXRM710

| mm | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 6 | **OEXRM6** | 16.3 | 13.2 | 6.7 | 3.5 | 122.9 | |
| 7 | **OEXRM7** | 16.8 | 15.2 | 6.9 | 3.9 | 134.6 | |
| 8 | **OEXRM8** | 17.8 | 17.0 | 7.1 | 4.3 | 147.0 | |
| 9 | **OEXRM9** | 19.6 | 19.2 | 8.0 | 4.7 | 159.0 | |
| 10 | **OEXRM10** | 21.5 | 21.1 | 8.4 | 5.1 | 171.0 | • |
| 11 | **OEXRM11** | 22.0 | 23.4 | 8.7 | 5.6 | 183.0 | • |
| 12 | **OEXRM12** | 23.5 | 25.1 | 9.3 | 5.9 | 195.0 | • |
| 13 | **OEXRM13** | 25.0 | 27.2 | 10.2 | 6.4 | 207.0 | • |
| 14 | **OEXRM14** | 27.0 | 29.2 | 10.2 | 6.7 | 219.0 | • |
| 15 | **OEXRM15** | 28.5 | 31.2 | 11.1 | 7.1 | 231.0 | • |
| 16 | **OEXRM16** | 30.5 | 33.0 | 11.1 | 7.4 | 243.0 | • |
| 17 | **OEXRM17** | 32.0 | 35.1 | 12.0 | 7.8 | 255.0 | • |
| 18 | **OEXRM18** | 34.5 | 37.1 | 12.0 | 8.2 | 267.0 | • |
| 19 | **OEXRM19** | 36.5 | 39.4 | 12.9 | 8.7 | 279.0 | • |

ASME® B107.100 Sets include storage tray



OEXR707

## Ratcheting Combination, Standard Handle, inches

Set Contains: OEXR707

| | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 1/4 | **OEXR8** | 5/8 | 17/32 | 1/4 | 1/8 | 4 27/32 | |
| 3/8 | **OEXR12** | 27/32 | 27/32 | 5/16 | 3/16 | 6 3/4 | • |
| 7/16 | **OEXR14** | 7/8 | 29/32 | 11/32 | 7/32 | 7 3/16 | • |
| 1/2 | **OEXR16** | 31/32 | 1 1/16 | 13/32 | 1/4 | 8 3/16 | • |
| 9/16 | **OEXR18** | 1 1/16 | 1 5/32 | 13/32 | 1/4 | 8 5/8 | • |
| 5/8 | **OEXR20** | 1 3/16 | 1 5/16 | 15/32 | 9/32 | 5 9/16 | • |
| 11/16 | **OEXR22** | 1 7/32 | 1 3/8 | 15/32 | 5/16 | 10 1/16 | • |
| 3/4 | **OEXR24** | 1 15/32 | 1 9/16 | 1/2 | 11/32 | 11 | • |

*ASME* B107.100 Set includes storage tray



OXIRM707

## Ratcheting Combination, Short Handle, mm

Set Contains: OXIRM707 OXIRM705

| mm | 12 | A | B | C | D | E | 12 | 12 |
|---|---|---|---|---|---|---|---|---|
| 6 | **OXIRM6** | 16.3 | 13.2 | 6.7 | 3.5 | 80.8 | | |
| 7 | **OXIRM7** | 16.8 | 15.2 | 6.9 | 3.9 | 84.8 | | |
| 8 | **OXIRM8** | 17.8 | 17.0 | 7.1 | 4.3 | 88.7 | • | |
| 9 | **OXIRM9** | 19.6 | 19.2 | 8.0 | 4.8 | 92.7 | • | |
| 10 | **OXIRM10** | 21.5 | 21.1 | 8.4 | 5.1 | 97.0 | • | |
| 11 | **OXIRM11** | 22.0 | 23.4 | 8.7 | 5.6 | 101.1 | • | |
| 12 | **OXIRM12** | 23.5 | 25.1 | 9.3 | 5.9 | 105.4 | • | |
| 13 | **OXIRM13** | 25.0 | 27.2 | 10.2 | 6.4 | 109.5 | • | |
| 14 | **OXIRM14** | 27.0 | 29.2 | 10.2 | 6.7 | 113.8 | • | |
| 15 | **OXIRM15** | 28.5 | 31.2 | 11.1 | 7.1 | 118.1 | | • |
| 16 | **OXIRM16** | 30.5 | 33.0 | 11.1 | 7.4 | 122.2 | | • |
| 17 | **OXIRM17** | 32.0 | 35.1 | 12.0 | 7.8 | 126.5 | | • |
| 18 | **OXIRM18** | 34.5 | 37.1 | 12.0 | 8.2 | 130.6 | | • |
| 19 | **OXIRM19** | 36.5 | 39.4 | 12.9 | 8.7 | 135.4 | | • |

*ASME* B107.100 Set includes storage tray



OXIR707

## Ratcheting Combination, Short Handle, inches

Set Contains: OXIR707

| | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 1/4 | **OXIR8** | 21/32 | 17/32 | 9/32 | 5/32 | 3 3/16 | |
| 5/16 | **OXIR10** | 21/32 | 11/16 | 9/32 | 3/16 | 3 17/32 | |
| 3/8 | **OXIR12** | 27/32 | 27/32 | 5/16 | 3/16 | 3 27/32 | • |
| 7/16 | **OXIR14** | 7/8 | 29/32 | 11/32 | 7/32 | 3 31/32 | • |
| 1/2 | **OXIR16** | 31/32 | 1 1/16 | 13/32 | 1/4 | 4 5/16 | • |
| 9/16 | **OXIR18** | 1 1/16 | 1 5/32 | 13/32 | 1/4 | 4 15/32 | • |
| 5/8 | **OXIR20** | 1 3/16 | 1 5/16 | 15/32 | 9/32 | 4 13/16 | • |
| 11/16 | **OXIR22** | 1 7/32 | 1 3/8 | 15/32 | 5/16 | 4 31/32 | • |
| 3/4 | **OXIR24** | 1 15/32 | 1 9/16 | 1/2 | 11/32 | 5 11/32 | • |

*ASME* B107.100 Set includes storage tray

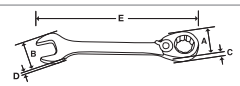
**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# REVERSIBLE RATCHETING COMBINATION Blue-Point®



BOERM712





BOER708

## Ratcheting Combination, Standard Handle, 15° Offset, mm

| mm | 12 | A | B | C | D | E | Set Contains: BOERM712 12 | Set Contains: BOERM704 12 |
|---|---|---|---|---|---|---|---|---|
| 6 | BOERM6 | 16.3 | 16.3 | 6.6 | 3.6 | 114.3 | | |
| 6 | BOERM7 | 16.5 | 16.4 | 6.6 | 3.9 | 125 | | |
| 8 | BOERM8 | 17.8 | 17.7 | 6.5 | 4.0 | 135 | • | |
| 9 | BOERM9 | 19.5 | 20.0 | 7.4 | 4.0 | 150 | • | |
| 10 | BOERM10 | 21.5 | 21.9 | 8.0 | 5.0 | 160 | • | |
| 11 | BOERM11 | 22.0 | 23.9 | 8.5 | 5.5 | 170 | • | |
| 12 | BOERM12 | 23.5 | 25.0 | 9.0 | 5.5 | 175 | • | |
| 13 | BOERM13 | 25.0 | 25.9 | 10.0 | 6.3 | 180 | • | |
| 14 | BOERM14 | 27.0 | 29.9 | 10.0 | 6.5 | 190 | • | |
| 15 | BOERM15 | 28.5 | 31.1 | 11.0 | 7.0 | 200 | • | |
| 16 | BOERM16 | 30.5 | 33.6 | 11.0 | 7.0 | 210 | • | |
| 17 | BOERM17 | 32.0 | 36.5 | 12.0 | 7.0 | 230 | • | |
| 18 | BOERM18 | 34.5 | 38.5 | 12.0 | 8.0 | 240 | • | |
| 19 | BOERM19 | 36.5 | 38.7 | 12.9 | 8.7 | 250 | • | |
| 21 | BOERM21 | 39.4 | 43.2 | 13.7 | 9.4 | 266.7 | | • |
| 22 | BOERM22 | 41.7 | 45.7 | 14.5 | 9.4 | 285.8 | | • |
| 24 | BOERM24 | 46.5 | 49.5 | 15.5 | 11.2 | 304.8 | | • |
| 25 | BOERM25 | 47.2 | 52.8 | 15.5 | 11.2 | 327.2 | | • |

ASME® B107.100 Sets include storage tray

## Ratcheting Combination, Standard Handle, 15° Offset, inches

| | 12 | A | B | C | D | E | Set Contains: BOER708 12 | Set Contains: BOER704 12 |
|---|---|---|---|---|---|---|---|---|
| 1/4 | BOER8 | 21/32 | 21/32 | 1/4 | 5/32 | 4 1/2 | | |
| 5/16 | BOER10 | 11/16 | 11/16 | 1/4 | 5/32 | 5 5/16 | • | |
| 3/8 | BOER12 | 27/32 | 7/8 | 5/16 | 3/16 | 6 5/16 | • | |
| 7/16 | BOER14 | 7/8 | 15/16 | 11/32 | 7/32 | 6 11/16 | • | |
| 1/2 | BOER16 | 31/32 | 1 1/32 | 13/32 | 1/4 | 7 1/16 | • | |
| 9/16 | BOER18 | 1 1/16 | 1 3/16 | 13/32 | 1/4 | 7 1/2 | • | |
| 5/8 | BOER20 | 1 3/16 | 1 5/16 | 7/16 | 9/32 | 8 1/4 | • | |
| 11/16 | BOER22 | 1 1/4 | 1 7/16 | 15/32 | 9/32 | 9 1/16 | • | |
| 3/4 | BOER24 | 1 7/16 | 1 17/32 | 1/2 | 11/32 | 9 13/16 | • | |
| 13/16 | BOER26 | 1 9/16 | 1 23/32 | 17/32 | 3/8 | 10 1/2 | | • |
| 7/8 | BOER28 | 1 21/32 | 1 27/32 | 9/16 | 3/8 | 11 1/4 | | • |
| 15/16 | BOER30 | 1 27/32 | 1 31/32 | 5/8 | 7/16 | 12 | | • |
| 1 | BOER32 | 1 7/8 | 2 3/32 | 5/8 | 7/16 | 12 7/8 | | • |

*ASME* B107.100 Set includes storage tray



BOERMS712



BOERS708

## Ratcheting Combination, Short Handle, 15° Offset, mm

| mm | 12 | A | B | C | D | E | Set Contains: BOERMS712 12 |
|---|---|---|---|---|---|---|---|
| 8 | BOERMS8 | 17.8 | 17.7 | 6.5 | 4.0 | 90 | • |
| 9 | BOERMS9 | 19.5 | 20.0 | 7.4 | 4.0 | 95 | • |
| 10 | BOERMS10 | 21.5 | 21.9 | 8.0 | 5.0 | 100 | • |
| 11 | BOERMS11 | 22.0 | 23.9 | 8.5 | 5.5 | 105 | • |
| 12 | BOERMS12 | 23.5 | 25.0 | 9.0 | 5.5 | 110 | • |
| 13 | BOERMS13 | 25.0 | 25.9 | 10.0 | 6.3 | 115 | • |
| 14 | BOERMS14 | 27.0 | 29.9 | 10.0 | 6.5 | 120 | • |
| 15 | BOERMS15 | 28.5 | 31.1 | 11.0 | 7.0 | 125 | • |
| 16 | BOERMS16 | 30.5 | 33.6 | 11.0 | 7.0 | 128 | • |
| 17 | BOERMS17 | 32.0 | 36.5 | 12.0 | 7.0 | 132 | • |
| 18 | BOERMS18 | 34.5 | 38.5 | 12.0 | 8.0 | 138 | • |
| 19 | BOERMS19 | 36.5 | 38.7 | 12.9 | 8.7 | 142 | • |

*ASME* B107.100 Set includes storage tray

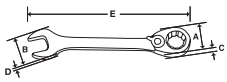
## Ratcheting Combination, Short Handle, 15° Offset, inches

| | 12 | A | B | C | D | E | Set Contains: BOERS708 12 |
|---|---|---|---|---|---|---|---|
| 5/16 | BOERS10 | 11/16 | 11/16 | 1/4 | 5/32 | 3 9/16 | • |
| 3/8 | BOERS12 | 27/32 | 7/8 | 5/16 | 3/16 | 3 15/16 | • |
| 7/16 | BOERS14 | 7/8 | 15/16 | 11/32 | 7/32 | 4 1/8 | • |
| 1/2 | BOERS16 | 31/32 | 1 1/32 | 13/32 | 1/4 | 4 1/2 | • |
| 9/16 | BOERS18 | 1 1/16 | 1 3/16 | 13/32 | 1/4 | 4 3/4 | • |
| 5/8 | BOERS20 | 1 3/16 | 1 5/16 | 7/16 | 9/32 | 5 1/16 | • |
| 11/16 | BOERS22 | 1 1/4 | 1 7/16 | 15/32 | 9/32 | 5 3/16 | • |
| 3/4 | BOERS24 | 1 7/16 | 1 17/32 | 1/2 | 11/32 | 5 9/16 | • |

*ASME* B107.100 Set includes storage tray








BOERMF712A

## Flex-Head Ratcheting Combination, Standard Handle, 15° Offset, mm

- Flex head pivots 90° in either direction to reach hard-to-get fasteners
- Reversible, dual pawl, ratcheting box end yields smooth operation and maximum strength
- 4.5° (5° or smaller wrenches) tooth engagement; less movement to engage the next tooth
- Tough, durable, nickel-chrome finish

Set Contains: BOERMF712A

| mm | 12 | A | B | C | D | E | | 12 |
|---|---|---|---|---|---|---|---|---|
| 8 | BOERMF8A | 17.8 | 17.7 | 6.5 | 4.0 | 142 | 60 | • |
| 9 | BOERMF9A | 19.5 | 20.0 | 7.4 | 4.0 | 152 | 72 | • |
| 10 | BOERMF10A | 21.5 | 21.9 | 8.0 | 5.0 | 162 | 72 | • |
| 11 | BOERMF11A | 22.0 | 23.9 | 8.5 | 5.5 | 172 | 72 | • |
| 12 | BOERMF12A | 23.5 | 25.0 | 9.0 | 5.5 | 180 | 80 | • |
| 13 | BOERMF13A | 25.0 | 25.9 | 10.0 | 6.3 | 188 | 80 | • |
| 14 | BOERMF14A | 27.0 | 29.9 | 10.0 | 6.5 | 196 | 80 | • |
| 15 | BOERMF15A | 28.5 | 31.1 | 11.0 | 7.0 | 204 | 80 | • |
| 16 | BOERMF16A | 30.5 | 33.6 | 11.0 | 7.0 | 214 | 80 | • |
| 17 | BOERMF17A | 32.0 | 36.5 | 12.0 | 7.0 | 228 | 80 | • |
| 18 | BOERMF18A | 34.5 | 38.5 | 12.0 | 8.0 | 242 | 80 | • |
| 19 | BOERMF19A | 36.5 | 38.7 | 12.9 | 8.7 | 256 | 80 | • |

ASME® B107.100 Sets include storage tray





BOERF708A

## Flex-Head Ratcheting Combination, Standard Handle, 15° Offset, inches

Set Contains: BOERF708A

| | 12 | A | B | C | D | E | | 12 |
|---|---|---|---|---|---|---|---|---|
| 5/16 | BOERF10A | 11/16 | 11/16 | 1/4 | 5/32 | 5 19/32 | 72 | • |
| 3/8 | BOERF12A | 27/32 | 7/8 | 5/16 | 3/16 | 6 3/8 | 72 | • |
| 7/16 | BOERF14A | 7/8 | 15/16 | 11/32 | 7/32 | 6 3/4 | 72 | • |
| 1/2 | BOERF16A | 31/32 | 1 1/32 | 13/32 | 1/4 | 7 13/32 | 80 | • |
| 9/16 | BOERF18A | 1 1/16 | 1 3/16 | 13/32 | 1/4 | 7 23/32 | 80 | |
| 5/8 | BOERF20A | 1 3/16 | 1 5/16 | 7/16 | 9/32 | 8 7/16 | 80 | • |
| 11/16 | BOERF22A | 1 1/4 | 1 7/16 | 15/32 | 9/32 | 8 31/32 | 80 | • |
| 3/4 | BOERF24A | 1 7/16 | 1 17/32 | 1/2 | 11/32 | 10 1/16 | 80 | • |

*ASME* B107.100 Set includes storage tray





BOERMSF712

## Flex Head Ratcheting Combination, Midget Handle, 15° Offset, mm

Set Contains: BOERMSF712

| mm | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 8 | BOERMSF8 | 17.8 | 17.7 | 6.5 | 4.0 | 94 | • |
| 9 | BOERMSF9 | 19.5 | 20.0 | 7.4 | 4.0 | 98 | • |
| 10 | BOERMSF10 | 21.5 | 21.9 | 8 | 5 | 103 | • |
| 11 | BOERMSF11 | 22 | 23.9 | 8.5 | 5.5 | 108 | • |
| 12 | BOERMSF12 | 23.5 | 25 | 9 | 5.5 | 111 | • |
| 13 | BOERMSF13 | 25 | 25.9 | 10 | 6.3 | 115 | • |
| 14 | BOERMSF14 | 27 | 29.9 | 10 | 6.5 | 120 | • |
| 15 | BOERMSF15 | 28.5 | 31.1 | 11 | 7 | 124 | • |
| 16 | BOERMSF16 | 30.5 | 33.6 | 11 | 7 | 128 | • |
| 17 | BOERMSF17 | 32 | 36.5 | 12 | 7 | 133 | • |
| 18 | BOERMSF18 | 34.5 | 38.5 | 12 | 8 | 140 | • |
| 19 | BOERMSF19 | 36.5 | 38.7 | 12.9 | 8.7 | 147 | • |

*ASME* B107.100 Set includes kit bag





BOERSF708

## Flex Head Ratcheting Combination, Midget Handle, 15° Offset, inches

Set Contains: BOERSF708

| | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 5/16 | BOERSF10 | 11/16 | 11/16 | 1/4 | 5/32 | 3 11/16 | • |
| 3/8 | BOERSF12 | 27/32 | 7/8 | 5/16 | 3/16 | 4 1/16 | • |
| 7/16 | BOERSF14 | 7/8 | 15/16 | 11/32 | 7/32 | 4 1/4 | • |
| 1/2 | BOERSF16 | 31/32 | 1 1/32 | 13/32 | 1/4 | 4 17/32 | • |
| 9/16 | BOERSF18 | 1 1/16 | 1 3/16 | 13/32 | 1/4 | 4 23/32 | • |
| 5/8 | BOERSF20 | 1 3/16 | 1 5/16 | 7/16 | 9/32 | 5 1/32 | • |
| 11/16 | BOERSF22 | 1 1/4 | 1 7/16 | 15/32 | 9/32 | 5 1/4 | • |
| 3/4 | BOERSF24 | 1 7/16 | 1 17/32 | 1/2 | 11/32 | 5 25/32 | • |

*ASME* B107.100 Set includes kit bag

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETING WRENCH ADAPTORS



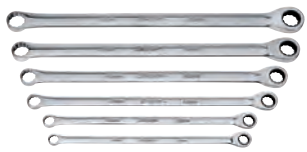
RWA2

## Ratcheting Combination Wrench Adaptors

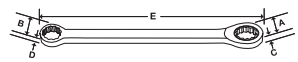
- Converts ratcheting wrench into a ratchet
- Use with reversible ratcheting box wrenches such as the SOEXRM, BOERM, BOERMF and BOERMS series
- Can be used with the combination ratcheting box wrenches such as the OEXRM and OXIRM series
- Use reverse lever on wrench to secure or remove adaptor from wrench
- Push button on adaptor to release socket

| Stock No. | Configuration | Use with Ratcheting Wrench Size |
|---|---|---|
| RWA1 | 1/4" Drive | 13 mm |
| RWA2 | 3/8" Drive | 16 mm |
| RWA3 | 1/2" Drive | 19 mm |
| RWA4 | 1/4" Hex | 13 mm |
| RWA1FR | 1/4" Drive | 1/2" |
| RWA2FR | 3/8" Drive | 5/8" |
| RWA3FR | 1/2" Drive | 3/4" |
| RWA4FR | 1/4" Hex | 1/2" |

# FLANK DRIVE® HIGH PERFORMANCE RATCHETING BOX



XDHRM606






XDHR705

## Ratcheting Box, mm

| mm | 12 | A | B | C | D | E | Set Contains: XDHRM604 12 | Set Contains: XDHRM606 12 |
|---|---|---|---|---|---|---|---|---|
| 8 | XDHRM8 | 17.9 | 11.5 | 7.1 | 6.4 | 230.6 | | |
| 9 | XDHRM9 | 19.4 | 13.0 | 7.9 | 6.4 | 243.7 | | |
| 10 | XDHRM10 | 21.5 | 14.4 | 8.3 | 6.3 | 256.5 | • | |
| 11 | XDHRM11 | 21.4 | 15.5 | 8.7 | 8.7 | 269.5 | | • |
| 12 | XDHRM12 | 23.4 | 17.1 | 9.1 | 9.1 | 282.6 | | • |
| 13 | XDHRM13 | 25.0 | 18.7 | 10.2 | 7.5 | 295.4 | • | |
| 14 | XDHRM14 | 27.0 | 20.2 | 10.3 | 10.3 | 336.6 | | • |
| 15 | XDHRM15 | 28.5 | 21.5 | 11.1 | 8.8 | 349.3 | • | |
| 16 | XDHRM16 | 30.6 | 22.6 | 11.1 | 11.1 | 362.3 | | • |
| 17 | XDHRM17 | 32.0 | 23.7 | 12.0 | 9.0 | 375.2 | • | |
| 18 | XDHRM18 | 34.5 | 25.0 | 11.9 | 12.3 | 388.1 | | • |
| 19 | XDHRM19 | 36.5 | 26.2 | 12.7 | 12.3 | 401.2 | | • |

Set includes kit bag

## Ratcheting Box, inches

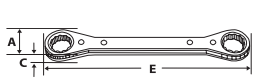
| 11 | 12 | A | B | C | D | E | Set Contains: XDHR705 12 |
|---|---|---|---|---|---|---|---|
| 5/16 | XDHR10 | 45/64 | 1/4 | 9/32 | 29/64 | 9 5/64 | |
| 3/8 | XDHR12 | 27/32 | 9/16 | 21/64 | 19/64 | 10 3/32 | • |
| 7/16 | XDHR14 | 27/32 | 39/64 | 11/32 | 11/32 | 10 39/64 | • |
| 1/2 | XDHR16 | 63/64 | 23/32 | 13/32 | 23/64 | 11 5/8 | • |
| 9/16 | XDHR18 | 1 1/16 | 13/16 | 13/32 | 13/32 | 13 1/4 | • |
| 5/8 | XDHR20 | 1 13/64 | 7/16 | 7/16 | 57/64 | 14 17/64 | |
| 11/16 | XDHR22 | 1 17/64 | 7/16 | 15/32 | 15/16 | 14 49/64 | |
| 3/4 | XDHR24 | 1 7/16 | 1 3/64 | 1/2 | 31/64 | 15 51/64 | • |

Set includes kit bag

# RATCHETING BOX

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.
Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on Flank Drive* wrenching system.






RES2630A

## Spline, inches

| | 11 | Stock No. | A | C | E | Number of Gear Teeth |
|---|---|---|---|---|---|---|
| #8–#10 | 1/4–5/16 | RES810C | 9/16–5/8 | 11/32 | 4 11/16 | 16–18 |
| #12–#14 | 3/8–7/16 | RES1214C | 3/4–7/8 | 11/32 | 6 5/32 | 20–22 |
| #18–#20 | 9/16–5/8 | RES1820C | 1 1/8–1 1/4 | 13/32 | 7 27/32 | 20–22 |
| #26–#30 | 13/16–15/16 | RES2630C | 1 1/2–1 9/16 | 7/16 | 9 25/32 | 22–22 |






RBM1213C



RB604C

## Standard Handle, 0° Offset, mm

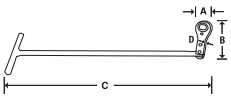
| mm | 6 | 12 | A | C | E |
|---|---|---|---|---|---|
| 7–8 | **RBM78SC** | **RBM78C** | 15.1–17.1 | 9.5 | 114.3 |
| 8–10 | – | **RBM810C** | 20.2–22.6 | 9.5 | 139.7 |
| 9–10 | – | **RBM910C** | 20.2–22.6 | 9.5 | 139.7 |
| 10–11 | **RBM1011SC** | **RBM1011C** | 25.8–29.4 | 12.7 | 174.6 |
| 10–12 | – | **RBM1012C** | 25.8–29.4 | 12.7 | 174.6 |
| 12–13 | **RBM1213SC** | **RBM1213C** | 25.8–29.4 | 12.7 | 174.6 |
| 12–14 | – | **RBM1214C** | 25.8–29.4 | 12.7 | 174.6 |
| 14–15 | – | **RBM1415C** | 32.9–36.5 | 12.7 | 206.4 |
| 16–18 | – | **RBM1618C** | 32.9–36.5 | 12.7 | 206.4 |
| 17–19 | – | **RBM1719C** | 32.9–36.5 | 12.7 | 206.4 |

## Standard Handle, 0° Offset, inches

Set Contains: RB604C

| | 6 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|---|
| 1/4–5/16 | **R810SC** | **R810C** | 19/32–43/64 | 3/8 | 4 1/2 | |
| 5/16–11/32 | – | **R1011C** | 5/8–3/4 | 11/32 | 5 3/8 | |
| 5/16–3/8 | – | **R1012C** | 51/64–57/64 | 3/8 | 5 1/2 | |
| 3/8–7/16 | **R1214SC** | **R1214C** | 51/64–57/64 | 3/8 | 5 1/2 | • |
| 1/2–9/16 | **R1618SC** | **R1618C** | 1 1/64–1 5/32 | 1/2 | 6 7/8 | • |
| 5/8–11/16 | – | **R2022C** | 1 19/64–1 7/16 | 1/2 | 8 1/8 | • |
| 5/8–3/4 | – | **R2024C** | 1 19/64–1 7/16 | 1/2 | 8 1/8 | |
| 3/4–13/16 | – | **R2426C** | 1 13/32–1 37/64 | 1/2 | 9 1/4 | |
| 3/4–7/8 | – | **R2428C** | 1 13/32–1 37/64 | 1/2 | 9 1/4 | • |
| 13/16–15/16 | – | **R2630C** | 1 13/32–1 37/64 | 1/2 | 9 1/4 | |
| 7/8–15/16 | – | **R2830C** | 1 29/32–2 17/64 | 9/16 | 15 | |
| 15/16–1 | – | **R3032C** | 1 29/32–2 17/64 | 9/16 | 15 | |
| 1 1/16–1 1/8 | – | **R3436A** | 2–2 | 9/16 | 12 3/4 | |
| 1 1/8–1 1/4 | **R3640SA** | – | 2 3/32–2 3/32 | 9/16 | 12 13/16 | |
| 1 3/16-1 1/4 | – | **R3840A** | 2–2 | 9/16 | 12 3/4 | |

Set includes storage tray






RTBM605



RTB607

## T-Handle, mm

Set Contains: RTBM605 / RTBM505

| mm | 12 | A | B | C | D | 12 | 12 |
|---|---|---|---|---|---|---|---|
| 8 | **RTBM8** | 17.5 | 71.4 | 307.2 | 9.5 | • | |
| 10 | **RTBM10** | 23.0 | 76.2 | 307.2 | 9.5 | • | |
| 12 | **RTBM12** | 29.4 | 86.5 | 308.8 | 12.7 | • | |
| 13 | **RTBM13** | 29.4 | 86.5 | 308.8 | 12.7 | • | |
| 14 | **RTBM14** | 29.4 | 86.5 | 308.8 | 12.7 | • | |
| 15 | **RTBM15** | 36.8 | 98.6 | 308.8 | 12.7 | | • |
| 16 | **RTBM16** | 36.8 | 98.6 | 308.8 | 12.7 | | • |
| 17 | **RTBM17** | 36.8 | 98.6 | 308.8 | 12.7 | | • |
| 18 | **RTBM18** | 36.8 | 98.6 | 308.8 | 12.7 | | • |
| 19 | **RTBM19** | 36.8 | 98.6 | 308.8 | 12.7 | | • |

Sets include storage tray

## T-Handle, inches

Set Contains: RTB607

| | 12 | A | B | C | D | 12 |
|---|---|---|---|---|---|---|
| 1/4 | **RTB8** | 11/16 | 2 13/16 | 12 3/32 | 3/8 | • |
| 5/16 | **RTB10** | 11/16 | 2 13/16 | 12 3/32 | 3/8 | • |
| 11/32 | **RTB11** | 29/32 | 3 | 12 3/32 | 3/8 | • |
| 3/8 | **RTB12** | 29/32 | 3 | 12 3/32 | 3/8 | • |
| 7/16 | **RTB14** | 29/32 | 3 | 12 3/32 | 3/8 | • |
| 1/2 | **RTB16** | 1 5/32 | 3 13/32 | 12 5/32 | 1/2 | • |
| 9/16 | **RTB18** | 1 5/32 | 3 13/32 | 12 5/32 | 1/2 | • |

Set includes storage tray

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETING BOX Blue-Point®



BXORM706

## Standard Handle, 25° Offset, Reversible, mm

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 8–9 | **BXORM89** | 18.0–19.3 | 6.4–7.6 | 184.2 | • |
| 10–11 | **BXORM1011** | 21.8–22.1 | 8.1–8.6 | 203.2 | • |
| 12–13 | **BXORM1213** | 23.6–24.6 | 8.9–10.2 | 222.3 | • |
| 14–15 | **BXORM1415** | 27.2–28.7 | 10.2–10.9 | 241.3 | • |
| 16–17 | **BXORM1617** | 31.0–32.0 | 10.9–11.9 | 260.4 | • |
| 18–19 | **BXORM1819** | 34.5–36.8 | 12.2–13.2 | 279.4 | • |

Set Contains: BXORM706

Set includes storage tray



RBYAM605

## Standard Handle, 25° Offset, mm

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 7–8 | **RYAM78** | 15.5–16.3 | 9.5 | 105.2 | • |
| 9–10 | **RYAM910** | 19.8–22.6 | 9.5 | 134.5 | • |
| 11–12 | **RYAM1112** | 25.4–29 | 12.7 | 165.9 | • |
| 13–14 | **RYAM1314** | 25.4–29 | 12.7 | 165.9 | • |
| 15–17 | **RYAM1517** | 33–36.5 | 12.7 | 197.2 | • |
| 16–18 | **RYAM1618** | 33–36.5 | 12.7 | 197.2 | |
| 19–21 | **RYAM1921** | 35.7–40.1 | 12.7 | 224.2 | |

Set Contains: RBYAM605

Set includes storage tray



RBZM605

## Latch-on®, 0° Offset, mm

- *Latch-on* head keeps wrench on fastener
- Ring prevents nut/fastener head from sliding through wrench

Set Contains: RBZM605

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 7–8 | **RBZM78** | 15.1–17.1 | 9.5 | 114.3 | • |
| 9–10 | **RBZM910** | 20.4–22.6 | 9.5 | 140.3 | • |
| 11–12 | **RBZM1112** | 25.8–29.4 | 12.7 | 174.6 | • |
| 13–14 | **RBZM1314** | 25.8–29.4 | 12.7 | 174.6 | • |
| 15–17 | **RBZM1517** | 32.9–36.5 | 12.7 | 206.4 | • |
| 16–18 | **RBZM1618** | 32.9–36.5 | 12.7 | 206.4 | |
| 19–21 | **RBZM1921** | 35.7–40.1 | 12.7 | 234.9 | |

Set includes storage tray





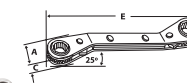
BXOR704

## Standard Handle, 25° Offset, Reversible, inches

| 11 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 5/16–3/8 | **BXOR1012** | 23/32–7/8 | 1/4–5/16 | 7 1/2 | • |
| 7/16–1/2 | **BXOR1416** | 7/8–31/32 | 11/32–13/32 | 8 3/4 | • |
| 9/16–5/8 | **BXOR1820** | 1 1/16–1 7/32 | 13/32–7/16 | 9 3/4 | • |
| 11/16–3/4 | **BXOR2224** | 1 9/32–1 7/16 | 15/32–1/2 | 11 | • |

Set Contains: BXOR704

Set includes storage tray





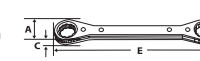
RBYA605

## Standard Handle, 25° Offset, inches

| 11 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 1/4–5/16 | **RYA810** | 9/16–5/8 | 11/32 | 4 9/32 | • |
| 5/16–11/32 | **RYA1011** | 19/32–11/16 | 3/8 | 4 1/32 | |
| 3/8–7/16 | **RYA1214** | 3/4–7/8 | 11/32 | 6 5/32 | • |
| 1/2–9/16 | **RYA1618** | 15/16–1 | 13/32 | 6 31/32 | • |
| 5/8–11/16 | **RYA2022** | 1 1/8–1 1/4 | 13/32 | 7 27/32 | • |
| 3/4–7/8 | **RYA2428** | 1 3/8–1 1/2 | 7/16 | 8 5/8 | • |

Set Contains: RBYA605

Set includes storage tray





RBZ605

## *Latch-on*, 0° Offset, inches

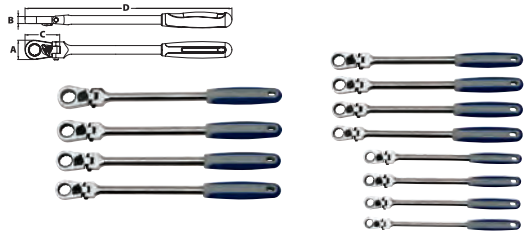
- *Latch-on* head keeps wrench on fastener
- Ring prevents nut/fastener head from sliding through wrench

Set Contains: RBZ605

| 11 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 1/4–5/16 | **RBZ810** | 19/32–11/16 | 3/8 | 4 1/2 | • |
| 3/8–7/16 | **RBZ1214** | 13/16–29/32 | 3/8 | 5 1/2 | • |
| 1/2–9/16 | **RBZ1618** | 1 1/32–1 5/32 | 1/2 | 6 7/8 | • |
| 5/8–11/16 | **RBZ2022** | 1 5/16–1 7/16 | 1/2 | 8 1/8 | • |
| 3/4–7/8 | **RBZ2428** | 1 13/32–1 19/32 | 1/2 | 9 1/4 | • |

Set includes storage tray

# LOCKING FLEX-HEAD REVERSIBLE RATCHETING BOX Blue-Point®



BOERMFLCG712



BOERFLCG708

## Locking Flex Head Ratcheting Box/Cushion Grip, mm

| mm | 12 | A | B | C | D | Set Contains: BOERMFLCG712 — 12 |
|---|---|---|---|---|---|---|
| 8 | BOERMFLCG8 | 17.8 | 6.55 | 32 | 228 | • |
| 9 | BOERMFLCG9 | 19.5 | 7.45 | 34 | 229 | • |
| 10 | BOERMFLCG10 | 21.5 | 8.05 | 38 | 233 | • |
| 11 | BOERMFLCG11 | 22 | 8.55 | 40 | 235 | • |
| 12 | BOERMFLCG12 | 23.5 | 9.05 | 42 | 285 | • |
| 13 | BOERMFLCG13 | 25 | 10.05 | 45 | 287 | • |
| 14 | BOERMFLCG14 | 27 | 10.05 | 48 | 289 | • |
| 15 | BOERMFLCG15 | 28.5 | 11.05 | 52 | 293 | • |
| 16 | BOERMFLCG16 | 30.5 | 11.05 | 54 | 347 | • |
| 17 | BOERMFLCG17 | 32 | 12.05 | 56 | 348 | • |
| 18 | BOERMFLCG18 | 34.5 | 12.05 | 60 | 352 | • |
| 19 | BOERMFLCG19 | 36.5 | 12.95 | 64 | 354 | • |

ASME® B107.100 — Set includes kit bag

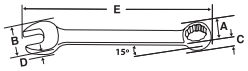
## Locking Flex Head Ratcheting Box/Cushion Grip, inches

| 11 | 12 | A | B | C | D | Set Contains: BOERFLCG708 — 12 |
|---|---|---|---|---|---|---|
| 5/16 | BOERFLCG10 | 23/32 | 1/4 | 1 1/4 | 9 | • |
| 3/8 | BOERFLCG12 | 27/32 | 5/16 | 1 1/2 | 9 1/4 | • |
| 7/16 | BOERFLCG14 | 7/8 | 11/32 | 1 9/16 | 9 19/32 | • |
| 1/2 | BOERFLCG16 | 31/32 | 13/32 | 1 25/32 | 11 9/32 | • |
| 9/16 | BOERFLCG18 | 1 1/16 | 13/32 | 1 29/32 | 11 3/8 | • |
| 5/8 | BOERFLCG20 | 1 7/32 | 7/16 | 2 1/8 | 13 21/32 | • |
| 11/16 | BOERFLCG22 | 1 1/4 | 15/32 | 2 7/32 | 13 23/32 | • |
| 3/4 | BOERFLCG24 | 1 7/16 | 1/2 | 2 17/32 | 13 15/16 | • |

*ASME* B107.100 — Set includes kit bag

# FLANK DRIVE® PLUS COMBINATION

Snap-on® *Flank Drive* Plus combination wrenches exceed the limits of any other open end design. The open end features a series of flutes or notches that grip a fastener away from its corners much like our box ends do. Force is directed away from the weaker corners of the nut and directed to the stronger flats.




## Standard Handle, mm

| mm | 12 | A | B | C | D | E | Set Contains: SOEXM710 — 12 | SOEXM707 — 12 | SOEXM705 — 12 |
|---|---|---|---|---|---|---|---|---|---|
| 7 | SOEXM7 | 11 | 15 | 5 | 4 | 135 | | | |
| 8 | SOEXM8 | 13 | 17 | 6 | 4 | 146 | | | |
| 9 | SOEXM9 | 14 | 19 | 6 | 5 | 159 | | | |
| 10 | SOEXM10 | 15 | 21 | 7 | 5 | 171 | • | • | |
| 11 | SOEXM11 | 17 | 23 | 8 | 6 | 184 | • | • | |
| 12 | SOEXM12 | 18 | 25 | 8 | 6 | 195 | • | • | |
| 13 | SOEXM13 | 20 | 27 | 9 | 6 | 207 | • | • | |
| 14 | SOEXM14 | 21 | 29 | 9 | 7 | 219 | • | • | |
| 15 | SOEXM15 | 22 | 31 | 10 | 7 | 231 | • | • | |
| 16 | SOEXM16 | 24 | 33 | 10 | 7 | 242 | • | | |
| 17 | SOEXM17 | 25 | 35 | 11 | 8 | 255 | • | • | |
| 18 | SOEXM18 | 27 | 37 | 12 | 8 | 267 | • | | |
| 19 | SOEXM19 | 28 | 39 | 12 | 9 | 279 | • | | |
| 20 | SOEXM20 | 30 | 41 | 13 | 9 | 292 | | | • |
| 21 | SOEXM21 | 31 | 43 | 13 | 9 | 304 | | | • |
| 22 | SOEXM22 | 33 | 46 | 14 | 10 | 318 | | | • |
| 23 | SOEXM23 | 34 | 47 | 14 | 10 | 327 | | | • |
| 24 | SOEXM24 | 35 | 49 | 15 | 11 | 337 | | | • |
| 25 | SOEXM25 | 37 | 52 | 16 | 11 | 356 | | | |

*ASME* B107.100 — Sets include storage tray



SOEXM710

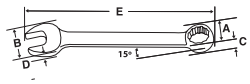
**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® PLUS COMBINATION

Selection, convenience and quality. *Flank Drive* Plus combination wrenches are available in many different styles and sizes. Just like all Snap-on® wrenches, they are sized for optimum comfort and balance in your hand.

Tough, durable, nickel-chrome plating produces a mirror-like finish that helps protect against corrosion and makes it easy to wipe the wrenches clean.






SOEX710

## Standard Handle, inches

| | 12 | A | B | C | D | E | SOEX710 Set Contains: 12 | SOEX707 Set Contains: 12 | SOEX703K1 Set Contains: 12 | SOEX704 Set Contains: 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | SOEX8 | 13/32 | 17/32 | 3/16 | 5/32 | 5 | | | | |
| 5/16 | SOEX10 | 1/2 | 21/32 | 7/32 | 5/32 | 5 3/4 | • | | | |
| 11/32 | SOEX11 | 17/32 | 23/32 | 1/4 | 3/16 | 6 1/8 | | | | |
| 3/8 | SOEX12 | 19/32 | 25/32 | 1/4 | 3/16 | 6 1/2 | • | • | | |
| 7/16 | SOEX14 | 21/32 | 29/32 | 9/32 | 7/32 | 7 1/4 | • | • | | |
| 1/2 | SOEX16 | 3/4 | 1 1/16 | 11/32 | 1/4 | 8 | • | • | | |
| 9/16 | SOEX18 | 27/32 | 1 5/32 | 3/8 | 9/32 | 8 3/4 | • | • | | |
| 5/8 | SOEX20 | 15/16 | 1 5/16 | 13/32 | 9/32 | 9 1/2 | • | • | | |
| 11/16 | SOEX22 | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 10 1/4 | • | • | | |
| 3/4 | SOEX24 | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 11 | • | • | | |
| 13/16 | SOEX26 | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 11 3/4 | • | | | |
| 7/8 | SOEX28 | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 12 1/2 | • | | | |
| 15/16 | SOEX30 | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 13 1/4 | | | | • |
| 1 | SOEX32 | 1 15/32 | 2 1/32 | 5/8 | 7/16 | 14 | | | | • |
| 1 1/16 | SOEX34 | 1 9/16 | 2 5/32 | 19/32 | 15/32 | 14 3/4 | | | | • |
| 1 1/8 | SOEX36 | 1 5/8 | 2 5/16 | 11/16 | 15/32 | 15 17/32 | | | | • |
| 1 3/16 | SOEX38 | 1 23/32 | 2 13/32 | 23/32 | 1/2 | 16 1/4 | | | • | |
| 1 1/4 | SOEX40 | 1 13/16 | 2 9/16 | 3/4 | 17/32 | 17 | | | • | |
| 1 5/16 | SOEX42 | 1 29/32 | 2 21/32 | 3/4 | 9/16 | 17 25/32 | | | • | |

ASME® B107.100

Sets include storage tray



SOEXLM710B

## Long Handle, mm

| mm | 12 | A | B | C | D | E | SOEXLM710B Set Contains: 12 |
|---|---|---|---|---|---|---|---|
| 10 | SOEXLM10B | 15 | 21 | 7 | 5 | 186 | • |
| 11 | SOEXLM11B | 17 | 23 | 8 | 6 | 204 | • |
| 12 | SOEXLM12B | 18 | 25 | 8 | 6 | 218 | • |
| 13 | SOEXLM13B | 20 | 27 | 9 | 6 | 234 | • |
| 14 | SOEXLM14B | 21 | 29 | 9 | 7 | 250 | • |
| 15 | SOEXLM15B | 22 | 31 | 10 | 7 | 266 | • |
| 16 | SOEXLM16B | 24 | 33 | 10 | 7 | 280 | • |
| 17 | SOEXLM17B | 25 | 35 | 11 | 8 | 298 | • |
| 18 | SOEXLM18B | 27 | 37 | 12 | 8 | 214 | • |
| 19 | SOEXLM19B | 28 | 39 | 12 | 9 | 331 | • |

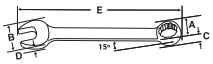


SOEXL707B

## Long Handle, inches

| | 12 | A | B | C | D | E | SOEXL707B 12 |
|---|---|---|---|---|---|---|---|
| 3/8 | SOEXL12B | 19/32 | 25/32 | 1/4 | 3/16 | 7 | • |
| 7/16 | SOEXL14B | 21/32 | 29/32 | 9/32 | 7/32 | 8 | • |
| 1/2 | SOEXL16B | 3/4 | 1 1/16 | 11/32 | 1/4 | 9 | • |
| 9/16 | SOEXL18B | 27/32 | 1 5/32 | 3/8 | 9/32 | 10 | • |
| 5/8 | SOEXL20B | 15/16 | 1 5/16 | 13/32 | 9/32 | 11 | • |
| 11/16 | SOEXL22B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 12 | • |
| 3/4 | SOEXL24B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 13 | • |
| 13/16 | SOEXL26B | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 14 | |
| 7/8 | SOEXL28B | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 15 | |
| 15/16 | SOEXL30B | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 16 | |
| 1 | SOEXL32B | 1 15/32 | 2 1/32 | 5/8 | 7/16 | 17 | |

# FLANK DRIVE® PLUS COMBINATION




## Short Handle, mm

| mm | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 10 | **SOEXM100** | 15 | 21 | 7 | 5 | 133 |
| 11 | **SOEXM110** | 17 | 23 | 8 | 6 | 138 |
| 12 | **SOEXM120** | 18 | 25 | 8 | 6 | 143 |
| 13 | **SOEXM130** | 20 | 27 | 9 | 6 | 148 |
| 14 | **SOEXM140** | 21 | 29 | 9 | 7 | 152 |
| 15 | **SOEXM150** | 22 | 31 | 10 | 7 | 157 |
| 17 | **SOEXM170** | 25 | 35 | 11 | 8 | 167 |



**SOEXM150**

# *FLANK DRIVE* COMBINATION



**OSHM713**



**OSHM707B**



**OEXM713B**



**OEXM710B**



**OEXM707B**



**OEXM706**

## Standard Handle, Chrome, mm

| Set Contains: | OSHM713 | OSHM707B* | OEXM25 | OEXM723K | OEXM713B* | OEXM710B* | OEXM707B* | OEXM705 | OEXM706 |
|---|---|---|---|---|---|---|---|---|---|

| mm | 6 | 12 | A | B | C | D | E | 6 | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | **OSHM70B** | – | 11 | 15 | 5 | 4 | 135 | • | | | | | | | | |
| 8 | **OSHM80B** | **OEXM80B** | 13 | 17 | 6 | 4 | 146 | • | | • | • | | | | | |
| 9 | **OSHM90B** | **OEXM90B** | 14 | 19 | 6 | 5 | 159 | • | | • | • | | | | | |
| 10 | **OSHM100B** | **OEXM100B** | 15 | 21 | 7 | 5 | 171 | • | • | • | • | • | • | • | | |
| 11 | **OSHM110B** | **OEXM110B** | 17 | 23 | 8 | 6 | 184 | • | • | • | • | • | • | • | | |
| 12 | **OSHM120B** | **OEXM120B** | 18 | 25 | 8 | 6 | 195 | • | • | • | • | • | • | • | | |
| 13 | **OSHM130B** | **OEXM130B** | 20 | 27 | 9 | 6 | 207 | • | • | • | • | • | • | • | | |
| 14 | **OSHM140B** | **OEXM140B** | 21 | 29 | 9 | 7 | 219 | • | • | • | • | • | • | • | | |
| 15 | **OSHM150B** | **OEXM150B** | 22 | 31 | 10 | 7 | 231 | • | • | • | • | • | • | • | | |
| 16 | **OSHM160B** | **OEXM160B** | 24 | 33 | 10 | 7 | 242 | • | | • | • | • | • | | | |
| 17 | **OSHM170B** | **OEXM170B** | 25 | 35 | 11 | 8 | 255 | • | • | • | • | • | • | • | | |
| 18 | **OSHM180B** | **OEXM180B** | 27 | 37 | 12 | 8 | 267 | • | | • | • | • | • | | | |
| 19 | **OSHM190B** | **OEXM190B** | 28 | 39 | 12 | 9 | 279 | • | | • | • | • | • | | | |
| 20 | – | **OEXM200B** | 30 | 41 | 13 | 9 | 292 | | | • | • | • | | | • | |
| 21 | – | **OEXM210B** | 31 | 43 | 13 | 9 | 304 | | | • | • | • | | | • | |
| 22 | – | **OEXM220B** | 33 | 46 | 14 | 10 | 318 | | | • | • | • | | | • | |
| 23 | – | **OEXM230B** | 34 | 47 | 14 | 10 | 327 | | | • | • | | | | • | |
| 24 | – | **OEXM240B** | 35 | 49 | 15 | 11 | 337 | | | • | • | | | | • | |
| 25 | – | **OEXM250B** | 37 | 52 | 16 | 11 | 356 | | | • | • | | | | | • |
| 26 | – | **OEXM260B** | 38 | 53 | 16 | 11 | 363 | | | • | • | | | | | • |
| 27 | – | **OEXM270B** | 39 | 55 | 17 | 12 | 375 | | | • | • | | | | | • |
| 28 | – | **OEXM280B** | 40 | 56 | 17 | 12 | 375 | | | | | | | | | • |
| 29 | – | **OEXM290B** | 42 | 58 | 18 | 12 | 394 | | | • | • | | | | | • |
| 30 | – | **OEXM300B** | 44 | 61 | 19 | 13 | 413 | | | • | • | | | | | • |
| 32 | – | **OEXM320B** | 46 | 65 | 19 | 14 | 432 | | | • | • | | | | | |
| 34 | – | **OEXM340B** | 48 | 68 | 19 | 14 | 452 | | | • | | | | | | |
| 36 | – | **OEXM360B** | 53 | 74 | 22 | 15 | 489 | | | • | | | | | | |
| **Kit Bag** | | | | | | | | | | | **C2301A** | | | | | |

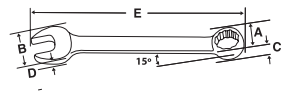
ASME®/ANSI® B107.100

*Set includes storage tray

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® COMBINATION






OSH711B



OEX704B



OEX707B

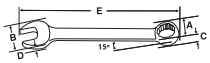
## Standard Handle, Chrome, inches

| Set Contains: | OSH711B* | OSH707B* | OEX724K | OEX714K | OEX710* | OEX711B* | OEX709B* | OEX707B* | OEX703K1 | OEX703K2 | OEX704B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 6 | 12 | A | B | C | D | E | 6 | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 1/4 | – | OEX8B | 13/32 | 17/32 | 3/16 | 5/32 | 5 | | | • | | | | | | | |
| 5/16 | OSH10B | OEX10B | 1/2 | 21/32 | 7/32 | 5/32 | 5 3/4 | | | • | | • | | | | | | |
| 11/32 | OSH11B | OEX11B | 17/32 | 3/4 | 1/4 | 3/16 | 6 1/8 | | | • | | | | | | | | |
| 3/8 | OSH12B | OEX12B | 19/32 | 13/16 | 5/16 | 3/16 | 6 1/2 | • | • | • | • | • | • | • | • | | | |
| 7/16 | OSH14B | OEX14B | 21/32 | 29/32 | 5/16 | 7/32 | 7 1/4 | • | • | • | • | • | • | • | • | | | |
| 1/2 | OSH16B | OEX16B | 3/4 | 1 1/16 | 11/32 | 1/4 | 8 | • | • | • | • | • | • | • | • | | | |
| 9/16 | OSH18B | OEX18B | 27/32 | 1 3/16 | 3/8 | 9/32 | 8 3/4 | • | • | • | • | • | • | • | • | | | |
| 5/8 | OSH20B | OEX20B | 15/16 | 1 5/16 | 13/32 | 9/32 | 9 1/2 | • | • | • | • | • | • | • | • | | | |
| 11/16 | OSH22B | OEX22B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 10 1/4 | • | • | • | • | • | • | • | • | | | |
| 3/4 | OSH24B | OEX24B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 11 | • | • | • | • | • | • | • | • | | | |
| 13/16 | OSH26B | OEX26B | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 11 3/4 | • | | • | • | • | • | • | | | | |
| 7/8 | OSH28B | OEX28B | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 12 1/2 | • | | • | • | • | • | • | | | | |
| 15/16 | OSH30B | OEX30B | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 13 1/4 | • | | • | • | | • | | | | | • |
| 1 | OSH32B | OEX32B | 1 15/32 | 2 1/32 | 21/32 | 7/16 | 14 | • | | • | • | | • | | | | | • |
| 1 1/16 | – | OEX34B | 1 9/16 | 2 3/16 | 11/16 | 15/32 | 14 3/4 | | | • | • | | | | | | | • |
| 1 1/8 | – | OEX36B | 1 5/8 | 2 5/16 | 11/16 | 17/32 | 15 7/16 | | | • | • | | | | | | | • |
| 1 3/16 | – | OEX38B | 1 3/4 | 2 7/16 | 3/4 | 1/2 | 16 5/16 | | | • | | | | | | • | | |
| 1 1/4 | – | OEX40B | 1 13/16 | 2 9/16 | 3/4 | 17/32 | 17 1/16 | | | • | • | | | | | • | | |
| 1 5/16 | – | OEX42B | 1 29/32 | 2 21/32 | 3/4 | 9/16 | 17 13/16 | | | • | | | | | | • | | |
| 1 3/8 | – | OEX44B | 2 | 2 13/16 | 3/4 | 19/32 | 18 9/16 | | | • | | | | | | | • | |
| 1 7/16 | – | OEX46B | 2 1/16 | 2 29/32 | 7/8 | 19/32 | 19 1/32 | | | • | | | | | | | • | |
| 1 1/2 | – | OEX48B | 2 5/32 | 3 1/16 | 7/8 | 5/8 | 20 1/16 | | | • | | | | | | | • | |
| 1 9/16 | – | OEX50B | 2 1/4 | 3 3/16 | 7/8 | 23/32 | 20 13/16 | | | • | | | | | | | | |
| 1 5/8 | – | OEX52B | 2 11/32 | 3 11/32 | 7/8 | 11/16 | 21 9/16 | | | • | | | | | | | | |
| 1 11/16 | – | OEX54A | 2 7/16 | 3 13/32 | 7/8 | 23/32 | 22 9/32 | | | | | | | | | | | |
| 1 3/4 | – | OEX56A | 2 17/32 | 3 9/16 | 1 1/32 | 23/32 | 22 7/8 | | | | | | | | | | | |
| 1 13/16 | – | OEX58A | 2 5/8 | 3 21/32 | 1 1/32 | 3/4 | 23 15/32 | | | | | | | | | | | |
| 1 7/8 | – | OEX60A | 2 11/32 | 3 13/16 | 1 1/32 | 25/32 | 24 1/32 | | | | | | | | | | | |
| 2 | – | OEX64A | 2 7/8 | 4 1/16 | 1 1/32 | 27/32 | 25 1/4 | | | | | | | | | | | |
| | | Kit Bag | | | | | | | | C2301A | C1401 | | | | | | | |

ASME® B107.100

*Set includes storage tray

OEX32B – OEX52B are full polish chrome. OEX54A – OEX64A are satin finish chrome.



## Standard Handle, Industrial, mm

| mm | 12 | A | B | C | D | E | Set Contains: GOEXM715 12 |
|---|---|---|---|---|---|---|---|
| 10 | GOEXM100B | 15 | 21 | 7 | 5 | 171 | • |
| 11 | GOEXM110B | 17 | 23 | 8 | 6 | 184 | • |
| 12 | GOEXM120B | 18 | 25 | 8 | 6 | 195 | • |
| 13 | GOEXM130B | 20 | 27 | 9 | 6 | 207 | • |
| 14 | GOEXM140B | 21 | 29 | 9 | 7 | 219 | • |
| 15 | GOEXM150B | 22 | 31 | 10 | 7 | 231 | • |
| 16 | GOEXM160B | 24 | 33 | 10 | 7 | 242 | • |
| 17 | GOEXM170B | 25 | 35 | 11 | 8 | 255 | • |
| 18 | GOEXM180B | 27 | 37 | 12 | 8 | 267 | • |
| 19 | GOEXM190B | 28 | 39 | 12 | 9 | 279 | • |
| 20 | GOEXM200B | 30 | 41 | 13 | 9 | 292 | • |
| 21 | GOEXM210B | 31 | 43 | 13 | 10 | 304 | • |
| 22 | GOEXM220B | 33 | 46 | 14 | 10 | 318 | • |
| 23 | GOEXM230B | 34 | 47 | 14 | 10 | 327 | • |
| 24 | GOEXM240B | 35 | 49 | 15 | 11 | 337 | • |
| 27 | GOEXM270B | 39 | 55 | 17 | 12 | 375 | |

ASME®/ANSI® B107.100

Set includes storage tray



GOEXM150B



GOEXM715



GOEX722K



GOEX711B

## Standard Handle, Industrial, inches

| 11 | 12 | A | B | C | D | E | Set Contains: GOEX722K 12 | GOEX714K 12 | GOEX711B* 12 | GOEX707B* 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| 5/16 | GOEX10B | 1/2 | 21/32 | 7/32 | 5/32 | 5 3/4 | • | | | |
| 3/8 | GOEX12B | 19/32 | 13/16 | 5/16 | 3/16 | 6 1/2 | • | • | • | • |
| 7/16 | GOEX14B | 21/32 | 29/32 | 5/16 | 7/32 | 7 1/4 | • | • | • | • |
| 1/2 | GOEX16B | 3/4 | 1 1/16 | 11/32 | 1/4 | 8 | • | • | • | • |
| 9/16 | GOEX18B | 27/32 | 1 3/16 | 3/8 | 9/32 | 8 3/4 | • | • | • | • |
| 5/8 | GOEX20B | 15/16 | 1 5/16 | 13/32 | 9/32 | 9 1/2 | • | • | • | • |
| 11/16 | GOEX22B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 10 1/4 | • | • | • | • |
| 3/4 | GOEX24B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 11 | • | • | • | • |
| 13/16 | GOEX26B | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 11 3/4 | • | • | • | |
| 7/8 | GOEX28B | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 12 1/2 | • | • | • | |
| 15/16 | GOEX30B | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 13 1/4 | • | • | • | |
| 1 | GOEX32B | 1 15/32 | 2 1/32 | 21/32 | 7/16 | 14 | • | • | • | |
| 1 1/16 | GOEX34B | 1 9/16 | 2 3/16 | 11/16 | 15/32 | 14 3/4 | • | • | | |
| 1 1/8 | GOEX36B | 1 5/8 | 2 5/16 | 11/16 | 17/32 | 15 7/16 | • | • | | |
| 1 3/16 | GOEX38B | 1 3/4 | 2 7/16 | 3/4 | 1/2 | 16 5/16 | • | | | |
| 1 1/4 | GOEX40B | 1 13/16 | 2 9/16 | 3/4 | 17/32 | 17 1/16 | • | • | | |
| 1 5/16 | GOEX42B | 1 29/32 | 2 21/32 | 3/4 | 9/16 | 17 13/16 | • | | | |
| 1 3/8 | GOEX44B | 2 | 2 13/16 | 3/4 | 19/32 | 18 9/16 | • | | | |
| 1 7/16 | GOEX46B | 2 1/16 | 2 29/32 | 7/8 | 19/32 | 19 1/32 | • | | | |
| 1 1/2 | GOEX48B | 2 5/32 | 3 1/16 | 7/8 | 5/8 | 20 1/16 | • | | | |
| 1 9/16 | GOEX50B | 2 1/4 | 3 3/16 | 7/8 | 23/32 | 20 13/16 | • | | | |
| 1 5/8 | GOEX52B | 2 11/32 | 3 11/32 | 7/8 | 11/16 | 21 9/16 | • | | | |
| | Kit Bag | | | | | | C2200 | C1401 | | |

*ASME* B107.100

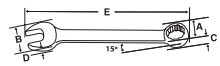
*Set includes storage tray

| 11 | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 3/4 | GOEX56A | 2 17/32 | 3 9/16 | 1 1/32 | 23/32 | 22 7/8 |
| 1 13/16 | GOEX58A | 2 5/8 | 3 21/32 | 1 1/32 | 3/4 | 23 15/32 |
| 1 7/8 | GOEX60A | 2 11/32 | 3 13/16 | 1 1/32 | 25/32 | 24 1/32 |
| 2 | GOEX64A | 2 7/8 | 4 1/16 | 1 1/32 | 27/32 | 25 1/4 |
| 2 1/16 | GOEX66A | 2 31/32 | 4 5/32 | 1 1/8 | 27/32 | 25 25/32 |
| 2 1/8 | GOEX68A | 3 1/16 | 4 5/16 | 1 5/32 | 7/8 | 26 3/8 |
| 2 3/16 | GOEX70A | 3 1/8 | 4 13/32 | 1 1/8 | 7/8 | 26 31/32 |
| 2 1/4 | GOEX72A | 3 7/32 | 4 9/16 | 1 1/8 | 15/16 | 27 9/16 |
| 2 3/8 | GOEX76A | 3 13/32 | 4 13/16 | 1 9/32 | 31/32 | 28 3/4 |
| 2 1/2 | GOEX80A | 3 19/32 | 5 1/16 | 1 9/32 | 1 | 29 29/32 |
| 2 5/8 | GOEX84A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 2 3/4 | GOEX88A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 2 7/8 | GOEX92A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 2 15/16 | GOEX94A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 3 | GOEX96A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 3 1/8 | GOEX1100A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 3 3/8 | GOEX1108A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |
| 3 1/2 | GOEX1112A | 4 7/8 | 6 5/8 | 1 5/8 | 1 3/16 | 32 |

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® COMBINATION






OEXLM710B



OEXL707B

## Long Handle, mm

Set Contains: OEXLM710B

| mm | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 10 | OEXLM10B | 15 | 21 | 7 | 5 | 186 | • |
| 11 | OEXLM11B | 17 | 23 | 8 | 6 | 203 | • |
| 12 | OEXLM12B | 18 | 25 | 8 | 6 | 218 | • |
| 13 | OEXLM13B | 20 | 27 | 9 | 6 | 234 | • |
| 14 | OEXLM14B | 21 | 29 | 9 | 7 | 250 | • |
| 15 | OEXLM15B | 22 | 31 | 10 | 7 | 266 | • |
| 16 | OEXLM16B | 24 | 33 | 10 | 7 | 282 | • |
| 17 | OEXLM17B | 25 | 35 | 11 | 8 | 298 | • |
| 18 | OEXLM18B | 27 | 37 | 12 | 8 | 314 | • |
| 19 | OEXLM19B | 28 | 39 | 12 | 9 | 330 | • |

ASME® B107.100

Set includes storage tray

## Long Handle, inches

Set Contains: OEXL707B

| | 12 | A | B | C | D | E | 12 |
|---|---|---|---|---|---|---|---|
| 3/8 | OEXL12B | 19/32 | 25/32 | 1/4 | 3/16 | 7 | • |
| 7/16 | OEXL14B | 21/32 | 29/32 | 5/16 | 7/32 | 8 | • |
| 1/2 | OEXL16B | 3/4 | 1 1/16 | 11/32 | 1/4 | 9 | • |
| 9/16 | OEXL18B | 27/32 | 1 5/32 | 3/8 | 9/32 | 10 | • |
| 5/8 | OEXL20B | 15/16 | 1 5/16 | 13/32 | 9/32 | 11 | • |
| 11/16 | OEXL22B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 12 | • |
| 3/4 | OEXL24B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 13 | • |
| 13/16 | OEXL26B | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 14 | |
| 7/8 | OEXL28B | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 15 | |
| 15/16 | OEXL30B | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 16 | |
| 1 | OEXL32B | 1 15/32 | 2 1/32 | 5/8 | 7/16 | 17 | |

*ASME* B107.100

Set includes storage tray



GOEXM17B



OEXSM710B

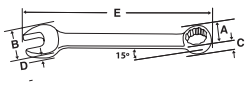
## Short Handle, mm

Set Contains: OEXSM719 / OEXSM714K / OEXSM710B*

| mm | 12 | 12 | A | B | C | D | E | 12 | 12 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | OEXM6B | GOEXM6B | 10 | 13 | 5 | 4 | 113 | • | • | |
| 7 | OEXM7B | GOEXM7B | 11 | 15 | 5 | 4 | 118 | • | • | |
| 8 | OEXM8B | GOEXM8B | 13 | 17 | 6 | 4 | 123 | • | • | |
| 9 | OEXM9B | GOEXM9B | 14 | 19 | 6 | 5 | 128 | • | • | |
| 10 | OEXM10B | GOEXM10B | 15 | 21 | 7 | 5 | 133 | • | • | • |
| 11 | OEXM11B | GOEXM11B | 17 | 23 | 8 | 6 | 138 | • | • | • |
| 12 | OEXM12B | GOEXM12B | 18 | 25 | 8 | 6 | 142 | • | • | • |
| 13 | OEXM13B | GOEXM13B | 20 | 27 | 9 | 6 | 148 | • | • | • |
| 14 | OEXM14B | GOEXM14B | 21 | 29 | 9 | 7 | 152 | • | • | • |
| 15 | OEXM15B | GOEXM15B | 22 | 31 | 10 | 7 | 157 | • | • | • |
| 16 | OEXM16B | GOEXM16B | 24 | 33 | 10 | 7 | 162 | • | • | • |
| 17 | OEXM17B | GOEXM17B | 25 | 35 | 11 | 8 | 167 | • | • | • |
| 18 | OEXM18B | GOEXM18B | 27 | 37 | 12 | 8 | 172 | • | • | • |
| 19 | OEXM19B | GOEXM19B | 28 | 39 | 12 | 9 | 177 | • | • | • |
| 20 | OEXM20B | – | 30 | 41 | 13 | 9 | 182 | • | | |
| 21 | OEXM21B | – | 31 | 43 | 13 | 9 | 186 | • | | |
| 22 | OEXM22B | – | 33 | 46 | 14 | 10 | 192 | • | | |
| 23 | OEXM23B | – | 34 | 47 | 14 | 10 | 197 | • | | |
| 24 | OEXM24B | – | 35 | 49 | 15 | 11 | 201 | • | | |
| | Kit Bag | | | | | | | | C1402 | |

*ASME* B107.100

*Set includes storage tray




## Short Handle, inches

| Set Contains: | | | | | | | | OEXS721 | OEXS715K | OEXS709B* |
|---|---|---|---|---|---|---|---|---|---|---|
| | 12 | 12 | A | B | C | D | E | 12 | 12 | 12 |
| 1/4 | OEX080B | GOEX080B | 13/32 | 17/32 | 3/16 | 5/32 | 4 17/32 | • | • | |
| 9/32 | OEX090B | – | 7/16 | 19/32 | 7/32 | 5/32 | 4 21/32 | • | • | |
| 5/16 | OEX100B | GOEX100B | 1/2 | 21/32 | 7/32 | 5/32 | 4 27/32 | • | • | • |
| 11/32 | OEX110B | GOEX110B | 17/32 | 23/32 | 1/4 | 3/16 | 5 | • | • | • |
| 3/8 | OEX120B | GOEX120B | 19/32 | 25/32 | 1/4 | 3/16 | 5 1/8 | • | • | • |
| 7/16 | OEX140B | GOEX140B | 21/32 | 29/32 | 5/16 | 7/32 | 5 7/16 | • | • | • |
| 1/2 | OEX160B | GOEX160B | 3/4 | 1 1/16 | 11/32 | 1/4 | 5 3/4 | • | • | • |
| 9/16 | OEX180B | GOEX180B | 27/32 | 1 5/32 | 3/8 | 9/32 | 6 1/16 | • | • | • |
| 5/8 | OEX200B | GOEX200B | 15/16 | 1 5/16 | 13/32 | 9/32 | 6 11/32 | • | • | • |
| 11/16 | OEX220B | GOEX220B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 6 21/32 | • | • | • |
| 3/4 | OEX240B | GOEX240B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 6 31/32 | • | • | • |
| 13/16 | OEX260B | GOEX260B | 1 3/16 | 1 21/32 | 17/32 | 3/8 | 7 9/32 | • | • | |
| 7/8 | OEX280B | GOEX280B | 1 9/32 | 1 13/16 | 9/16 | 3/8 | 7 9/16 | • | • | |
| 15/16 | OEX300B | GOEX300B | 1 3/8 | 1 29/32 | 19/32 | 13/32 | 7 7/8 | • | • | |
| 1 | OEX320B | GOEX320B | 1 15/32 | 2 1/32 | 5/8 | 7/16 | 8 3/16 | • | • | |
| 1 1/16 | OEX340B | – | 1 9/16 | 2 5/32 | 21/32 | 15/32 | 8 17/32 | • | | |
| 1 1/8 | OEX360B | – | 1 5/8 | 2 5/16 | 11/16 | 1/2 | 8 27/32 | • | | |
| 1 3/16 | OEX380B | – | 1 23/32 | 2 13/32 | 23/32 | 1/2 | 9 1/8 | • | | |
| 1 1/4 | OEX400B | – | 1 13/16 | 2 9/16 | 3/4 | 17/32 | 9 7/16 | • | | |
| 1 5/16 | OEX420B | – | 1 29/32 | 2 21/32 | 3/4 | 9/16 | 9 3/4 | • | | |
| 1 3/8 | OEX440B | – | 2 | 2 13/16 | 3/4 | 19/32 | 10 1/16 | • | | |
| | Kit Bag | | | | | | | | C1505 | |

ASME® B107.100

*Set includes storage tray



GOEX200B



OEXS715K



OEXS709B



OXIM707SBK

## Midget, mm

| Set Contains: | | | | | | | | | OXIM717 | OXIM707SBK | OXIM710B** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | 6 | 12 | A | B | C | D | E | | 6 | 12 |
| 4 | OXIM4SB* | – | 7 | 10 | 4 | 3 | 72 | 6-Point | • | |
| 5 | OXIM5SB* | – | 8 | 12 | 4 | 3 | 76 | 6-Point | • | |
| 5.5 | OXIM55SB | – | 9 | 13 | 4 | 4 | 79 | 6-Point | • | |
| 6 | OXIM6SB | OXIM6B | 10 | 13 | 5 | 4 | 81 | 12-Point | • | |
| 7 | OXIM7SB | OXIM7B | 11 | 15 | 5 | 4 | 85 | 12-Point | • | |
| 8 | OXIM8SB | OXIM8B | 13 | 17 | 6 | 4 | 89 | 12-Point | • | |
| 9 | OXIM9SB | OXIM9B | 14 | 19 | 6 | 5 | 93 | 12-Point | • | |
| 10 | – | OXIM10B | 15 | 21 | 7 | 5 | 98 | 12-Point | | • |
| 11 | – | OXIM11B | 17 | 23 | 8 | 6 | 102 | 12-Point | | • |
| 12 | – | OXIM12B | 18 | 25 | 8 | 6 | 106 | 12-Point | | • |
| 13 | – | OXIM13B | 20 | 27 | 9 | 6 | 110 | 12-Point | | • |
| 14 | – | OXIM14B | 21 | 29 | 9 | 7 | 115 | 12-Point | | • |
| 15 | – | OXIM15B | 22 | 31 | 10 | 7 | 119 | 12-Point | | • |
| 16 | – | OXIM16B | 24 | 33 | 10 | 7 | 122 | 12-Point | | • |
| 17 | – | OXIM17B | 25 | 35 | 11 | 8 | 127 | 12-Point | | • |
| 18 | – | OXIM18B | 27 | 37 | 12 | 8 | 131 | 12-Point | | • |
| 19 | – | OXIM19B | 28 | 39 | 12 | 9 | 136 | 12-Point | | • |
| | Kit Bag | | | | | | | | C0700 | |

*ASME* B107.100 *Conventional Hex

**Set includes storage tray

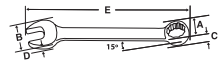
**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® COMBINATION



OXI709SBK




## Midget Handle, inches

| Set Contains: | | | | | | | | OXI709SBK | OXI707BK | OXI715 | OXI706B** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 12 | A | B | C | D | E | 6 | 12 | | 12 |
| 1/8 | OXI4SB* | – | 7/32 | 11/32 | 1/8 | 1/8 | 2 11/16 | • | | 6-Point | |
| 5/32 | OXI5SB* | – | 9/32 | 13/32 | 5/32 | 1/8 | 2 27/32 | • | | 6-Point | |
| 3/16 | OXI6SB* | OXI6B* | 5/16 | 7/16 | 5/32 | 1/8 | 2 31/32 | • | • | 12-Point | |
| 7/32 | OXI7SB | OXI7B | 3/8 | 1/2 | 3/16 | 1/8 | 3 3/32 | • | • | 12-Point | |
| 1/4 | OXI8SB | OXI8B | 13/32 | 17/32 | 3/16 | 5/32 | 3 7/32 | • | • | 12-Point | |
| 9/32 | OXI9SB | OXI9B | 7/16 | 19/32 | 7/32 | 5/32 | 3 11/32 | • | • | 12-Point | |
| 5/16 | OXI10SB | OXI10B | 1/2 | 21/32 | 7/32 | 5/32 | 3 1/2 | • | • | 12-Point | |
| 11/32 | OXI11SB | OXI11B | 17/32 | 23/32 | 1/4 | 3/16 | 3 5/8 | • | • | 12-Point | |
| 3/8 | OXI12SB | OXI12B | 19/32 | 25/32 | 1/4 | 3/16 | 3 3/4 | • | • | 12-Point | |
| 7/16 | – | OXI14B | 21/32 | 29/32 | 5/16 | 7/32 | 4 1/32 | | | 12-Point | • |
| 1/2 | – | OXI16B | 3/4 | 1 1/16 | 11/32 | 1/4 | 4 9/32 | | | 12-Point | • |
| 9/16 | – | OXI18B | 27/32 | 1 5/32 | 3/8 | 9/32 | 4 17/32 | | | 12-Point | • |
| 5/8 | – | OXI20B | 15/16 | 1 5/16 | 13/32 | 9/32 | 4 13/16 | | | 12-Point | • |
| 11/16 | – | OXI22B | 1 1/32 | 1 13/32 | 7/16 | 5/16 | 5 1/16 | | | 12-Point | • |
| 3/4 | – | OXI24B | 1 1/8 | 1 9/16 | 15/32 | 11/32 | 5 11/32 | | | 12-Point | • |
| | Kit Bag | | | | | | | C0900A | C0700 | | |

ASME® B107.100 *Conventional Hex **Set includes storage tray



FHOM606B






FHO607B

## Flex-Combination, mm

| Set Contains: | | | | | | | FHOM606B |
|---|---|---|---|---|---|---|---|
| mm | 12 | A | B | D | E | F | 12 |
| 8 | FHOM8B | 12 | 17 | 5 | 146 | 6 | |
| 9 | FHOM9B | 13 | 18 | 5 | 156 | 6 | |
| 10 | FHOM10B | 14 | 20 | 5 | 166 | 6 | • |
| 11 | FHOM11B | 16 | 23 | 6 | 181 | 7 | |
| 12 | FHOM12B | 17 | 30 | 6 | 198 | 9 | • |
| 13 | FHOM13B | 19 | 27 | 7 | 205 | 9 | • |
| 14 | FHOM14B | 20 | 30 | 7 | 213 | 9 | • |
| 15 | FHOM15B | 21 | 31 | 7 | 224 | 10 | • |
| 16 | FHOM16B | 23 | 33 | 7 | 229 | 10 | |
| 17 | FHOM17B | 24 | 37 | 8 | 246 | 10 | • |
| 18 | FHOM18B | 24 | 38 | 8 | 254 | 11 | |
| 19 | FHOM19B | 26 | 40 | 8 | 261 | 12 | |

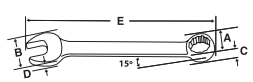
*ASME* B107.100 Set includes storage tray

## Flex-Combination, inches

| Set Contains: | | | | | | | FHO607B |
|---|---|---|---|---|---|---|---|
| | 12 | A | B | D | E | F | 12 |
| 1/4 | FHO8B | 3/8 | 17/32 | 1/8 | 4 15/16 | 7/32 | |
| 5/16 | FHO10B | 15/32 | 21/32 | 3/16 | 5 31/32 | 1/4 | |
| 3/8 | FHO12B | 9/16 | 17/32 | 7/32 | 6 1/2 | 1/4 | • |
| 7/16 | FHO14B | 5/8 | 29/32 | 7/32 | 7 1/8 | 9/32 | • |
| 1/2 | FHO16B | 23/32 | 1 1/16 | 1/4 | 7 13/16 | 11/32 | • |
| 9/16 | FHO18B | 25/32 | 1 3/16 | 9/32 | 8 3/8 | 11/32 | • |
| 5/8 | FHO20B | 29/32 | 1 5/16 | 9/32 | 9 | 3/8 | • |
| 11/16 | FHO22B | 1 | 1 7/16 | 9/32 | 9 11/16 | 13/32 | • |
| 3/4 | FHO24B | 1 1/32 | 1 1/2 | 5/16 | 10 1/4 | 15/32 | • |
| 13/16 | FHO26B | 1 1/32 | 1 23/32 | 5/16 | 10 5/16 | 1/2 | |
| 7/8 | FHO28B | 1 3/16 | 1 27/32 | 5/16 | 10 15/32 | 9/16 | |

*ASME* B107.100 Set includes storage tray

## British Standard, Short Handle






WOEX90B

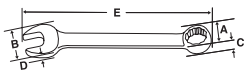
| BS | Decimal Equiv., inches | 12 | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 3/16" | .338 | WOEX6B | 25/32 | 19/32 | 3/16 | 1/4 | 5 3/32 |
| 1BA | .365 | WOEX70B | 25/32 | 19/32 | 3/16 | 1/4 | 5 1/8 |
| 0BA | .413 | WOEX80B | 29/32 | 21/32 | 7/32 | 5/16 | 5 13/32 |
| 1/4" | .445 | WOEX90B | 29/32 | 21/32 | 7/32 | 5/16 | 5 15/32 |
| 5/16" | .525 | WOEX100B | 1 5/32 | 27/32 | 9/32 | 3/8 | 6 1/32 |
| 3/8" | .600 | WOEX110B | 1 5/16 | 15/16 | 9/32 | 13/32 | 6 11/32 |
| 7/16" | .710 | WOEX120B | 1 5/16 | 1 1/32 | 5/16 | 7/16 | 6 23/32 |

# SPLINE COMBINATION

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool. Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.

## Short Handle, inches

| | | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| #8 | 1/4 | OES8B | 13/32 | 17/32 | 1/8 | 5/32 | 4 1/2 |
| #10 | 5/16 | OES10B | 15/32 | 21/32 | 11/64 | 15/64 | 4 55/64 |
| #12 | 3/8 | OES12B | 17/32 | 25/32 | 13/64 | 17/64 | 5 7/32 |
| #14 | 7/16 | OES14B | 5/8 | 29/32 | 15/64 | 5/16 | 5 27/64 |
| #16 | 1/2 | OES16B | 23/32 | 1 1/16 | 1/4 | 5/16 | 5 47/64 |
| #18 | 9/16 | OES18B | 13/16 | 1 3/16 | 17/64 | 21/64 | 6 1/32 |
| #20 | 5/8 | OES20B | 7/8 | 1 5/16 | 9/32 | 11/32 | 6 5/16 |
| #22 | 11/16 | OES22B | 31/32 | 1 7/16 | 19/64 | 23/64 | 6 39/64 |
| #24 | 3/4 | OES24B | 1 1/16 | 1 9/16 | 5/16 | 3/8 | 6 29/32 |






OES18B

# COMBINATION Blue-Point®

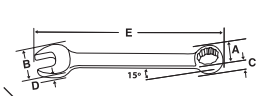


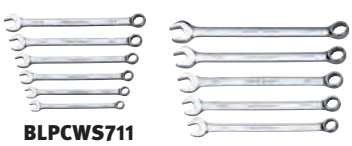
BLPCWSM712

## Standard Handle, mm

| mm | Stock No. | Length, mm | Set Contains: 12 |
|---|---|---|---|
| 8 | BLPCWM8 | 148 | • |
| 9 | BLPCWM9 | 160 | • |
| 10 | BLPCWM10 | 167 | • |
| 11 | BLPCWM11 | 186 | • |
| 12 | BLPCWM12 | 196 | • |
| 13 | BLPCWM13 | 205 | • |
| 14 | BLPCWM14 | 223 | • |
| 15 | BLPCWM15 | 233 | • |
| 16 | BLPCWM16 | 243 | • |
| 17 | BLPCWM17 | 262 | • |
| 18 | BLPCWM18 | 272 | • |
| 19 | BLPCWM19 | 281 | • |

Set includes storage tray



BLPCWS711

## Standard Handle, inches

| | Stock No. | Length, inches | Set Contains: 12 |
|---|---|---|---|
| 1/4 | BLPCW14 | 5 1/32 | |
| 5/16 | BLPCW516 | 5 7/32 | |
| 3/8 | BLPCW38 | 6 9/16 | • |
| 7/16 | BLPCW716 | 7 11/32 | • |
| 1/2 | BLPCW12 | 8 1/16 | • |
| 9/16 | BLPCW916 | 8 25/32 | • |
| 5/8 | BLPCW58 | 9 9/16 | • |
| 11/16 | BLPCW1116 | 10 5/16 | • |
| 3/4 | BLPCW34 | 11 1/16 | • |
| 13/16 | BLPCW1316 | 11 27/32 | • |
| 7/8 | BLPCW78 | 12 9/16 | • |
| 15/16 | BLPCW1516 | 13 11/32 | • |
| 1 | BLPCW1 | 14 3/32 | • |

Set includes storage tray

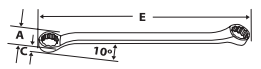
# *FLANK DRIVE* OFFSET BOX

## Standard Handle, 10° Offset, mm

| mm | 6 | 12 | A | C | E | Set Contains: XBM605A 12 |
|---|---|---|---|---|---|---|
| 8–10 | – | XBM810A | 12.3–15 | 6.7–7.7 | 185 | |
| 10–11 | – | XBM1011A | 15–16.4 | 7.7–8.3 | 202 | • |
| 10–12 | – | XBM1012A | 15–17.7 | 7.7–8.8 | 208 | |
| 11–13 | – | XBM1113A | 16.4–19.1 | 8.3–9.3 | 219 | |
| 12–14 | XBM1214SA | XBM1214A | 17.7–20.4 | 8.8–9.7 | 230 | • |
| 13–15 | XBM1315SA | XBM1315A | 19.1–21.8 | 9.3–10.2 | 241 | • |
| 14–17 | – | XBM1417A | 20.4–24.5 | 9.8–11.4 | 248 | |
| 16–18 | – | XBM1618A | 23.1–25.9 | 10.9–11.9 | 275 | • |
| 17–19 | – | XBM1719A | 24.5–27.2 | 11.4–12.3 | 286 | • |
| 18–21 | – | XBM1821A | 25.9–29.9 | 11.9–13.3 | 303 | |
| 22–24 | – | XBM2224A | 31.3–34 | 13.7–14.7 | 342 | |
| 27–30 | – | XBM2730A | 38.1–42.2 | 16–17.3 | 404 | |

ASME® B107.100

Set includes storage tray






XBM605A

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® OFFSET BOX



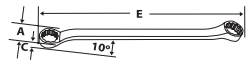
**XB605A**

## Standard Handle, 10° Offset, inches

Set Contains: XB605A

| | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 3/8–7/16 | **XB1214A** | 9/16–21/32 | 5/16–11/32 | 7 19/32 | • |
| 7/16–1/2 | **XB1416A** | 21/32–3/4 | 5/16–11/32 | 7 15/16 | |
| 1/2–9/16 | **XB1618A** | 3/4–13/16 | 11/32–3/8 | 8 11/16 | • |
| 9/16–5/8 | **XB1820A** | 13/16–29/32 | 13/32–7/16 | 9 13/32 | |
| 5/8–11/16 | **XB2022A** | 29/32–1 | 7/16–15/32 | 10 5/32 | • |
| 11/16–3/4 | **XB2224A** | 1–1 1/16 | 15/32–1/2 | 10 15/16 | |
| 3/4–13/16 | **XB2426A** | 1 1/16–1 5/32 | 1/2–17/32 | 11 21/32 | • |
| 7/8–15/16 | **XB2830A** | 1 1/4–1 11/32 | 17/32–9/16 | 13 1/8 | • |
| 15/16–1 | **XB3032A** | 1 11/32–1 13/32 | 9/16–19/32 | 13 7/8 | |
| 1–1 1/16 | **XB3234A** | 1 13/32–1 1/2 | 19/32–5/8 | 14 19/32 | |
| 1 1/16–1 1/4 | **XB3440A** | 1 1/2–1 3/4 | 5/8–23/32 | 16 3/32 | |
| 1 1/8–1 3/16 | **XB3638A** | 1 9/32–1 21/32 | 21/32–11/16 | 16 3/32 | |
| 1 1/4–1 5/16 | **XB4042A** | 1 3/4–1 27/32 | 23/32–3/4 | 17 19/32 | |
| 1 3/8–1 7/16 | **XB4446A** | 1 31/32–2 1/16 | 3/4–25/32 | 19 1/8 | |
| 1 1/2–1 5/8 | **XB4852A** | 2 3/32–2 9/32 | 13/16–7/8 | 20 15/16 | |

ASME® B107.100 — Set includes storage tray






**XSM608A**

## Short Handle, 10° Offset, mm

Set Contains: XSM608A

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 6–7 | **XSM67A** | 9.6–10.9 | 5.7–6.2 | 86 | • |
| 8–9 | **XSM89A** | 12.3–13.7 | 6.7–7.2 | 103 | • |
| 8–10 | **XSM810** | 12.3–15 | 6.7–7.7 | 107 | |
| 9–10 | **XSM910A** | 13.7–15 | 7.2–7.7 | 112 | • |
| 11–12 | **XSM1112A** | 16.4–17.7 | 8.3–8.8 | 128 | • |
| 13–14 | **XSM1314A** | 19.1–20.4 | 9.3–9.8 | 146 | • |
| 15–16 | **XSM1516A** | 21.8–23.1 | 10.2–10.9 | 163 | • |
| 17–19 | **XSM1719A** | 24.5–27.2 | 11.4–12.3 | 185 | • |
| 18–20 | **XSM1820A** | 25.9–28.6 | 11.9–12.8 | 194 | • |

*ASME* B107.100 — Set includes storage tray



**XS609A**

## Short Handle, 10° Offset, inches

Set Contains: XS609A

| | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 3/16–7/32 | **XS67A** | 5/16–11/32 | 7/32–7/32 | 3 27/32 | • |
| 1/4–5/16 | **XS810A** | 13/32–15/32 | 1/4–9/32 | 4 1/4 | • |
| 5/16–3/8 | **XS1012A** | 15/32–9/16 | 9/32–5/16 | 4 9/16 | • |
| 3/8–7/16 | **XS1214A** | 9/16–21/32 | 5/16–11/32 | 4 29/32 | • |
| 7/16–1/2 | **XS1416A** | 21/32–3/4 | 11/32–11/32 | 5 3/16 | • |
| 1/2–9/16 | **XS1618A** | 3/4–13/16 | 3/8–3/8 | 5 17/32 | • |
| 9/16–5/8 | **XS1820A** | 13/16–29/32 | 13/32–7/16 | 5 7/8 | • |
| 5/8–3/4 | **XS2024A** | 29/32–1 1/16 | 7/16–1/2 | 6 3/8 | • |
| 11/16–13/16 | **XS2226A** | 1–1 5/32 | 15/32–17/32 | 6 23/32 | • |

*ASME* B107.100 — Set includes storage tray



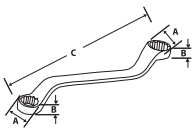
**XID604KA**

## Midget Handle, 10° Offset, inches

Set Contains: XID604KA

| | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 3/16–13/64 | **XID1213A** | 5/16–11/32 | 1/8–5/32 | 2 13/16 | • |
| 7/32–15/64 | **XID1415A** | 3/8–3/8 | 5/32–5/32 | 3 1/16 | • |
| 1/4–9/32 | **XID1618A** | 13/32–7/16 | 5/32–3/16 | 3 13/32 | • |
| 5/16–11/32 | **XID2022A** | 15/32–1/2 | 3/16–7/32 | 3 31/32 | • |
| | **Kit Bag** | | | | **C0401** |

*ASME* B107.100




Heads of XO, XOM and XSO wrenches deep 60° offset for improved access to recessed fasteners.



XOM605

## Standard Handle, Deep 60° Offset, mm

| mm | 12 | A | B | C | 12 |
|---|---|---|---|---|---|
| 8–10 | **XOM810** | 11.7–14.2 | 6.9–7.3 | 178.1 | |
| 9–10 | **XOM910** | 14.2–16.3 | 7.6 | 193.0 | |
| 10–11 | **XOM1011** | 15–16.3 | 7.6 | 193.0 | • |
| 12–14 | **XOM1214** | 15–20.3 | 9.0 | 210.0 | • |
| 13–14 | **XOM1314** | 18.8–21.2 | 8.9 | 223.3 | |
| 13–15 | **XOM1315** | 16.3–21.2 | 8.9 | 223.0 | • |
| 15–16 | **XOM1516** | 23.0–25.2 | 10.8 | 252.7 | |
| 16–18 | **XOM1618** | 17.7–25.4 | 10.8 | 253.0 | • |
| 17–19 | **XOM1719** | 17.7–27.4 | 11.1 | 260.0 | • |
| 18–20 | **XOM1820** | 32.5–33.3 | 13.8 | 330.0 | |
| 20–21 | **XOM2021** | 32.5–33.3 | 13.7 | 329.6 | |
| 22–24 | **XOM2224** | 31.9–34.1 | 13.7 | 329.6 | |

Set Contains: XOM605

ASME® B107.100

Set includes storage tray



XO605

## Standard Handle, Deep 60° Offset, inches

| | 12 | A | B | C | 12 |
|---|---|---|---|---|---|
| 1/4–5/16 | **XO810** | 3/8 | 9/32 (1/4–9/32) | 6 13/32 | |
| 5/16–3/8 | **XO1012** | 15/32–9/16 | 9/32 | 7 | |
| 3/8–7/16 | **XO1214** | 9/16–5/8 | 5/16 | 7 19/32 | • |
| 1/2–9/16 | **XO1618** | 23/32–13/16 | 11/32 | 8 25/32 | • |
| 9/16–5/8 | **XO1820** | 13/16–29/32 | 13/32 | 9 3/8 | • |
| 5/8–11/16 | **XO2022** | 29/32–1 | 13/32 | 9 15/16 | |
| 5/8–3/4 | **XO2024** | 29/32–1 3/32 | 7/16 | 10 1/4 | |
| 11/16–13/16 | **XO2226** | 1–1 5/32 | 15/32 | 10 27/32 | • |
| 3/4–7/8 | **XO2428** | 1 3/32–1 1/4 | 1/2 | 11 13/32 | • |
| 7/8–15/16 | **XO2830** | 1 1/4–1 11/32 | 17/32 | 12 31/32 | |
| 15/16–1 | **XO3032** | 1 11/32–1 7/16 | 9/16 | 13 15/16 | |

Set Contains: XO605

*ASME*/ANSI® B107.6

Set includes storage tray

## Short Handle, Deep 60° Offset, inches

| | 12 | A | B | C |
|---|---|---|---|---|
| 1/4–9/32 | **XSO89** | 13/32–7/16 | 3/16–7/32 | 3 7/8 |
| 1/4–5/16 | **XSO810A** | 3/8–7/16 | 3/16–7/32 | 4 5/32 |
| 3/8–7/16 | **XSO1214A** | 17/32–5/8 | 1/4–9/32 | 4 13/16 |
| 5/8–11/16 | **XSO2022** | 29/32–1 | 3/8–7/16 | 6 5/16 |
| 5/8–3/4 | **XSO2024A** | 7/8–1 1/16 | 3/8–7/16 | 6 1/2 |



XSO1214A

*ASME/ANSI* B107.100

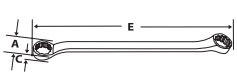
# *FLANK DRIVE* HIGH PERFORMANCE OFFSET BOX

## Standard Handle, 0° Offset Heads, mm

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 6–7 | **XDHFM67** | 9.1–10.4 | 5.3–5.8 | 211.5 | |
| 8–9 | **XDHFM89** | 11.6–13.0 | 5.8–6.2 | 226.1 | |
| 8–10 | **XDHFM810** | 11.6–14.4 | 6.2–7.6 | 232.7 | |
| 10–11 | **XDHFM1011** | 14.4–15.6 | 7.6–8.5 | 253.7 | • |
| 10–12 | **XDHFM1012** | 14.4–17.1 | 8.5–9.0 | 272.2 | |
| 12–13 | **XDHFM1213** | 17.1–18.7 | 9.0–9.0 | 286.2 | • |
| 12–14 | **XDHFM1214** | 17.1–20.1 | 9.0–10.2 | 298.4 | |
| 13–14 | **XDHFM1314** | 18.7–20.1 | 9.0–9.7 | 299.2 | |
| 13–15 | **XDHFM1315** | 20.1–21.5 | 9.8–10.9 | 323.5 | |
| 14–15 | **XDHFM1415** | 20.1–21.5 | 9.8–10.9 | 323.5 | • |
| 14–17 | **XDHFM1417** | 20.1–23.7 | 9.8–11.3 | 345.0 | |
| 15–16 | **XDHFM1516** | 21.5–22.6 | 10.9–10.9 | 347.5 | • |
| 16–18 | **XDHFM1618** | 23.8–26.3 | 11.3–12.1 | 372.1 | |
| 17–19 | **XDHFM1719** | 23.8–26.3 | 11.3–12.1 | 372.1 | • |
| 18–20 | **XDHFM1820** | 25.0–27.3 | 12.1–13.6 | 395.7 | • |
| 21–22 | **XDHFM2122** | 28.8–30.6 | 13.7–14.6 | 421.2 | |
| 22–24 | **XDHFM2224** | 30.6–33.1 | 14.0–14.9 | 445.2 | |

Set Contains: XDHFM606

Set includes storage tray






XDHFM606



XDHF605

## Standard Handle, 0° Offset Heads, inches

| | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 1/4–5/16 | **XDHF810** | 13/32–15/32 | 7/32–1/4 | 8 5/16 | • |
| 3/8–7/16 | **XDHF1214** | 17/32–5/8 | 5/16–11/32 | 10 1/16 | • |
| 1/2–9/16 | **XDHF1618** | 23/32–13/16 | 11/32–13/32 | 11 3/4 | • |
| 5/8–3/4 | **XDHF2024** | 7/8–1 1/32 | 7/16–15/32 | 13 5/8 | • |
| 11/16–13/16 | **XDHF2226** | 31/32–1 5/32 | 15/32–17/32 | 15 5/8 | • |

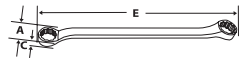
Set Contains: XDHF605

Set includes storage tray

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® HIGH PERFORMANCE OFFSET BOX




## Short Handle, 0° Offset Heads, mm



XDHSFM1214

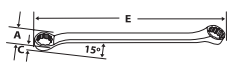
| mm | 12 | A | C | E |
|---|---|---|---|---|
| 8–10 | XDHSFM810 | 12.1–14.9 | 6.2–7.6 | 162.9 |
| 10–12 | XDHSFM1012 | 14.4–17.1 | 7.6–9.0 | 190.5 |
| 12–14 | XDHSFM1214 | 17.1–20.1 | 8.5–10.2 | 208.8 |
| 17–19 | XDHSFM1719 | 23.8–26.3 | 11.3–12.1 | 260.3 |

## Short Handle, 15° Offset Heads, inches



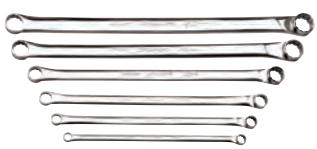
XDHS1012

| | 12 | A | C | E |
|---|---|---|---|---|
| 5/16–3/8 | XDHS1012 | 31/64–9/16 | 1/4–5/16 | 7 |




## Standard Handle, 15° Offset Heads, mm

Set Contains: XDHM606



XDHM606

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 8–9 | XDHM89 | 11.6–13.0 | 5.8–6.2 | 219.2 | • |
| 8–10 | XDHM810 | 11.6–14.4 | 6.2–7.6 | 225.6 | |
| 10–11 | XDHM1011 | 14.4–15.6 | 7.6–8.5 | 246.3 | • |
| 10–12 | XDHM1012 | 14.4–17.1 | 7.6–9.0 | 264.0 | |
| 12–13 | XDHM1213 | 17.1–18.7 | 9.0–9.0 | 277.6 | • |
| 12–14 | XDHM1214 | 17.1–20.1 | 9.0–10.2 | 289.6 | |
| 14–15 | XDHM1415 | 20.1–21.5 | 9.8–10.9 | 313.1 | • |
| 14–17 | XDHM1417 | 20.1–23.7 | 9.8–11.3 | 334.7 | |
| 15–16 | XDHM1516 | 21.5–22.6 | 10.9–10.9 | 334.8 | |
| 17–19 | XDHM1719 | 23.7–26.3 | 11.3–12.1 | 360.1 | • |
| 18–20 | XDHM1820 | 24.9–27.3 | 12.1–13.6 | 384.0 | • |

Set includes storage tray

## Standard Handle, 15° Offset Heads, inches

Set Contains: XDH605



GXDH1618A



XDH605

| | 12 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|---|
| 7/32–1/4 | XDH78A | GXDH78A | 11/32–3/8 | 13/64–15/64 | 7 15/64 | |
| 1/4–5/16 | XDH810B | GXDH810B | 3/8–29/64 | 1/4–1/4 | 8 3/64 | • |
| 5/16–3/8 | XDH1012B | GXDH1012B | 29/64–35/64 | 1/4–19/64 | 8 7/8 | |
| 3/8–7/16 | XDH1214A | GXDH1214A | 35/64–5/8 | 19/64–11/32 | 9 11/16 | • |
| 7/16–1/2 | XDH1416A | GXDH1416A | 11/32–3/4 | 11/32–23/64 | 10 7/16 | |
| 1/2–9/16 | XDH1618A | GXDH1618A | 23/32–13/16 | 23/64–13/32 | 11 7/16 | • |
| 9/16–5/8 | XDH1820A | – | 13/16–29/32 | 13/32–7/16 | 12 3/8 | |
| 5/8–3/4 | XDH2024A | – | 57/64-1 3/64 | 7/16–31/64 | 13 9/32 | • |
| 11/16–3/4 | XDH2224A | – | 31/32–1 1/32 | 15/32–3/4 | 14 7/32 | |
| 11/16–13/16 | XDH2226A | – | 63/64-1 9/64 | 31/64–17/32 | 15 5/32 | • |
| 3/4–7/8 | XDH2428 | – | 1 3/64–1 1/64 | 31/64–37/64 | 15 3/4 | |
| 25/32–7/8 | XDH2528 | – | 1 5/64–1 13/64 | 35/64–37/64 | 16 5/64 | |
| 15/16–1 | XDH3032 | – | 1 5/16–1 25/64 | 37/64–39/64 | 15 1/2 | |
| 1 1/16–1 1/4 | XDH3440 | – | 1 31/64–1 47/64 | 5/8–23/32 | 18 1/4 | |
| 1 1/4–1 5/16 | XDH4042 | – | 1 47/64–1 13/16 | 23/32–47/64 | 19 1/4 | |
| 1 1/4–1 3/8 | XDH4044 | – | 1 47/64–1 15/16 | 23/32–49/64 | 20 1/4 | |
| 1 1/4–1 7/16 | XDH4046 | – | 1 47/64–2 | 23/32–51/64 | 21 | |
| 1 7/16–1 1/2 | XDH4648 | – | 2–2 1/16 | 51/64–13/16 | 22 | |

Aerospace Spec. AS954E

Set includes storage tray

# SPLINE OFFSET BOX

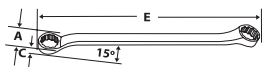
Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.
Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.

## Standard Handle, 15° Offset Heads, inches

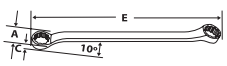


XDES1618A




| | | Stock No. | A | C | E |
|---|---|---|---|---|---|
| #7–#9 | 7/32–9/32 | XDES79A | 11/32–7/16 | 11/64–13/64 | 7 1/4 |
| #8–#10 | 1/4–5/16 | XDES810A | 3/8–15/32 | 3/16–7/32 | 8 1/16 |
| #12–#14 | 3/8–7/16 | XDES1214A | 35/64–41/64 | 5/16–11/32 | 9 3/4 |
| #16–#18 | 1/2–9/16 | XDES1618A | 3/4–13/16 | 3/8–3/8 | 11 7/16 |
| #18–#20 | 9/16–5/8 | XDES1820A | 13/16–57/64 | 25/64–13/32 | 12 3/8 |
| #22–#24 | 11/16–3/4 | XDES2224A | 31/32–1 5/64 | 7/16–5/64 | 14 1/4 |
| #26–#30 | 13/16–15/16 | XDES2630A | 1 5/32–1 5/16 | 1/2–9/16 | 16 3/16 |
| #28–#32 | 7/8–1 | XDES2832A | 1 1/4–1 7/16 | 17/32–37/64 | 17 |

# TORX® OFFSET BOX






XLE605

## Standard Handle, *TORX*

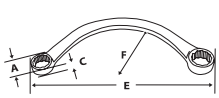
Set Contains: XLE605

| # | | A | C | E | |
|---|---|---|---|---|---|
| E5–E6 | XLE56 | 9/32–5/16 | 5/32–3/16 | 6 13/32 | • |
| E7–E8 | XLE78 | 11/32–3/8 | 7/32–7/32 | 7 7/32 | • |
| E10–E12 | XLE1012A | 15/32–17/32 | 1/4–5/16 | 8 7/8 | • |
| E14–E16 | XLE1416 | 5/8–23/32 | 11/32–11/32 | 10 7/16 | • |
| E18–E20 | XLE1820 | 13/16–7/8 | 13/32–7/16 | 12 3/8 | • |

ASME® B107.100

Set includes storage tray

# *FLANK DRIVE* SPECIALTY BOX






CXM605

## Half Moon, mm

Set Contains: CXM605

| mm | 12 | A | C | E | F | 12 |
|---|---|---|---|---|---|---|
| 10–12 | CXM1012 | 15–17 | 6–7 | 128 | 48 | • |
| 11–13 | CXM1113 | 16–18 | 8–8 | 144 | 57 | • |
| 14–17 | CXM1417 | 20–23 | 9–9 | 166 | 65 | • |
| 15–19 | CXM1519 | 22–27 | 10–11 | 198 | 78 | • |
| 18–21 | CXM1821 | 27–31 | 11–13 | 224 | 86 | • |

*ASME* B107.100



CX605

## Half Moon, inches

Set Contains: CX605

| | 12 | A | C | E | F | 12 |
|---|---|---|---|---|---|---|
| 5/16–3/8 | CX1012 | 15/32–9/16 | 3/16–5/16 | 4 5/8 | 2 1/16 | |
| 7/16–1/2 | CX1416 | 5/8–23/32 | 5/16–5/16 | 5 | 2 7/32 | • |
| 9/16–5/8 | CX1820 | 13/16–7/8 | 11/32–3/8 | 6 1/2 | 2 9/16 | • |
| 5/8–3/4 | CX2024 | 7/8–1 7/32 | 13/32–7/16 | 7 3/4 | 3 1/16 | • |
| 11/16–13/16 | CX2226 | 31/32–1 9/32 | 13/32–15/32 | 8 1/2 | 3 1/2 | • |
| 7/8–15/16 | CX2830 | 1 1/4–1 11/32 | 9/16–9/16 | 10 | 4 1/16 | • |

*ASME* B107.100

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SPECIALTY BOX



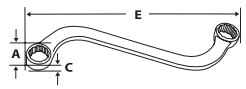
SBXM605

## "S" Shaped, mm

Set Contains: SBXM605

| mm | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 10–12 | SBXM1012 | 14–18 | 6–8 | 140 | • |
| 11–13 | SBXM1113 | 16–19 | 7–8 | 155 | • |
| 14–15 | SBXM1415 | 21–22 | 9–9 | 190 | • |
| 16–18 | SBXM1618 | 24–27 | 10–11 | 173 | • |
| 17–19 | SBXM1719 | 25–28 | 10–12 | 240 | • |

ASME® B107.100 — Set includes storage tray






SBX605

## "S" Shaped, inches

Set Contains: SBX605

| 11 | 12 | A | C | E | 12 |
|---|---|---|---|---|---|
| 5/16–3/8 | SBX1012 | 15/32–9/16 | 9/16–7/32 | 3 3/4 | • |
| 7/16–1/2 | SBX1416 | 21/32–3/4 | 9/32–5/16 | 5 5/16 | • |
| 9/16–5/8 | SBX1820 | 27/32–15/16 | 11/32–13/32 | 6 7/8 | • |
| 11/16–3/4 | SBX2224 | 1 1/32–1 1/8 | 13/32–15/32 | 8 7/16 | • |
| 13/16–7/8 | SBX2628 | 1 7/32–1 5/16 | 17/32–9/16 | 10 | • |

*ASME* B107.100 — Set includes storage tray

# OPEN END



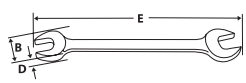
VOM1415B

## Standard, mm

| mm | Stock No. | B | D | E |
|---|---|---|---|---|
| 6–7 | VOM67B | 13–15 | 4–4 | 97 |
| 7–8 | VOM78B | 15–17 | 4–4 | 106 |
| 8–9 | VOM89B | 17–20 | 4–5 | 119 |
| 8–10 | VOM810B | 17–21 | 4–5 | 121 |
| 10–11 | VOM1011B | 21–23 | 5–6 | 136 |
| 11–13 | VOM1113B | 23–27 | 6–6 | 151 |
| 12–13 | VOM1213B | 25–27 | 6–6 | 157 |
| 12–14 | VOM1214B | 25–29 | 6–7 | 162 |
| 14–15 | VOM1415B | 29–31 | 7–7 | 178 |
| 16–18 | VOM1618B | 33–37 | 7–8 | 205 |
| 17–19 | VOM1719B | 35–38 | 8–9 | 216 |
| 19–22 | VOM1922B | 39–46 | 9–10 | 245 |
| 21–24 | VOM2124B | 43–49 | 9–10 | 267 |
| 22–24 | VOM2224B | 46–49 | 10–10 | 273 |
| 27–30 | VOM2730B | 55–61 | 11–12 | 338 |
| 30–32 | VOM3032B | 61–65 | 12–12 | 368 |

*ASME*/ANSI® B107.100





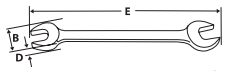

V0806B

## Standard, inches

Set Contains: V0820K / V0806B*

| 11 | Stock No. | B | D | E | | |
|---|---|---|---|---|---|---|
| 3/16–1/4 | V068 | 13/32 | 9/64 | 3 13/32 | | |
| 1/4–5/16 | V0810B | 17/32–21/32 | 5/32–5/32 | 4 1/16 | • | • |
| 5/16–3/8 | V01012B | 21/32–25/32 | 5/32–3/16 | 4 21/32 | • | |
| 3/8–7/16 | V01214B | 25/32–29/32 | 3/16–7/32 | 5 5/16 | • | • |
| 7/16–1/2 | V01416B | 29/32–1 1/16 | 7/32–1/4 | 5 15/16 | • | |
| 1/2–9/16 | V01618B | 1 1/16–1 5/32 | 1/4–9/32 | 6 19/32 | • | • |
| 9/16–5/8 | V01820B | 1 5/32–1 5/16 | 9/32–9/32 | 7 9/32 | • | |
| 5/8–11/16 | V02022B | 1 5/16–1 13/32 | 9/32–5/16 | 7 15/16 | • | • |
| 5/8–3/4 | V02024B | 1 5/16–1 9/16 | 9/32–11/32 | 8 9/32 | • | |
| 11/16–3/4 | V02224B | 1 13/32–1 9/16 | 5/16–11/32 | 8 5/8 | • | |
| 3/4–13/16 | V02426B | 1 9/16–1 21/32 | 11/32–3/8 | 9 11/32 | • | • |
| 3/4–7/8 | V02428B | 1 9/16–1 13/16 | 11/32–3/8 | 9 21/32 | • | |
| 13/16–7/8 | V02628B | 1 21/32–1 13/16 | 3/8–3/8 | 10 1/32 | • | |
| 7/8–15/16 | V02830B | 1 13/16–1 29/32 | 3/8–13/32 | 10 3/4 | • | • |
| 15/16–1 | V03032B | 1 29/32–2 1/32 | 13/32–13/32 | 11 15/32 | • | |
| 1–1 11/16 | V03234B | 2 1/32–2 5/32 | 13/32–7/16 | 12 7/32 | • | |
| 1 1/16–1 1/4 | V03440B | 2 5/32–2 17/32 | 7/16–1/2 | 12 15/16 | • | |
| 1 1/8–1 3/16 | V03638B | 2 5/16–2 13/32 | 7/16–15/32 | 13 23/32 | • | |
| 1 1/4–1 5/16 | V04042B | 2 17/32–2 21/32 | 1/2–1/2 | 15 1/4 | • | |
| 1 3/8–1 7/16 | V04446B | 2 13/16–2 29/32 | 17/32–17/32 | 16 7/8 | • | |
| 1 1/2–1 5/8 | V04852B | 3 1/16–3 5/16 | 9/16–19/32 | 18 29/32 | • | |
| | Kit Bag | | | | C200 | |

*ASME/ANSI* B107.100 — *Set includes storage tray




## Low Torque Slimline, 15° Offset, mm

| mm | Stock No. | B | D | E | Set Contains: LTAM811 |
|---|---|---|---|---|---|
| 6–7 | **LTAM67** | 13–15 | 3 | 165 | • |
| 8–10 | **LTAM810** | 17–21 | 3 | 165 | • |
| 10–11 | **LTAM1011** | 21–23 | 3 | 165 | • |
| 12–14 | **LTAM1214** | 25–29 | 4 | 241 | • |
| 13–15 | **LTAM1315** | 27–31 | 4 | 241 | • |
| 16–18 | **LTAM1618** | 33–37 | 4 | 241 | • |
| 17–19 | **LTAM1719** | 35–39 | 4 | 241 | • |
| 19–22 | **LTAM1922** | 39–45 | 4 | 241 | • |
| 21–24 | **LTAM2124** | 43–49 | 4 | 241 | • |
| 27–30 | **LTAM2730** | 55–61 | 6 | 311 | • |
| 32–36 | **LTAM3236** | 65–73 | 6 | 311 | • |

ASME®/ANSI® B107.100



**LTAM811**

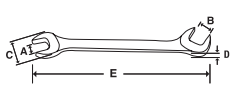
## Low Torque Slimline, 15° Offset, inches

| | Stock No. | B | D | E | Set Contains: LTA812 | LTA805K |
|---|---|---|---|---|---|---|
| 3/8–7/16 | **LTA1214** | 25/32–29/32 | 3/32 | 9 1/2 | • | |
| 7/16–1/2 | **LTA1416** | 29/32–1 1/32 | 5/32 | 9 1/2 | • | • |
| 1/2–9/16 | **LTA1618** | 1 1/32–1 5/32 | 5/32 | 9 1/2 | • | • |
| 5/8–11/16 | **LTA2022** | 1 9/32–1 13/32 | 5/32 | 9 1/2 | • | • |
| 3/4–13/16 | **LTA2426** | 1 17/32–1 11/16 | 5/32 | 9 1/2 | • | |
| 3/4–7/8 | **LTA2428** | 1 17/32–1 25/32 | 5/32 | 9 1/2 | • | • |
| 15/16–1 | **LTA3032** | 1 29/32–2 1/32 | 5/32 | 9 1/2 | • | • |
| 1 1/16–1 1/8 | **LTA3436** | 2 5/32–2 9/32 | 1/4 | 12 1/4 | • | |
| 1 1/4–1 5/16 | **LTA4042** | 2 17/32–2 21/32 | 1/4 | 12 1/4 | • | |
| 1 3/8–1 7/16 | **LTA4446** | 2 25/32–2 29/32 | 1/4 | 12 1/4 | • | |
| 1 1/2–1 5/8 | **LTA4852** | 3 1/16–3 9/32 | 9/32 | 14 1/4 | • | |
| 1 11/16–1 7/8 | **LTA5460** | 3 13/32–3 17/32 | 9/32 | 14 1/4 | • | |
| | **Kit Bag** | | | | | **C0507** |

*ASME* B107.100



**LTA805K**




## Ignition, 15/60° Offset, mm

| A | B | Stock No. | C | D | E | Set Contains: DSM810K |
|---|---|---|---|---|---|---|
| 3.2 | 5.5 | **DSM3.25.5** | 8–11 | 3 | 74 | • |
| 5.5 | 3.2 | **DSM5.53.2** | 11–8 | 3 | 83 | • |
| 4 | 5 | **DSM45** | 9–11 | 3 | 77 | • |
| 5 | 4 | **DSM54** | 11–9 | 3 | 81 | • |
| 6 | 7 | **DSM67** | 12–14 | 3 | 85 | • |
| 7 | 6 | **DSM76** | 14–12 | 3 | 89 | • |
| 8 | 9 | **DSM89** | 15–17 | 3 | 93 | • |
| 9 | 8 | **DSM98** | 17–15 | 3 | 97 | • |
| 10 | 11 | **DSM1011** | 20–22 | 4 | 101 | • |
| 11 | 10 | **DSM1110** | 22–20 | 4 | 105 | • |
| | | **Kit Bag** | | | | **C1003A** |

*ASME/ANSI* B107.100



**DSM810K**

## Ignition, 15/60° Offset, inches

| A | B | Stock No. | C | D | E | Set Contains: DS809K | DS806AK |
|---|---|---|---|---|---|---|---|
| 1/8 | 1/8 | **DS88A** | 5/16–5/16 | 1/8 | 2 29/32 | • | |
| 5/32 | 5/32 | **DS1010A** | 3/8–3/8 | 1/8 | 2 7/8 | • | |
| 3/16 | 3/16 | **DS1212A** | 13/32–13/32 | 1/8 | 3 1/8 | • | |
| 15/64 | 1/4 | **DS1516A** | 15/32–1/2 | 1/8 | 3 1/4 | • | • |
| 1/4 | 15/64 | **DS1615A** | 1/2–15/32 | 1/8 | 3 13/32 | • | • |
| 9/32 | 5/16 | **DS1820A** | 9/16–19/32 | 1/8 | 3 1/2 | • | • |
| 5/16 | 9/32 | **DS2018A** | 19/32–9/16 | 1/8 | 3 21/32 | • | • |
| 11/32 | 3/8 | **DS2224A** | 21/32–23/32 | 5/32 | 3 3/4 | • | • |
| 3/8 | 11/32 | **DS2422A** | 23/32–21/32 | 5/32 | 3 3/4 | • | • |
| | | **Kit Bag** | | | | **C0900A** | **C0605** |

*ASME/ANSI* B107.100

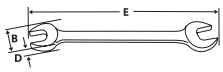


**DS809K**

**⚠WARNING**

- Use only moderate force on slim line wrenches
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# OPEN END






VSM807B

## Four-Way Angle Head, mm

- Angle head wrenches offset at 30° and 60° angles to the handle
- Both ends are same size to permit use of one wrench in four positions

| mm | Stock No. | B | D | E | Set Contains: VSM814 | VSM807B* |
|---|---|---|---|---|---|---|
| 10 | VSM5210B | 20 | 6 | 127 | • | • |
| 11 | VSM5211B | 22 | 6 | 137 | • | • |
| 12 | VSM5212B | 24 | 6 | 145 | • | • |
| 13 | VSM5213B | 26 | 6 | 154 | • | • |
| 14 | VSM5214B | 28 | 6 | 164 | • | • |
| 15 | VSM5215B | 30 | 7 | 173 | • | • |
| 16 | VSM5216B | 31 | 7 | 181 | • | |
| 17 | VSM5217B | 34 | 7 | 191 | • | • |
| 18 | VSM5218B | 36 | 7 | 200 | • | |
| 19 | VSM5219B | 37 | 7 | 210 | • | |
| 21 | VSM5221B | 41 | 8 | 228 | • | |
| 22 | VSM5222B | 44 | 8 | 239 | • | |
| 24 | VSM5224B | 47 | 8 | 254 | • | |
| 27 | VSM5227B | 53 | 9 | 283 | • | |

ASME® B107.100 *Set includes storage tray



GVS24B



VS807B

## Four-Way Angle Head, inches

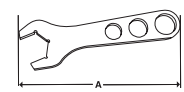
| Stock No. | Industrial Stock No. | B | D | E | Set Contains: VS828A | VS814A | VS807B* |
|---|---|---|---|---|---|---|---|
| 1/4 | VS8B | – | 17/32 | 3/16 | 3 11/16 | • | | |
| 5/16 | VS10B | – | 21/32 | 3/16 | 4 1/4 | • | | |
| 11/32 | VS11B | – | 23/32 | 7/32 | 4 17/32 | • | | |
| 3/8 | VS12B | – | 25/32 | 7/32 | 4 27/32 | • | • | • |
| 7/16 | VS14B | – | 7/8 | 7/32 | 5 13/32 | • | • | • |
| 1/2 | VS16B | GVS16B | 1 | 1/4 | 5 31/32 | • | • | • |
| 9/16 | VS18B | GVS18B | 1 1/8 | 1/4 | 6 9/16 | • | • | • |
| 5/8 | VS20B | GVS20B | 1 1/4 | 9/32 | 7 1/8 | • | • | • |
| 11/16 | VS22B | GVS22B | 1 3/8 | 9/32 | 7 11/16 | • | • | • |
| 3/4 | VS24B | GVS24B | 1 15/32 | 9/32 | 8 9/32 | • | • | • |
| 13/16 | VS26B | GVS26B | 1 19/32 | 5/16 | 8 27/32 | • | • | |
| 7/8 | VS28B | GVS28B | 1 23/32 | 5/16 | 9 13/32 | • | • | |
| 15/16 | VS30B | GVS30B | 1 27/32 | 11/32 | 10 | • | • | |
| 1 | VS32B | GVS32B | 1 31/32 | 11/32 | 10 9/16 | • | • | |
| 1 1/16 | VS34B | – | 2 3/32 | 11/32 | 11 1/8 | • | • | |
| 1 1/8 | VS36B | – | 2 3/16 | 3/8 | 11 23/32 | • | • | |
| 1 3/16 | VS38B | – | 2 11/32 | 3/8 | 12 9/32 | • | | |
| 1 1/4 | VS40B | GVS40B | 2 7/16 | 13/32 | 12 7/8 | • | • | |
| 1 5/16 | VS42B | – | 2 9/16 | 13/32 | 13 7/16 | • | | |
| 1 3/8 | VS44B | – | 2 11/16 | 13/32 | 14 | • | | |
| 1 7/16 | VS46B | – | 2 27/32 | 7/16 | 14 19/32 | • | | |
| 1 1/2 | VS48B | – | 2 15/16 | 7/16 | 15 5/32 | • | | |
| 1 5/8 | VS52B | – | 3 7/32 | 15/32 | 16 5/16 | • | | |
| 1 11/16 | VS54B | – | 3 11/32 | 1/2 | 16 7/8 | • | | |
| 1 3/4 | VS56B | – | 3 15/32 | 1/2 | 17 7/16 | • | | |
| 1 13/16 | VS58B | – | 3 19/32 | 1/2 | 18 | • | | |
| 1 7/8 | VS60B | – | 3 23/32 | 17/32 | 18 19/32 | • | | |
| 2 | VS64B | – | 3 31/32 | 9/16 | 19 3/4 | • | | |

*ASME* B107.100 *Set includes storage tray



ANWR708A

- Securely tighten expensive AN fittings to reduce risk of damage in aircraft, marine and industrial applications as well as race and show cars
- Machined from aluminum billet to exacting tolerances
- Made from quality heat treated hardened aluminum
- Corner reliefs on open end wrenches prevent rounding the corners of the fitting
- Handle length designed to apply appropriate torque without overtightening
- Open end wrenches are color-coded and stamped for quick size identification




## Aluminum (for "AN" Fittings)

| # | Stock No. | Color | A inches (mm) | Set Contains: ANWR708A |
|---|---|---|---|---|
| No. 3 | 1/2 | ANWR3A | Silver | 4 (101.6) | • |
| No. 4 | 9/16 | ANWR4A | Black | 4 3/4 (120.7) | • |
| No. 6 | 11/16 | ANWR6A | Light Blue | 5 3/4 (146.1) | • |
| No. 8 | 7/8 | ANWR8A | Pink | 5 3/4 (146.1) | • |
| No. 10 | 1 | ANWR10A | Gold | 7 1/8 (181.0) | • |
| No. 12 | 1 1/4 | ANWR12A | Red | 7 1/2 (190.5) | • |
| No. 16 | 1 1/2 | ANWR16A | Brass | 8 3/4 (222.3) | • |
| No. 20 | 1 13/16 | ANWR20A | Dark Blue | 9 1/4 (237.0) | • |

Set includes heavy gauge vinyl pouch

# OPEN END Blue-Point®



BDOEM1415

## Open End, mm

| mm | Stock No. | Length, mm |
|---|---|---|
| 10–11 | BDOEM1011 | 145 |
| 12–13 | BDOEM1213 | 165 |
| 14–15 | BDOEM1415 | 185 |
| 16–17 | BDOEM1617 | 185 |
| 18–19 | BDOEM1819 | 227 |

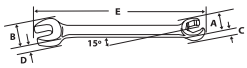


BDOE1820

## Open End, inches

| Stock No. | Length, inches |
|---|---|
| 5/16–3/8 | BDOE1012 | 5 5/16 |
| 7/16–1/2 | BDOE1416 | 6 1/2 |
| 9/16–5/8 | BDOE1820 | 7 9/32 |
| 11/16–3/4 | BDOE2224 | 8 15/16 |

*ASME*/ANSI® B107.100




## Open End and Flare Nut, mm

Set Contains: RXSM605B

| mm | 6 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|
| 8 | **RXSM8B** | 17 | 17 | 7 | 7 | 135 | |
| 9 | **RXSM9B** | 18 | 19 | 7 | 7 | 144 | |
| 10 | **RXSM10B** | 20 | 21 | 8 | 8 | 152 | • |
| 11 | **RXSM11B** | 21 | 23 | 9 | 9 | 162 | • |
| 12 | **RXSM12B** | 22 | 25 | 9 | 9 | 169 | • |
| 13 | **RXSM13B** | 24 | 27 | 9 | 9 | 178 | • |
| 14 | **RXSM14B** | 25 | 29 | 10 | 10 | 186 | • |
| 15 | **RXSM15B** | 26 | 31 | 10 | 10 | 194 | |
| 16 | **RXSM16B** | 27 | 33 | 11 | 11 | 202 | |
| 17 | **RXSM17B** | 29 | 35 | 11 | 11 | 211 | |
| 18 | **RXSM18B** | 30 | 37 | 12 | 12 | 219 | |
| 19 | **RXSM19B** | 32 | 39 | 12 | 12 | 228 | |
| 20 | **RXSM20B** | 33 | 41 | 13 | 13 | 235 | |

ASME® B107.100

Set includes storage tray



**RXSM605B**

## Open End and Flare Nut, inches

Set Contains: RXS605B

| | 6 | 12 | A | B | C | D | E | 6 |
|---|---|---|---|---|---|---|---|---|
| 3/8 | **RXS12B** | – | 3/4 | 25/32 | 5/16 | 5/16 | 5 27/32 | • |
| 7/16 | **RXS14B** | **RXS14BS** | 27/32 | 29/32 | 11/32 | 11/32 | 6 3/8 | • |
| 1/2 | **RXS16B** | – | 29/32 | 1 1/16 | 3/8 | 3/8 | 6 7/8 | • |
| 9/16 | **RXS18B** | – | 1 | 1 5/32 | 13/32 | 13/32 | 7 13/32 | • |
| 5/8 | **RXS20B** | – | 1 3/32 | 1 5/16 | 7/16 | 7/16 | 7 15/16 | • |
| 11/16 | – | **RXS22BS** | 1 5/32 | 1 13/32 | 15/32 | 15/32 | 6 15/32 | |
| 3/4 | – | **RXS24BS** | 1 1/4 | 1 9/16 | 1/2 | 1/2 | 9 | |

*ASME* B107.100

Set includes storage tray



**RXS605B**

## Double End Flare Nut, mm

Set Contains: RXFMS606B

| mm | 12 | A–B | C–D | E | 12 |
|---|---|---|---|---|---|
| 9–11 | **RXFMS911B** | 18–21 | 7–8 | 145 | • |
| 10–12 | **RXFMS1012B** | 20–22 | 8–9 | 153 | • |
| 13–14 | **RXFMS1314B** | 24–25 | 9–10 | 173 | • |
| 15–17 | **RXFMS1517B** | 26–29 | 10–11 | 193 | • |
| 16–18 | **RXFMS1618B** | 28–30 | 11–12 | 200 | • |
| 19–21 | **RXFMS1921B** | 32–34 | 12–13 | 223 | • |

ANSI® B107.100

Set includes storage tray



**RXFMS606B**

## Double End Flare Nut, inches

Set Contains: RXFS605B

| | 12 | A–B | C–D | E | 12 |
|---|---|---|---|---|---|
| 1/4–5/16 | **RXFFS810B** | 19/32–21/32 | 1/4–9/32 | 4 27/32 | • |
| 3/8–7/16 | **RXFS1214B** | 3/4–27/32 | 5/16–11/32 | 5 13/16 | • |
| 1/2–9/16 | **RXFS1618B** | 29/32–1 | 3/8–13/32 | 6 13/16 | • |
| 5/8–11/16 | **RXFS2022B** | 1 3/32–1 5/32 | 7/16–15/32 | 7 3/4 | • |
| 3/4–13/16 | **RXFS2426B** | 1 1/4–1 5/16 | 1/2–17/32 | 8 25/32 | • |
| 3/4–7/8 | **RXFS2428B** | 1 1/4–1 27/64 | 1/2–5/8 | 9 1/2 | |
| 3/4–1 | **RXFS2432B** | 1 1/4–1 9/16 | 1/2–5/8 | 9 1/2 | |
| 7/8–1 1/8 | **RXFS2836B** | 1 13/32–1 3/4 | 9/16–11/16 | 10 1/2 | |

*ASME* B107.100

Set includes storage tray



**RXFS605B**

**⚠WARNING**

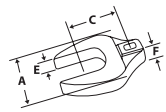
- Use only moderate force on flare nut wrenches
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# CROWFOOT WRENCHES, 1/4" DRIVE

## Flank Drive® Plus, Open End, inches



TMCOS16




| | | A | C | D | E | F |
|---|---|---|---|---|---|---|
| 7/16 | TMCOS14 | 29/32 | 5/8 | 1 5/32 | 5/16 | 5/16 |
| 1/2 | TMCOS16 | 1 1/16 | 21/32 | 1 15/64 | 5/16 | 5/16 |
| 9/16 | TMCOS18 | 1 5/32 | 11/16 | 1 19/64 | 5/16 | 5/16 |

## Open End, mm



107TMCOM

Set Contains: 107TMCOM

| mm | Stock No. | A | C | E | F | D | |
|---|---|---|---|---|---|---|---|
| 7 | TMCOM7 | 13.5 | 13.2 | 6.6 | 6.6 | 24.4 | • |
| 8 | TMCOM8 | 16.8 | 14.1 | 6.6 | 6.6 | 25.9 | • |
| 10 | TMCOM10 | 19.8 | 14.6 | 6.6 | 6.6 | 27.5 | • |
| 11 | TMCOM11 | 22.4 | 16.0 | 7.9 | 7.9 | 29.4 | • |
| 12 | TMCOM12 | 24.4 | 16.5 | 7.9 | 7.9 | 30.6 | • |
| 13 | TMCOM13 | 26.4 | 16.6 | 7.9 | 7.9 | 31.2 | • |
| 14 | TMCOM14 | 29.0 | 17.7 | 7.9 | 7.9 | 32.9 | • |

ASME® B107.21

Set includes storage tray

## Open End, inches



106TMCO

Set Contains: 106TMCO

| | Stock No. | A | C | E | F | D | |
|---|---|---|---|---|---|---|---|
| 1/4 | TMCO8 | 17/32 | 17/32 | 1/4 | 1/4 | 31/32 | • |
| 5/16 | TMCO10 | 21/32 | 9/16 | 1/4 | 1/4 | 1 1/32 | • |
| 3/8 | TMCO12 | 25/32 | 19/32 | 1/4 | 1/4 | 1 3/32 | • |
| 7/16 | TMCO14 | 7/8 | 5/8 | 5/16 | 5/16 | 1 5/32 | • |
| 1/2 | TMCO16 | 1 1/32 | 21/32 | 5/16 | 5/16 | 1 1/4 | • |
| 9/16 | TMCO18 | 1 1/8 | 11/16 | 5/16 | 5/16 | 1 9/32 | • |

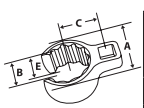
*ASME* B107.21

Set includes storage tray

## *Flank Drive* Flare Nut, Shallow, inches, 12-Point



TMRX12




| | 12 | A | B | C | E | Maximum Recommended Working Torque, in-lb |
|---|---|---|---|---|---|---|
| 1/4 | TMRX8 | 13/32 | 1/8 | 31/32 | 1/4 | 75 |
| 5/16 | TMRX10 | 1/2 | 3/16 | 31/32 | 1/4 | 75 |
| 3/8 | TMRX12 | 19/32 | 1/4 | 31/32 | 1/4 | 75 |

*ASME* B107.21

## *Flank Drive* Flare Nut, Deep, inches, 12-Point



AN85088B

| | 12 | A | B | C | E | Maximum Recommended Working Torque, in-lb |
|---|---|---|---|---|---|---|
| 3/8 | AN85086B | 19/32 | 9/32 | 1/2 | 1/2 | 75 |
| 7/16 | AN85087B | 11/16 | 11/32 | 9/16 | 9/16 | 200 |
| 1/2 | AN85088B | 25/32 | 13/32 | 19/32 | 9/16 | 200 |
| 9/16 | AN85089B | 27/32 | 15/32 | 5/8 | 9/16 | 200 |

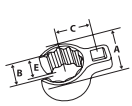
*ASME* B107.21

# CROWFOOT WRENCHES, 3/8" DRIVE

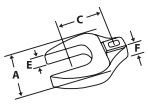
## *Flank Drive* Plus, Open End, inches



FCOS24




| | Stock No. | A | C | D | E | F |
|---|---|---|---|---|---|---|
| 5/8 | FCOS20 | 1 1/4 | 27/32 | 1 19/32 | 7/32 | 17/32 |
| 3/4 | FCOS24 | 1 17/32 | 1 | 1 29/32 | 1/4 | 17/32 |
| 15/16 | FCOS30 | 2 | 1 1/8 | 2 1/8 | 23/64 | 43/64 |
| 1 1/16 | FCOS34 | 2 | 1 3/32 | 2 1/8 | 23/64 | 43/64 |






214FC



211GFCO

## Open End, inches

| Set Contains: | 242FC | 226FC | 214FC | 211FCOA | 211GFCO |
|---|---|---|---|---|---|

| | Stock No. | Industrial Stock No. | A | C | E | F | D | Maximum Recommended Working Torque, in-lb | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | FCO12A | GFCO12A | 7/8 | 23/32 | 7/32 | 33/64 | 1 19/64 | 75 | | | | • | • |
| 7/16 | FCO14A | GFCO14A | 7/8 | 41/64 | 7/32 | 33/64 | 1 17/64 | 75 | • | • | • | • | • |
| 1/2 | FCO16A | GFCO16A | 1 1/32 | 51/64 | 7/32 | 33/64 | 1 29/64 | 105 | • | • | • | • | • |
| 9/16 | FCO18A | GFCO18A | 1 1/4 | 59/64 | 7/32 | 33/64 | 1 5/8 | 105 | • | • | • | • | • |
| 5/8 | FCO20A | GFCO20A | 1 1/4 | 55/64 | 7/32 | 33/64 | 1 19/32 | 125 | • | • | • | • | • |
| 11/16 | FCO22A | GFCO22A | 1 9/16 | 1 3/32 | 7/32 | 33/64 | 1 59/64 | 150 | • | • | • | • | • |
| 3/4 | FCO24A | GFCO24A | 1 9/16 | 1 1/32 | 7/32 | 33/64 | 1 57/64 | 190 | • | • | • | • | • |
| 13/16 | FCO26A | GFCO26A | 1 23/32 | 1 3/32 | 9/32 | 19/32 | 2 | 245 | • | • | • | • | • |
| 7/8 | FCO28A | GFCO28A | 1 23/32 | 1 1/32 | 9/32 | 19/32 | 1 31/32 | 300 | • | • | • | • | • |
| 15/16 | FCO30A | GFCO30A | 2 | 1 5/32 | 11/32 | 21/32 | 2 1/8 | 360 | • | • | • | • | • |
| 1 | FCO32A | GFCO32A | 2 | 1 5/64 | 11/32 | 21/32 | 2 3/32 | 420 | • | • | • | • | • |
| 1 1/16 | FC34B | – | 1 23/32 | 1 1/8 | 3/8 | 39/64 | 1 15/32 | 465 | • | • | • | | |
| 1 1/8 | FC36A | – | 1 29/32 | 1 5/32 | 3/8 | 39/64 | 2 1/16 | 510 | • | • | • | | |
| 1 3/16 | FC38A | – | 1 29/32 | 1 13/64 | 3/8 | 39/64 | 2 1/16 | 510 | • | • | • | | |
| 1 1/4 | FC40A | – | 2 5/32 | 1 15/64 | 3/8 | 41/64 | 2 7/32 | 555 | • | • | • | | |
| 1 5/16 | FC42A | – | 2 5/32 | 1 17/64 | 3/8 | 41/64 | 2 7/32 | 600 | • | • | | | |
| 1 3/8 | FC44A | – | 2 3/8 | 1 19/64 | 3/8 | 41/64 | 2 3/8 | 680 | • | • | | | |
| 1 7/16 | FC46A | – | 2 3/8 | 1 11/32 | 3/8 | 41/64 | 2 3/8 | 760 | • | • | | | |
| 1 1/2 | FC48A | – | 2 17/32 | 1 3/8 | 3/8 | 41/64 | 2 1/2 | 795 | • | • | | | |
| 1 9/16 | FC50A | – | 2 17/32 | 1 13/32 | 3/8 | 41/64 | 2 1/2 | 795 | • | • | | | |
| 1 5/8 | FC52A | – | 2 21/32 | 1 29/64 | 3/8 | 41/64 | 2 19/32 | 820 | • | • | | | |
| 1 11/16 | FC54A | – | 2 21/32 | 1 31/64 | 3/8 | 41/64 | 2 19/32 | 860 | • | • | | | |
| 1 3/4 | FC56A | – | 2 7/8 | 1 33/64 | 3/8 | 41/64 | 2 3/4 | 910 | • | • | | | |
| 1 13/16 | FC58A | – | 2 7/8 | 1 35/64 | 3/8 | 41/64 | 2 3/4 | 960 | • | • | | | |
| 1 7/8 | FC60A | – | 3 5/32 | 1 19/32 | 3/8 | 41/64 | 2 55/64 | 1,040 | • | • | | | |
| 1 15/16 | FC62A | – | 3 5/32 | 1 5/8 | 3/8 | 41/64 | 2 55/64 | 1,040 | • | • | | | |
| 2 | FC64A | – | 3 13/32 | 1 23/32 | 1/2 | 45/64 | 3 1/8 | 1,115 | • | • | | | |
| 2 1/16 | FC66A | – | 3 13/32 | 1 3/4 | 1/2 | 45/64 | 3 1/8 | 1,190 | • | | | | |
| 2 1/8 | FC68A | – | 3 19/32 | 1 25/32 | 1/2 | 45/64 | 3 1/4 | 1,190 | • | | | | |
| 2 3/16 | FC70A | – | 3 19/32 | 1 53/64 | 1/2 | 45/64 | 3 1/4 | 1,275 | • | | | | |
| 2 1/4 | FC72A | – | 3 27/32 | 1 15/16 | 1/2 | 45/64 | 3 1/2 | 1,370 | • | | | | |
| 2 5/16 | FC74A | – | 3 27/32 | 1 15/16 | 1/2 | 45/64 | 3 1/2 | 1,370 | • | | | | |
| 2 3/8 | FC76A | – | 4 3/32 | 2 1/16 | 1/2 | 45/64 | 3 3/4 | 1,450 | • | | | | |
| 2 7/16 | FC78A | – | 4 3/32 | 2 1/8 | 1/2 | 45/64 | 3 3/4 | 1,555 | • | | | | |
| 2 1/2 | FC80A | – | 4 9/32 | 2 11/64 | 1/2 | 45/64 | 3 57/64 | 1,555 | • | | | | |
| 2 9/16 | FC82A | – | 4 9/32 | 2 11/64 | 1/2 | 45/64 | 3 57/64 | 1,660 | • | | | | |
| 2 5/8 | FC84A | – | 4 17/32 | 2 21/64 | 1/2 | 45/64 | 4 1/8 | 1,760 | • | | | | |
| 2 11/16 | FC86A | – | 4 17/32 | 2 3/8 | 1/2 | 45/64 | 4 1/8 | 1,760 | • | | | | |
| 2 3/4 | FC88A | – | 4 23/32 | 2 7/16 | 1/2 | 45/64 | 4 19/64 | 1,900 | • | | | | |
| 2 13/16 | FC90A | – | 4 23/32 | 2 17/32 | 1/2 | 45/64 | 4 19/64 | 2,075 | • | | | | |
| 2 7/8 | FC92A | – | 5 3/32 | 2 41/64 | 1/2 | 45/64 | 4 43/64 | 2,075 | • | | | | |
| 2 15/16 | FC94A | – | 5 3/32 | 2 43/64 | 1/2 | 45/64 | 4 5/8 | 2,200 | • | | | | |
| 3 | FC96A | – | 5 3/32 | 2 23/32 | 1/2 | 45/64 | 4 5/8 | 2,200 | • | | | | |

ASME®/ANSI® B107.100

**⚠WARNING**

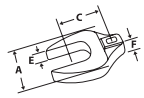
- Use only moderate force on crowfoot and flare nut wrenches
- Read safety precautions on pages W1 to W4

# CROWFOOT WRENCHES, 3/8" DRIVE

## Open End, mm



210FCOMA



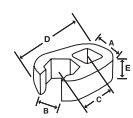

| mm | Stock No. | A | C | E | F | D | Maximum Recommended Working Torque, in-lb | Set Contains: 216FCOM | 210FCOMA* |
|---|---|---|---|---|---|---|---|---|---|
| 9 | FCOM9A | 22.4 | 18.8 | 5.3 | 13.2 | 33.3 | 75 | • | |
| 10 | FCOM10A | 22.4 | 17.6 | 5.3 | 13.2 | 33.0 | 75 | • | • |
| 11 | FCOM11A | 22.4 | 16.6 | 5.3 | 13.2 | 32.3 | 75 | • | • |
| 12 | FCOM12A | 26.2 | 21.0 | 5.3 | 13.2 | 37.3 | 105 | • | • |
| 13 | FCOM13A | 26.2 | 19.8 | 5.3 | 13.2 | 36.8 | 105 | • | • |
| 14 | FCOM14A | 26.2 | 18.6 | 5.3 | 13.2 | 36.1 | 105 | • | • |
| 15 | FCOM15A | 31.8 | 22.7 | 5.3 | 13.2 | 40.9 | 125 | • | • |
| 16 | FCOM16A | 31.8 | 21.7 | 5.3 | 13.2 | 40.4 | 125 | • | • |
| 17 | FCOM17A | 31.8 | 20.5 | 5.3 | 13.2 | 39.9 | 125 | • | • |
| 18 | FCOM18A | 38.4 | 27.2 | 6.4 | 13.2 | 48.5 | 170 | • | • |
| 19 | FCOM19A | 38.4 | 26.2 | 6.4 | 13.2 | 48.0 | 170 | • | • |
| 20 | FCOM20A | 38.4 | 25.0 | 6.4 | 13.2 | 48.0 | 170 | • | |
| 21 | FCOM21A | 43.7 | 27.4 | 7.1 | 15.0 | 48.8 | 250 | • | |
| 22 | FCOM22A | 43.7 | 26.4 | 7.1 | 15.0 | 50.0 | 250 | • | |
| 23 | FCOM23A | 50.5 | 30.1 | 8.9 | 16.8 | 54.4 | 390 | • | |
| 24 | FCOM24A | 50.5 | 28.8 | 8.9 | 16.8 | 53.8 | 400 | • | |

ASME® B107.21

*Set includes storage tray



210FRHMA






207SFRH

## Flank Drive® Flare Nut, mm, 6-Point

| mm | 6 | A | B | C | D | E | Maximum Recommended Working Torque, in-lb | Set Contains: 210FRHMA 6 |
|---|---|---|---|---|---|---|---|---|
| 9 | FRHM9 | 22.4 | 6.7 | 14.2 | 33.3 | 9.7 | 150 | |
| 10 | FRHM10 | 22.9 | 7.4 | 14.2 | 35.3 | 9.7 | 200 | • |
| 11 | FRHM11 | 22.9 | 8.3 | 14.2 | 35.3 | 9.7 | 200 | • |
| 12 | FRHM12 | 25.4 | 9.0 | 14.2 | 36.6 | 9.7 | 250 | • |
| 13 | FRHM13 | 25.4 | 9.4 | 14.2 | 36.6 | 9.7 | 250 | • |
| 14 | FRHM14 | 28.4 | 10.5 | 18.8 | 40.9 | 11.2 | 375 | • |
| 15 | FRHM15 | 28.4 | 11.2 | 18.8 | 40.9 | 11.2 | 375 | • |
| 16 | FRHM16 | 28.4 | 11.7 | 18.8 | 40.9 | 11.2 | 375 | • |
| 17 | FRHM17 | 33.3 | 12.6 | 20.6 | 44.7 | 12.7 | 525 | • |
| 18 | FRHM18 | 33.3 | 13.6 | 20.6 | 44.7 | 12.7 | 525 | • |
| 19 | FRHM19 | 33.3 | 14.7 | 20.6 | 44.7 | 12.7 | 525 | • |
| 20 | FRHM20 | 41.1 | 15.2 | 22.1 | 50.3 | 14.2 | 600 | |
| 21 | FRHM21 | 41.1 | 16.3 | 22.1 | 50.3 | 14.2 | 650 | |
| 22 | FRHM22 | 41.1 | 17.0 | 22.1 | 50.3 | 14.2 | 650 | |

*ASME* B107.21

Set includes storage tray

## *Flank Drive* Flare Nut, inches, 6-Point

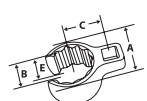
| 11 | 6 | A | B | C | D | E | Maximum Recommended Working Torque, in-lb | Set Contains: 207SFRH 6 |
|---|---|---|---|---|---|---|---|---|
| 3/8 | FRH120S | 13/32 | 1/4 | 9/16 | 1 11/32 | 3/8 | 150 | • |
| 7/16 | FRH140S | 29/32 | 5/16 | 9/16 | 1 13/32 | 3/8 | 200 | • |
| 1/2 | FRH160S | 1 | 11/32 | 9/16 | 1 7/16 | 3/8 | 250 | • |
| 9/16 | FRH180S | 1 1/8 | 3/8 | 3/4 | 1 5/8 | 7/16 | 300 | • |
| 5/8 | FRH200S | 1 1/8 | 7/16 | 3/4 | 1 5/8 | 7/16 | 375 | • |
| 11/16 | FRH220S | 1 5/16 | 1/2 | 13/16 | 1 25/32 | 1/2 | 450 | • |
| 3/4 | FRH240S | 1 5/16 | 9/16 | 13/16 | 1 25/32 | 1/2 | 525 | • |
| 13/16 | FRH260S | 1 5/8 | 5/8 | 7/8 | 1 31/32 | 9/16 | 600 | |
| 7/8 | FRH280S | 1 5/8 | 23/32 | 7/8 | 1 31/32 | 9/16 | 675 | |
| 15/16 | FRH300S | 1 7/8 | 11/16 | 15/16 | 2 3/16 | 5/8 | 750 | |
| 1 | FRH320S | 1 7/8 | 3/4 | 15/16 | 2 3/16 | 5/8 | 825 | |

*ASME* B107.21

Set includes storage tray



205ANM




## *Flank Drive* Flare Nut-Deep, mm, 12-Point

| mm | 12 | A | B | C | E | Set Contains: 205ANM |
|---|---|---|---|---|---|---|
| 12 | ANM12 | 18.9 | 8.3 | 16.3 | 15.0 | • |
| 13 | ANM13 | 21.2 | 9.7 | 17.7 | 15.0 | • |
| 14 | ANM14 | 21.2 | 10.5 | 17.7 | 15.0 | • |
| 17 | ANM17 | 26.6 | 13.0 | 19.7 | 19.1 | • |
| 19 | ANM19 | 29.0 | 14.6 | 20.9 | 19.8 | • |

Set includes storage tray



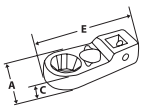
208AN

## *Flank Drive* Flare Nut-Deep, inches, 12-Point

| 11 | 12 | A | B | C | E | Maximum Recommended Working Torque, in-lb | Set Contains: 208AN 12 |
|---|---|---|---|---|---|---|---|
| 5/8 | AN850810B | 15/16 | 1/2 | 23/32 | 23/32 | 250 | • |
| 11/16 | AN850811B | 1 1/32 | 17/32 | 25/32 | 23/32 | 310 | • |
| 3/4 | AN850812B | 1 1/8 | 9/16 | 13/16 | 3/4 | 450 | • |
| 13/16 | AN850813B | 1 7/32 | 5/8 | 7/8 | 3/4 | 450 | • |
| 7/8 | AN850814B | 1 5/16 | 25/32 | 15/16 | 25/32 | 625 | • |
| 15/16 | AN850815B | 1 3/8 | 3/4 | 31/32 | 25/32 | 625 | • |
| 1 | AN850816B | 1 7/16 | 3/4 | 1 | 13/16 | 625 | • |
| 1 1/16 | AN850817B | 1 17/32 | 25/32 | 1 1/32 | 13/16 | 625 | • |

*ASME*/ANSI® B107.21





BFCRM712A

## Ratcheting, mm Blue-Point®

| mm | | A | C | E | Set Contains: BFCRM712A* |
|---|---|---|---|---|---|
| 8 | BFCRM8A | 17.8 | 6.5 | 49.3 | • |
| 9 | BFCRM9A | 19.5 | 7.4 | 50.8 | • |
| 10 | BFCRM10A | 21.5 | 8.0 | 53.8 | • |
| 11 | BFCRM11A | 22.0 | 8.5 | 53.8 | • |
| 12 | BFCRM12A | 23.5 | 9.0 | 57.2 | • |
| 13 | BFCRM13A | 25.0 | 10.0 | 57.2 | • |
| 14 | BFCRM14A | 27.0 | 10.0 | 60.3 | • |
| 15 | BFCRM15A | 28.5 | 11.0 | 63.5 | • |
| 16 | BFCRM16A | 30.5 | 11.0 | 66.7 | • |
| 17 | BFCRM17A | 34.5 | 12.0 | 68.3 | • |
| 18 | BFCRM18A | 36.5 | 12.0 | 71.4 | • |
| 19 | BFCRM19A | 36.5 | 12.9 | 73.0 | • |



BFCR708A

## Ratcheting, inches *Blue-Point*

| | | A | C | E | Set Contains: BFCR708A* |
|---|---|---|---|---|---|
| 5/16 | BFCR10A | 11/16 | 1/4 | 2 | • |
| 3/8 | BFCR12A | 27/32 | 5/16 | 2 1/8 | • |
| 7/16 | BFCR14A | 7/8 | 11/32 | 2 1/8 | • |
| 1/2 | BFCR16A | 31/32 | 13/32 | 2 1/4 | • |
| 9/16 | BFCR18A | 1 1/16 | 13/32 | 2 3/8 | • |
| 5/8 | BFCR20A | 1 3/16 | 7/16 | 2 5/8 | • |
| 11/16 | BFCR22A | 1 1/4 | 15/32 | 2 5/8 | • |
| 3/4 | BFCR24A | 1 7/16 | 1/2 | 2 7/8 | • |

*Set includes FXLBP10 – 10" locking extension

Set includes storage tray



ADCF8

## Adjustable, inches/mm

| Stock No. | Drive Size | Maximum Recommended Working Torque, in-lb |
|---|---|---|
| ADCF8 | 3/8 | 2,849 |

**ADCF8 Adjustable Crowfoot Wrench**
- Metric and fractional scales
- Opening range from 0"–1.14" (0 mm–29 mm)
- Lateral side nut designed to work on difficult access fasteners and minimize dirt accumulation



A277

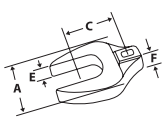
## Crowfoot Wrench Holder

**A277 3/8" Crowfoot Holder**
- Organize and store your crowfoot wrenches
- Two-piece design snaps apart for access to desired size
- 8 3/4" long

# CROWFOOT WRENCHES, 1/2" DRIVE

## Open End, mm

| mm | | A | C | E | F | Maximum Recommended Working Torque, in-lb |
|---|---|---|---|---|---|---|
| 20 | SCOM20 | 40.4 | 42.9 | 7.8 | 15.9 | 1,400 |
| 21 | SCOM21 | 40.4 | 42.9 | 7.8 | 15.9 | 1,500 |
| 22 | SCOM22 | 44.7 | 44.5 | 8.2 | 15.9 | 1,500 |
| 23 | SCOM23 | 48.0 | 44.5 | 8.9 | 15.9 | 1,600 |
| 24 | SCOM24 | 46.7 | 44.5 | 8.5 | 15.9 | 1,800 |
| 25 | SCOM25 | 51.1 | 45.2 | 8.9 | 15.9 | 1,800 |
| 26 | SCOM26 | 53.1 | 45.2 | 9.2 | 15.9 | 1,800 |
| 27 | SCOM27 | 53.1 | 44.5 | 9.2 | 15.9 | 2,000 |
| 28 | SCOM28 | 53.1 | 43.6 | 9.2 | 15.9 | 2,100 |
| 30 | SCOM30 | 59.7 | 44.5 | 9.9 | 15.9 | 2,200 |
| 32 | SCOM32 | 62.7 | 50.0 | 10.3 | 15.9 | 2,300 |
| 34 | SCOM34 | 62.7 | 51.6 | 10.3 | 15.9 | 2,400 |
| 35 | SCOM35 | 69.1 | 50.8 | 11.0 | 15.9 | 2,500 |
| 36 | SCOM36 | 69.1 | 50.0 | 11.0 | 15.9 | 2,600 |
| 38 | SCOM38 | 75.4 | 50.8 | 11.8 | 15.9 | 2,900 |
| 40 | SCOM40 | 75.4 | 51.6 | 11.8 | 15.9 | 3,000 |
| 41 | SCOM41 | 81.8 | 50.8 | 12.5 | 15.9 | 3,400 |
| 42 | SCOM42 | 81.8 | 50.0 | 12.5 | 15.9 | 3,400 |
| 46 | SCOM46 | 91.2 | 51.2 | 13.5 | 15.9 | 4,100 |





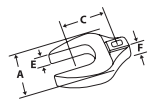
SCOM32

ASME® B107.21

**⚠WARNING**

- Use only moderate force on crowfoot and flare nut wrenches
- Read safety precautions on pages W1 to W4

# CROWFOOT WRENCHES, 1/2" DRIVE





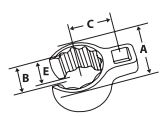

314SCO

## Open End, inches

Set Contains: 314SCO

| | | A | C | E | F | Maximum Recommended Working Torque, in-lb | |
|---|---|---|---|---|---|---|---|
| 15/16 | SCO30 | 1 27/32 | 1 15/32 | 11/32 | 5/8 | 1,800 | |
| 1 | SCO32 | 1 31/32 | 1 11/16 | 23/64 | 5/8 | 1,900 | |
| 1 1/16 | SCO34 | 2 3/32 | 1 3/4 | 3/8 | 5/8 | 2,000 | • |
| 1 1/8 | SCO36 | 2 7/32 | 1 3/4 | 3/8 | 5/8 | 2,100 | • |
| 1 3/16 | SCO38 | 2 11/32 | 1 3/4 | 13/32 | 5/8 | 2,200 | • |
| 1 1/4 | SCO40 | 2 15/32 | 2 | 13/32 | 5/8 | 2,300 | • |
| 1 5/16 | SCO42 | 2 19/32 | 2 | 7/16 | 5/8 | 2,400 | • |
| 1 3/8 | SCO44 | 2 23/32 | 2 | 7/16 | 5/8 | 2,500 | • |
| 1 7/16 | SCO46 | 2 27/32 | 2 | 7/16 | 5/8 | 2,600 | • |
| 1 1/2 | SCO48 | 2 31/32 | 2 | 15/32 | 5/8 | 2,900 | • |
| 1 9/16 | SCO50 | 2 31/32 | 1 31/32 | 15/32 | 5/8 | 3,000 | |
| 1 5/8 | SCO52 | 3 7/32 | 1 31/32 | 1/2 | 5/8 | 3,400 | • |
| 1 11/16 | SCO54 | 3 11/32 | 2 3/16 | 1/2 | 5/8 | 3,700 | • |
| 1 3/4 | SCO56 | 3 15/32 | 2 3/16 | 17/32 | 5/8 | 3,900 | • |
| 1 13/16 | SCO58 | 3 19/32 | 2 3/16 | 17/32 | 5/8 | 4,100 | • |
| 1 7/8 | SCO60 | 3 23/32 | 2 3/16 | 9/16 | 5/8 | 4,300 | • |
| 2 | SCO64 | 3 31/32 | 2 7/32 | 9/16 | 5/8 | 5,000 | • |
| 2 1/8 | SCO68 | 3 31/32 | 2 7/32 | 37/64 | 5/8 | 5,000 | |
| 2 1/4 | SCO72 | 3 31/32 | 2 13/32 | 37/64 | 5/8 | 5,000 | |
| 2 3/8 | SCO76 | 4 3/8 | 2 31/64 | 19/32 | 5/8 | 5,000 | |
| 2 7/16 | SCO78 | 4 3/8 | 2 7/16 | 19/32 | 5/8 | 5,000 | |
| 2 1/2 | SCO80 | 4 3/8 | 2 13/32 | 19/32 | 5/8 | 5,000 | |

ASME® B107.21





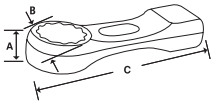

315AN

## Flank Drive® Flare Nut, Deep, inches, 12-Point

Set Contains: 315AN

| | | A | B | C | E | Maximum Recommended Working Torque, in-lb | 12 |
|---|---|---|---|---|---|---|---|
| 1 1/8 | AN850818B | 1 5/8 | 27/32 | 1 5/32 | 7/8 | 825 | • |
| 1 3/16 | AN850819B | 1 11/16 | 29/32 | 1 3/16 | 7/8 | 825 | • |
| 1 1/4 | AN850820B | 1 25/32 | 15/16 | 1 7/32 | 7/8 | 825 | • |
| 1 5/16 | AN850821B | 1 27/32 | 31/32 | 1 1/4 | 7/8 | 900 | • |
| 1 3/8 | AN850822B | 1 15/16 | 1 1/16 | 1 5/16 | 15/16 | 900 | • |
| 1 7/16 | AN850823B | 2 | 1 1/16 | 1 11/32 | 15/16 | 900 | • |
| 1 1/2 | AN850824B | 2 3/32 | 1 1/8 | 1 3/8 | 15/16 | 900 | • |
| 1 9/16 | AN850825B | 2 5/32 | 1 5/32 | 1 13/32 | 15/16 | 900 | • |
| 1 5/8 | AN850826B | 2 7/32 | 1 7/32 | 1 7/16 | 15/16 | 1,100 | • |
| 1 11/16 | AN850827B | 2 5/16 | 1 5/16 | 1 1/2 | 1 1/32 | 1,100 | • |
| 1 3/4 | AN850828B | 2 3/8 | 1 5/16 | 1 9/16 | 1 1/32 | 1,150 | • |
| 1 13/16 | AN850829B | 2 15/32 | 1 11/32 | 1 19/32 | 1 1/32 | 1,200 | • |
| 1 7/8 | AN850830B | 2 9/16 | 1 3/8 | 1 21/32 | 1 1/16 | 1,200 | • |
| 1 15/16 | AN850831B | 2 5/8 | 1 7/16 | 1 11/16 | 1 1/16 | 1,200 | • |
| 2 | AN850832B | 2 23/32 | 1 9/16 | 1 23/32 | 1 1/16 | 1,400 | • |
| 2 1/8 | AN850834B | 2 7/8 | 1 9/16 | 1 13/16 | 1 1/8 | 1,450 | |
| 2 3/16 | AN850835B | 2 15/16 | 1 21/32 | 1 27/32 | 1 1/8 | 1,500 | |
| 2 1/4 | AN850836B | 3 1/32 | 1 11/16 | 1 7/8 | 1 1/8 | 1,500 | |
| 2 3/8 | AN850838B | 3 3/16 | 1 13/16 | 1 31/32 | 1 3/16 | 1,600 | |
| 2 7/16 | AN850839B | 3 1/4 | 1 13/16 | 2 | 1 3/16 | 1,650 | |
| 2 9/16 | AN850841B | 3 7/16 | 1 29/32 | 2 3/32 | 1 9/32 | 1,750 | |
| 2 5/8 | AN850842B | 3 1/2 | 2 1/16 | 2 1/8 | 1 9/32 | 1,800 | |
| 2 11/16 | AN850843B | 3 19/32 | 2 1/16 | 2 5/32 | 1 9/32 | 1,800 | |
| 2 3/4 | AN850844B | 3 21/32 | 2 1/16 | 2 7/32 | 1 9/32 | 1,850 | |
| 3 1/8 | AN850850B | 4 1/8 | 2 5/16 | 2 7/16 | 1 5/16 | 2,000 | |

*ASME* B107.21




## Flank Drive® Straight Handle Sledge Hammer, inches, 12-Point

| | | | | | | Set Contains: DX634 |
|---|---|---|---|---|---|---|
| | mm | 12 | A | B | C | 12 |
| 1 3/16 | — | DX138A | 7/8 | 2 3/32 | 7 35/64 | • |
| 1 1/4 | — | DX140A | 7/8 | 2 3/32 | 7 35/64 | • |
| 1 5/16 | — | DX142A | 7/8 | 2 3/32 | 7 35/64 | • |
| 1 3/8 | — | DX144A | 61/64 | 2 17/64 | 7 41/64 | • |
| 1 7/16 | — | DX146A | 61/64 | 2 17/64 | 7 41/64 | • |
| 1 1/2 | — | DX148A | 61/64 | 1 17/64 | 7 41/64 | • |
| 1 5/8 | — | DX152A | 1 9/64 | 2 5/8 | 7 53/64 | • |
| 1 11/16 | — | DX154A | 1 9/64 | 2 5/8 | 7 53/64 | • |
| 1 3/4 | — | DX156A | 1 7/32 | 2 13/16 | 7 29/32 | • |
| 1 13/16 | — | DX158A | 1 7/32 | 2 13/16 | 7 29/32 | • |
| 1 7/8 | — | DX160A | 1 7/32 | 2 13/16 | 7 29/32 | • |
| — | 50 | DXM50 | 1 13/32 | 3 11/64 | 11 19/32 | • |
| 2 | — | DX164A | 1 13/32 | 3 11/64 | 11 19/32 | • |
| 2 1/16 | — | DX166A | 1 13/32 | 3 11/64 | 11 19/32 | • |
| 2 3/16 | — | DX170A | 1 17/32 | 3 29/64 | 11 47/64 | • |
| 2 1/4 | — | DX172A | 1 17/32 | 3 29/64 | 11 47/64 | • |
| 2 3/8 | — | DX176A | 1 21/32 | 3 23/32 | 11 55/64 | • |
| 2 7/16 | — | DX178A | 1 21/32 | 3 23/32 | 11 55/64 | • |
| 2 1/2 | — | DX180A | 1 21/32 | 3 23/32 | 11 55/64 | • |
| 2 9/16 | — | DX182A | 1 51/64 | 3 63/64 | 13 | • |
| 2 5/8 | — | DX184A | 1 51/64 | 3 63/64 | 13 | • |
| 2 3/4 | — | DX188A | 1 59/64 | 4 17/64 | 14 17/64 | • |
| 2 13/16 | — | DX190A | 1 59/64 | 4 17/64 | 14 17/64 | • |
| 2 15/16 | — | DX194A | 2 3/64 | 4 17/32 | 14 13/32 | • |
| 3 | — | DX196A | 2 3/64 | 4 17/32 | 14 13/32 | • |
| 3 1/8 | — | DX1100A | 2 17/64 | 4 29/32 | 17 37/64 | • |
| 3 3/8 | — | DX1108A | 2 17/64 | 4 29/32 | 17 37/64 | • |
| 3 1/2 | — | DX1112A | 2 29/64 | 5 19/64 | 17 51/64 | • |
| 3 3/4 | — | DX1120A | 2 21/32 | 5 17/32 | 17 51/64 | • |
| 3 7/8 | — | DX1124A | 2 21/32 | 5 17/32 | 17 57/64 | • |
| 4 1/8 | — | DX1132A | 2 59/64 | 6 1/32 | 18 9/64 | • |
| 4 1/4 | — | DX1136A | 2 59/64 | 6 1/32 | 18 9/64 | • |
| 4 1/2 | — | DX1144A | 3 5/32 | 6 25/32 | 20 1/64 | • |
| 4 5/8 | — | DX1148A | 3 5/32 | 6 25/32 | 20 1/64 | • |

ASME® B107.100



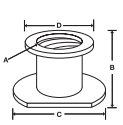
DX158A

## Slugging Wrench Retainers

| Stock No. | Description | A | B | C | D | Set Contains: HTX100P |
|---|---|---|---|---|---|---|
| HTX24 | Retainer for 3/4" studs | 3/8 | 1 29/32 | 1 15/16 | 1 3/4 | • |
| HTX28 | Retainer for 7/8" studs | 7/8 | 2 | 2 3/16 | 1 29/32 | • |
| HTX32 | Retainer for 1" studs | 1 | 2 1/8 | 2 1/2 | 2 1/32 | • |
| HTX36 | Retainer for 1 1/8" studs | 1 1/8 | 2 1/4 | 2 1/2 | 2 5/32 | • |
| HTX40 | Retainer for 1 1/4" studs | 1 1/4 | 2 3/8 | 2 7/8 | 2 9/32 | • |
| HTX44 | Retainer for 1 3/8" studs | 1 3/8 | 2 15/32 | 3 1/8 | 2 3/8 | • |
| HTX48 | Retainer for 1 1/2" studs | 1 1/2 | 2 5/8 | 3 1/8 | 2 1/2 | • |
| HTX52 | Retainer for 1 5/8" studs | 1 5/8 | 2 3/4 | 3 5/8 | 2 21/32 | • |
| HTX56 | Retainer for 1 3/4" studs | 1 3/4 | 2 7/8 | 3 7/8 | 2 3/4 | • |
| HTX60 | Retainer for 1 7/8" studs | 1 7/8 | 3 | 4 1/2 | 2 7/8 | • |



HTX100P






HTX52

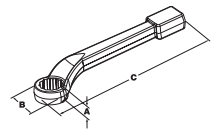
**⚠WARNING**

- Use only moderate force on crowfoot and flare nut wrenches
- Read safety precautions on pages W1 to W4

# HEAVY DUTY STRIKING WRENCHES



HX400B




## Flank Drive® Offset Handle Sledge Hammer, inches, 12-Point

| | | | | | | Set Contains: HX635 |
|---|---|---|---|---|---|---|
| 11 | mm | 12 | A | B | C | 12 |
| 1 1/16 | 27 | **HX340A** | 11/16 | 1 5/8 | 10 | • |
| 1 1/8 | — | **HX360A** | 3/4 | 1 15/16 | 11 | • |
| 1 3/16 | 30 | **HX380A** | 3/4 | 1 15/16 | 11 | • |
| 1 1/4 | 32 | **HX400B** | 3/4 | 1 15/16 | 11 | • |
| 1 5/16 | 33 | **HX420A** | 3/4 | 1 15/16 | 11 | • |
| 1 3/8 | 35 | **HX440A** | 7/8 | 2 1/8 | 11 1/2 | • |
| 1 7/16 | 36 | **HX460A** | 7/8 | 2 1/8 | 11 1/2 | • |
| 1 1/2 | 38 | **HX480A** | 1 | 2 7/16 | 12 | • |
| 1 5/8 | 41 | **HX520A** | 1 | 2 7/16 | 12 | • |
| 1 11/16 | 43 | **HX540A** | 1 1/8 | 2 5/8 | 12 1/2 | • |
| 1 3/4 | 44 | **HX560A** | 1 1/8 | 2 5/8 | 12 1/2 | • |
| 1 13/16 | 46 | **HX580A** | 1 1/8 | 2 5/8 | 12 1/2 | • |
| 1 7/8 | 47 | **HX600A** | 1 1/4 | 2 7/8 | 13 | • |
| 1 15/16 | 49 | **HX620A** | 1 1/2 | 2 7/8 | 13 | • |
| — | 50 | **HXM50** | 1 1/4 | 2 7/8 | 13 | • |
| 2 | 51 | **HX640A** | 1 1/4 | 2 7/8 | 13 | • |
| 2 1/8 | — | **HX680A** | 1 3/8 | 3 1/4 | 13 9/16 | • |
| 2 3/16 | 55 | **HX700A** | 1 3/8 | 3 1/4 | 13 9/16 | • |
| 2 1/4 | 57 | **HX720A** | 1 3/8 | 3 1/4 | 13 9/16 | • |
| 2 5/16 | 59 | **HX740A** | 1 3/8 | 3 1/4 | 13 9/16 | • |
| 2 3/8 | 60 | **HX760A** | 1 1/2 | 3 5/8 | 14 1/8 | • |
| 2 1/2 | 64 | **HX800A** | 1 1/2 | 3 5/8 | 14 1/8 | • |
| 2 9/16 | 65 | **HX820A** | 1 1/2 | 3 5/8 | 14 1/8 | • |
| 2 5/8 | 67 | **HX840A** | 1 5/8 | 3 15/16 | 15 | • |
| 2 3/4 | 70 | **HX880A** | 1 5/8 | 3 15/16 | 15 | • |
| 2 7/8 | 73 | **HX920A** | 1 3/4 | 4 7/16 | 16 | • |
| 2 15/16 | 75 | **HX940A** | 1 3/4 | 4 7/16 | 16 | • |
| 3 | 76 | **HX960A** | 1 3/4 | 4 7/16 | 16 | • |
| 3 1/8 | 80 | **HX1000A** | 1 3/4 | 4 7/16 | 16 | • |
| 3 3/8 | 85 | **HX1080A** | 2 | 6 1/4 | 18 1/4 | • |
| 3 1/2 | 89 | **HX1120A** | 2 | 6 1/4 | 18 1/4 | • |
| 3 3/4 | 95 | **HX1200A** | 2 | 6 1/4 | 18 1/4 | • |
| 3 7/8 | 98 | **HX1240A** | 2 | 6 1/4 | 18 1/4 | • |
| 4 1/8 | 105 | **HX1320A** | 2 | 6 1/4 | 18 1/4 | • |
| 4 1/4 | 108 | **HX1360A** | 2 | 6 1/4 | 18 1/4 | • |




## Open End Tubular Wrenches, inches/mm

| | mm | Stock No. | A | B | C | Fits Handle No. |
|---|---|---|---|---|---|---|
| 7/8 | — | **OE128C** | 1/2 | 1 15/16 | 10 1/2 | 13B or 24B |
| 15/16 | — | **OE130C** | 1/2 | 1 15/16 | 10 1/2 | 13B or 24B |
| 1 | — | **OE132C** | 9/16 | 2 5/16 | 11 5/16 | 13B or 24B |
| 1 1/16 | 27 | **OE134C** | 9/16 | 2 5/16 | 11 5/16 | 13B or 24B |
| 1 1/8 | — | **OE136C** | 9/16 | 2 5/16 | 11 1/4 | 13B or 24B |
| 1 1/4 | 32 | **OE140C** | 5/8 | 2 3/4 | 12 5/16 | 13B or 24B |
| 1 5/16 | 33 | **OE142C** | 5/8 | 2 3/4 | 12 5/16 | 13B or 24B |
| 1 3/8 | 35 | **OE144B** | 5/8 | 2 3/4 | 12 1/4 | 13B or 24B |
| 1 7/16 | 36 | **OE146C** | 11/16 | 3 1/8 | 13 1/4 | 13B or 24B |
| 1 1/2 | 38 | **OE148C** | 11/16 | 3 1/8 | 13 5/16 | 13B or 24B |

ASME® B107.100



**OE148C**

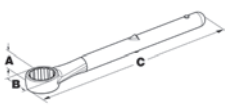



## Tubular Handles

| Stock No. | A | B | Size, inches |
|---|---|---|---|
| **13B** | 13 1/2 | 7/8 | 13 |
| **24B** | 24 | 7/8 | 24 |
| **36B** | 36 | 1 9/64 | 36 |



**13B**




## Flank Drive® Straight Box, inches/mm

| | mm | 12 | A | B | C | Fits Handle No. |
|---|---|---|---|---|---|---|
| 3/4 | — | **XH124C** | 1/2 | 1 1/4 | 10 13/16 | 13B or 24B |
| 13/16 | — | **XH126C** | 1/2 | 1 1/4 | 10 13/16 | 13B or 24B |
| 7/8 | — | **XH128C** | 5/8 | 1 7/16 | 10 15/16 | 13B or 24B |
| 15/16 | — | **XH130C** | 5/8 | 1 7/16 | 10 15/16 | 13B or 24B |
| 1 | — | **XH132C** | 11/16 | 1 9/16 | 11 | 13B or 24B |
| 1 1/16 | 27 | **XH134C** | 11/16 | 1 9/16 | 11 | 13B or 24B |
| 1 1/8 | — | **XH136C** | 11/16 | 1 11/16 | 11 1/8 | 13B or 24B |
| 1 1/4 | 32 | **XH140C** | 3/4 | 1 15/16 | 13 1/2 | 13B or 24B |
| 1 5/16 | 33 | **XH142C** | 3/4 | 1 15/16 | 13 1/2 | 13B or 24B |
| 1 7/16 | 36 | **XH146C** | 7/8 | 2 3/16 | 13 5/8 | 13B or 24B |
| 1 1/2 | 38 | **XH148C** | 7/8 | 2 3/16 | 13 3/4 | 13B or 24B |
| 1 5/8 | 41 | **XH152C** | 15/16 | 2 3/8 | 13 3/4 | 13B or 24B |
| 3 1/8 | 79 | **XH1100C** | 1 3/4 | 4 15/16 | 14 7/8 | 36B |

*ASME* B107.100



**XH124C**



**⚠WARNING** • Read safety precautions on pages W1 to W4

# COMBINATION T- AND L-SHAPED WRENCHES

- Ergonomic, soft grip handle provides comfort during repetitive tasks
- Delivers superior turning power
- Allows maximum pressure to be applied when loosening difficult fasteners with both “T” and “L” applications
- Blades constructed from high strength steel and hardened for durability
- Blade tips are black oxide coated to prevent chipping and to help maintain a secure fastener engagement
- Short blade provides maximum torque for tight quarters
- Long blade promotes quick fastener turning in difficult access situations
- Hole in handle for hanging tool or tether
- Color coded handles identify metric and inch sizes at a glance



**AWSGM800**

## Hex, mm

| mm | Blue Handle | T-Length, mm | Length, mm | Set Contains: AWSGM800 |
|---|---|---|---|---|
| 2 | **AWSGM2** | 95 | 152 | • |
| 2.5 | **AWSGM2.5** | 95 | 152 | • |
| 3 | **AWSGM3** | 98 | 152 | • |
| 4 | **AWSGM4** | 98 | 187 | • |
| 5 | **AWSGM5** | 117 | 187 | • |
| 6 | **AWSGM6** | 117 | 246 | • |
| 8 | **AWSGM8** | 117 | 246 | • |
| 10 | **AWSGM10** | 124 | 248 | • |

Set includes storage tray



**AWSG800**

## Hex, inches

| | Red Handle | T-Length, inches | Length, inches | Set Contains: AWSG800 |
|---|---|---|---|---|
| 3/32 | **AWSG06** | 3 7/8 | 6 | • |
| 7/64 | **AWSG07** | 3 7/8 | 6 | • |
| 1/8 | **AWSG08** | 3 7/8 | 6 | • |
| 9/64 | **AWSG09** | 3 7/8 | 6 | • |
| 5/32 | **AWSG10** | 3 7/8 | 7 3/8 | • |
| 3/16 | **AWSG12** | 4 3/4 | 7 3/4 | • |
| 7/32 | **AWSG14** | 4 3/4 | 7 3/4 | • |
| 1/4 | **AWSG16** | 4 3/4 | 9 5/8 | • |
| 5/16 | **AWSG20** | 4 3/4 | 9 5/8 | |
| 3/8 | **AWSG24** | 4 3/4 | 9 5/8 | |

Set includes storage tray



**AWBSGM800**

## Ball Hex, mm

| mm | Blue Handle | T-Length, mm | Length, mm | Set Contains: AWBSGM800 |
|---|---|---|---|---|
| 2 | **AWBSGM2** | 95 | 152 | • |
| 2.5 | **AWBSGM25** | 95 | 152 | • |
| 3 | **AWBSGM3** | 98 | 152 | • |
| 4 | **AWBSGM4** | 98 | 187 | • |
| 5 | **AWBSGM5** | 117 | 187 | • |
| 6 | **AWBSGM6** | 117 | 246 | • |
| 8 | **AWBSGM8** | 117 | 246 | • |
| 10 | **AWBSGM10** | 124 | 248 | • |

Set includes storage tray



**AWBSG800**

## Ball Hex, inches

| | Red Handle | T-Length, inches | Length, inches | Set Contains: AWBSG800 |
|---|---|---|---|---|
| 3/32 | **AWBSG06** | 3 7/8 | 6 | • |
| 7/64 | **AWBSG07** | 3 7/8 | 6 | • |
| 1/8 | **AWBSG08** | 3 7/8 | 6 | • |
| 9/64 | **AWBSG09** | 3 7/8 | 6 | • |
| 5/32 | **AWBSG10** | 3 7/8 | 7 3/8 | • |
| 3/16 | **AWBSG12** | 4 3/4 | 7 3/4 | • |
| 7/32 | **AWBSG14** | 4 3/4 | 7 3/4 | • |
| 1/4 | **AWBSG16** | 4 3/4 | 9 5/8 | • |
| 5/16 | **AWBSG20** | 4 3/4 | 9 5/8 | |
| 3/8 | **AWBSG24** | 4 3/4 | 9 5/8 | |

Set includes storage tray



AWSGTRP20



AWSGT800

## TORX Plus® Special Application

| # | Green Handle | T-Length, inches | Length, inches |
|---|---|---|---|
| T20 | **AWSGTRP20** | 3 7/8 | 10 1/2 |

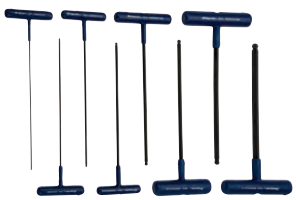
- Extra long T20 tamper-resistant *TORX Plus*
- Access mirrors on Mercedes® vehicles
- Short end also T20 tamper-resistant *TORX* for tight quarters

## TORX®

| # | Green Handle | T-Length, inches | Length, inches | Set Contains: AWSGT800 |
|---|---|---|---|---|
| T6 | **AWSGT6** | 3 7/8 | 6 | |
| T7 | **AWSGT7** | 3 7/8 | 6 | |
| T8 | **AWSGT8** | 3 7/8 | 6 | |
| T9 | **AWSGT9** | 3 7/8 | 6 | |
| T10 | **AWSGT10** | 3 7/8 | 6 | • |
| T15 | **AWSGT15** | 3 7/8 | 7 3/8 | • |
| T20 | **AWSGT20** | 3 7/8 | 7 3/8 | • |
| T25 | **AWSGT25** | 4 3/4 | 7 5/8 | • |
| T27 | **AWSGT27** | 4 3/4 | 7 5/8 | • |
| T30 | **AWSGT30** | 4 3/4 | 9 5/8 | • |
| T40 | **AWSGT40** | 4 3/4 | 9 5/8 | • |
| T45 | **AWSGT45** | 4 3/4 | 9 3/4 | • |
| T50 | **AWSGT50** | 4 3/4 | 9 3/4 | |

Set includes storage tray

# T-SHAPE



AWBMCG1600

## Ball Hex, mm

| mm | Blue Handle 228 mm Length | Set Contains: AWBMCG1600 |
|---|---|---|
| 2 | **AWBMCG1602** | • |
| 2.5 | **AWBMCG16025** | • |
| 3 | **AWBMCG1603** | • |
| 4 | **AWBMCG1604** | • |
| 5 | **AWBMCG1605** | • |
| 6 | **AWBMCG1606** | • |
| 8 | **AWBMCG1608** | • |
| 10 | **AWBMCG1610** | • |



AWBCG1600

## Ball Hex, inches

| | Red Handle 9" Length | Set Contains: AWBCG1600 |
|---|---|---|
| 3/32 | **AWBCG1606** | • |
| 7/64 | **AWBCG1607** | • |
| 1/8 | **AWBCG1608** | • |
| 9/64 | **AWBCG1609** | • |
| 5/32 | **AWBCG1610** | • |
| 3/16 | **AWBCG1612** | • |
| 7/32 | **AWBCG1614** | • |
| 1/4 | **AWBCG1616** | • |
| 5/16 | **AWBCG1620** | |
| 3/8 | **AWBCG1624** | |

## Tamper Resistant, mm

**AWMCGR1608**

**Metric T-Shape Hex Wrench**

- Yamaha® Rhino doors and aftermarket license plate holders with 8 mm tamper-proof hex security fasteners
- Permits maximum pressure application when loosening difficult fasteners



AWMCGR1608



AWCGT500

## TORX

| # | Green Handle 6" Length | Set Contains: AWCGT500 |
|---|---|---|
| T7 | **AWCGT7** | |
| T8 | **AWCGT8** | • |
| T10 | **AWCGT10** | • |
| T15 | **AWCGT15** | • |
| T20 | **AWCGT20** | • |
| T25 | **AWCGT25** | • |
| T30 | **AWCGT30** | |
| T40 | **AWCGT40** | |
| T45 | **AWCGT45** | |

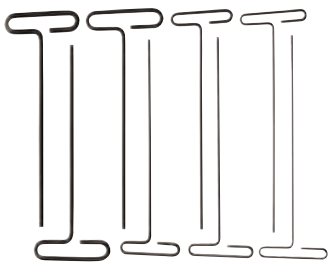
**⚠WARNING**

- Plastic handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# T-SHAPE



AWMCG1600B



GAW1900A



AWCG1600B

## Hex, mm

| mm | Blue Handle 152 mm Length | Set Contains: AWMCG1600B |
|---|---|---|
| 2 | AWMCG1602B | • |
| 2.5 | AWMCG16025B | • |
| 3 | AWMCG1603B | • |
| 4 | AWMCG1604B | • |
| 5 | AWMCG1605B | • |
| 6 | AWMCG1606B | • |
| 8 | AWMCG1608B | • |
| 10 | AWMCG1610B | • |

## Hex, inches

| | Standard Handle 9" Length | Red Handle 6" Length | Set Contains: GAW1900A | AWCG1600B |
|---|---|---|---|---|
| 3/32 | GAW1906 | AWCG1606B | • | • |
| 7/64 | GAW1907 | AWCG1607B | • | • |
| 1/8 | GAW1908 | AWCG1608B | • | • |
| 9/64 | GAW1909 | AWCG1609B | • | • |
| 5/32 | GAW1910 | AWCG1610B | • | • |
| 3/16 | GAW1912 | AWCG1612B | • | • |
| 7/32 | GAW1914 | AWCG1614B | • | • |
| 1/4 | GAW1916 | AWCG1616B | • | • |
| 5/16 | GAW1920 | AWCG1620B | | |
| 3/8 | GAW1924 | AWCG1624B | | |



**AWSTAND**
Tools not included with AWSTAND



AWSTAND

## Wrench Stands

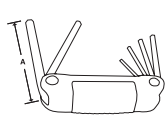
**AWSTAND Wrench Stand**

- Mounting holes on top and bottom of stand provide many mounting locations
- Another AWSTAND can be added for increased storage options
- Stands can mount to a Slots-N-Dots™ Plus personal work center or lie flat on top of toolbox
- Stand holds the following wrench styles:
  - L- or T-shaped fractional hex 1/16"–3/8"
  - L- or T-shaped metric hex 2 mm–10 mm
  - L- or T-shaped TORX® T6–T50
  - Metric or *TORX* on one stand
  - Fractional and metric on one stand
  - Metric and fractional ball wrenches

# FOLDING SETS



AWMEF7K





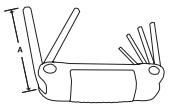

AWMEF8K



AWMEF6K

## Hex, mm

| mm | AWMEF7K | AWMEF8K | AWMEF6K |
|---|---|---|---|
| | A | A | A |
| 1.5 | 45.7 | — | — |
| 2 | 50.8 | 50.8 | — |
| 2.5 | 55.9 | 55.9 | — |
| 3 | 61.0 | 61.0 | 83.8 |
| 4 | 66.0 | 66.0 | 88.9 |
| 5 | 78.7 | 78.7 | 96.5 |
| 6 | 83.8 | 96.5 | 101.6 |
| 7 | — | 106.7 | — |
| 8 | — | 121.9 | 121.9 |
| 10 | — | — | 129.5 |





AWEF6K



AWEF9K



AWTEF8K



AWEFBH9K

## Hex, inches

| | AWEF6K | | AWEF9K |
|---|---|---|---|
| | A | | A |
| 5/32 | 2.7 | 0.05 | 1.8 |
| 3/16 | 3.3 | 1/16 | 1.9 |
| 7/32 | 3.5 | 5/64 | 2.0 |
| 1/4 | 3.7 | 3/32 | 2.1 |
| 5/16 | 4.8 | 7/64 | 2.3 |
| 3/8 | 5.1 | 1/8 | 2.4 |
| | | 9/64 | 2.6 |
| | | 5/32 | 2.7 |
| | | 3/16 | 2.9 |

## TORX®

| # | AWTEF8K |
|---|---|
| | A |
| T8 | 2.4 |
| T10 | 2.7 |
| T15 | 3.0 |
| T20 | 3.2 |
| T25 | 3.4 |
| T27 | 3.5 |
| T30 | 3.7 |
| T40 | 3.9 |

## Ball Hex, inches

| | AWEFBH9K |
|---|---|
| | A |
| 5/64 | 2.0 |
| 3/32 | 2.1 |
| 7/64 | 2.3 |
| 1/8 | 2.4 |
| 9/64 | 2.6 |
| 5/32 | 2.7 |
| 3/16 | 2.9 |
| 7/32 | 3.5 |
| 1/4 | 3.7 |

**AWCPEF16K Combination Set**
Set includes **AWEF9K** hex set and **AWMEF7K** metric hex set

## Combination

**AWHD8K Hex/*TORX* Set**
Includes two *TORX* sizes (T27, T40) and six hex sizes (5/32", 3/16", 7/32", 1/4", 5/16" and 3/8"). Fits a wide range of Harley-Davidson® motorcycles.

**AWEF6M6K Fractional/Metric Hex Folding Set**
- Turn and flip feature eliminates the need for constant removal of tool to reposition it in screw head when working next to obstructions
- 90° stops turn the tool into a speed wrench
- Hex sizes molded into storage case for easy identification of each hex
- Flutes in storage case allow easy selection
- Access the blades from top or bottom, eliminating the need to unstack the blades
- High torque steel 20% stronger and twice the wear resistance of standard grades of steel
- Handle is 40% stronger than steel cases
- Corrosion resistant finish is five times more resistant than the competition



AWHD8K



AWEF6M6K

# L-SHAPED

## Ball Hex, inches

**Industrial Finish L-Shaped Ball Hex Wrench Sets:**
Ball hex allows up to 25° angle entry. Made from high strength steel.

**BHS7A Ball Hex Set**
Set includes 5/64", 3/32", 7/64", 1/8", 9/64", 5/32" and 3/16" sizes (7pc) (5/64"–3/16") in plastic index.

**BHS13A Ball Hex Set**
Set includes 0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" and 3/8" sizes (13pc) (.050"–3/8") in plastic index.

**AWBPH13 Ball Hex Set**
Screw holding tip holds fastener to tool for delicate installations. Set includes 0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" and 3/8" sizes (13pc) (.050"–3/8") in plastic index.

**AWBS13 Stubby Ball Hex Set**
Stubby length for access to tight quarters. Set includes 0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" and 3/8" sizes (13pc) (.050"–3/8") in plastic index.

**AWBXL13 Extra Long Ball Hex Set**
Set includes sizes: 0.05", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16" and 3/8".

**Unique Screw Holding Tip***
Holds fastener to tool for delicate installations
*AWBPH13 set only



BHS7A





BHS13A



AWBS13



AWBPH13



AWBXL13

**⚠WARNING**

- Plastic handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# L-SHAPED

**Unique Screw Holding Tip***
Holds fastener to tool for delicate installations
*AWMBPH9 set only





BHM9A



AWMBPH9



AWMBS9



AWBMXL9

## Ball Hex, mm

**Industrial Finish L-Shaped Ball Hex Wrench Sets:**
Ball hex allows up to 25° angle entry. Made from high strength steel.

**BHM9A Metric Ball Hex Set**
Set includes 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm and 10 mm sizes (9pc) (1.5 mm–10 mm) in plastic index.

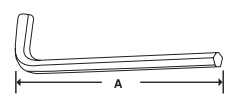
**AWMBPH9 Metric Ball Hex Set**
Screw holding tip holds fastener to tool for delicate installations. Set includes 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm and 10 mm sizes (9pc) (1.5 mm–10 mm) in plastic index.

**AWMBS9 Metric Stubby Ball Hex Set**
Stubby length for access in tight quarters. Set includes 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm and 10 mm sizes (9pc) (1.5 mm–10 mm) in plastic index.

**AWBMXL9 Metric Extra Long Ball Hex Set**
Set includes: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm and 10 mm sizes.



AWM110DHK






AW1013DK

## Hex, mm

| | Stock No. | mm | A | Set Contains: AWM140DK | AWM110DK | AWM110DHK |
|---|---|---|---|---|---|---|
| Standard Length | AWM2D | 2 | 47.7 | • | • | • |
| | AWM2-1/2D | 2.5 | 52.0 | • | • | • |
| | AWM3D | 3 | 58.6 | • | • | • |
| | AWM4D | 4 | 65.6 | • | • | • |
| | AWM5D | 5 | 75.6 | • | • | • |
| | AWM6D | 6 | 82.2 | • | • | • |
| | AWM7D | 7 | 92.4 | • | • | • |
| | AWM8D | 8 | 99.2 | • | • | • |
| | AWM9D | 9 | 105.1 | • | • | • |
| | AWM10D | 10 | 111.4 | • | • | • |
| | AWM12D | 12 | 139.3 | • | • | • |
| | AWM14D | 14 | 138.8 | • | | |
| | AWM17D | 17 | 167.2 | • | | |
| | AWM19D | 19 | 193.6 | • | | |
| Long | AWML1.5D | 1.5 | 77.7 | | | |
| | AWML2D | 2 | 83.0 | | | |
| | AWML2.5D | 2.5 | 89.8 | | | |
| | AWML3D | 3 | 100.0 | | | |
| | AWML4D | 4 | 107.0 | | | |
| | AWML5D | 5 | 118.5 | | | |
| | AWML6D | 6 | 141.0 | | | |
| | AWML8D | 8 | 161.5 | | | |
| | AWML10D | 10 | 172.0 | | | |
| | AWML12D | 12 | 193.6 | | | |
| | Kit Bag | | | C1209 | C15B | |
| | Metal Index | | | | | BHK11 |

## Hex, inches

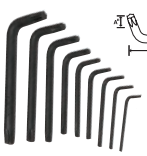
| Stock No. | | A | Set Contains: AW1020DK | AW1015DK | AW1013DK | AW1015DHK |
|---|---|---|---|---|---|---|
| AW028D | 0.028 | 1 1/4 | • | • | | • |
| AW035D | 0.035 | 1 5/16 | • | • | | • |
| AW050D | 0.050 | 1 3/4 | • | • | • | • |
| AW2D | 1/16 | 1 3/4 | • | • | • | • |
| AW2-1/2D | 5/64 | 1 7/8 | • | • | • | • |
| AW3D | 3/32 | 2 | • | • | • | • |
| AW3-1/2D | 7/64 | 2 1/8 | • | • | • | • |
| AW4D | 1/8 | 2 1/4 | • | • | • | • |
| AW4-1/2D | 9/64 | 2 3/8 | • | • | • | • |
| AW5D | 5/32 | 2 1/2 | • | • | • | • |
| AW6D | 3/16 | 2 3/4 | • | • | • | • |
| AW7D | 7/32 | 3 | • | • | • | • |
| AW8D | 1/4 | 3 1/4 | • | • | • | • |
| AW10D | 5/16 | 3 3/4 | • | • | • | • |
| AW12D | 3/8 | 4 1/4 | • | • | • | • |
| AW14D | 7/16 | 4 3/4 | • | | | |
| AW16D | 1/2 | 5 1/4 | • | | | |
| AW18D | 9/16 | 5 3/4 | • | | | |
| AW20D | 5/8 | 6 1/4 | • | | | |
| AW24D | 3/4 | 7 1/4 | • | | | |
| Kit Bag | | | C1209 | C154 | | |
| Metal Index | | | | | | BHK15 |



AWL1010DHK

## Hex, Long, inches

| Stock No. | | A | AWL1010DK | AWL1010DHK |
|---|---|---|---|---|
| | | | Set Contains: | |
| AWL3D | 3/32 | 3 1/8 | • | • |
| AWL3-1/2D | 7/64 | 3 1/2 | • | • |
| AWL4D | 1/8 | 3 3/4 | • | • |
| AWL4-1/2D | 9/64 | 4 | • | • |
| AWL5D | 5/32 | 4 1/8 | • | • |
| AWL6D | 3/16 | 4 1/2 | • | • |
| AWL7D | 7/32 | 4 7/8 | • | • |
| AWL8D | 1/4 | 5 1/4 | • | • |
| AWL10D | 5/16 | 6 | • | • |
| AWL12D | 3/8 | 6 3/4 | • | • |
| AWL14D | 7/16 | 7 1/2 | | |
| AWL16D | 1/2 | 8 1/4 | | |
| AWL18D | 9/16 | 9 | | |
| AWL20D | 5/8 | 9 3/4 | | |
| Kit Bag | | | C15B | |
| Metal Index | | | | BHK10 |



AWT100KA



AWTPH8

## TORX®

| Stock No. | # | A | B | AWT100KA |
|---|---|---|---|---|
| | | | | Set Contains: |
| AWT8A | T8 | .137 | 1 7/8 | |
| AWT9A | T9 | .148 | 1 7/8 | |
| AWT10A | T10 | .162 | 2 | • |
| AWT15A | T15 | .194 | 2 1/8 | • |
| AWT20A | T20 | .228 | 2 1/4 | • |
| AWT25A | T25 | .262 | 2 3/8 | • |
| AWT27A | T27 | .295 | 2 1/2 | • |
| AWT30A | T30 | .218 | 2 3/4 | • |
| AWT40A | T40 | .262 | 3 | • |
| AWT45A | T45 | .430 | 3 5/8 | • |
| AWT50A | T50 | .348 | 3 3/4 | • |
| AWT55A | T55 | .442 | 4 1/4 | • |

**AWTPH8 *TORX* Set**
Set includes T9, T10, T15, T20, T25, T27, T30 and T40 sizes (8pc) (T9–T40) in plastic index. Made from high torque steel.

## *TORX* Tamper Resistant



AWTR8

| Stock No. | # | AWTR8 |
|---|---|---|
| | | Set Contains: |
| AWTR8-1 | T9 | • |
| AWTR8-2 | T10 | • |
| AWTR8-3 | T15 | • |
| AWTR8-4 | T20 | • |
| AWTR8-5 | T25 | • |
| AWTR8-6 | T27 | • |
| AWTR8-7 | T30 | • |
| AWTR8-8 | T40 | • |



AWMG9



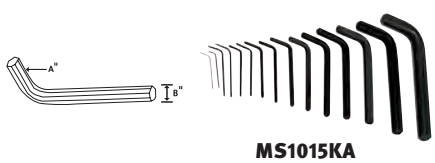
AWS13

## Hex/Gold Finish, mm

| Stock No. | mm | AWMG9 |
|---|---|---|
| | | Set Contains: |
| AWMG9-1 | 1.5 | • |
| AWMG9-2 | 2 | • |
| AWMG9-3 | 2.5 | • |
| AWMG9-4 | 3 | • |
| AWMG9-5 | 4 | • |
| AWMG9-6 | 5 | • |
| AWMG9-7 | 6 | • |
| AWMG9-8 | 8 | • |
| AWMG9-9 | 10 | • |

## Hex/Natural Finish, inches

| Stock No. | | AWS13 |
|---|---|---|
| | | Set Contains: |
| AWS13-1 | 1/20 | • |
| AWS13-2 | 1/16 | • |
| AWS13-3 | 5/64 | • |
| AWS13-4 | 3/32 | • |
| AWS13-5 | 7/64 | • |
| AWS13-6 | 1/8 | • |
| AWS13-7 | 9/64 | • |
| AWS13-8 | 5/32 | • |
| AWS13-9 | 3/16 | • |
| AWS13-10 | 7/32 | • |
| AWS13-11 | 1/4 | • |
| AWS13-12 | 5/16 | • |
| AWS13-13 | 3/8 | • |



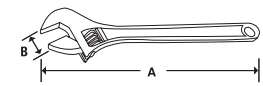
MS1015KA

## Multi-Spline

| Stock No. | A | B | MS1015KA |
|---|---|---|---|
| | | | Set Contains: |
| MS2A | 4 | .033 | • |
| MS3A | 4 | .048 | • |
| MS4A | 6 | .060 | • |
| MS5A | 4 | .069 | • |
| MS6A | 4 | .076 | • |
| MS7A | 6 | .072 | • |
| MS8A | 6 | .096 | • |
| MS10A | 6 | .110 | • |
| MS16A | 6 | .144 | • |
| MS20A | 6 | .183 | • |
| MS24A | 6 | .216 | • |
| MS28A | 6 | .251 | • |
| MS32A | 6 | .291 | • |
| MS40A | 6 | .372 | • |
| MS48A | 6 | .454 | • |

Set includes C16 kit bag, wrenches are not pre-packaged in kit bag

# ADJUSTABLE






## Flank Drive® Plus Adjustable/Cushion Handles

- Adjustable wrenches with serrated jaws feature our *Flank Drive* Plus wrenching system for more turning power from an adjustable wrench
- Precision-made wrenches feature fractional and metric scales for size reference
- Elastomer handle surface is soft, yet provide a nonslip gripping surface even for greasy and oily hands
- Cushion handle insulates against cold temperatures



**FADH704A**

| Stock No. | A inches (mm) | B inches (mm) | Set Contains: FADH704A | FADH702 |
|---|---|---|---|---|
| FADH6A | 6 (152) | 3/4 (19) | • | |
| FADH8A | 8 (203) | 15/16 (24) | • | • |
| FADH10A | 10 (254) | 1 1/8 (29) | • | |
| FADH12A | 12 (304) | 1 5/16 (33) | • | • |

ASME® Standard

Set includes storage tray

## Adjustable Wrenches

- Opposing fractional and metric quick sizing scales are provided for convenience
- High strength alloy steel machined to exacting specs and precision heat treated for strength and durability
- Nickel-chrome finish helps protect against corrosion and speeds cleanup



**AD704A**

| Stock No. | A inches (mm) | B inches (mm) | Set Contains: AD704A |
|---|---|---|---|
| AD6A | 6 (155) | 25/32 (20) | • |
| AD8A | 8 (205) | 1 1/16 (27) | • |
| AD10A | 10 (255) | 1 3/16 (30) | • |
| AD12A | 12 (305) | 1 11/32 (34) | • |

*ASME* B107.100

Set includes storage tray

## Wide Mouth Adjustable/Cushion Handle

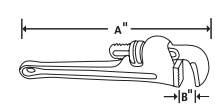
- Opens larger than standard adjustable wrench
- Longer jaws and slimline design for greater reach
- Metric and fractional scales for quick observation
- Adjustable moving jaw will not fall out, even when at max opening
- Elastomer handle is soft, insulates against cold and provides a nonslip surface
- ADHW6 opens as wide as an 8" adjustable wrench; ADHW8 opens as wide as a 10" adjustable wrench



**ADHW8**

| Stock No. | A inches (mm) | B inches (mm) |
|---|---|---|
| ADHW6 | 6 (152) | 1 1/4 (32) |
| ADHW8 | 8 (203) | 1 1/2 (38) |

*ASME* B107.100




## External Pipe Wrenches



**PW10C**

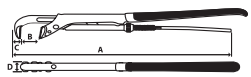


**PWA10A**

| Stock No. Coated Handle | Stock No. Aluminum Handle | A | B Max Opening |
|---|---|---|---|
| PW6C | – | 6 | 3/4 |
| PW8C | – | 8 | 1 |
| PW10C | PWA10A | 10 | 1 1/2 |
| PW12C | – | 12 | 2 |
| PW14C | PWA14A | 14 | 2 |
| PW18C | PWA18A | 18 | 2 1/2 |
| PW24C | PWA24A | 24 | 3 |
| PW36C | PWA36A | 36 | 5 |

## Pliers Wrench

- Inwardly angled teeth for a stronger grip
- Quick adjustment of grip width
- Built-in guard against unthreading
- Soft, high-friction handle surfaces with a strong, stable core

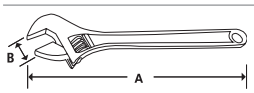





PWZ1

| Stock No. | A | B | C | D | Weight, lb |
|---|---|---|---|---|---|
| PWZ0 | 8 3/16 | 1 1/2 | 5/16 | 9/16 | 1 |
| PWZ1 | 12 5/8 | 1 3/4 | 1/2 | 3/4 | 1 5/8 |
| PWZ2 | 17 | 2 1/2 | 5/8 | 13/16 | 2 1/2 |
| PWZ3 | 21 1/2 | 3 1/2 | 3/4 | 1 | 6 3/8 |

## ADJUSTABLE Blue-Point®




## Adjustable Wrenches

- Inch and metric scales on fixed jaw indicate wrench opening
- Fixed jaw and handle forged in one piece to ensure maximum strength
- Wrench is balanced to minimize wrist stress
- Hole at handle end for tether or hanging



BLPADJ404



GAJS30 GAJS30A

| Stock No. | A inches (mm) | B inches (mm) | Set Contains: BLPADJT03 | Set Contains: BLPADJ404* |
|---|---|---|---|---|
| GAJ4A | 4 (108) | 1/2 (13) | | |
| GAJ6A | 6 (160) | 1 (25.4) | | • |
| GAJ8A | 8 (210) | 1 1/8 (29) | | • |
| GAJ10A | 10 (260) | 1 9/32 (33) | | • |
| GAJ12A | 12 (310) | 1 1/2 (38) | | • |
| GAJ15A | 15 (385) | 1 19/32 (43) | • | |
| GAJ18A | 18 (450) | 2 1/16 (52) | • | |
| GAJ24A | 24 (610) | 2 7/16 (62) | • | |
| GAJS30** | 30 (778) | 3 11/32 (85) | | |
| GAJS30A | 30 (778) | 3 11/32 (85) | | |

ASME® B107.10

*Set includes storage tray

**Side adjusting nut style provides smoother operation, allows greater jaw opening and offers minimum jaw play

## Adjustable Wrenches/Soft Grip



BLPADJ404SG

| Stock No. | A inches (mm) | B inches (mm) | Set Contains: BLPADJ404SG |
|---|---|---|---|
| GAJ6SG | 6 (160) | 1 (25.4) | • |
| GAJ8SG | 8 (210) | 1 1/8 (29) | • |
| GAJ10SG | 10 (260) | 1 9/32 (32.8) | • |
| GAJ12SG | 12 (310) | 1 1/2 (38) | • |

Set includes storage tray

## Aluminum (for "AN" Fittings)

- Securely tighten expensive AN fittings to reduce risk of damage in aircraft, marine and industrial applications as well as for race and show cars
- Machined from aluminum billet to exacting tolerances and made from quality heat-treated aluminum



ANADJ8A

| Stock No. | Color | A inches (mm) | B inches (mm) |
|---|---|---|---|
| ANADJ8A | Red | 8 (203) | AN #10 (1") |

**⚠WARNING**

- Do not use "cheater bars" on handles
- Plastic handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# SPECIAL APPLICATION



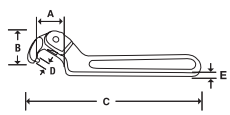
N6893B

## Valve Persuader (Special order only)

**N6893B Valve Persuader Wrench**
- Persuader end provides extra leverage on valve wheels
- Hooks around valve stems and protrudes through spokes
- 15" long
- Opening is 1 1/4"



304APSK




## Adjustable Pin Spanners
- Removes rings, collars and lock nuts
- Make sure jaw hook is properly aligned when in use

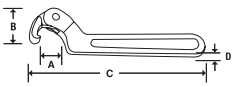
Set Contains: 304APSK

| Stock No. | A | B | C | D | E | |
|---|---|---|---|---|---|---|
| APS351B | 3/4–2 | 1/8 | 6 3/8 | 1/8 | 11/32 | • |
| APS357B | 1 1/4–3 | 3/16 | 8 1/8 | 3/16 | 11/32 | • |
| APS363B | 2–4 3/4 | 1/4 | 11 3/8 | 1/4 | 15/32 | • |
| APS366B | 4 1/2–6 1/4 | 1/4 | 12 1/8 | 3/8 | 15/32 | • |

Set shown includes kit bag



304AHSK




## Adjustable Hook Spanners
- Services collars, rings and bearings
- Single jaw and roll pin construction with industrial finish
- Make sure jaw hook is properly positioned when in use

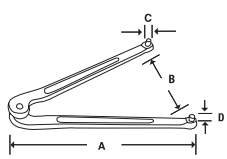
Set Contains: 304AHSK

| Stock No. | A | B | C | D | |
|---|---|---|---|---|---|
| AHS300B | 3/4–2 | 1/8 | 6 3/8 | 11/32 | • |
| AHS301B | 1 1/4–3 | 5/32 | 8 1/8 | 13/32 | • |
| AHS304B | 2–4 3/4 | 3/16 | 11 3/8 | 15/32 | • |
| AHS307B | 4 1/2–6 1/2 | 1/4 | 12 1/8 | 15/32 | • |

Set shown includes kit bag



AFS482B




## Adjustable Face Pin Spanners

For servicing seal and packing nuts on hydraulic cylinders.

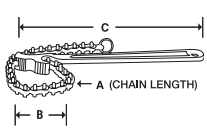
| Stock No. | A | B | C | D |
|---|---|---|---|---|
| AFS482B | 6 3/8 | 2 | 3/16 | 5/32 |
| AFS483B | 8 1/4 | 3 | 1/4 | 3/16 |
| AFS484B | 10 3/8 | 4 | 5/16 | 1/4 |

# SPECIAL APPLICATION Blue-Point®



CW12A

VGP18110




## Chain Wrenches

| Stock No. | A | B | C | Replacement Chain |
|---|---|---|---|---|
| CW12A | 16 | 4 | 12 | CW12A-1 |
| CW15A | 19 | 5 | 15 | CW15A-1 |
| CW24A | 23 | 6 | 24 | CW24A-1 |

**VGP18110 Locking Chain Wrench**
- Wraps around and holds irregular shaped objects like oil filters and mufflers
- Chain capacity: up to 6 9/32" (160 mm)
- Handle length: 9 27/32" (250 mm)

**VGP181101 Replacement Chain**
- Replacement chain for VGP18110



BLPSTWRKT

## Strap Wrenches

**BLPSTWR4 Strap Wrench**
- Adjusts to fit any circumference or irregular shape
- Will not scratch or damage surfaces
- Cushioned grip for maximum comfort
- Heavy duty construction for longer life
- 4" max diameter

**BLPSTWR6 Strap Wrench**
- Same as BLPSTWR4 except features a 6" max diameter

**BLPSTWRKT Strap Wrench Set**
- BLPSTWR4 and BLPSTWR6 (2pc)

# A NEW SPIN ON TORQUE.

Torque is critical. And with vehicle manufacturers investing heavily to reduce weight and improve fuel mileage – by using a wide array of materials, like high-strength alloys, aluminum, and engineered composites – torque is more important than ever. Improved capabilities and technology mean manufacturers can maintain exceptional tolerances on components: contingent on accurate, consistent torque and angle application. That's where Snap-on excels.

**TechAngle® Electronic Torque Wrenches —** Get the confidence you deserve, and the advanced technology and intuitive design you need, with our new ATECH Series torque wrenches. With a wealth of innovative features – like progressive LEDs, large backlit LCD panels, six different measurement modes, four different alert modes, multiple presets, "Torque-Then-Angle" sequencing, and more – this wrench will handle whatever comes its way.

**Mechanical Torque Wrenches —** If your needs call for something simpler, Snap-on has a wide selection of mechanical torque wrenches that offer excellent performance. Need a highly accurate – yet compact – profile for tight jobs? Choose a QD Series micrometer-style torque wrench. With a smooth, easy-to-use adjustment, non-slip knurled handle and Snap-on® high-strength sealed ratchet head, this wrench offers a great blend of performance and reliability. Additionally, it comes in a wide range of drive sizes, lengths, ratchet head articulation and measurement scales that are sure to meet your needs.

**TQ Series Torque Wrenches —** Want something with a comfortable composite handle, durable internal components, and fast, easy-to-set torque adjustment? Then opt for a TQ Series split-beam torque wrench. With a strong steel-beam mechanism that has fewer parts to wear out, this wrench offers a durable, long-lasting torque solution for the toughest environments. Simply set the torque and you are ready to go – without the need to wind it down before being stored.



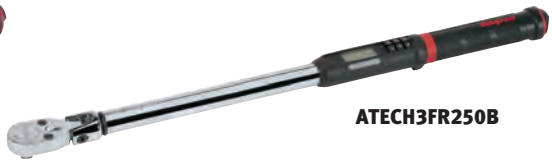
# TECHANGLE® TORQUE WRENCHES



ATECH1FR240B



ATECH2FR100B



ATECH3FR250B



ATECH4R600



ATECH2FS100

## *TechAngle* Models/2% Accuracy

- Dual progressive LEDs allow user to see active torque at various work positions; enables user to anticipate torque and slow down as they get closer to desired torque level
- Large LCD screen with back light – numbers become larger and bolder during active torque making it easier to read during use
- Four alert modes (LCD, Dual LED, Audible, Vibratory)
- Six measurement modes – ft-lb, in-lb, N•m, dN•m, kg-cm and angle at the touch of a button
- "Motorcycle-style" handle with seamless textured grip offers a comfortable, nonslip surface
- Flared end prevents your hand from slipping off during high-leverage applications
- Protected end cap design with solid brass contacts prevents accidental loosening and ensures continuity
- Torque then angle allows the user to torque fasteners and then switch to angle without removing the torque wrench from the fastener
- Highly configurable – ten presets with the ability to customize numerous functions (sleep mode, LCD display, calibration, cycle counter, etc.) and store up to 50 records
- "Exclusive Battery Carriage Slide" minimizes battery movement if tool is dropped or impacted for reliability
- Low-profile buttons protect against accidental activation
- Uses (three) AA alkaline batteries (included)
- Angle accuracy ±1% of reading ±1° at angular velocity >10°/sec
- Two-year warranty
- Ratchet mechanism features Snap-on® Dual 80® design – only 4.5° of ratchet arc
- Up to 90% Non-condensing
- Includes storage case

## ATECH Steel Models only:

- Multiple language translation built into wrench (English, French, German, Spanish)
- Compact, all-metal body
- For more information visit www.snapon.com/doitjustright

**Applications:**
Head bolts on large and small trucks, passenger vehicles, motorcycles, snowmobiles, ATVs, automobile suspensions and brakes

| Specifications | ATECH1FR240B** | ATECH2FR100B** | ATECH3FR250B** | ATECH4R600* ** | ATECH2FS100** | ATECH3FS250** |
|---|---|---|---|---|---|---|
| Square Drive, inches | 1/4 | 3/8 | 1/2 | 3/4 | 3/8 | 1/2 |
| Head Type | Sealed Flex Head | Sealed Flex Head | Sealed Flex Head | Sealed Fixed Head | Sealed Flex Head | Sealed Flex Head |
| Gear Teeth | 72 | 80 | 80 | 32 | 80 | 80 |
| Gear Action | 5° | 4.5° | 4.5° | 11° | 4.5° | 4.5° |
| Range, in-lb | 12–240 | 60–1,200 | 150–3,000 | 720–7,200 | 60–1,200 | 150–3,000 |
| Range, ft-lb | 1–20 | 5–100 | 12.5–250 | 60–600 | 5–100 | 12.5–250 |
| Range, N•m | 1.36–27.12 | 6.8–135.0 | 16.9–339 | 81–813 | 6.8–135.0 | 16.9–339 |
| Angle Range | 0°–360° | 0°–360° | 0°–360° | 5°–360° | 0°–360° | 0°–360° |
| Head Depth, inches | 7/16 | 9/16 | 3/4 | 1 1/4 | 9/16 | 3/4 |
| Head Width, inches | 7/8 | 1 1/4 | 1 5/8 | 2 1/2 | 1 1/4 | 1 5/8 |
| Operating Temperature | 0–130 °F (0–54 °C) | 0–130 °F (-17–54 °C) | 0–130 °F (-17–54 °C) | 40-110 °F (5-42 °C) | 0–130 °F (-17–54 °C) | 0–130 °F (-17–54 °C) |
| Storage Temperature | 0–130 °F (0–54 °C) | 0–130 °F (-17–54 °C) | 0–130 °F (-17–54 °C) | 0–122 °F (-20–50 °C) | 0–130 °F (-17–54 °C) | 0–130 °F (-17–54 °C) |
| Housing Color | Black | Black | Black | Black | Chrome | Chrome |
| Length, inches | 16.4 | 17.9 | 26.6 | 49.0 | 15.4 | 26.7 |
| Ratchet Service Kit | RKRT72A | RKRF80 | RKRS80A | RKRQC4 | RKRF80 | RKRS80A |
| Storage Case | PBATECH100B | PBATECH100B | PBATECH250B | PBATECH4 | PBATECH100B | PBATECH250B |

*Includes protective boot.
** CE

All *Snap-on* torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20–100% of full scale, using NIST® traceable equipment.



CTECH3FR250



CTECH4R600



CTECH2Y100



CTAL1240



CTAL1R240



CTAL1J240

## *ControlTech* Industrial Torque Wrench

In addition to features found in the standard CTECH series wrenches, the CTAL series of wrenches also feature:
- Manufactured from rugged black anodized 6061-T6 aerospace aluminum for durability and reduced weight
- Multiple language translation built into wrench (English, French, German, Spanish)

## CTECH/CTAL Features

- Torque and Angle combo modes provide the most accurate and fastest way to achieve torque plus angle in a single motion (patent pending)
- Built-in calibration factor for different head lengths (patent pending)
- Dual side LED indicator lights with configurable settings including customizable passwords
- Large LCD screen with backlight
- Four indicator modes: LCD, LED, audible, vibratory
- Rugged, all-metal body for strength
- 50 presets with lockout ability
- Sequence programming and job mode
- USB downloadable data
- Two-year warranty
- Includes storage case

## CTECH/CTAL Specifications

- Torque Accuracy: +/- 2%CW, +/-3%CCW
- Angle Accuracy: +/-1% of Reading, +/- 1° @ Angular Velocity › 10°/Sec ‹ 180°/Sec
- Angle Range: 0–360°
- Storage Capacity: 1,500 Readings
- Number of Presets: 50
- Operating Temperature: 0–130 °F (-18–54 °C)
- Storage Temperature: 0–130 °F (-18–54 °C)
- Humidity: Up to 90% Non-condensing

| Stock No. | Head Type | Square Drive, inches | Gear Teeth | Gear Action | Range, in-lb | Range, ft-lb | Range, N•m | Shank Diameter, inches | Weight, lb (kg) | Length, inches (mm) |
|---|---|---|---|---|---|---|---|---|---|---|
| **CTECH1FR240*** | Sealed Flex Head | 1/4 | 72 | 5° | 12–240 | 1.0–20.0 | 1.4–27.2 | — | 2.0 (.9) | 14.1 (358) |
| **CTECH1R240*** | Sealed Fixed Head | 1/4 | 72 | 5° | 12–240 | 1.0–20.0 | 1.4–27.2 | — | 2.0(.9) | 14.1 (358) |
| **CTECH2FR100**** | Sealed Flex Head | 3/8 | 80 | 4.5° | 60–1,200 | 5–100 | 6.8–135.6 | — | 2.7 (1.2) | 17.2 (437) |
| **CTECH3FR250***** | Sealed Flex Head | 1/2 | 80 | 4.5° | 150–3,000 | 12.5–250 | 16.9–339 | — | 4.5 (2.0) | 26.7 (678) |
| **CTECH4R600**†** | Sealed Fixed Head | 3/4 | 32 | 11° | 360–7,200 | 30–600 | 40.7–813.5 | — | 10.5 (4.8) | 48.6 (1,234) |
| **CTECH1J240** | Interchangeable | — | — | — | 12–240 | 1.0-20.0 | 1.4-27.2 | J (0.425") | 1.8 (0.8) | 12.5 (318) |
| **CTECH2Y100** | Interchangeable | — | — | — | 60–1,200 | 5–100 | 6.8–135.6 | Y (0.560") | 2.7 (1.2) | 17.2 (436.9) |
| **CTECH3X250** | Interchangeable | — | — | — | 150–3,000 | 12.5–250 | 16.9–339 | X (0.735") | 3.6 (1.6) | 24.1 (612) |
| **CTECH4Z600** | Interchangeable | — | — | — | 360–7,200 | 30–600 | 40.7–813.5 | Z (0.990") | 7.6 (3.5) | 44.8 (1,138) |
| **CTAL1J240** | Interchangeable | — | — | — | 12-240 | 1.0-20.0 | 1.4-27.2 | J (0.425") | 1.0 (0.45) | 12.5 (316) |
| **CTAL1R240** | Sealed Fixed Head | 1/4 | 72 | 5° | 12–240 | 1.0–20.0 | 1.4–27.2 | — | 1.2 (0.54) | 14.1 (358) |
| **CTAL1240** | Fixed Head | 1/4 | — | — | 12–240 | 1.0–20.0 | 1.4–27.2 | — | 1.1 (0.49) | 12.4 (315) |

*Uses Ratchet Service Kit RKRT72A Includes three AAA Lithium batteries.
**Uses Ratchet Service Kit RKRF80. Includes three AA Lithium batteries.
***Uses Ratchet Service Kit RKRS80A. Includes three AA Lithium batteries.
†Uses Ratchet Service Kit RKRQC4. Includes three AA Lithium batteries.
CTAL Torque Wrenches include three AAA Lithium batteries.

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# TECHWRENCH® TORQUE WRENCHES



TECH2R100



TECH4R600

## *Techwrench* (all models)

- Manual preset and automatic track and peak hold modes
- Torque units conversion, N•m, ft-lb, in-lb
- Audible (tone) and tactile (vibrating handle) preset alerts
- Display resolution 0.1 ft-lb, 0.1 N•m, 1 in-lb
- Each button has only one function (power on, preset increase, preset decrease, unit of measure select)
- Comfortable, nonslip grip
- Sealed flex head ratchets move ±15°
- Three AA alkaline cells included
- Low battery indicator and auto shutoff after two minutes idle
- Operating temperature 40–110 °F (5–42 °C)
- Storage temperature 0–122 °F (-20–50 °C)
- Humidity up to 90% non-condensing
- Splash proof, protects against water and most automotive shop fluid
- ISO-6789-2003 and ASME® B107.300-2010 (B107.28) standard compliant
- Certificate of NIST® traceability for 20%–100% of full scale
- Dual 80® technology on all 72- and 80- tooth models
- Includes storage case

## Standard Models - 2% Accuracy/Fixed Head

| | TECH1R240* | TECH2R100* | TECH3R250* | TECH4R600* |
|---|---|---|---|---|
| **Square Drive, inches** | 1/4 | 3/8 | 1/2 | 3/4 |
| **Head Type** | Sealed Fixed Ratchet | Sealed Fixed Ratchet | Sealed Fixed Ratchet | Sealed Fixed Ratchet |
| **Gear Teeth** | 72 | 80 | 80 | 32 |
| **Gear Action** | 5° | 4.5° | 4.5° | 11° |
| **Range, in-lb** | 24–240 | 60–1,200 | 300–3,000 | 720–7,200 |
| **Range, ft-lb** | 2–20 | 5–100 | 25–250 | 60–600 |
| **Range, N•m** | 27.1–27.12 | 6.7–135 | 34–339 | 81–813 |
| **Head Depth, inches** | 7/16 | 5/8 | 3/4 | 1 1/4 |
| **Head Width, inches** | 7/8 | 1 5/32 | 1 5/8 | 2 1/2 |
| **Housing Color** | Red | Red | Red | Red |
| **Length, inches** | 15 1/4 | 17 1/4 | 26 1/4 | 48 |
| **Ratchet Service Kit** | **RKRT72A** | **RKRTF80** | **RKRS80A** | **RKRQC4** |

* CE



TECH3FR250



TECH2Y100



TECH4Z600

## *Techwrench* (standard models)

- Torque accuracy ratchet head models: 2% CW, 3% CCW from 20%–100% F.S. 4% CW, 6% CCW from 10%–19% F.S. 8% CW, 10% CCW from 5%–9% F.S. (TECH2 only)
- Torque accuracy interchangeable head models: 4% CW, 6% CCW from 20%–100% F.S. 8% CW, 12% CCW from 10%–19% F.S. 16% CW, 20% CCW from 5%–9% F.S. (TECH Y only)

## Standard Models - 2% Accuracy

| | TECH1FR240* | TECH2FR100* | TECH3FR250* |
|---|---|---|---|
| **Square Drive, inches** | 1/4 | 3/8 | 1/2 |
| **Head Type** | Sealed Flex Head | Sealed Flex Head | Sealed Flex Head |
| **Gear Teeth** | 72 | 80 | 80 |
| **Gear Action** | 5° | 4.5° | 4.5° |
| **Range, in-lb** | 24–240 | 60–1,200 | 300–3,000 |
| **Range, ft-lb** | 2–20 | 5–100 | 25–250 |
| **Range, N•m** | 27.1–27.12 | 6.7–135 | 34–339 |
| **Head Depth, inches** | 7/16 | 5/8 | 3/4 |
| **Head Width, inches** | 7/8 | 1 5/32 | 1 5/8 |
| **Housing Color** | Red | Red | Red |
| **Length, inches** | 15 1/4 | 17 1/4 | 26 1/4 |
| **Ratchet Service Kit** | **RKRT72A** | **RKRF80** | **RKRS80A** |

* CE

## Standard Models - 4% Accuracy/ Interchangeable Head

| | TECH1J240* | TECH2Y100* | TECH3X250* | TECH4Z600* |
|---|---|---|---|---|
| **Range, in-lb** | 24–240 | 60–1,200 | 300–3,000 | 720–7,200 |
| **Range, ft-lb** | 2–20 | 5–100 | 25–250 | 60–600 |
| **Range, N•m** | 27.1–27.12 | 6.7–135 | 34–339 | 81–813 |
| **Shank Diameter** | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") |
| **Housing Color** | Red | Red | Red | Red |
| **Length, inches** | 13 3/4 | 15 1/2 | 23 3/4 | 42 |

Wrench length specification does not include the length of interchangeable heads.
The certification of accuracy provided per *ASME* and ISO® standards is 20% to 100% of full scale.

* CE

The QD Series of click-type Torque Instruments features an innovative design that provides consistently accurate readings and rugged, trouble-free performance.


GQT1F200NP


QD2R100


QD3150

**Features:**

- **Certificate of Calibration.** A Certificate of Calibration is packed with every QD series torque instrument. Actual certification readings and individual instrument serial number are included. Each torque instrument, as calibrated at the factory, is certified to meet the accuracy specified in ASME® and was calibrated on a torque standard traceable to the National Institute of Standards Technology (NIST®)
- **Accuracy.** All QD series torque instruments are accurate to ±4% clockwise and ±6% counterclockwise from 20% to 100% of full scale
- **Long Life Ratchet Head.** QD series torque instruments feature the Snap-on® high strength sealed ratchet head. Sealed ratchet heads keep out dirt and moisture while being virtually maintenance-free. Applies to all QD series ratchet head models. (US Patent #6,125,722) applies to 1/4", 3/8" and 1/2" drive ratchet head models only
- **Minimal Friction "Hour Glass" Cam.** Unique cam design minimizes friction due to reduced contact area between the cam and internal tube wall. Cam retains and releases lubricant where needed. Reduced friction results in more accurate and repeatable torque values
- **Laser Etched Scale.** Easier to read under most light conditions
- **Positive Stop.** Instrument cannot be accidentally disassembled if wound down past scale
- **Long-Term Protection.** Each instrument includes a storage case

## US Torque Instruments (in-lb) - ±4% Accuracy

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth, inches | Storage Case | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | QD150 | Fixed | — | — | 10 in-lb | 50 in-lb | .5 in-lb | 9 3/4 | 5/8 | 13/16 | PBQD1 | — |
| 1/4 | QD1R50 | Fixed Ratchet | 36 | 10° | 10 in-lb | 50 in-lb | .5 in-lb | 9 7/8 | 7/8 | 7/16 | PBQD1 | RKRT936 |
| 1/4 | QD1200 | Fixed | — | — | 40 in-lb | 200 in-lb | 1 in-lb | 10 15/16 | 5/8 | 13/16 | PBQD1 | — |
| 1/4 | QD1R200 | Fixed Ratchet | 36 | 10° | 40 in-lb | 200 in-lb | 1 in-lb | 11 1/16 | 7/8 | 7/16 | PBQD1 | RKRT936 |
| 1/4 | GQT1F200NP | Plain | 32 | 12° | 40 in-lb | 200 in-lb | 1 in-lb | 8.97 | .61 | .69 | WPB7 | — |
| 1/4 | GQT1R200NP | Fixed Ratchet | 32 | 12° | 40 in-lb | 200 in-lb | 1 in-lb | 8.97 | .88 | .76 | WPB7 | R11AR-RK |
| 3/8 | QD2R200 | Compact Ratchet | 36 | 10° | 40 in-lb | 200 in-lb | 1 in-lb | 11 1/16 | 7/8 | 7/16 | PBQD1 | RKRFC936 |
| 3/8 | GQT2R200NP | Fixed Ratchet | 32 | 12° | 40 in-lb | 200 in-lb | 1 in-lb | 8.97 | .88 | .88 | WPB7 | R21AR-RK |
| 3/8 | QD21000 | Fixed | — | — | 200 in-lb | 1,000 in-lb | 5 in-lb | 14 9/16 | 1 | 1 3/16 | PBQD2 | — |
| 3/8 | QD2R1000 | Fixed Ratchet | 36 | 10° | 200 in-lb | 1,000 in-lb | 5 in-lb | 15 9/16 | 1 5/32 | 9/16 | PBQD2 | RKRF936 |
| 3/8 | GQT2F1000NP | Plain | 32 | 12° | 200 in-lb | 1,000 in-lb | 5 in-lb | 14 | .80 | 1.03 | WPB7 | R11AR-RK |
| 3/8 | GQT2R1000NP | Fixed Ratchet | 32 | 12° | 200 in-lb | 1,000 in-lb | 5 in-lb | 14 | 1.26 | 1.07 | WPB50A | R22AR-RK |
| 1/2 | QD3R1600 | Fixed Ratchet | 36 | 10° | 320 in-lb | 1,600 in-lb | 10 in-lb | 19 | 1 5/8 | 3/4 | PBQD3 | RKRS936 |
| 1/2 | QD32500 | Fixed | — | — | 500 in-lb | 2,500 in-lb | 10 in-lb | 18 1/8 | 1 | 1 1/4 | PBQD3 | — |
| 1/2 | QD3R2500 | Fixed Ratchet | 36 | 10° | 500 in-lb | 2500 in-lb | 10 in-lb | 19 1/8 | 1 5/8 | 3/4 | PBQD3 | RKRS936 |

## US Torque Instruments (ft-lb) - ±4% Accuracy

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth, inches | Storage Case | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | QD275 | Fixed | — | — | 15 ft-lb | 75 ft-lb | .5 ft-lb | 14 9/16 | 1 | 1 3/16 | PBQD2 | — |
| 3/8 | QD2FR75 | Flex Ratchet | 36 | 10° | 5 ft-lb | 75 ft-lb | .5 ft-lb | 15 3/4 | 1 5/32 | 9/16 | PBQD2 | RKRF936 |
| 3/8 | QD2100 | Fixed | — | — | 20 ft-lb | 100 ft-lb | .5 ft-lb | 14 9/16 | 1 | 1 3/16 | PBQD2 | — |
| 3/8 | QD2R100A | Fixed Ratchet | 80 | 4.5° | 20 ft-lb | 100 ft-lb | .5 ft-lb | 15 9/16 | 1 7/32 | 9/16 | PBQD2 | RKRF936 |
| 1/2 | QD3150 | Fixed | — | — | 30 ft-lb | 150 ft-lb | 1 ft-lb | 18 | 1 | 1 1/4 | PBQD3 | — |
| 1/2 | QD3R150 | Fixed Ratchet | 36 | 10° | 30 ft-lb | 150 ft-lb | 1 ft-lb | 19 | 1 5/8 | 3/4 | PBQD3 | RKRS936 |
| 1/2 | QD3250 | Fixed | — | — | 50 ft-lb | 250 ft-lb | 1 ft-lb | 23 3/16 | 1 | 1 1/4 | PBQD3 | — |
| 1/2 | QD3R250 | Fixed Ratchet | 36 | 10° | 50 ft-lb | 250 ft-lb | 1 ft-lb | 24 3/16 | 1 5/8 | 3/4 | PBQD3 | RKRS936 |
| 1/2 | BRUTUS3R250D | Fixed Ratchet | 36 | 10° | 50 ft-lb | 250 ft-lb | 1 ft-lb | 28 | 1 3/8 | 3/4 | PBTQ4 | RKRS936 |
| 1/2 | GQT3R250NP | Fixed Ratchet | 32 | 12° | 50 ft-lb | 250 ft-lb | 1 ft-lb | 23.75 | 1.74 | 1.42 | WPB5 | R33AR-RK |
| 3/4 | QD4400 | Fixed | — | — | 80 ft-lb | 400 ft-lb | 2.5 ft-lb | 33 3/4 | 1 1/2 | 1 1/2 | PBQC4 | — |
| 3/4 | QD4R400 | Fixed Ratchet | 32 | 11° | 80 ft-lb | 400 ft-lb | 2.5 ft-lb | 35 3/4 | 2 1/2 | 1 1/4 | PBQC4 | RKRQC4 |
| 3/4 | QD4600 | Fixed | — | — | 120 ft-lb | 600 ft-lb | 5 ft-lb | 40 3/4 | 1 1/2 | 1 1/2 | PBQC4 | — |
| 3/4 | QD4R600 | Fixed Ratchet | 32 | 11° | 120 ft-lb | 600 ft-lb | 5 ft-lb | 42 3/4 | 2 1/2 | 1 1/4 | PBQC4 | RKRQC4 |
| 1 | QD5R1000 | Fixed Ratchet | 30 | 12° | 200 ft-lb | 1,000 ft-lb | 5 ft-lb | 71 | 3 1/8 | 1 1/2 | PBQC5 | RKRQC5 |

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# ADJUSTABLE CLICK-TYPE

## Metric Torque Wrenches (kg-m, kg-cm) - ±4% Accuracy



QD2RM1000

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth, inches | Storage Case | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | **QD2RM1000** | Flex Head | 36 | 10° | 200 kg-cm | 1,000 kg-cm | 5 kg-cm | 15 9/16 | 1 5/32 | 9/16 | **PBQD2** | **RKRF936** |
| 1/2 | **QD3RM30** | Fixed Ratchet | 36 | 10° | 6 kg-m | 30 kg-m | .2 kg-m | 19 | 1 5/8 | 3/4 | **PBQD3** | **RKRS936** |

## Newton Meter Torque Wrenches - ±4% Accuracy



QD2RN50

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth, inches | Storage Case | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | **QD1RN6A** | Fixed Ratchet | 36 | 10° | 1 N•m | 6 N•m | .05 N•m | 9 7/8 | 7/8 | 7/16 | **PBQD1** | **RKRT936** |
| 1/4 | **QD1RN25A** | Fixed Ratchet | 36 | 10° | 5 N•m | 25 N•m | .1 N•m | 11 3/4 | 7/8 | 7/16 | **PBQD1** | **RKRT936** |
| 3/8 | **QD2RN25A** | Compact Ratchet | 36 | 10° | 5 N•m | 25 N•m | .1 N•m | 11 3/4 | 7/8 | 7/16 | **PBQD2** | **RKRFC936** |
| 3/8 | **QD2RN50** | Fixed Ratchet | 36 | 10° | 10 N•m | 50 N•m | .5 N•m | 15 9/16 | 1 5/32 | 9/16 | **PBQD2** | **RKRF936** |
| 3/8 | **QD2RN100** | Fixed Ratchet | 36 | 10° | 20 N•m | 100 N•m | .5 N•m | 15 9/16 | 1 5/32 | 9/16 | **PBQD2** | **RKRF936** |
| 1/2 | **QD3RN200** | Fixed Ratchet | 36 | 10° | 40 N•m | 200 N•m | 2 N•m | 19 | 1 5/8 | 3/4 | **PBQD3** | **RKRS936** |
| 1/2 | **QD3RN350** | Fixed Ratchet | 36 | 10° | 70 N•m | 350 N•m | 2 N•m | 24 3/16 | 1 5/8 | 3/4 | **PBQD3** | **RKRS936** |
| 3/4 | **QD4RN800** | Fixed Ratchet | 32 | 11° | 150 N•m | 800 N•m | 5 N•m | 42 3/4 | 2 1/2 | 1 1/4 | **PBQC4** | **RKRQC4** |

# ADJUSTABLE CLICK-TYPE, TQ SERIES

## TQ Thumb Wheel Series:

- Flex Head Models offer sealed Snap-on® ratchets, which flex up to 15° to provide knuckle and obstruction clearance
- Fixed Ratchet Models offer a sealed *Snap-on* ratchet that is rigidly fixed in line with the torque body
- *Snap-on* Sealed Ratchet Head is virtually maintenance-free; more time working with the tool, less time on tool maintenance
- Thumb Screw Type Adjustment is faster than cycling through a micrometer style torque wrench. Guard prevents setting from being changed accidentally. Setting is displayed in window. Conversion table to N•m displayed on handle
- Sealed Neck keeps dust and grit away from the torque mechanism for longer tool life
- "Split Beam" Measuring Element provides accurate, reliable readings and eliminates the heavy coil spring used in conventional click-type wrenches. This yields fewer moving parts, reducing friction and wear
- Cushion Grip Handle provides comfort plus control and resists most automotive fluids
- Designed for measuring torque in a clockwise direction only. Wrench is not reversible
- CE EU — GB, FR, ES, DE



TQFR100C



TQFR250E



TQR600E

**Guaranteed Accuracy:**

**TQ Series – Accurate within ±4% of any clockwise setting from 20% of full scale to full scale.**

**TQR400E/TQR600E only:**

- ±4% of setting when used in the following orientations:
- Main body vertical orientation
- Torque wrench square drive axis with vertical orientation
- In all other positions, guaranteed accuracy is ±5% Accuracy is guaranteed in the clockwise direction from 20%-100% full scale.

## US Reading Torque Wrenches with Conversion Scale - ±4% Accuracy

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth*, inches | Ratchet Service Kit | Storage Case |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | **TQFR50C** | Flex | 36 | 10° | 120 in-lb | 600 in-lb | 10 in-lb | 18 5/8 | 1 5/8 | 9/16 | **RKRF936** | **PB50B** |
| 3/8 | **TQFR100C** | Flex | 36 | 10° | 20 ft-lb | 100 ft-lb | 2 ft-lb | 18 5/8 | 1 5/8 | 9/16 | **RKRF936** | **PB50B** |
| 1/2 | **TQFR250E** | Flex Head | 36 | 10° | 40 ft-lb | 250 ft-lb | 5 ft-lb | 22 3/8 | 1 5/8 | 3/4 | **RKRS936** | **PBTQ3** |
| 1/2 | **TQR250E** | Fixed Ratchet | 36 | 10° | 40 ft-lb | 250 ft-lb | 5 ft-lb | 22 3/8 | 1 5/8 | 3/4 | **RKRS936** | **PBTQ3** |
| 3/4 | **TQR400E**** | Detach Ratchet | 32 | 11° | 80 ft-lb | 400 ft-lb | 10 ft-lb | 38 1/8 | 2 1/2 | 1 1/4 | **RKRTQ4** | **PBTQ4** |
| 3/4 | **TQR600E**** | Detach Ratchet | 32 | 11° | 200 ft-lb | 600 ft-lb | 10 ft-lb | 48 5/8 | 2 1/2 | 1 1/4 | **RKRTQ4** | **PBTQ4** |

All wrenches are non-reversible
*Does not include square drive dimension
**Three-piece construction disassembles for storage/transport.

All *Snap-on* torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated).
All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.



TQFRN350E

## Newton Meter Torque Wrenches with Conversion Scale - ±4% Accuracy

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Depth*, inches | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|
| 3/8 | **TQFRN130B** | Flex Head | 30 | 12° | 25 N•m | 130 N•m | 5 N•m | 17 5/8 | 9/16 | **RKQJA2D** |
| 3/8 | **TQFRN68B** | Flex Head | 30 | 12° | 14 N•m | 68 N•m | 2 N•m | 17 5/8 | 9/16 | **RKQJA2D** |
| 1/2 | **TQFRN350E** | Flex Head | 32 | 11° | 70 N•m | 350 N•m | 5 N•m | 22 1/8 | 3/4 | **RKTQ3** |

All wrenches are non-reversible. 3/8" drive models in this table are metal handle.
*Does not include square drive dimension.



TQFRM34D

## Metric Torque Wrenches with Conversion Scale - ±4% Accuracy

| Square Drive, inches | Stock No. | Head Style | Gear Teeth | Swing Arc | Range, min | Range, max | Increments | Length, inches | Head Width, inches | Head Depth*, inches | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/2 | **TQFRM34D** | Flex Head | 32 | 11° | 5.0 kg-m | 34 kg-m | 1.0 kg-m | 22 1/8 | 1 5/8 | 3/4 | **RKTQ3** |
| 3/4 | **TQRM80C** | Detach Ratchet | 32 | 11° | 26.0 kg-m | 80 kg-m | 2.0 kg-m | 48 | 2 3/8 | 1 1/4 | **RKRQC4** |

All wrenches are non-reversible.
*Does not include squre drive dimension.

# TORQOMETER® TORQUE WRENCHES

## US Reading/Standard - ±2% Accuracy

| Square Drive, inches | Basic Models Stock No. | Follow up Models Stock No. | Signal Models Stock No. | Range | Increments | Length, inches | Width, inches | Head Depth*, inches | Storage Case |
|---|---|---|---|---|---|---|---|---|---|
| 1/4 | **TE1A** | **TE1FUA** | – | 15 in-lb | 1/4 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 1/4 | **TE3A** | **TE3FUA** | – | 30 in-lb | 1/2 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 1/4 | **TE6A** | **TE6FUA** | – | 75 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 1/4 | **GTE6A** | – | – | 75 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE12A** | **TE12FUA** | **TE12LA** | 150 in-lb | 2 1/2 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE25A** | **TE25FUA** | **TE25LA** | 300 in-lb | 5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE50A** | **TE50FUA** | **TE50LA** | 600 in-lb | 10 in-lb | 12 1/2 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE12FA** | **TE12FFUA** | **TE12FLA** | 12 ft-lb | 1/2 ft-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE25FA** | **TE25FFUA** | **TE25FLA** | 25 ft-lb | 1/2 ft-lb | 9 29/32 | 2 11/16 | 1 1/4 | **PB9** |
| 3/8 | **TE50FA** | **TE50FFUA** | **TE50FLA** | 50 ft-lb | 1 ft-lb | 12 1/2 | 2 11/16 | 1 1/4 | **PB9** |
| 1/2 | **TE51** | **TE51FU** | **TE51L** | 600 in-lb | 10 in-lb | 15 | 2 11/16 | 1 5/16 | – |
| 1/2 | **TE51F** | **TE51FFU** | **TE51FL** | 50 ft-lb | 1 ft-lb | 15 | 2 11/16 | 1 5/16 | – |
| 1/2 | **TE100** | **TE100FU** | **TE100L** | 100 ft-lb | 1 ft-lb | 16 | 2 3/4 | 1 3/8 | **PBR5** |
| 1/2 | **GTE100** | – | – | 100 ft-lb | 1 ft-lb | 16 | 2 3/4 | 1 3/8 | **PBR5** |
| 1/2 | **TE175** | **TE175FU** | **TE175L** | 175 ft-lb | 2 1/2 ft-lb | 18 3/4 | 2 3/4 | 1 3/8 | **PBR5** |
| 1/2 | **GTE175** | – | – | 175 ft-lb | 2 1/2 ft-lb | 18 3/4 | 2 3/4 | 1 3/8 | **PBR5** |
| 1/2 | **TE250** | **TE250FU** | **TE250L** | 250 ft-lb | 5 ft-lb | 23 3/4 | 2 3/4 | 1 3/8 | **PB8A** |
| 3/4 | **TE352A** | **TE352FUA** | **TE352LA** | 350 ft-lb | 5 ft-lb | 29 7/8 | 3 1/4 | 1 25/32 | – |
| 3/4 | **TE602A** | **TE602FUA** | **TE602LA** | 600 ft-lb | 10 ft-lb | 40 7/8 | 3 1/4 | 1 25/32 | **PB39** |
| 1 | **TE803**** | **TE803FU**** | **TE803L**** | 800 ft-lb | 10 ft-lb | 66 13/16 | 3 9/16 | 2 1/32 | – |
| 1 | **TE1003**** | **TE1003FU**** | **TE1003L**** | 1,000 ft-lb | 10 ft-lb | 66 13/16 | 3 9/16 | 2 1/32 | – |
| 1 | **TE1503**† | **TE1503FU**† | **TE1503L**† | 1,500 ft-lb | 25 ft-lb | 80 | 4 13/32 | 2 1/8 | – |
| 1 | **TE2003**† | **TE2003FU**† | **TE2003L**† | 2,000 ft-lb | 25 ft-lb | 80 | 4 13/32 | 2 1/8 | – |
| 1 1/2 | **TE2005**† | **TE2005FU**† | **TE2005L**† | 2,000 ft-lb | 25 ft-lb | 80 | 3 9/16 | 2 3/8 | – |
| 1 1/2 | **TE3005**† | **TE3005FU** | **TE3005L** | 3,000 ft-lb | 50 ft-lb | 140 | 5 1/2 | 2 13/16 | – |





GTE6A



TE50FUA



TE175L

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number
*Does not include square drive dimension.
**Includes separately packed 92TQPA 4' tubular extension handle.
†Includes separeately packed 93TQPA 5' tubular extension handle.
Basic model = 1 needle
Follow-up = 2 needles
Signal = signal light
GTE models feature a black oxide finish

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# TORQOMETER® TORQUE WRENCHES



TESI75



TESI75L

## Newton Meter Reading/Standard - 2% Accuracy

| Square Drive, inches | Basic Models Stock No. | Follow up Models Stock No. | Signal Models Stock No. | Range, N•m | Increments, N•m | Length, inches | Width, inches | Head Depth*, inches | Storage Case |
|---|---|---|---|---|---|---|---|---|---|
| 1/4 | TESI5 | – | TESI5L | 5 | .2 | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 1/4 | TESI10 | TESI10FU | TESI10L | 10 | .5 | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TESI20 | TESI20FU | TESI20L | 20 | .5 | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TESI30 | TESI30FU | TESI30L | 30 | 1.0 | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TESI60 | TESI60FU | TESI60L | 60 | 2.0 | 12 1/2 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TESI70 | TESI70FU | TESI70L | 70 | 2.0 | 12 1/2 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TESI75 | TESI75FU | TESI75L | 75 | 1.0 | 12 1/2 | 2 11/16 | 1 1/4 | PB9 |
| 1/2 | TESI125 | TESI125FU | TESI125L | 125 | 5.0 | 16 | 2 11/16 | 1 3/8 | PBR5 |
| 1/2 | TESI200 | TESI200FU | TESI200L | 200 | 5.0 | 18 3/4 | 2 3/4 | 1 3/8 | PBR5 |
| 1/2 | TESI250 | TESI250FU | TESI250L | 250 | 5.0 | 18 3/4 | 2 3/4 | 1 3/8 | PBR5 |
| 3/4 | TESI500A | TESI500FUA | TESI500LA | 500 | 10.0 | 29 7/8 | 3 1/4 | 1 25/32 | PB39 |
| 3/4 | TESI800A | TESI800FUA | TESI800LA | 800 | 20.0 | 40 7/8 | 3 1/4 | 1 25/32 | PB39 |
| 1 | TESI1360** | TESI1360FU** | TESI1360L** | 1,360 | 20.0 | 66 13/16 | 3 9/16 | 2 1/32 | – |
| 1 | TESI2803*** | TESI2803FU*** | TESI2803L*** | 2,800 | 50.0 | 80 | 4 13/32 | 2 1/8 | – |
| 1 1/2 | TESI2805*** | TESI2805FU*** | TESI2805L*** | 2,800 | 50.0 | 80 | 4 25/32 | 2 3/8 | – |
| 1 1/2 | – | TESI4000FU | TESI4000L | 4,000 | 100.0 | 140 | 5 1/2 | 2 13/16 | – |

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.
*Does not include square drive dimension.
**Includes separately packed 92TQPA 4' tubular extension handle.
†Includes separately packed 93TQPA 5' tubular extension handle.
Basic model= 1 needle
Follow-up = 2 needles
Signal = signal light



TER175



TER175L

## Combination US/Newton Meter Reading – Precise 1% Accuracy

| Square Drive, inches | Basic Models Stock No. | Follow up Models Stock No. | Signal Models Stock No. | Range, N•m | Increments, N•m | US Range | US Increments | Length, inches | Width, inches | Head Depth*, inches | Storage Case |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | TER1A | TER1FUA | – | 1.7 N•m | .05 N•m | 15 in-lb | .5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 1/4 | TER3A | TER3FUA | – | 3.5 N•m | 0.1 N•m | 30 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 1/4 | TER6A | TER6FUA | – | 8.4 N•m | 0.2 N•m | 75 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TER12A | TER12FUA | TER12LA | 17 N•m | .5 N•m | 150 in-lb | 5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TER25A | TER25FUA | TER25LA | 3200 N•cm | 50 N•cm | 300 in-lb | 5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TER50A | TER50FUA | TER50LA | 60 N•m | 1 N•m | 600 in-lb | 20 in-lb | 12 1/2 | 2 11/16 | 1 1/4 | PB9 |
| 1/2 | TER51 | TER51FU | TER51L | 60 N•m | 1 N•m | 600 in-lb | 20 in-lb | 15 | 2 11/16 | 1 5/16 | – |
| 1/2 | TER100 | TER100FU | TER100L | 140 N•m | 5 N•m | 100 ft-lb | 2 ft-lb | 16 | 2 3/4 | 1 3/8 | PBR5 |
| 1/2 | TER175 | TER175FU | TER175L | 230 N•m | 10 N•m | 175 ft-lb | 5 ft-lb | 18 3/4 | 2 3/4 | 1 3/8 | PBR5 |
| 1/2 | TER250 | – | – | 340 N•m | 10 N•m | 250 ft-lb | 10 ft-lb | 23 3/4 | 2 3/4 | 1 3/8 | PB8A |
| 3/4 | TER352A | TER352FUA | TER352LA | 480 N•m | 10 N•m | 350 ft-lb | 5 ft-lb | 29 7/8 | 3 1/4 | 1 3/8 | PB39 |
| 3/4 | TER602A | TER602FUA | TER602LA | 800 N•m | 20 N•m | 600 ft-lb | 20 ft-lb | 40 7/8 | 3 1/4 | 1 25/32 | PB39 |
| 1 | TER1003** | – | TER1003L** | 1360 N•m | 20 N•m | 1000 ft-lb | 20 ft-lb | 66 13/16 | 3 9/16 | 2 1/32 | – |

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.
*Does not include square drive dimension.
**Includes separately packed 92TQPA 4' tubular extension handle.
Basic model= 1 needle
Follow-up = 2 needles
Signal = signal light

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated).
All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20%–100% of full scale, using NIST® traceable equipment.

# TORQOMETER® TORQUE WRENCHES



TEC175



TEC175L

## Combination US/Metric Reading - Standard 2% Accuracy

| Square Drive, inches | Basic Models Stock No. | Follow up Models Stock No. | Signal Models Stock No. | Metric Range | Metric Increments | US Range | US Increments | Length, inches | Width, inches | Head Depth*, inches | Storage Case |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/4 | TEC1A | TEC1FUA | – | 16 kg-cm | 1 kg-cm | 15 in-lb | .5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 1/4 | TEC3A | TEC3FUA | – | 35 kg-cm | 1 kg-cm | 30 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 1/4 | TEC6A | TEC6FUA | – | 90 kg-cm | 2.5 kg-cm | 75 in-lb | 1 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TEC12A | TEC12FUA | TEC12LA | 175 kg-cm | 5 kg-cm | 150 in-lb | 5 in-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TEC25FA | TEC25FFUA | TEC25FLA | 350 kg-cm | 10 kg-cm | 25 ft-lb | 1 ft-lb | 9 29/32 | 2 11/16 | 1 1/4 | PB9 |
| 3/8 | TEC50A | TEC50FUA | TEC50LA | 700 kg-cm | 20 kg-cm | 600 in-lb | 20 in-lb | 12 1/2 | 2 11/16 | 1 1/4 | PB9 |
| 1/2 | TEC51 | TEC51FU | TEC51L | 700 kg-cm | 20 kg-cm | 600 in-lb | 20 in-lb | 15 | 2 11/16 | 1 5/16 | – |
| 1/2 | TEC100 | TEC100FU | TEC100L | 14 kg-m | .5 kg-m | 100 ft-lb | 2 ft-lb | 16 | 2 3/4 | 1 3/8 | PBR5 |
| 1/2 | TEC175 | TEC175FU | TEC175L | 25 kg-m | 1 kg-m | 175 ft-lb | 5 ft-lb | 18 3/4 | 2 3/4 | 1 3/8 | PBR5 |
| 1/2 | TEC250 | TEC250FU | TEC250L | 35 kg-m | 1 kg-m | 250 ft-lb | 10 ft-lb | 23 3/4 | 2 3/4 | 1 3/8 | PB8A |
| 3/4 | TEC352A | TEC352FUA | TEC352LA | 50 kg-m | 1 kg-m | 350 ft-lb | 10 ft-lb | 29 7/8 | 3 1/4 | 1 25/32 | PB39 |
| 3/4 | TEC602A | TEC602FUA | TEC602LA | 80 kg-m | 2 kg-m | 600 ft lb | 20 ft-lb | 40 7/8 | 3 1/4 | 1 25/32 | PB39 |
| 1 | TEC803** | TEC803FU** | TEC803L** | 110 kg-m | 2 kg-m | 800 ft-lb | 25 ft-lb | 66 13/16 | 3 9/16 | 2 1/32 | – |
| 1 | – | – | TEC1003L** | 136 kg-m | 2 kg-m | 1000 ft-lb | 20 ft-lb | 66 13/16 | 3 9/16 | 2 1/32 | – |
| 1 | – | TEC1503FU† | TEC1503L† | 200 kg-m | 5 kg-m | 1500 ft-lb | 25 ft-lb | 80 | 4 13/32 | 2 1/8 | – |
| 1 | – | TEC2003FU† | TEC2003L† | 280 kg-m | 5 kg-m | 2000 ft-lb | 50 ft-lb | 80 | 4 13/32 | 2 1/8 | – |
| 1 1/2 | TEC2005† | TEC2005FU† | TEC2005L† | 280 kg-m | 5 kg-m | 2000 ft-lb | 50 ft-lb | 80 | 4 13/32 | 2 3/8 | – |
| 1 1/2 | – | TEC3005FU | TEC3005L | 400 kg-m | 5 kg-m | 3000 ft-lb | 50 ft-lb | 140 | 5 1/2 | 2 13/16 | – |

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.
*Does not include square drive dimension.
**Includes separately packed 92TQPA 4' tubular extension handle.
†Includes separately packed 93TQPA 5' tubular extension handle.
Basic model= 1 needle
Follow-up = 2 needles
Signal = signal light

# T-HANDLE *TORQOMETER* TORQUE WRENCHES



TEX602TLA



85TQP



TEXC2003TFU

## US Reading Standard - 2% Accuracy

| Input Drive Female Sq, inches | Output Drive Male Sq, inches | Follow up Models Stock No. | Light Signal Models Stock No. | US Range, ft-lb | US Increments, ft-lb | Metric Range, kg-m | Metric Increments, kg-m | Length, inches | Width, inches | Head Depth, inches | Optional "T" Bars/Extension Handles: "T" Bars | Length, inches | Ext., inches | Length, inches |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/4 | 3/4 | TEX602TFUA | TEX602TLA | 600 | 10 | — | — | 9 | 3 1/4 | 3 3/4 | 79TQP | 45 | – | — |
| 3/4 | 1 | TEX1003TFUA | TEX1003TLA | 1,000 | 10 | — | — | 9 7/8 | 3 5/8 | 4 1/8 | 81TQP | 66 | – | — |
| 1 | 1 | – | TEX2003TL | 2,000 | 25 | — | — | 10 7/8 | 4 3/8 | 4 7/16 | 82TQP | 18 | 85TQP | 31 |
| 1 | 1 1/2 | TEX2005TFU | – | 2,000 | 25 | — | — | 10 7/8 | 4 3/8 | 4 7/16 | 82TQP | 18 | 85TQP | 31 |

Wrenches in chart do not include certificate of calibration.
Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.
Follow-up = 2 needles
Signal = signal light

## Combination US/Metric Reading

| Input Drive Female Sq, inches | Output Drive Male Sq, inches | Follow up Models Stock No. | Light Signal Models Stock No. | US Range, ft-lb | US Increments, ft-lb | Metric Range, kg-m | Metric Increments, kg-m | Length, inches | Width, inches | Head Depth, inches | "T" Bar | Length, inches | Ext., inches | Length, inches |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3/4 | 3/4 | TEXC602TFUA | TEXC602TLA | 600 | 20 | 80 | 2 | 9 | 3 1/4 | 3 3/4 | 79TQP | 45 | – | — |
| 3/4 | 1 | TEXC1003TFUA | TEXC1003TLA | 1000 | 20 | 136 | 2 | 9 7/8 | 3 5/8 | 4 1/8 | 81TQP | 66 | – | — |
| 1 | 1 | TEXC2003TFU | TEXC2003TL | 2000 | 50 | 280 | 5 | 10 7/8 | 4 3/8 | 4 7/16 | 82TQP | 18 | 85TQP | 31 |

Wrenches in chart do not include certificate of calibration.
Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number.
Follow-up = 2 needles
Signal = signal light

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# TORQOMETER® TORQUE DRIVERS – 1/4" DRIVE

## US Reading – Standard 2% Accuracy

| Standard Basic Models Stock No. | Standard Follow up Models Stock No. | Length, inches | Stubby Basic Models Stock No. | Stubby Follow up Models Stock No. | Length, inches | Range | Increments |
|---|---|---|---|---|---|---|---|
| TQS025A | TQS025FUA | 7 3/4 | TQSS025A | TQSS025FUA | 5 1/4 | 48 in-oz/ 3 in-lb | 1 in-oz/ 1/16 in-lb |
| TQS050A | TQS050FUA | 7 3/4 | TQSS050A | TQSS050FUA | 5 1/4 | 96 in-oz/ 6 in-lb | 2 in-oz/ 1/8 in-lb |
| TQS1A | TQS1FUA | 7 3/4 | TQSS1A | TQSS1FUA | 5 1/4 | 192 in-oz/ 12 in-lb | 4 in-oz/ 1/4 in-lb |
| TQS2A | TQS2FUA | 7 3/4 | TQSS2A | TQSS2FUA | 5 1/4 | 384 in-oz/ 24 in-lb | 8 in-oz/ 1/2 in-lb |
| TQS2.5A | TQS2.5FUA | 7 3/4 | TQSS2.5A | TQSS2.5FUA | 5 1/4 | 480 in-oz/ 30 in-lb | 12 in-oz/ 1 in-lb |
| TQS4A* | TQS4FUA* | 8 11/16 | TQSS4A* | TQSS4FUA* | 5 1/4 | 50 in-lb | 1 in-lb |
| TQS6A* | TQS6FUA* | 8 11/16 | TQSS6A* | TQSS6FUA* | 5 1/4 | 75 in-lb | 1 in-lb |

Wrenches in chart do not incude certificate of calibration. Wrenches with a certification of calibration are available by adding "C" to the end of the stock number. All wrenches include PB47 Storage Case.
*Includes 1/4" internal square drive in handle
Basic model = 1 needle
Follow-up = 2 needles



TQSC4FUA

## Combination US/Metric Reading – Standard 2% Accuracy

| Standard Basic Models Stock No. | Standard Follow up Models Stock No. | Length, inches | Stubby Basic Models Stock No. | Stubby Follow up Models Stock No. | Length, inches | Range | Increments |
|---|---|---|---|---|---|---|---|
| – | TQSC1FUA | 7 3/4 | – | TQSSC1FUA | 5 1/4 | 17 kg-cm/ 15 in-lb | .5 kg-cm/ .5 in-lb |
| – | TQSC2.5FUA | 7 3/4 | – | TQSSC2.5FUA | 5 1/4 | 35 kg-cm/ 30 in-lb | 1.000 kg-cm/ 1.0 in-lb |
| – | TQSC4FUA* | 8 11/16 | – | TQSSC4FUA* | 5 1/4 | 56 kg-cm/ 50 in-lb | 2 kg-cm/ 2 in-lb |
| – | TQSC6FUA | — | – | TQSSC6FUA* | 5 1/4 | 90 kg-cm/ 75 in-lb | 3 kg-cm/ 5 in-lb |

Wrenches in chart do not incude certificate of calibration. Wrenches with a certification of calibration are available by adding "C" to the end of the stock number. All wrenches include PB47 Storage Case.
*Includes 1/4" internal square drive in handle
Basic model = 1 needle
Follow-up = 2 needles

## Combination US/Newton Meter Reading – Standard 2% Accuracy**

| Standard Basic Models Stock No. | Standard Follow up Models Stock No. | Length, inches | Stubby Basic Models Stock No. | Stubby Follow up Models Stock No. | Length, inches | Range | Increments |
|---|---|---|---|---|---|---|---|
| – | TQSR1FUA | 7 3/4 | – | – | — | 1.6 N•cm/ 15 in-lb | 5 N•cm/ .25 in-lb |
| – | TQSR2.5FUA | 7 3/4 | – | – | — | 3.4 N•m/ 30 in-lb | .1 N•m/ 1 in-lb |
| – | TQSR4FUA* | 8 11/16 | – | – | — | 5.5 N•m/ 50 in-lb | .1 N•m/ 1 in-lb |
| – | TQSR6FUA* | 8 11/16 | – | – | — | 8.4 N•m/ 75 in-lb | .2 N•m/ 5 in-lb |

Wrenches in chart do not include certificate of calibration. Wrenches with a certificate of calibration are available by adding "C" to the end of the stock number. All wrenches include PB47 Storage Case.
*Includes 1/4" internal square drive in handle. Follow-up = 2 needles.
**Precise 1% models are available on special order.
ANSI® Spec. B107.300 applies to all these models.

# TORQUE ANGLE GAUGES



TA362

**TA358 Torque Angle Gauge**
- Determines angle controlled torque tightening
- Allows user to follow manufacturer's specifications
- Use on automotive, diesel and industrial equipment plus head bolts and rod bolts on motorcycles
- 3/8" square drive

**TA362 Torque Angle Gauge**
- Allows user to follow manufacturer's specifications
- Calibrated in degrees in large, easy-to-read increments
- 3/4" square drive

**TA360 Torque Angle Gauge**
- Similar to TA362 except 1/2" square drive

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated).
All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20%–100% of full scale, using NIST® traceable equipment.



QDRIVER3P

## Preset Torque Screwdrivers - ±6% Accuracy

- Ideal for low torque assemblies and precision applications
- Drivers accept all standard 1/4" hex screwdriver bits
- Cam over torque limiting clutch-free wheels when set torque is achieved
- Accuracy is ±6% from 20%–100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features aluminum body with stainless-steel shank
- Comfortable ergonomic trilobe grip and magnetic bit retention
- Not supplied with certificate of calibration

| Stock No. | Range, min | Range, max | Length, inches |
|---|---|---|---|
| QDRIVER1P | 6 in-oz (4 N•cm) | 32 in oz. (22 N•cm) | 4 9/16" |
| QDRIVER2P | 10 in-oz (7 N•cm) | 100 in-oz (70 N•cm) | 5 5/8" |
| QDRIVER3P | 1.5 in-lb (16 N•cm) | 15 in-lb (169 N•cm) | 5 5/8" |
| QDRIVER4P | 4 in-lb (45 N•cm) | 40 in-lb (451 N•cm) | 6" |

ASME B107.300-2010 Type III, Class A, Style 2, Design A



QDRIVER3

## Adjustable Torque Screwdrivers - ±6% Accuracy

- Ideal for low torque assemblies, precision applications and dash/under dash work on most US and imported vehicles
- Drivers accept all standard 1/4" hex screwdriver bits
- Cam over torque limiting clutch-free wheels when set torque is achieved
- Accuracy is ±6% from 20%–100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features aluminum body with stainless-steel shank
- Comfortable ergonomic trilobe grip and magnetic bit retention

| Stock No. | Range | Resolution | Length, inches |
|---|---|---|---|
| QDRIVER2 | 20–100 in-oz (14–70 N•cm) | 1 in-oz | 5 7/16 |
| QDRIVER3 | 3–15 in-lb (34–169 N•cm) | .2 in-lb | 6 1/4 |
| QDRIVER4 | 5–40 in-lb (56–451 N•cm) | .5 in-lb | 6 11/16 |
| QDRIVER4NM | 90–450 N•cm | — | 6 11/16 |

ASME B107.300-2010 Type III, Class A, Style 1, Design A

# TORQUE DRIVERS



QTS135

## Torque Limiting Drivers - ±4% Accuracy

**QTS135 Adjustable Limiting Driver**

- Micrometer type adjustment
- Clutch allows 25° of free rotation on reaching set torque
- Guaranteed accuracy: within ±4% of setting from 20% of capacity to full capacity clockwise and counterclockwise

**QTSP135 US Preset Limiting Driver**

- Clutch mechanism to help prevent over torquing by allowing free rotation upon reaching the set torque value
- Ideal selection for assembly line work where the same requirement is constant
- Can be reset at different torque values or readjusted for accuracy whenever necessary with a torque tester

| Stock No. | Range, minimum | Range, maximum | Increments | Length, inches |
|---|---|---|---|---|
| QTS135 | 5 in-lb | 35 in-lb | 0.5 in-lb | 7 |
| QTSP135 | 5 in-lb | 35 in-lb | 0.5 in-lb | 7 1/2 |

- Torque limit is preset at the factory so user should specify the desired torque limit when ordering



QDRIVER4NMA

## Adjustable Torque Drivers

- 1/4" square drive end complements earlier QDRIVER models with 1/4" hex bit holders
- Pin retains the socket to the square drive
- Freewheels 90° when specified torque is obtained — competitive units without this freewheeling feature can cause overtorquing of the fasteners
- Torques only in the clockwise direction; accuracy within ± 6% (from 20%–100% full scale)
- New textured body provides a nonslip grip
- Comfortable ergonomic tri-lobe grip — prevents the device from rolling off a flat surface and being damaged
- Lightweight yet rugged construction
- Easy-to-read torque setting
- Certificate of Calibration included — ensures accuracy in conformance to ASME® B107.300-2010 (B107.14) and ISO 6789:2003
- Torque screwdrivers calibrated to torque standards of the National Institute of Standards Technology (NIST®)

| Stock No. | Range | Increments | Length, inches |
|---|---|---|---|
| QDRIVER2A | 20–100 in-oz (14–70 N•cm) | 1 in-oz | 5 7/16 |
| QDRIVER3A | 3–15 in-lb (34–169 N•cm) | 0.2 in-lb | 6 1/4 |
| QDRIVER4A | 5–40 in-lb (56–451 N•cm) | 0.5 in-lb | 6 11/16 |
| QDRIVER4NMA | 90–450 N•cm | 5.0 N•cm | 6 11/16 |

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# INTERCHANGEABLE HEADS



QC1I200

## Torque Wrench Bodies/Adjustable/ ±4% Accuracy

Interchangeable heads permit ratcheting, fixed or open end torquing capability with either adjustable or preset torque wrench bodies. A push of the locking pin provides quick change action, with a wide range of head styles to choose from.

- Selection: there are two adjustable models for quickly setting desired torque and eight preset models for assembly line work
- Slim profile: each torque body is thin enough and long enough to get into tight areas
- Micrometer type adjustment: ensures fast, accurate settings and changes
- Guaranteed accuracy: all QC series interchangeable torque wrenches are accurate ±4% clockwise and ±6% counterclockwise from 20% to 100% of full scale

| Stock No. | Model Type | Shank Diameter | Range | Increments | Length, inches |
|---|---|---|---|---|---|
| QC1I200 | Adjustable | J (0.425") | 40–200 in-lb | 1 in-lb | 9 3/8 |
| QC2I75 | Adjustable | J (0.425") | 5–75 ft-lb | .5 ft-lb | 13 |



QC1P300



QC3P200

## Torque Wrench Bodies/ Preset/±4% Accuracy

| Stock No. | Model Type | Shank Diameter | Range | Length, inches |
|---|---|---|---|---|
| QC1P60 | Preset | J (0.425") | 10–60 in-lb (1.1–6.8 N•m) | 6 |
| QC1P100 | Preset | J (0.425") | 15–100 in-lb (1.7–11.3 N•m) | 8 |
| QC1P300 | Preset | J (0.425") | 60–300 in-lb (6.8–33.9 N•m) | 10 |
| QC2P75 | Preset | J (0.425") | 5–75 ft-lb (7–100 N•m) | 11 |
| QC3P150 | Pre-set | Y (0.560") | 30–150 ft-lb (41–203 N•m) | 23 |
| QC3P200 | Preset | Y (0.560") | 40–200 ft-lb (55–270 N•m) | 23 |
| QC4P300 | Preset | X (0.735") | 60–300 ft-lb (82–400 N•m) | 27 |



QD3IN200

## Torque Wrench Bodies/Adjustable/Dual Range

- Plug and play system of interchangeable heads are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Includes certificate of calibration
- Minimal friction “Hour Glass” cam retains and releases lubricant where needed to reduce friction
- Push buttons for quick release of interchangeable head
- Laser etched scale for easier reading in varying light sources
- Positive stop ensures instrument cannot be accidentally disassembled if wound down past scale
- Each instrument comes in a molded storage case for long-term protection

| Stock No. | Range, N•m | Range, ft-lb | Increments | Shank Type | Weight, lb (kg) | Length, inches (mm) |
|---|---|---|---|---|---|---|
| QD2IN50 | 10–50 | 9.2–35.0 | 0.5 N•m/0.4 ft-lb | J | 2.3 (1.12) | 14 1/2 (368) |
| QD2IN100 | 20–100 | 16.6–71.9 | 0.5 N•m/0.4 ft-lb | J | 2.3 (1.12) | 14 1/2 (368) |
| QD3IN200 | 40–200 | 37–140 | 2 N•m/1.2 ft-lb | Y | 3.36 (1.64) | 23 (584) |
| QD3IN350 | 70–350 | 59–251 | 2 N•m/1.2 ft-lb | X | 3.36 (1.64) | 23 (584) |
| QD4IN800* | 150–800 | 129–572 | 5 N•m/4.3 ft-lb | Z | 11.14 (5.46) | 41 1/2 (1054) |

*For use with dual pin heads only
ASME® B107.300

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per *ASME* and ISO® standards for accuracy, from 20%–100% of full scale, using NIST® traceable equipment.

## Square Drive Heads/Ratcheting

Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachment.

| Square Drive, inches | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | Head O.D., inches | Depth, inches | Center of Fastener to Retaining Pin | Ratchet Service Kit |
|---|---|---|---|---|---|---|---|---|
| 1/4 | QJD8A-72* | – | – | – | 17/32 | 9/64 | QJD Series – 2.50" | RKRT72A |
| 3/8 | QJD12A*(60) | QYD12A*(100) | – | – | 21/32 | 11/64 | QYD Series – 3.00" | RKRF936 |
| 1/2 | QJD16A*(60) | QYD16A*(240) | QXD16A*(240) | – | 21/32 | 11/64 | QXD Series – 4.50" | RKRS936 |
| 3/4 | – | – | QXD24A(240) | QZD24BDP(480) | 25/32 | 11/64 | QZD Series – 5.75" | RKRQC4 |
| 1 | – | – | QXD32A(240) | QZD32BDP(480) | 29/32 | 11/64 | – | RKRQC5 |

*US Patent #6,125,722
Value in parentheses in chart is the Maximum Recommended Working Torque, ft-lb



QJD12A

## Square Drive Heads/Fixed

Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachments.

| Square Drive, inches | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | Center of Fastener to Retaining Pin |
|---|---|---|---|---|---|
| 1/4 | QJSD8A(60) | – | – | – | QJD Series – 2.50" |
| 3/8 | QJSD12A(60) | QYSD12A(100) | – | – | QYD Series – 3.00" |
| 1/2 | QJSD16A(60) | QYSD16A(240) | QXSD16A (240) | – | QXD Series – 4.50" |
| 3/4 | – | – | QXSD24A(240) | QZSD24ADP(480) | QZD Series – 5.75" |
| 1 | – | – | QXSD32A(240) | QZSD32ADP(480) | – |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb



QYSD16A

## Ratcheting Box End Heads, 12-Point, mm

- Ratcheting box head allows constant contact with the fastener
- Plug and play shanks are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Reverse lever is located on top of the head to reduce the chance of accidental ratchet reversal

| mm | Stock No. | Shank Diameter | O.D., mm | Head Depth, mm |
|---|---|---|---|---|
| 10 | QJBOERM10A | J (0.425") | 21.9 | 5.0 |
| 13 | QJBOERM13A | J (0.425") | 25.9 | 6.3 |
| 16 | QJBOERM16A | J (0.425") | 33.6 | 7.0 |
| 17 | QJBOERM17A | J (0.425") | 36.5 | 7.0 |
| 18 | QJBOERM18A | J (0.425") | 38.5 | 8.0 |
| 19 | QJBOERM19A | J (0.425") | 38.7 | 8.7 |
| 22 | QJBOERM22A | J (0.425") | 45.7 | 9.4 |
| 24 | QJBOERM24A | J (0.425") | 49.5 | 11.2 |
| 18 | QYBOERM18A | Y (0.560") | 38.5 | 8.0 |
| 24 | QYBOERM24A | J (0.560") | 49.5 | 11.2 |



QJBOERM16A

## Ratcheting Box End Heads, 12-Point, inches

| | Stock No. | Shank Diameter | O.D., inches | Head Depth, inches |
|---|---|---|---|---|
| 3/8 | QJBOER12A | J (0.425") | 7/8 | 3/16 |
| 7/16 | QJBOER14A | J (0.425") | 15/16 | 7/32 |
| 1/2 | QJBOER16A | J (0.425") | 1 1/32 | 1/4 |
| 9/16 | QJBOER18A | J (0.425") | 1 3/16 | 1/4 |
| 5/8 | QJBOER20A | J (0.425") | 1 5/16 | 9/32 |
| 3/4 | QJBOER24A | J (0.425") | 1 17/32 | 11/32 |
| 9/16 | QYBOER18A | Y (0.560") | 1 3/16 | 1/4 |
| 5/8 | QYBOER20A | Y (0.560") | 1 5/16 | 9/32 |
| 11/16 | QYBOER22A | Y (0.560") | 1 3/16 | 1 1/4 |
| 3/4 | QYBOER24A | Y (0.560") | 1 17/32 | 11/32 |



QJBOER16A

## Ratcheting Pipe Wrench Heads, inches

| | Stock No. | Shank Diameter | O.D., inches | Head Depth, inches |
|---|---|---|---|---|
| 2 | RPWH128Z | Z (0.990") | 3 1/4 | .665 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb



RPWH128YZ

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# INTERCHANGEABLE HEAD, CLICK-TYPE TORQUE WRENCHES

## 12-Point Box End Heads, mm



QYXM21A

Center of fastener to retaining pin:
- **QJXM** Series – 2 .50"
- **QYXM** Series – 3.00"
- **QXXM** Series – 4.50"
- **QZXM** Series – 5.75"

| mm | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | O.D., mm | Head Depth, mm |
|---|---|---|---|---|---|---|
| 6 | QJXM6A(15) | – | – | – | 11 | 5 |
| 7 | QJXM7A(20) | – | – | – | 11 | 5 |
| 8 | QJXM8A(22) | – | – | – | 13 | 6 |
| 9 | QJXM9A(30) | – | – | – | 14 | 6 |
| 10 | QJXM10A(53) | – | – | – | 15 | 7 |
| 11 | QJXM11A(59) | – | – | – | 17 | 8 |
| 12 | QJXM12A(60) | – | – | – | 18 | 8 |
| 13 | QJXM13A(60) | – | – | – | 20 | 9 |
| 14 | QJXM14A(60) | QYXM14A(117) | QXXM14A(117) | – | 21 | 9 |
| 15 | QJXM15A(60) | QYXM15A(148) | – | – | 22 | 10 |
| 16 | QJXM16A(60) | QYXM16A(160) | QXXM16A(183) | – | 24 | 10 |
| 17 | QJXM17A(60) | QYXM17A(160) | QXXM17A(197) | – | 25 | 11 |
| 18 | QJXM18A(60) | QYXM18A(160) | QXXM18A(224) | – | 27 | 12 |
| 19 | QJXM19A(60) | QYXM19A(160) | QXXM19A(238) | – | 28 | 12 |
| 20 | QJXM20A(60) | QYXM20A(160) | QXXM20A(240) | – | 30 | 13 |
| 21 | QJXM21A(60) | QYXM21A(160) | QXXM21A(240) | – | 31 | 13 |
| 22 | QJXM22A(60) | QYXM22A(160) | QXXM22A(240) | – | 32 | 14 |
| 23 | QJXM23A(60) | QYXM23A(160) | QXXM23A(240) | – | 34 | 15 |
| 24 | QJXM24A(60) | QYXM24A(160) | QXXM24A(240) | QZXM24ADP(375) | 35 | 15 |
| 25 | – | – | QXXM25A(240) | QZXM25ADP(413) | 37 | 16 |
| 26 | QJXM26A(60) | QYXM26A(160) | – | QZXM26ADP(448) | 38 | 16 |
| 27 | QJXM27A(60) | QYXM27A(160) | QXXM27A(240) | QZXM27ADP(480) | 39 | 17 |
| 29 | – | QYXM29A(160) | QXXM29A(240) | QZXM29ADP(480) | 42 | 18 |
| 30 | – | QYXM30A(160) | QXXM30A(240) | QZXM30ADP(480) | 44 | 19 |
| 32 | – | QYXM32A(160) | QXXM32A(240) | QZXM32ADP(480) | 46 | 19 |
| 34 | – | QYXM34A(160) | QXXM34A(240) | QZXM34ADP(480) | 48 | 19 |
| 36 | – | QYXM36A(160) | QXXM36A(240) | QZXM36ADP(480) | 53 | 22 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb

## 12-Point Box End Heads, inches



QJX12A



QXX52A

Center of fastener to retaining pin:
- **QJX** Series – 2.50"
- **QYX** Series – 3.00"
- **QXX** Series – 4.50"
- **QZX** Series – 5.75"

| 11 | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | O.D., inches | Head Depth, inches |
|---|---|---|---|---|---|---|
| 1/4 | QJX8A(18) | – | – | – | 13/32 | 3/16 |
| 9/32 | QJX9A(41) | – | – | – | 13/32 | 3/16 |
| 3/8 | QJX12A(60) | – | – | – | 9/32 | 1/4 |
| 7/16 | QJX14A(60) | – | – | – | 21/32 | 5/16 |
| 1/2 | QJX16A(60) | QYX16A(75) | – | – | 3/4 | 11/32 |
| 9/16 | QJX18A(60) | QYX18A(112) | – | – | 27/32 | 3/8 |
| 5/8 | QJX20A(60) | QYX20A(160) | – | – | 15/16 | 13/32 |
| 11/16 | QJX22A(60) | QYX22A(160) | – | – | 1 1/32 | 7/16 |
| 3/4 | QJX24A(60) | QYX24A(160) | QXX24A(219) | – | 1 1/8 | 15/32 |
| 13/16 | QJX26A(60) | QYX26A(160) | QXX26A(240) | QZX26ADP(275) | 1 3/16 | 17/32 |
| 7/8 | QJX28A(60) | QYX28A(160) | QXX28A(240) | – | 1 9/32 | 9/16 |
| 15/16 | QJX30A(60) | QYX30A(160) | QXX30A(240) | – | 1 3/8 | 19/32 |
| 1 | QJX32A(60) | QYX32A(160) | QXX32A(240) | – | 1 15/32 | 21/32 |
| 1 1/16 | QJX34A(60) | QYX34A(160) | – | QZX34ADP(300) | 1 9/16 | 11/16 |
| 1 1/8 | – | QYX36A(160) | QXX36A(240) | QZX36ADP(480) | 1 5/8 | 11/16 |
| 1 3/16 | – | QYX38A(160) | QXX38A(240) | QZX38ADP(480) | 1 3/4 | 3/4 |
| 1 1/4 | – | QYX40A(160) | QXX40A(240) | QZX40ADP(480) | 1 13/16 | 3/4 |
| 1 5/16 | – | QYX42A(160) | QXX42A(240) | QZX42ADP(480 | 1 29/32 | 3/4 |
| 1 3/8 | – | – | QXX44A(240) | QZX44ADP(480) | 2 | 3/4 |
| 1 7/16 | – | – | QXX46A(240) | QZX46ADP(480) | 2 1/16 | 7/8 |
| 1 1/2 | – | QYX48A(160) | QXX48A(240) | QZX48ADP(480) | 2 5/32 | 7/8 |
| 1 9/16 | – | – | QXX50A(240) | QZX50ADP(480) | 2 1/4 | 7/8 |
| 1 5/8 | – | QYX52A(160) | QXX52A(240) | QZX52ADP(480) | 2 11/32 | 7/8 |
| 1 11/16 | – | – | – | QZX54ADP(480) | 2 7/16 | 7/8 |
| 1-3/4 | – | – | QXX56A(240) | QZX56ADP(480) | 2 17/32 | 1 1/32 |
| 1 13/16 | – | – | QXX58A(240) | QZX58ADP(480) | 2 5/8 | 1 1/32 |
| 1 7/8 | – | – | QXX60A(240) | QZX60ADP(480) | 2 11/32 | 1 1/32 |
| 2 | – | – | QXX64A(240) | QZX64ADP(480) | 2 7/8 | 1 1/32 |
| 2 1/16 | – | – | – | QZX66ADP(480) | 2 21/32 | 1 3/16 |
| 2 1/8 | – | – | – | QZX68ADP(480) | 3 1/16 | 1 3/16 |
| 2 1/4 | – | – | – | QZX72ADP(480) | 3 7/32 | 1 3/16 |
| 2 1/2 | – | – | – | QZX80ADP(480) | 3 19/32 | 1 5/16 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb

## Box End Heads, 0° Offset, 12-Point, inches

| | Stock No. | Shank Diameter | Maximum Working Torque, ft-lb |
|---|---|---|---|
| 3/8 | QJXD12A | J (0.425") | 60 |
| 7/16 | QJXD14A | J (0.425") | 60 |
| 1/2 | QJXD16A | J (0.425") | 60 |
| 9/16 | QJXD18A | J (0.425") | 60 |
| 11/16 | QJXD22A | J (0.425") | 60 |
| 3/4 | QJXD24A | J (0.425") | 60 |
| 7/8 | QJXD28A | J (0.425") | 60 |
| 15/16 | QJXD30A | J (0.425") | 60 |
| 1 | QJXD32A | J (0.425") | 60 |
| 5/8 | QYXD20A | Y (0.560") | 160 |
| 11/16 | QYXD22A | Y (0.560") | 160 |
| 3/4 | QYXD24A | Y (0.560") | 160 |
| 15/16 | QYXD30A | Y (0.560") | 160 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb

Center of fastener to retaining pin:
- **QJXD** Series – 2.50"
- **QYXD** Series – 3.00"

## Box End Heads, 10° Offset, 12-Point, mm

| mm | Stock No. | Shank Diameter | Maximum Working Torque, ft-lb |
|---|---|---|---|
| 11 | QJXBM11A | J (0.425") | 59 |
| 12 | QJXBM12A | J (0.425") | 60 |
| 13 | QJXBM13A | J (0.425") | 60 |
| 14 | QJXBM14A | J (0.425") | 60 |
| 16 | QJXBM16A | J (0.425") | 60 |
| 18 | QJXBM18A | J (0.425") | 60 |
| 19 | QJXBM19A | J (0.425") | 60 |
| 18 | QYXBM18A | Y (0.560") | 160 |
| 24 | QYXBM24A | Y (0.560") | 160 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb

Center of fastener to retaining pin:
- **QJXBM** Series – 2.50"
- **QYXBM** Series – 3.00"

## Box End Heads, 10° Offset, 12-Point, inches

| | Stock No. | Shank Diameter | Maximum Working Torque, ft-lb |
|---|---|---|---|
| 1/2 | QJXB16A | J (0.425") | 60 |
| 9/16 | QJXB18A | J (0.425") | 60 |
| 5/8 | QJXB20A | J (0.425") | 60 |
| 11/16 | QJXB22A | J (0.425") | 60 |
| 3/4 | QJXB24A | J (0.425") | 60 |
| 5/8 | QYXB20A | Y (0.560") | 79 |
| 3/4 | QYXB24A | Y (0.560") | 160 |
| 7/8 | QYXB28A | Y (0.560") | 160 |
| 15/16 | QYXB30A | Y (0.560") | 160 |
| 1 | QYXB32A | Y (0.560") | 160 |
| 1 1/8 | QYXB36A | Y (0.560") | 160 |
| 1 3/8 | QXXB44A | X (0.735") | 240 |
| 1 1/2 | QXXB48A | X (0.735") | 240 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb

Center of fastener to retaining pin:
- **QJXB** Series – 2.50"
- **QYXB** Series – 3.00"
- **QXXB** Series – 4.50"

## Box End Heads, 40° Bend, 12-Point, mm

| mm | Stock No. | Shank Diameter | Center of Fastener to Retaining Pin |
|---|---|---|---|
| 18 | QYSBXM18A | Y (0.560") | QYSBXM Series – 3.00" |
| 24 | QYSBXM24A | Y (0.560") | QYSBXM Series – 3.00" |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb



**QYSBXM18A**

Center of fastener to retaining pin:
- **QYSBXM** Series – 3.00"

**⚠WARNING**

- Do not exceed rated capacity
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# INTERCHANGEABLE HEADS



QYOM32A

## Thin Open End Heads, inches

Center of fastener to retaining pin:
- **QJO** Series – 2.50"
- **QYO** Series – 3.00"

| | Stock No. | Shank Diameter | Maximum Working Torque, ft-lb |
|---|---|---|---|
| 11/16 | QJO22ARTH60 | J (0.425") | 60 |
| 1 | QJO32ARTH | J (0.425") | 60 |
| 1 1/16 | QJO34ARTH | J (0.425") | 60 |
| 1 1/8 | QJO36ARTH | J (0.425") | 60 |
| 1 3/16 | QJO38ARTH | J (0.425") | 60 |
| 1 1/4 | QJO40ARTH | J (0.425") | 60 |
| 1 3/8 | QJO44ARTH | J (0.425") | 60 |
| 1 1/2 | QJO48ARTH | J (0.425") | 60 |
| 1 9/16 | QJO50ARTH | J (0.425") | 60 |
| 1 5/8 | QJO52ARTH | J (0.425") | 60 |
| 1 3/4 | QJO56ARTH | J (0.425") | 60 |
| 1 7/8 | QJO60ARTH | J (0.425") | 60 |
| 2 | QJO64ARTH | J (0.425") | 60 |
| 2 1/16 | QJO66ARTH | J (0.425") | 60 |
| 2 11/16 | QJO86ARTH | J (0.425") | 60 |
| 1 5/8 | QYO52ARTH | Y (0.560") | 160 |
| 1 3/4 | QYO56ARTH | Y (0.560") | 160 |
| 1 7/8 | QYO60ARTH | Y (0.560") | 160 |
| 2 | QYO64ARTH | Y (0.560") | 160 |
| 2 1/8 | QYO68ARTH | Y (0.560") | 160 |
| 2 1/4 | QYO72ARTH | Y (0.560") | 160 |

## Open End Heads, mm

Center of fastener to retaining pin:
- **QJOM** Series – 2.50"
- **QYOM** Series – 3.00"
- **QXOM** Series – 4.50"
- **QZOM** Series – 5.75"

| mm | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | O.D., mm | Head Depth, mm |
|---|---|---|---|---|---|---|
| 6 | QJOM6A*(5) | – | – | – | 13.5 | 3.6 |
| 7 | QJOM7A*(6) | – | – | – | 13.5 | 3.6 |
| 8 | QJOM8A*(10) | – | – | – | 16.5 | 3.3 |
| 9 | QJOM9A(14) | – | – | – | 19.8 | 4.8 |
| 10 | QJOM10A(22) | – | – | – | 19.8 | 4.8 |
| 11 | QJOM11A(33) | – | – | – | 22.9 | 5.6 |
| 12 | QJOM12A(36) | – | – | – | 26.9 | 6.1 |
| 13 | QJOM13A(41) | – | – | – | 26.9 | 6.1 |
| 14 | QJOM14A(55) | QYOM14A(55) | – | – | 29.5 | 6.6 |
| 15 | QJOM15A(60) | QYOM15A(74) | – | – | 33.3 | 6.9 |
| 16 | QJOM16A(60) | QYOM16A(88) | – | – | 33.3 | 6.9 |
| 17 | QJOM17A(60) | QYOM17A(103) | QXOM17A(103) | – | 37.1 | 7.3 |
| 18 | QJOM18A(60) | QYOM18A (115) | QXOM18A(115) | – | 37.1 | 7.3 |
| 19 | QJOM19A(60) | QYOM19A(138) | QXOM19A(138) | – | 40.4 | 7.6 |
| 20 | QJOM20A(60) | QYOM20A(160) | QXOM20A(160) | – | 43.7 | 9.2 |
| 21 | QJOM21A(60) | QYOM21A(160) | QXOM21A(180) | – | 43.7 | 9.2 |
| 22 | QJOM22A(60) | QYOM22A(160) | QXOM22A(206) | – | 43.7 | 9.2 |
| 23 | QJOM23A(60) | QYOM23A(160) | QXOM23A(229) | – | 47 | 10 |
| 24 | QJOM24A(60) | QYOM24A(160) | QXOM24A(240) | QZOM24ADP(250) | 49 | 11 |
| 25 | QJOM25A(60) | QYOM25A(160) | QXOM25A(240) | QZOM25ADP(275) | 52 | 11 |
| 26 | QJOM26A(60) | QYOM26A(160) | QXOM26A(240) | QZOM26ADP(298) | 53 | 11 |
| 27 | QJOM27A(60) | QYOM27A(160) | QXOM27A(240) | QZOM27ADP(319) | 55 | 12 |
| 29 | QJOM29A(60) | QYOM29A(160) | QXOM29A(240) | QZOM29ADP(379) | 58 | 12 |
| 30 | QJOM30(60) | QYOM30A(160) | QXOM30A(240) | QZOM30ADP(413) | 61 | 13 |
| 32 | QJOM32(60) | QYOM32A(160) | QXOM32A(240) | QZOM32ADP(480) | 65 | 14 |
| 34 | – | QYOM34A(160) | QXOM34A(240) | QZOM34ADP(480) | 68 | 14 |
| 36 | QJOM36A(60) | QYOM36A(160) | QXOM36A(240) | QZOM36ADP(480) | 74 | 15 |
| 41 | – | QYOM41(160) | QXOM41A(240) | QZOM41ADP(480) | 83 | 17 |
| 46 | – | – | QXOM46 (240) | QZOM46ADP(480) | 93 | 19 |
| 50 | – | – | QXOM55A(240) | QZOM50ADP(480) | 102 | 20 |
| | – | – | – | QZOM55ADP(480) | 115.1 | 3.6 |
| 60 | – | – | – | QZOM60ADP(480) | 125 | 27 |
| | – | – | – | QZOM65ADP(480) | 128.3 | 25.9 |
| 70 | – | – | – | QZOM70ADP(480) | 168 | 31 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb
*Use with QC1P100 and QC1I200 Torque bodies only; other heads may be used with all listed torque bodies.

## Open End Heads, inches

| | J (0.425") | Y (0.560") | X (0.735") | Z (0.990") | O.D., inches | Head Depth, inches |
|---|---|---|---|---|---|---|
| 1/4 | QJO8A*(5) | – | – | – | 17/32 | 9/64 |
| 5/16 | QJO10A(9) | – | – | – | 21/32 | 11/64 |
| 3/8 | QJO12A(18) | – | – | – | 25/32 | 11/64 |
| 7/16 | QJO14A(26) | – | – | – | 29/32 | 11/64 |
| 1/2 | QJO16A(34) | QYO16A(58) | – | – | 1 1/16 | 11/64 |
| 9/16 | QJO18A(58) | QYO18A(58) | – | – | 1 1/16 | 9/32 |
| 5/8 | QJO20A(60) | QYO20A(70) | – | – | 1 5/16 | 9/32 |
| 11/16 | QJO22A(60) | QYO22A(99) | – | – | 1 7/16 | 5/16 |
| 3/4 | QJO24A(60) | QYO24A(125) | QXO24A(125) | – | 1 19/32 | 11/32 |
| 13/16 | QJO26A(60) | QYO26A(160) | QXO26A(164) | – | 1 23/32 | 3/8 |
| 7/8 | QJO28A(60) | QYO28A(160) | – | – | 1 23/32 | 3/8 |
| 15/16 | QJO30A(60) | QYO30A(160) | QXO30A(200) | – | 1 29/32 | 13/32 |
| 1 | QJO32A(60) | QYO32A(160) | QXO32A(240) | QZO32ADP(298) | 2 1/32 | 7/16 |
| 1 1/16 | QJO34A(60) | QYO34A(160) | QXO34A(240) | QZO34ADP(480) | 2 3/16 | 15/32 |
| 1 1/8 | QJO36A(60) | QYO36A(160) | QXO36A(240) | QZO36ADP(367) | 2 5/16 | 15/32 |
| 1 3/16 | – | QYO38A(160) | QXO38A(240) | QZO38ADP(433) | 2 7/16 | 1/2 |
| 1 1/4 | QJO40A(60) | QYO40A(160) | QXO40A(240) | QZO40ADP(480) | 2 9/16 | 17/32 |
| 1 5/16 | – | QYO42A(160) | QXO42A(240) | QZO42ADP(480) | 2 21/32 | 9/16 |
| 1 3/8 | QJO44A(60) | QYO44A(160) | QXO44A(240) | QZO44ADP(480) | 2 3/16 | 19/32 |
| 1 7/16 | – | QYO46A(160) | QXO46A(240) | QZO46ADP(480) | 3 | 19/32 |
| 1 1/2 | QJO48A(60) | QYO48A(160) | QXO48A(240) | QZO48ADP(480) | 3 1/16 | 5/8 |
| 1 9/16 | | QYO50A(160) | QXO50A(240) | QZO50ADP(480) | 3 3/16 | 21/32 |
| 1 5/8 | QJO52A(60) | QYO52A(160) | QXO52A(240) | QZO52ADP(480) | 3 11/32 | 11/16 |
| 1 11/16 | – | – | QXO54A(240) | QZO54ADP(480) | 3 13/32 | 23/32 |
| 1 3/4 | – | QYO56A(240) | QXO56A(240) | QZO56ADP(480) | 3 9/16 | 23/32 |
| 1 13/16 | – | – | QXO58A(240) | QZO58ADP(480) | 3 21/32 | 13/32 |
| 1 7/8 | – | QYO60A(240) | QXO60A(240) | QZO60ADP(480) | 3 13/16 | 25/32 |
| 2 | – | – | QXO64A(240) | QZO64ADP(480) | 4 1/16 | 27/32 |
| 2 1/16 | – | – | QXO66A(240) | QZO66ADP(480) | 4 3/16 | 27/32 |
| 2 1/8 | – | – | – | QZO68ADP(480) | 4 5/16 | 5/8 |
| 2 1/4 | – | QYO72(240) | – | QZO72ADP(480) | 4 9/16 | 15/16 |
| 2 3/8 | – | – | – | QZO76ADP(480) | 4 1/2 | 3/4 |
| 2 1/2 | – | – | – | QZO80ADP(480) | 5 1/16 | 1 |
| 2 5/8 | – | QYO84(240) | – | – | 4 1/2 | 3/4 |
| 2 7/8 | – | QYO92(240) | – | – | 5 31/32 | 5/8 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb
*Use with QC1P100 and QC1I200 Torque Bodies only; other heads may be used with all listed torque bodies.



QJO28A

Center of fastener to retaining pin:
- **QJO** Series – 2.50"
- **QYO** Series – 3.00"
- **QXO** Series – 4.50"
- **QZO** Series – 5.75"

## Ratcheting Flare Nut Head, 12-Point, mm

| Size, mm | Stock No. | Shank Diameter |
|---|---|---|
| 16 | RTWHM16J | J (0.425") |

## Ratcheting Flare Nut Heads, 12-Point, inches

| Size, inches | Stock No. | Shank Diameter |
|---|---|---|
| 9/16 | RTWH36J | J (0.425") |
| 5/8 | RTWH40J | J (0.425") |
| 11/16 | RTWH44J | J (0.425") |
| 13/16 | RTWH52J | J (0.425") |
| 3/4 | RTWH48Y | Y (0.560") |
| 7/8 | RTWH56Y | Y (0.560") |
| 15/16 | RTWH60Y | Y (0.560") |
| 1 | RTWH64Y | Y (0.560") |
| 1 1/8 | RTWH72Y | Y (0.560") |
| 1 1/4 | RTWH80Y | Y (0.560") |
| 1 3/8 | RTWH88Y | Y (0.560") |
| 1 5/8 | RTWH104Y | Y (0.560") |
| 1 7/8 | RTWH120Y | Y (0.560") |
| 1 1/2 | RTWH96X | X (0.735") |



RTWH60Y

Center of fastener to retaining pin:
- **RTWHM** "J" Series – 2.50"
- **RTWH** "J" Series – 2.50"
- **RTWH** "Y" Series – 3.00"
- **RTWH** "X" Series – 4.50"

## Adaptor

**QZD32A-1** Z Shank to 1" square drive adaptor

**⚠WARNING**

- Do not exceed rated capacity
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# INTERCHANGEABLE HEADS

## Flare Nut Heads, 6-Point, mm

| mm J (0.425") | Shank Dia. J (0.425") | Shank Dia. Y (0.560") | O.D., mm | Head Depth, mm |
|---|---|---|---|---|
| 10 | QJRXSM10A(33) | – | 20 | 8 |
| 11 | QJRXSM11A(42) | – | 21 | 9 |
| 12 | QJRXSM12A(50) | – | 22 | 9 |
| 13 | QJRXSM13A(58) | – | 24 | 9 |
| 14 | QJRXSM14A(60) | – | 25 | 10 |
| 16 | – | QYRXSM16A(75) | 27 | 11 |
| 17 | QJRXSM17A(60) | QYRXSM17A(83) | 29 | 11 |
| 18 | QJRXSM18A(60) | QYRXSM18A(94) | 30 | 12 |
| 19 | QJRXSM19A(60) | QYRXSM19A(104) | 32 | 12 |
| 20 | – | QYRXSM20A(113) | 33 | 13 |

Value in parentheses is the Maximum Recommended Torque, ft-lb

## Flare Nut Heads, 6-Point, inches

| J (0.425") | Shank Dia. J (0.425") | Shank Dia. Y (0.560") | O.D., inches | Head Depth, inches |
|---|---|---|---|---|
| 7/16 | QJRXS14A(42) | – | 27/32 | 11/32 |
| 5/8 | QJRXS20A(60) | QYRXS20A(74) | 1 3/32 | 7/16 |
| 11/16 | QJRXS22A(60) | QYRXS22A(92) | 1 5/32 | 15/32 |
| 3/4 | QJRXS24A(60) | QYRXS24A(104) | 1 1/4 | 1/2 |
| 13/16 | QJRXS26A(60) | QYRXS26A(117) | 1 5/16 | 7/32 |
| 7/8 | QJRXS28A(60) | QYRXS28A(133) | 1 13/32 | 9/16 |
| 15/16 | QJRXS30A(75) | QYRXS30A(146) | 1 1/2 | 19/32 |
| 1 | QJRXS32A(75) | QYRXS32A(158) | 1 9/16 | 5/8 |
| 1 1/8 | – | QYRXS36A(160) | 1 3/4 | 11/16 |

Value in parentheses is the Maximum Recommended Working Torque, ft-lb



QYRX18A

Center of fastener to retaining pin:

- **QJRXSM** Series – 2.50"
- **QYRXSM** Series – 3.00"
- **QJRXS** Series – 2.50"
- **QYRXS** Series – 3.00"
- **QYRX** Series – 3.00"

## Flare Nut Heads, 12-Point, inches

| J (0.425") | Shank Dia. Y (0.560") | O.D., inches | Head Depth, inches |
|---|---|---|---|
| 9/16 | QYRX18A(67) | 1 | 13/32 |
| 5/8 | QYRX20A(79) | 1 3/32 | 7/16 |
| 3/4 | QYRX24A(104) | 1 1/4 | 1/2 |
| 13/16 | QYRX26A(117) | 1 11/32 | 17/32 |
| 7/8 | QYRX28A(133) | 1 13/32 | 9/16 |
| 15/16 | QYRX30A(146) | 1 1/2 | 19/32 |
| 1 | QYRX32A(158) | 1 19/32 | 21/32 |
| 1 1/16 | QYRX34A(160) | 1 21/32 | 11/16 |
| 1 1/8 | QYRX36A(160) | 1 3/4 | 23/32 |
| 1 3/16 | QYRX38A(160) | 1 7/16 | 3/4 |
| 1 1/4 | QYRX40A(160) | 1 29/32 | 25/32 |

Value in parentheses is the Maximum Recommended Torque, ft-lb

# GEARED HEAD MULTIPLIERS



YA391



YA394

## Geared Head Multipliers

- Some models feature a replacement square drive to protect components by automatically shearing when rated output is exceeded by 3%–10%
- All models include an input/output conversion chart in ft-lb and N•m
- To determine correct input torque, divide desired output torque by the "Torque Ratio" listed in the chart

| | YA290PLUS | YA300 | YA391 | YA292 | YA392 | YA393 | YA394 | YA395 |
|---|---|---|---|---|---|---|---|---|
| Reaction Type | Bar | Bar | Bar | Bar | Bar | Bar | Plate | Plate |
| Output Capacity, ft-lb | 750 | 1,000 | 1,200 | 2,000 | 2,200 | 3,200 | 5,000 | 8,000 |
| Input Capacity, ft-lb | 227 | 333 | 200 | 500 | 162 | 173 | 189 | 154 |
| Gear Ratio | 4:1 | 4.0:1 | 6.33:1 | 4.27:1 | 15.0:1 | 20.25:1 | 29.25:1 | 60.0:1 |
| Torque Ratio | 3:1 | 3.1:1* | 6.0:1* | 3.75:1* | 13.6:1* | 18.5:1* | 26.5:1* | 52.0:1* |
| Reductions | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 3 |
| Input Drive Female Square, inches | 1/2 | 1/2 | 1/2 | 3/4 | 1/2 | 1/2 | 1/2 | 1/2 |
| Output Drive Male Square, inches | 3/4 | 3/4 | 3/4 | 1 | 1 | 1 | 1 1/2 | 1 1/2 |
| Bearings | — | — | Needle | — | Needle | Needle | Needle | Needle |
| Length, inches | 8.75 | 17.06 | 19.56 | 19.5 | 19.6 | 19.6 | 14.88 | 15.22 |
| Width, inches | 2.75 | 2.81 | 4 | 4.5 | 4.06 | 4.06 | 5.63 | 5.81 |
| Height, inches | 3.25 | 3.25 | 3.94 | 3.75 | 5.75 | 6.54 | 8.75 | 10.75 |
| Storage Case | Yes | — | Yes | — | Yes | Yes | ** | ** |
| Angle Protractor | — | — | Yes | — | Yes | Yes | — | — |
| Anti-Backlash | — | — | — | — | Yes | Yes | Yes | Yes |
| Replacement Square Drive | – | – | YA391RK | – | YA392RK | YA393RK | YA394RK | YA395RK |

*Accuracy of Torque Ratio is ±5%. **Includes drawstring bag for storage and protection.
Handle or other anchor plate serves as a "reaction bar" and must be placed against a strong fixed object.

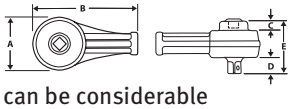
# GEARED HEAD MULTIPLIERS

**YA390 Reversible Air Motor**
- Provides up to 200 ft-lb of input power for each of the YA Series Gear Multipliers
- Output drive: 1/2"
- Maximum operating air pressure: 60 PSIG
- Free speed: 70 RPM, Dimensions: 16 1/4" x 3 1/8" x 4 3/4"



YA390

## Geared Head Multipliers X4 Models




- Use individually or stack up to three X4 models
- Stacking multiplies torque ratios; resulting torque can be considerable
- Only the torque ratio changes; total capacity is equal to and does not exceed the capacity of the largest wrench in the stack

| | GA184A | GA185 | GA190 |
|---|---|---|---|
| **Reaction Type** | Bar | Bar | Bar |
| **Output Capacity, ft-lb** | 1,000 | 2,000 | 2,000 |
| **Input Capacity, ft-lb** | 294 | 588 | 588 |
| **Gear Ratio** | 4.0:1 | 4.0:1 | 4.0:1 |
| **Torque Ratio** | 3.4:1* | 3.4:1* | 3.4:1* |
| **Reductions** | 1 | — | 1 |
| **Input Drive Female Square, inches** | 1/2 | 3/4 | 3/4 |
| **Output Drive Male Square, inches** | 3/4 | 1 | 1 |
| **Dimension A, O.D., inches** | 3 1/2 | 3 3/4 | 3 3/4 |
| **Dimension B, Length, inches** | 6 5/8 | 6 5/8 | 6 5/8 |
| **Dimension C, Head Height, inches** | 1/2 | 3/4 | 1 1/2 |
| **Dimension D, Drive End Height, inches** | 3/4 | 1 | 1 |
| **Dimension E, Overall Height, inches** | 3 11/32 | 4 3/8 | 5 |
| **Overall Length, inches** | 22 | 25 | 25 |
| **Anti-Backlash** | — | — | Yes |



GA184A



GA190

*Accuracy of Torque Ratio is ±10%.
Handle or other anchor plate serves as a "reaction bar" and must be placed against a strong fixed object.

# ELECTRONIC TORQUE WRENCHES

## Electronic Dial Type Torque Wrenches



ED2600

- Intended for worldwide automotive, nuclear, military and industrial markets
- Digital accuracy is ±1% from 20%–100% of full scale in CW and CCW
- Three-step LED visual signal system: Over torque alarm (Red), Approaching target warning signal when getting close (Yellow at 90% of target), and target achieved signal when desired torque is obtained (Green)
- Secondary audible alarm goes off when desired torque is reached
- Large storage capacity available: memory stores up to 4,000 torque values
- Downloading capability: individual torque values and store values in memory may be directly downloaded to a printer or data logger via an RS-232 connection
- Selectable modes of operation: "peak hold" and "track" modes of operation are standard
- Range: available from 5 in-lb–600 ft-lb engineering units can be selected through the keypad (in-oz, in-lb, ft-lb, N•m, dN•m, kg-m and kg-cm)
- Accuracy: ±1% from 10%–100% of scale
- Quality Construction: proven industrial quality
- 9V alkaline battery included

**Features:**
- Display can be turned 180° to allow left hand usage
- Four units of measurement on the same torque wrench: in-lb, ft-lb, N•m, kg-cm
- Large 2" easy-to-read single scale eliminates confusion on conversion scales
- Tough polycarbonate body ensures durability
- Comfort cushion grip reduces strain for prolonged use
- Rubber boot protects work piece
- Composite and steel body beam provides years of accurate service
- Includes storage case
- 9V battery with long life and easy replacement, 80 hours
- Battery cover designed to be FOD proof

| Stock No. | Square Drive, inches | in-lb | ft-lb | N•m | kg-cm | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|
| **ED1050*** | 1/4 | 10–50 | .42–4.17 | .56–5.65 | 5.7–57.61 | 11.5 (292) | 1.25 (.57) |
| **ED2250*** | 3/8 | 50–250 | 2.08–20.83 | 2.82–28.25 | 28–288.03 | 14.5 (368) | 1.51 (.68) |
| **ED2600*** | 3/8 | 60–600 | 5–50 | 6.79–67.79 | 69–691.27 | 14.5 (368) | 1.51 (.68) |

* CE

**⚠WARNING**

- Do not exceed rated torque
- Do not use torque wrenches to break fasteners loose
- Torque multipliers produce very high reaction force, use caution
- Read safety precautions on pages W1 to W4

# TORQUE TESTERS




QC3DTT250

## Digital Torque Tester™ (DTT)

The Snap-on® *Digital Torque Tester* is an advanced, highly-accurate tester that can be mounted on a wall or in a bench top vise to allow operator to conveniently test torque wrenches and torque screwdrivers. It features an easy-to-use color touch pad screen to capture peak torque values during a test in real time and download stored torque data to a PC. All DTT torque testers are sold in a kit with the complete tester, AC/DC power supply, USB cable adaptor and carrying case.

- Easy-to-use touch screen
- Testing options: quick check or ASME® style test
- Refresh rate of 1,000 data points per second
- Record and track torque wrench test results by serial number
- Choose your wrench type
- Adds traceability by using wrench serial numbers and technician I.D.
- Color-coded numbers indicate low, good and high torque readings
- Color bar at the top allows the user to see progress relative to the target torque
- Data can be stored for download later on your computer via USB

| | QC2DTT250 | QC3DTT250 |
|---|---|---|
| **Square Drive, inches** | 3/8 | 1/2 |
| **Range English** | 25-250 in-lb | 25–250 ft-lb |
| **Range, N•m** | 2.9-28.2 | 33.9–338.9 |
| **Accuracy** | ±0.5% of indicated test value from 10%–100% or rated capacity | ±0.5% of indicated test value from 10%–100% or rated capacity |
| **Units Of Measure** | N•m, kg-cm, ft-lb, in-lb, in-oz | N•m, kg-cm, ft-lb, in-lb, in-oz |
| **Operating Modes** | TRACK, PEAK, FIRST PEAK | TRACK, PEAK, FIRST PEAK |
| **Operating Temperature** | 10 °–32 ºC (50 °–°90 ºF) | 10º–32 ºC (50º–90 ºF) |
| **Storage Temperature** | -20 °–50 ºC (-2 °–°122 ºF) | -20º–50 ºC (-2º–122 ºF) |
| **Humidity** | 85% Relative Humidity @ 21 ºC (70 ºF) | 85% Relative Humidity @ 21 ºC (70 ºF) |
| **Power Supply** | Included 9V AC/DC adaptor, 6 AA batteries included | Included 9V AC/DC adaptor, 6 AA batteries included |
| **Data/Surge/Recall** | Memory Capacity – 500 records (complete check mode only) | Memory Capacity – 500 records (complete check mode only) |




QC1ETT50

## Electronic Torque Tester™

Designed to be a sturdy, low cost tester, these electronic torque testers can be placed on the wall in the factory or on a bench to allow operators to test torque wrenches or power tools without having to leave their station.

- Track and peak modes
- Can be used with non-impacting power tools (joint rate simulators required)
- Dual scale (English/N•m or English/dN•m)
- Reads bidirectional (clockwise and counterclockwise)
- Uses rechargeable Ni-Cad batteries (2 Ni-Cad 9V). Charger included

| Stock No. | Square Drive, inches | Range English | Range, N•m |
|---|---|---|---|
| **QC1ETT10** | 1/4 | 10–100 in-oz | 7.0–70.6 cN•m |
| **QC1ETT400** | 1/4 | 40–400 in-oz | 28–280 cN•m |
| **QC1ETT50** | 1/4 | 5–50 in-lb | 5.6–56 dN•m |
| **QC1ETT100** | 1/4 | 10–100 in-lb | 11.3–113 dN•m |
| **QC2ETT250** | 3/8 | 25–250 in-lb | 28–280 dN•m |
| **QC2ETT1000** | 3/8 | 100–1,000 in-lb | 113–1,130 dN•m |
| **QC3ETT250** | 1/2 | 25–250 ft-lb | 34–339 N•m |
| **QC4ETT600** | 3/4 | 60–600 ft-lb | 81–813 N•m |

The certification of accuracy provided per *ASME* and ISO® Standards is 10%–100% of full scale.

All *Snap-on* torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20–100% of full scale, using NIST® traceable equipment.

# VERSATORQ® TORQUE METERING/DATA ACQUISITION SYSTEM

The *Versatorq* system can be used for any job requiring repetitive torque applications or regular inspection of fastener torque. This system can also be used to verify pneumatic and mechanical torque wrench accuracy. Peak torque can be captured by using a rotary sensor with a non-impact power tool operating at less than 1,000 rpm and being driven into a soft joint. Inspectors can check critical fastener torque and record data for quality audits. Perfect for process quality control. The *Versatorq* system can internally perform statistical analysis, including histograms, and print to a serial printer.

- **Versatile** – Battery operated and lightweight, with available ranges from 2–20 in-oz to 150–1,500 ft-lb and seven units of measure: in-oz, in-lb, ft-lb, N•m, d•Nm, kg-m, and kg-cm. The *Versatorq* system can be used with sockets, extensions, universal joints, ratcheting drivers or any of these combined
- **Data Aquisition** – Store and recall up to 3,500 readings. An internal memory backup battery retains setup and last memory data for up to 10 years
- **Track or Peak Mode** – Track mode displays applied torque value and peak mode displays highest torque value
- **Easily Calibrated** – Customer calibration supports ISO® 9000. Instructions for step-by-step calibration provided in the user's manual
- **Smart Sensors** – Built-in EEPROM memory chip stores sensor identification and calibration factors. Factory calibrated, a sensor retains its accuracy with all *Versatorq* meters; just plug in the desired sensor. Periodic recalibration is necessary
- **120VAC/220VAC, 60 Hz Adaptor** – Rechargeable battery and belt clip allow you to take it to the task or use it at the bench with the optional table stand and AC adaptor
- **PC Statistical Analysis Output** – Download histogram, minimum and maximum reading, mean, sigma N, sigma, Cp, Cpk, % error and number of readings under and over tolerance
- **Serial Port Interface with Computer or Printer** – True RS-232 communications port for downloading to computer or serial printer or configurable to MITUTOYO statistical printer protocol
- **Visual and Audio Cues** – Analog bar graph at top of display provides a live indication of applied torque. An OVER warning flag comes on to indicate that maximum sensor range has been exceeded. Green MIN LED indicates lower tolerance has been achieved, and Red MAX LED indicates upper tolerance has been exceeded. Audio alarm produces a distinctive 2 kHz tone. Includes an audio output jack for optional headphones in a noisy environment

## Versatorq1® System Specifications

| Specification | Description |
|---|---|
| ***VERSATORQ1*** | 120V AC Charger and Carrying Case. Basic Torque Acquisition Meter |
| **Display** | 4-digit with alpha and numeric function flags |
| **Display Capacity*** | ± 4 digits, 8,000 counts |
| **Accuracy** | ±1% of Reading (10%–100% of Sensor Range) (± 2% with VERSA1S10 and VERSA1S20 Sensors) |
| **Push-Button Keypad** | Min/max alarm, zero tare, setup, units, store/recall/clear, send, statistics, enter |
| **Units Of Measure** | in-oz, in-lb, ft-lb, N•m, dN•m, kg-m, kg-cm |
| **Operating Temperature** | 5°–42°C (40°–110°F) |
| **Storage Temperature** | -10°–50°C (-2°–12°F) |
| **Humidity** | Up to 90%, non-condensing |
| **Dimensions** | 3" W, 2.5" H (" with belt clip), 6" D |
| **Weight** | 1 lb |
| **Charge Life (full charge to shutoff)** | 20 hours continuous |
| **Battery Charger** | 120V AC or 220V AC, 50–60 Hz |
| **Data Storage/Recall** | 3,500 measurements |
| **Battery Charger Output** | 9V DC, 200mA |
| **Serial Output Port – *VERSATORQ1*** | RS-232 (True), 300-19.2K baud, and Mitutoyo (statistical protocol) |
| **Statistical Analysis – *VERSATORQ1*** | MAX, MIN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo |
| **Histogram – *VERSATORQ1*** | Lower set limit, upper set limit, 10 divisions |

**Versatorq* display ignores torque input less than .5% of full scale in track mode and 2.0% of full scale in peak mode.

**Please reference the *Versatorq* instruction manual for the sensor ranges and resolutions in different units of torque measurement.**



***VERSATORQ1***

### *Versatorq1*

**Torque Acquisition Meter**
Includes VERSACHARGE1 charger and PB57A case.

Sensors sold separately.



**VERSA2S100**

## *Versatorq* Sensors

| Stock No. | Square Drive, inches | Range | Sensor Diameter, inches | Sensor Length, inches | Cable Length, inches |
|---|---|---|---|---|---|
| **VERSA1S20*** | 1/4 | 2–20 in-oz | .5 | 2.9 | 48 |
| **VERSA1S10*** | 1/4 | 1–10 in-lb | .7 | 2.9 | 48 |
| **VERSA1S50** | 1/4 | 5–50 in-lb | .9 | 2.1 | 48 |
| **VERSA1S200** | 1/4 | 20–200 in-lb | .9 | 2.1 | 48 |
| **VERSA2S100** | 3/8 | 10–100 ft-lb | 1.2 | 2.4 | 48 |
| **VERSA3S250** | 1/2 | 25–250 ft-lb | 1.4 | 2.6 | 48 |
| **VERSA4S600** | 3/4 | 60–600 ft-lb | 2.0 | 3.9 | 96 |
| **VERSA5S1500**** | 1 | 150–1,500 ft-lb | 2.4** | 4.4 | 92*** |

*Knurled handles allow for fingertip control.
**Diameter does not include side mounted connector.
***Heavy duty coiled cord with four-pin MS style connector.

## *Versatorq* System Accessories

| Stock No. | Description |
|---|---|
| **VERSACHARGE1** | Power Pack, 120VAC to 9VDC |
| **VERSACABLE2** | PC Interface Cable |
| **PB57A** | Carrying Case |

**⚠WARNING**

- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

# VERSATEST™ ELECTRONIC TORQUE TESTER & CALIBRATOR




**VERSATEST600**

The *Versatest* Indicator is a laboratory grade instrument used for precise, in-house torque wrench testing and calibration. High precision torque transducers provide system readings with an accuracy of ± 0.25% of indicated value. Transducers are available in ranges from 15–200 in-oz to 200–2,000 ft-lb and feature a special built-in memory chip that identifies the range and maintains the calibration between all *Versatest* Indicators. Setup and calibration programming is entered via front panel membrane keys. The *Versatest* can store and recall up to 3,000 different torque/force readings. Statistical analysis stored in memory can be downloaded to a computer or serial printer. A hard wired lithium battery keeps the internal memory and the date/time clock operating for up to ten years.

**Features:**

- Automatic downloading
- RS232C serial port – use with printer or PC
- Data storage/recall (with date/time stamp) holds up to 3,000 measurements
- Real-time clock
- Smart transducers
- Analog output: connect to oscilloscope or X-Y plotter
- External printer can be mounted on top of the *Versatest* unit
- Remote foot switch interface for send/print functions
- Four modes: TRACK, PEAK HOLD, FIRST PEAK, POWER TOOL
- Statistic Process Control (SPC) built in

## *Versatest* Specifications

| Specifications | *VERSATEST* |
|---|---|
| Display | Large 5.5" x 1.5" backlighted LCD graphics display (240 x 64 dot matrix, 0.67" torque digits character height) |
| Capacity | 5 significant digits +/- 32,000 counts (16 bit A/D) |
| Sample Rate | 2,000 samples per second |
| Display Rate | 5 updates per second |
| Accuracy | ± 0.25% of reading AT 25 °C (with TTC Transducer calibration) |
| Temperature Drift | + 0.03% / °C (+0.017% / °F) |
| Bar Graph | 100 segment analog of applied torque scaled to Limits Set value |
| Units Of Measure | in-oz, in-lb, ft-lb, N•m, dN•m, kg-cm and kg-m |
| Modes | Track, peak hold, first peak, power tool |
| Soft Key User Interface | Units, Calibration, Date/Time, Statistics, Hi/Low Limits Set, Data Store, Data Recall, Printer Setup, Zero, Auto/Manual Store/Send/Clear |
| Select Keys | Increment, Decrement, Shift Left, Shift Right, Enter |
| Operating Temperature | 10 °–32 °C (50 °–90 °F) |
| Storage Temperature | -20 °–50 °C (-2 °–122 °F) |
| Humidity | 85% Relative Humidity @ 21 °C (70 °F) |
| Dimensions | 10" wide x 4" high x 10.5" deep (including carry handle) |
| Power Supply | Auto Switching 100VAC-24-VAC, 50/60 Hz, 50 watts |
| Data Storage/Recall | 3,000 Measurements |
| Statistical Analysis | Max, Min, Range, Mean, Sigma N, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo |
| Histogram | Lower Set Limit, Upper Set Limit, 10 Divisions |
| Printer/Computer Serial Output Port | RS232 (True), 300-19.2K Baud |
| Computer Serial Com Port | RS232 (True), 300-19.2K Baud |
| Analog Output | +(CW)/-(CCW) 1.8V at Transducer Full Range Linearity, ±1% of reading |
| Loader Control Relays | Two, Normally Open, Form A, Rated 12V DC @ 1/2A close contact at 110% CW or CCW or torque/force transducer range |

Refer to Transducer Chart on p.298 for additional information.

**VERSATEST600 Electronic Torque Metering System**
Provides high speed monitoring of static and dynamic torque inputs. Includes the VERSATEST600 Electronic Torque Calibration System indicator, VERSA600LDR2 loader, TTC12 transducer, TTC400 four-in-one transducer and TTC5000-1 four-in-one adaptor plate.

# ELECTRONIC TORQUE TESTER AND CALIBRATOR

- Automatic sensor recognition with TTC series "Smart" transducers
- Range: 15 in-oz to 2,000 ft-lb (bidirectional)
- Total uncertainty (10%–100% of range): ± 0.25% of indicated torque value
- Alpha numeric eight-digit display
- Memory to 3,000 values
- Includes low-profile serial printer
- Date and time stamp for stored values
- Statistical analysis performed on stored data
- Programmable manual or automatic options for clear, store and print functions
- Recall and review of stored torque values
- Modes: track, peak, first peak and power tool
- Optional angle encoder
- RS232C port is standard
- Analog output is standard
- Full digital circuitry
- Eight torque measurement units: in-oz, in-lb, ft-lb, cN•m, dN•m, N•m, kg-cm and kg-m
- Automatic lockup for transducer protection
- Automatic zero
- Automatic transducer recognition
- Operates on 120V AC or 240V AC



TTCELCON



TTC2000SYS

## TTC2000SYS/TTC2800SYS System Specifications

| | | |
|---|---|---|
| **TTC2000SYS Manual Loader System** | **Torque/Force Display** | Eight-digit, alpha-numeric, super bright red LED, 0.55" character height |
| | **Capacity** | 8 digits ± 32,000 counts (16 bit A/D) |
| | **Accuracy*** | ± 0.25% of reading at 25 °C (with TTC Transducer calibration) |
| | **Temperature Drift** | + 0.03% / ºC (+ 0.017% / ºF) |
| | **Units Of Measure** | Torque: ft-lb, in-lb, in-oz, N•m, dN•m, kg-cm and kg-cm; Force: lbf, ozf, N, dN, kp and gf |
| | **Maximum Range Display** | 2-line x 16 character 5 x 8 dot-matrix LCD used for MAX. Transducer range, Units, Angle, Calibration, Date/Time, Statistics, Torque/Force or Torque/Angle Limits Set, Data Store/Recall, Printer Setup |
| | **Modes** | Track, Peak Hold, Angle, First Peak, Power Tool |
| | **Operating Temperature** | 10 °–32 °C (50 °–90 °F) |
| | **Storage Temperature** | -20 °–50 °C (-2 °–122 °F) |
| | **Humidity** | Up to 90%, Non-condensing |
| | **Power Supply** | UL® Approved, 120V AC/220VAC, 50/60 Hz |
| | **Data Storage/Recall** | 3,000 Measurements |
| | **Statistical Analysis** | Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo |
| | **Histogram** | Lower Set Limit, Upper Set Limit, 10 Divisions |
| | **Printer/Computer Serial Output Port** | RS232 (True), 300-19.2K Baud |
| | **Computer Serial Com Port** | RS232 (True), 300-19.2K Baud (Optional) |
| | **Analog Output** | +(CW)/-(CW) 1.8V at Transducer Full Range Linearity, ±1% of reading |
| | **Loader Control Relays** | Two, Normally Open, Form A, Rated 12DVC @ 1/2A close contact at 110% CW or CCW or torque/force transducer range |
| | **Loader Hand Crank** | Input torque 8 ft-lb Maximum, Output Torque 2,000 ft-lb Maximum |
| | **Motorized Loader Modes** | TTC2000SYS is 110/220 manual switch. TTCC2800SYS is 110V only. |
| | **Motorized Loader Power Supply** | 120V AC +/- 10% Hz @ 3.14A (including motor current); (optional step-down transformer for 240V AC operation) |
| **TTC2800SYS Motorized Control System** | **Motorized Loader Modes** | Manual; Auto Dial; Auto 1st Peak |
| | **Motorized Loader Power Supply** | 120V AC ± 10% Hz @ 3.14A (including motor current); (optional step-down transformer for 240V AC operation) |

## System Components

**TTC2000SYS Electronic Manual Torque Tester/Calibrator**
TTC2000SYS includes TTC2000 Monitor, Mechanical Loader and Cabinet, TTC400 four-in-one Transducer Kit (4 in-lb–250 ft-lb), TTC12 Transducer Kit (60–600 ft-lb), TTC14 Transducer Kit (200–2000 ft-lb), TTC5500-1 Extension Arm, TTC5000-1 four-in-one Transducer Bracket, 2000-SW WedgeLink Software and TTC501 Download Cable.

**TTC2800SYS Electronic Motorized Torque Tester/ Calibrator**
Model TTC2800SYS includes TTC2800 TTC Monitor, Motorized Loader, and Cabinet, TTC400 four-in-one Transducer Kit (4 in-lb–250 ft lb), TTC5000-1 four-in-one Transducer Bracket, TTC12 Transducer Kit (60–600 ft-lb), TTC14 Transducer Kit (200–2,000 ft-lb), TTC5500-1 Extension Arm, 2000-SW WedgeLink Software, andTTC501 Download Cable.

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration (unless otherwise indicated). All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20%–100% of full scale, using NIST® traceable equipment.

**⚠WARNING**

- Do not exceed rated torque
- Periodic recalibration checks are necessary to maintain and assure torque tester accuracy
- Read safety precautions on pages W1 to W4

# ELECTRONIC TORQUE TESTER AND CALIBRATOR



TTC8



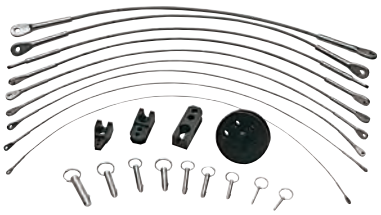
TTC400

## Transducers

• All TTC series transducers include the correct adaptor for the indicated torque range

| Stock No. | Description | Sq. Drive Size | Range | Bench Top Mounting Bracket |
|---|---|---|---|---|
| TTC4 | Transducer | 1/4 | 5–50 in-oz | TTC3421 |
| TTC5 | Transducer | 1/4 | 15–200 in-oz | TTC3421 |
| TTC6 | Transducer | 1/4 | 4–50 in-lb | TTC3421 |
| TTC65 | Transducer | 1/4 | 15–150 in-lb | TTC3421 |
| TTC7 | Transducer | 3/8 | 30–400 in-lb | TTC3421 |
| TTC8 | Transducer | 3/8 | 80–1,000 in-lb | TTC3421 |
| TTC10 | Transducer | 1/2 | 10–25 ft-lb | TTC3422 |
| TTC11 | Transducer | 1/2 | 20–250 ft-lb | TTC3422 |
| TTC12 | Transducer | 3/4 | 60–600 ft-lb | TTC3422 |
| TTC13 | Transducer | 1 | 100–1,000 ft-lb | TTC15002 |
| TTC14 | Transducer | 1 | 200–2,000 ft-lb | TTC15002 |
| TTC400* | 4-in-1 Transducer | 1/4<br>3/8<br>3/8<br>1/2 | 4–50 in-lb<br>30–400 in-lb<br>80–1,000 in-lb<br>20/250 ft-lb | –<br>–<br>–<br>– |
| TTC5000-1** | 4-in-1 Adaptor Plate | — | — | – |

*TTC400 requires the TTC5000-1 adaptor plate when used with the TTC600 manual loader, TTC800 motorized loader and VERSA600LDR
**Required for TTC400 4-in-1 torque transducer to be used on TTC600/TTC800 loaders



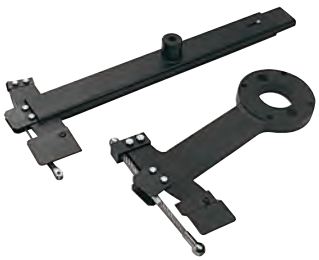
TTC2600



TTC2620



TTC2610



TTC26302

## Force Testing Equipment

- Reaction arms, cables, mounting plates and fixtures are available for testing tensiometers plus compression and tension gauges
- The TTC600 and TTC800 loaders and TTC series transducers can be configured to deliver compression and tension loads
- The TTC610/TTC810 indicator also provides measurement, display, storage and statistical analysis for FORCE inputs

| Stock No. | Description |
|---|---|
| TTC2600 | Tensiometer Testing Kit |
| TTC2610 | Tension Gauge Testing Kit |
| TTC2620 | Compression Gauge Testing Kit |
| TTC26302 | Force Arm Kit (Only one is needed for any Force Testing Kit) |

**TTCCALKIT Calibration Kit**

- Includes TTC3200 Weight Set (#1), TTC500 2 1/2" Calibration Wheel, TTC1510 5" Calibration Wheel, TTC1520 10" Butterfly Calibration Wheel, 2000-226-3 Adaptor (1/2" x 3/8"), TTC1540 40" Calibration Arm, 390-2-2 4 oz Calibration Weight Tray, TTC301 8 oz Calibration Weight Tray, TTC3040 7.5 lb Calibration Weight Tray, TTC3020 15 lb Calibration Weight Tray, TTC3030 50 lb Calibration Weight Tray and TTC25002 Calibration Stand Kit
- Kit can be used on all TTC Systems

## Calibration Wheels/Arms

- Use to calibrate any TTC series transducer. Arms are certified to manufacturer's standards

| Stock No. | Description |
|---|---|
| TTC500 | 2.5" Calibration Wheel, 1/4" sq. dr. |
| TTC1510 | 5" Calibration Wheel, 1/4" sq. dr. |
| TTC1520 | 10" Calibration Butterfly, 1/2" sq. dr. (adaptor is optional) |
| TTC1540 | 40" Calibration Arm, 1 1/4" sq. dr. |

## Weight Sets

- Use to calibrate any TTC series transducer. All weights are NIST® (NBS) traceable.

| Stock No. | Description |
|---|---|
| TTC3200 | Weight Set #1 (Use for all TTC Series Transducers) |
| TTC3210 | Weight Set #2 (For 200 in-oz to 250 ft-lb TTC Series Transducers) |
| TTC3220 | Weight Set #3 (For 600 ft-lb to 2,000 ft-lb TTC Series Transducers) |

## Weight Hangers/Trays

- Use to calibrate any TTC series transducer. Weight trays certified as to weight

| Stock No. | Description |
|---|---|
| TTC301 | Weight Hanger, 8 oz |
| TTC3040 | Weight Tray, 7.5 lb |
| TTC3020 | Weight Tray, 15 lb |
| TTC3030 | Weight Tray, 50 lb |



## Joint Rate Simulator Adaptors

- Use with torque tester when testing non-impacting power tools
- Square drive adaptor is placed on top of square drive of the torque tester and tightened with a set screw
- Adaptor bit is inserted into the power tool and mated to the top of the joint adaptor
- By stacking the belleville washers in set patterns, the joint rate adaptor can simulate soft, medium or hard joints

| Stock No. | Square Drive, inches | Capacity, in-lb | Adaptor Bit | Load Screw |
|---|---|---|---|---|
| QC1JRS50 | 1/4 | 50 | 1/4" Hex x 3/16" Hex | 1/4" x 28 x 1 |
| QC2JRS400 | 3/8 | 400 | 3/8" Square Internal x 3/8" Hex | 7/16" x 20 x 1.5 |
| QC2JRS1000 | 3/8 | 1,000 | 3/8" Square Internal x 1/2" Hex | 5/8" x 18 x 1.5 |



**QC2JRS400**

**⚠WARNING**

- Do not exceed rated torque
- Periodic recalibration checks are necessary to maintain and assure torque tester accuracy
- Read safety precautions on pages W1 to W4

# TORQUE COMPARATORS



TTC25002

## Accessories

| Stock No. | Description |
|---|---|
| TTC3421 | Mounting Bracket A |
| TTC3422 | Mounting Bracket B |
| CDI200015003 | Mounting Bracket C |
| TTC501 | Cable, PC |
| TTC75006 | Kit, Torque Screwdriver Testing |
| 260-27 | 1/4" hex x 1/4" square Female to Female Adaptor |
| 342-40 | 1/4" square x 1/4" square Female to Female Adaptor |
| 342-41-1S | 1/4" square x 3/8" square Female to Female Adaptor |
| 342-41-2 | 3/8" square x 3/8" square Female to Female Adaptor |
| 65-26-2 | 1/2" square x 3/8" square Female to Female Adaptor |
| 65-26-3S | 1/2" square x 1/2" square Female to Female Adaptor |
| 65-78-1 | 1/2" square x 3/4" square Female to Female Adaptor |
| 65-78-2 | 3/4" square x 3/4" square Female to Female Adaptor |
| 75-25-1 | 1" square x 3/4" square Female to Female Adaptor |
| 75-20 | 1" square x 1" square Female to Female Adaptor |
| 2000-152-3 | 1/2" x 3/8" Square Drive Reducer |
| 2000-226-3 | 3/4" x 1/2" Square Drive Reducer |
| 2000-226-2 | 1" x 3/4" Square Drive Reducer |
| 2000-0154-18 | 1 1/4" x 3/4" Square Drive Reducer |
| TTC501 | Connects TTC610 Digital Indicator to PC |
| TTC25002 | Free standing calibration stand with mounting block and hardware for use with TTC2000/TTC2800 Systems and all TTC Series Transducers |
| TTC75002 | Torque Screwdriver Testing Kit |
| TTC5500-1 | Extension Arm (required for wrenches longer than 45") |



TCR175



TCR600




QCDTC3250

## Torque Comparators

**TCR175 Torque Comparator**

- Determine if a torque wrench requires calibration to maintain proper application of torque
- 1/2" female square drive input and 175 ft-lb capacity with 5 ft-lb graduations and 230 N•m capacity with 10 N•m increments is a perfect fit for the most popular torque wrenches
- Integrated exercise adaptor makes it easy to break in simple, providing the most accurate results (as per B107-300 standard)
- 2% accurate within ± 2% of the reading from 20% of full scale to full scale clockwise and counterclockwise
- Can check a 3/8" drive torque wrench by using an A2A or GAF2A adaptor

**TCR600 Torque Comparator**

Similar to TCR175 except for these differences:

- 3/4" female square drive input and 600 ft-lb capacity with 10 ft-lb graduations and 800 N•m capacity with 20 N•m increments
- Compact design with 1/4" steel mounting plate allows for convenient installation in any direction: horizontally on a bench, vertically on a wall, or on any other sturdy, flat surface
- Use on most 3/4" drive torque wrenches including these popular Snap-on® models: ATECH4R600, TECH4R600/TECH4RM600, QD4400/QD4R400, QD4600/QD4R600, TQR400E/TQR600E, TE352A/TE602A series and TEC352A/TEC602A series
- Does not include certificate of calibration

**QCDTC3250 Electronic Torque Comparator**

- Fast, highly accurate method to check the accuracy of mechanical and electronic 3/8" and 1/2" drive torque wrenches
- Large easy-to-read LCD Display with backlight
- Three measurement units [ft-lb, in-lb, N•m]
- Highly accurate; +/- 1% CW & +/- 1% CCW, 10%–100% of full scale
- Tough composite housing with integrated adaptor storage
- Three primary torque check functions: including Track, Peak Hold, First Peak
- Adjustable auto shutoff feature
- Integrated exercise adaptor on mounting plate (allows user to break-in for accurate results per B107-300 standard)
- Use (three) "AA" alkaline batteries (Optional AC adaptor DTS8269)
- Includes 3/8" adaptor (GAF2A)
- CE Approved

**Specifications:**

- Accuracy: +/- 1% CW & +/- 1% CCW, 10%–100% of full scale) @ 72 °F (22 °C)
- Size: ½" Female Square Drive (and 3/8" Drive with included GAF2A adaptor)
- Range: 25 ft-lb to 250 ft-lb (34–339 Nm)
- Dimensions: 13.2" L, 4.75" W, 2.2" D
- Weight: 4.9 lb (2.22 kg)
- Operating/Storage Temperature: 0 °F – 130 °F
- Measurement Drift: Torque +0.01% of reading per °C
- Humidity: Up to 90% non-condensing
- LCD: Dot matrix (192 x 65 resolution); 3.3"L x 1.25"H viewing area

## Pneumatic Torque Wrenches

- Control torque to ± 5% accuracy by controlling input air pressure
- Dual-speed gearbox
- High-speed rundown gear up to greater than 100 rpm for fast rundown of nuts along the stud
- Low-speed torque gear: much slower rpm ensures controlled and accurate torque
- Safety paddle requires two-handed operation of the wrench to keep both hands away from pinch points near the reaction arm
- Low vibration eliminates injury caused by repetitive use of impacting wrenches
- Continuous drive exhibits lower decibels than competitors pneumatic torque wrenches or impact wrenches
- Ideal for oil fields, construction, ship yards, power generation, railroads, maintenance, mining equipment maintenance and more
- Use with Snap-on® filter regulator PTQFRL

| Stock No. | Drive Size, inches | Torque Range, ft-lb (N•m) |
|---|---|---|
| PTQ0.5 | 3/4 | 195–500 (264–678) |
| PTQ1 | 3/4 | 320–1,285 (434–1,742) |
| PTQ3 | 1 | 915–3,305 (1,240–4,481) |
| PTQ8 | 1 1/2 | 1,300–8,500 (1,763–11,524) |


PTQ0.5


PTQ1


PTQ3


PTQ8

## Pneumatic Reaction Arm Kits

- Variety of reaction arms for any application

| Pneumatic Torque Wrench Stock No. | Reaction Arm Stock No. | Reaction Arm Description | Reaction Arm Length, inches | Reaction Arm Offset, inches |
|---|---|---|---|---|
| PTQ0.5<br>PTQ1 | PTQ1-03S | Short Arm Included with Wrenches | 4.48 | 2.40 |
| | PTQ1-03R | Rotatable Arm | 6.27 | 2.13 |
| | PTQ1-ALC7 | ALCO Arm | 7.00 | No Offset |
| | PTQ1-03L | Long Arm | 6.02 | 2.44 |
| | PTQ1CN612812 | Twin Tool Arm | 6.75–8.75 Adj. | No Offset |
| | PTQ1-EXTRF12 | 12" Wheel Gun Extension and Reaction Fixture | 2.41–4.59 Adj. 12.68* | No Offset |
| PTQ3 | PTQ3-03S | Short Arm Included with Wrench | 3.3 | 5.26 |
| | PTQ3-03R | Rotatable Arm | 8.2 | 3.05 |
| | PTQ3-ALC9 | ALCO Arm | 9.00 | No Offset |
| | PTQ3-03L | Long Arm | 7.65 | 3.3 |
| | PTQ3-CN65825 | Twin Tool Arm | 6.5–8.25 Adj. | 3.25 |
| PTQ8 | PTQ8-03 | Short Arm Included with Wrench | 10.68 | 4.55 |
| | PTQ8-03R | Rotatable Arm | 10.8 | 4.1 |
| | PTQ8-ALC11 | ALCO Arm | 11.00 | No Offset |
| | PTQ8-FROG | Frog Nut Tool | 8.23 | — |

*Tool length

### PTQFRL Filter/Regulator Unit

- Combination Filter-Regulator-Lubrication (FRL) unit gives you complete control over your pneumatic supply
- Unit includes the hoses, lubrication, couplings and gauges necessary to operate the torque wrench for safe, long-lasting performance


PTQFRL

**⚠WARNING**

- Do not exceed rated capacity
- Periodic calibration checks are necessary to maintain and assure torque tester accuracy
- Read safety precautions on pages W1 to W4

# A POWERFUL SPIN ON SUPERIOR PERFORMANCE.

Comfort, power and versatility are built into each Snap-on® Instinct screwdriver. Even the most basic tools should still be the best. And our selection is superior as well: with lengths, thicknesses, tip types, finishes and handle sizes and styles to meet any job.

**Multi-faceted Design —** Unique handle geometry provides excellent gripping surface and superior turning force.

**Inner Core —** Maximizes torque between the handle and the blade.

**Middle Layer —** Tough, brightly-colored material provides impact and solvent resistance.

**Outer Layer —** Textured material gives you grip, comfort and torque – even in the greasiest shop environments.

**Hard or Soft Grip Handle Design —** Choose from an ultra-comfortable soft grip or a grease-resistant hard grip.

**Shanks —** Round shanks are made from special alloy steel with few impurities for strength and lasting durability.

**Seven Tip Types —** *Snap-on* screwdrivers are available in seven different tip profiles to handle a wide variety of fastener types.

**FORMED FOR BETTER FUNCTION.**

Built with exclusive features that provide superior durability and performance, it only takes one turn to know it's a *Snap-on* screwdriver.



## Standard Flat Tip/Phillips® Combination Screwdriver Sets

| | Stock No. | Handle | Set Contains: SGDX80BR | SGDX80BO | SGDX80BG | SGDX60BR | SGDX60BO | SGDX60BG |
|---|---|---|---|---|---|---|---|---|
| | | | Red | Orange | Green | Red | Orange | Green |
| Flat Tip Standard | SHD1* | Hard | • | • | • | | | |
| | SGD2B | Soft | • | • | • | • | • | • |
| | SGD4B | Soft | • | • | • | • | • | • |
| | SGD6B | Soft | • | • | • | • | • | • |
| | SGD8B | Soft | • | • | • | | | |
| *Phillips* Standard | SHDP22IR* | Hard | • | • | • | | | |
| | SGDP31IRB | Soft | • | • | • | • | • | • |
| | SGDP42IRB | Soft | • | • | • | • | • | • |
| | SGDP63IRB | Soft | | | | • | • | • |

*Does not include hex bolster.

**Soft Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS



SGDX80BR



SGDX60BO

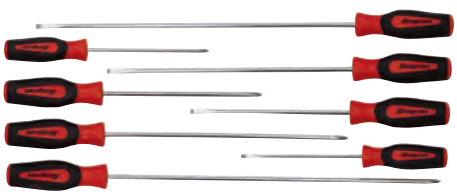
## Cabinet, Mini Tip, Extra Long Flat Tip/*Phillips* Screwdriver Sets

| | Stock No. | Set Contains: SGDXL80BR | SGDXL80BO | SGDXL80BG | SGDX40BR | SGDX40BO | SGDX40BG | SGDXXL20BR | SGDXXL20BO | SGDXXL20BG |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Red | Orange | Green | Red | Orange | Green | Red | Orange | Green |
| Flat Tip Cabinet | SGD146B | • | • | • | | | | | | |
| | SGD480B | • | • | • | | | | | | |
| | SGD4120B | • | • | • | | | | | | |
| | SGD4160B | • | • | • | | | | | | |
| *Phillips* Cabinet | SGDP61B | • | • | • | | | | | | |
| | SGDP82B | • | • | • | | | | | | |
| | SGDP122B | • | • | • | | | | | | |
| | SGDP162B | • | • | • | | | | | | |
| Flat Tip Mini-Tip | SGD304B | | | | • | • | • | | | |
| | SGD306B | | | | • | • | • | | | |
| *Phillips* Mini-Tip | SGDP300B | | | | • | • | • | | | |
| | SGDP301B | | | | • | • | • | | | |
| Extra Long | SGD424B | | | | | | | • | • | • |
| | SGDP242B | | | | | | | • | • | • |

**Soft Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS



SGDXL80BR



SGDX40BG



SGDXXL20BO

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Read safety precautions on pages W1 to W4

# HARD GRIP HANDLE COMBINATION SETS INSTINCT®



SHDX80R



SHDX60O



GSHDX80R



SHDXL80O



SHDX40G

## Standard Length Flat Tip/Phillips® Combination Screwdriver Sets

| Set Contains: | | SHDX80R | SHDX80O | SHDX80G | SHDX60R | SHDX60O | SHDX60G |
|---|---|---|---|---|---|---|---|
| | Stock No. | Red | Orange | Green | Red | Orange | Green |
| Flat Tip Standard | SHD1* | • | • | • | | | |
| | SHD2 | • | • | • | • | • | • |
| | SHD4 | • | • | • | • | • | • |
| | SHD6 | • | • | • | • | • | • |
| | SHD8 | • | • | • | | | |
| *Phillips* Standard | SHDP22IR* | • | • | • | | | |
| | SHDP31IR | • | • | • | • | • | • |
| | SHDP42IR | • | • | • | • | • | • |
| | SHDP63IR | | | | • | • | • |

*Does not include hex bolster.

**Hard Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS

## Industrial Finish Shank, Cabinet and Mini Tip Flat Tip/*Phillips* Screwdriver Sets

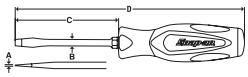
| Set Contains: | | GSHDX80R | SHDXL80O | SHDX40R | SHDX40O | SHDX40G |
|---|---|---|---|---|---|---|
| | Stock No. | Red | Orange | Red | Orange | Green |
| Flat Tip Industrial Finish Shank | GSHD1* | • | | | | |
| | GSHD2 | • | | | | |
| | GSHD4 | • | | | | |
| | GSHD6 | • | | | | |
| | GSHD8 | • | | | | |
| *Phillips* Tip Industrial Finish Shank | GSHDP22IR* | • | | | | |
| | GSHDP31 | • | | | | |
| | GSHDP42 | • | | | | |
| Flat Tip Cabinet | SHD146 | | • | | | |
| | SHD480 | | • | | | |
| | SHD4120 | | • | | | |
| | SHD4160 | | • | | | |
| *Phillips* Tip Cabinet | SHDP61 | | • | | | |
| | SHDP82 | | • | | | |
| | SHDP122 | | • | | | |
| | SHDP162 | | • | | | |
| Flat Tip Mini Tip | SHD304 | | | • | • | • |
| | SHD306 | | | • | • | • |
| *Phillips* Tip Mini Tip | SHDP300 | | | • | • | • |
| | SHDP301 | | | • | • | • |

*Does not include hex bolster.

**Hard Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS





SGD2BR

## — Standard

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGD2BR | SGD2BO | SGD2BG | .035 | 7/32 | 2 13/16 | 6 15/16 |
| SGD4BR | SGD4BO | SGD4BG | .040 | 1/4 | 3 15/16 | 8 27/32 |
| SGD6BR | SGD6BO | SGD6BG | .050 | 5/16 | 5 15/16 | 10 27/32 |
| SGD8BR | SGD8BO | SGD8BG | .055 | 3/8 | 7 29/32 | 13 13/32 |
| SGD10BR | SGD10BO | SGD10BG | .055 | 3/8 | 10 | 15 7/16 |

**SGDS50BR Flat Tip Screwdriver Set**
Includes SGD2BR, SGD4BR and SGD6BR Flat Tip Screwdrivers plus SGD304BR and SGD306BR Miniature Flat Tip Screwdrivers (5-piece)

**SGDS50BG Flat Tip Screwdriver Set**
Includes SGD2BG, SGD4BG and SGD6BG Flat Tip Screwdrivers plus SGD304BG and SGD306BG Miniature Flat Tip Screwdrivers (five-piece)

**SGDS50BO Flat Tip Screwdriver Set**
Includes SGD2BO, SGD4BO and SGD6BO Flat Tip Screwdrivers plus SGD304BO and SGD306BO Miniature Flat Tip Screwdrivers (five-piece)



SGD306BR

## — Mini Tip

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGD304BR | SGD304BO | SGD304BG | .020 | 1/8 | 3 | 5 7/8 |
| SGD306BR | SGD306BO | SGD306BG | .030 | 3/16 | 3 | 5 7/8 |



SGD480BR

## — Cabinet

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGD146BR | SGD146BO | SGD146BG | .030 | 3/16 | 5 13/16 | 10 1/8 |
| SGD1410BR | SGD1410BO | SGD1410BG | .032 | 3/16 | 10 | 14 5/32 |
| SGD1416BR | SGD1416BO | SGD1416BG | .032 | 3/16 | 16 | 20 5/32 |
| SGD480BR | SGD480BO | SGD480BG | .032 | 1/4 | 7 15/16 | 12 3/4 |
| SGD4100BR | SGD4100BO | SGD4100BG | .032 | 1/4 | 9 15/16 | 14 3/4 |
| SGD4120BR | SGD4120BO | SGD4120BG | .032 | 1/4 | 11 15/16 | 16 3/4 |
| SGD4160BR | SGD4160BO | SGD4160BG | .032 | 1/4 | 15 15/16 | 20 3/4 |



SGDS50BR



SGD424BR

## — Extra Long

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGD424BR | SGD424BO | SGD424BG | .046 | 5/16 | 24 | 28 3/4 |





SHD6R

## — Standard

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SHD1R* | SHD1O* | SHD1G* | .040 | 1/4 | 1 7/8 | 3 3/4 |
| SHD2R | SHD2O | SHD2G | .035 | 7/32 | 2 13/16 | 6 15/16 |
| SHD4R | SHD4O | SHD4G | .040 | 1/4 | 3 15/16 | 8 27/32 |
| SHD6R | SHD6O | SHD6G | .050 | 5/16 | 5 15/16 | 10 27/32 |
| SHD8R | SHD8O | SHD8G | .055 | 3/8 | 7 29/32 | 13 13/32 |
| SHD10R | SHD10O | SHD10G | .055 | 3/8 | 10 | 15 7/16 |

*Does not include hex bolster.



SHD304R

## Mini Tip

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SHD304R | SHD304O | SHD304G | .018 | 1/8 | 3 | 5 7/8 |
| SHD306R | SHD306O | SHD306G | .030 | 3/16 | 3 | 5 7/8 |



GSHD4R

## — Industrial Finish Shank

| Industrial/Red | A | B | C | D |
|---|---|---|---|---|
| GSHD1R* | .037 | 1/4 | 1 1/2 | 3 3/4 |
| GSHD2R | .032 | 7/32 | 2 7/8 | 7 |
| GSHD4R | .037 | 1/4 | 4 | 8 7/8 |
| GSHD6R | .046 | 5/16 | 6 | 10 27/32 |
| GSHD8R | .050 | 3/8 | 8 | 13 13/32 |

*Does not include hex bolster.



SHD4160O

## Cabinet

| Orange | A | B | C | D |
|---|---|---|---|---|
| SHD146O | .030 | 3/16 | 6 | 10 1/8 |
| SHD480O | .032 | 1/4 | 8 | 12 3/4 |
| SHD4120O | .032 | 1/4 | 12 | 16 3/4 |
| SHD4160O | .032 | 1/4 | 16 | 20 3/4 |

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Read safety precautions on pages W1 to W4

# FLAT TIP/POCKET AND SPARK TEST



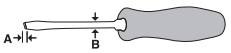
SDD204O

## Pocket

| Stock No. | Type | Description | A | D |
|---|---|---|---|---|
| SDD204O | Pocket | Screwdriver with Pocket Clip | .025 | 4 3/4 |
| SDD224O* | Pocket | Distributor Screwdriver* | .025 | 4 3/4 |

*Magnet on handle






SDD214

## Spark Test

| Stock No. | Type | Description | A | D |
|---|---|---|---|---|
| SDD214 | Spark Test | Screwdriver with Pocket Clip | .025 x 1/8 | 5 1/8 |

# SOFT HANDLE PHILLIPS® INSTINCT®



SGDP42IRBR

## Standard

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGDP31IRBR | SGDP31IRBO | SGDP31IRBG | #1 | 3/16 | 2 31/32 | 7 1/8 |
| SGDP42IRBR | SGDP42IRBO | SGDP42IRBG | #2 | 1/4 | 3 31/32 | 8 7/8 |
| SGDP62IRBR | SGDP62IRBO | SGDP62IRBG | #2 | 1/4 | 6 | 10 7/8 |
| SGDP63IRBR | SGDP63IRBO | SGDP63IRBG | #3 | 5/16 | 5 29/32 | 10 13/16 |
| SGDP64IRBR | SGDP64IRBO | SGDP64IRBG | #4 | 3/8 | 6 | 11 1/2 |
| SGDP84BR | SGDP84BO | SGDP84BG | #4 | 3/8 | 8 | 15 5/8 |

**SGDP50BR *Phillips* Tip Screwdriver Set**
Includes SGDP31IRBR, SGDP42IRBR and SGDP63IRBR *Phillips* Tip Screwdrivers plus SGDP300BR and SGDP301BR Miniature *Phillips* Tip Screwdrivers (5-piece)

**SGDP50BO *Phillips* Tip Screwdriver Set**
Includes SGDP31IRBO, SGDP42IRBO and SGDP63IRBO *Phillips* Tip Screwdrivers plus SGDP300BO and SGDP301BO Miniature *Phillips* Tip Screwdrivers 5-piece)

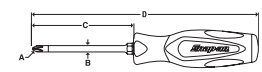
**SGDP50BG *Phillips* Tip Screwdriver Set**
Includes SGDP31IRBG, SGDP42IRBG and SGDP63IRBG *Phillips* Tip Screwdrivers plus SGDP300BG and SGDP301BG Miniature *Phillips* Tip Screwdrivers (5-piece)



SGDP82BR

## Cabinet Type

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGDP61BR | SGDP61BO | SGDP61BG | #1 | 3/16 | 6 | 10 |
| SGDP82BR | SGDP82BO | SGDP82BG | #2 | 1/4 | 8 | 13 |
| SGDP162BR | SGDP162BO | SGDP162BG | #2 | 1/4 | 16 | 21 |
| SGDP122BR | SGDP122BO | SGDP122BG | #2 | 1/4 | 12 | 17 |
| SGDP102BR | SGDP102BO | SGDP102BG | #2 | 1/4 | 9 3/8 | 14 1/4 |
| SGDP101BR | SGDP101BO | SGDP101BG | #1 | 3/16 | 10 | 14 1/8 |






SGDP300BR

## Mini Tip

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGDP300BR | SGDP300BO | SGDP300BG | #0 | 1/8 | 3 | 6 |
| SGDP301BR | SGDP301BO | SGDP301BG | #1 | 3/16 | 3 | 6 |



SGDP50BR



SGDP216BR

## Extra Long

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SGDP116BR | SGDP116BO | SGDP116BG | #1 | 3/16 | 16 | 20 5/32 |
| SGDP216BR | SGDP216BO | SGDP216BG | #2 | 3/16 | 16 | 20 5/32 |
| SGDP242BR | SGDP242BO | SGDP242BG | #2 | 5/16 | 24 | 28 3/4 |



SGDDP50BR

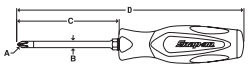
## Diamond Tip

- Diamond particles "bite" into fasteners which minimizes slipping
- Diamond particles are extremely hard for long-lasting performance and minimal wear

Set Contains: SGDDP50BR

| Red | A | B | C | D | Blade | |
|---|---|---|---|---|---|---|
| SGDDP31IRBR | #1 | .197 | 3 | 7 5/32 | SSDDP31RB | • |
| SGDDP42IRBR | #2 | .236 | 4 | 8 29/32 | SSDDP42RB | • |
| SGDDP61IRBR | #1 | .197 | 6 | 10 5/32 | SSDDP61RB | • |
| SGDDP62IRBR | #2 | .236 | 6 | 10 29/32 | SSDDP62RB | • |
| SGDDP63IRBR | #3 | .315 | 5 3/4 | 10 5/8 | SSDDP63RB | • |

## HARD HANDLE PHILLIPS® INSTINCT®




### Standard

| Red | Orange | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SHDP22IRR* | SHDP22IRO* | SHDP22IRG* | #2 | 1/4 | 1 5/8 | 3 1/2 |
| SHDP31IRR | SHDP31IRO | SHDP31IRG | #1 | 3/16 | 2 31/32 | 7 1/8 |
| SHDP42IRR | SHDP42IRO | SHDP42IRG | #2 | 1/4 | 3 31/32 | 8 7/8 |
| SHDP62IRR | SHDP62IRO | SHDP62IRG | #2 | 1/4 | 6 | 10 13/32 |
| SHDP63IRR | SHDP63IRO | SHDP63IRG | #3 | 5/16 | 5 29/32 | 10 13/16 |
| SHDP64IRR | SHDP64IRO | SHDP64IRG | #4 | 3/8 | 6 | 11 1/2 |

*Does not include hex bolster.


SHDP63IRR

### Standard/Industrial Finish Shank

| Industrial/Red | A | B | C | D |
|---|---|---|---|---|
| GSHDP22IRR* | #2 | 1/4 | 1 1/2 | 3 3/4 |
| GSHDP31R | #1 | 3/16 | 3 | 7 1/4 |
| GSHDP42R | #2 | 1/4 | 4 | 8 7/8 |

*Does not include hex bolster.


GSHDP31R

### Cabinet Type

| Chrome/Orange | A | B | C | D |
|---|---|---|---|---|
| SHDP61O | #1 | 3/16 | 6 | 10 1/4 |
| SHDP82O | #2 | 1/4 | 8 | 12 7/8 |
| SHDP122O | #2 | 1/4 | 12 | 16 3/4 |
| SHDP162O | #2 | 1/4 | 16 | 20 3/4 |


SHDP82O

## MINI TIP AND POCKET INSTINCT®


SHDP300R

### Mini Tip

| Orange | Red | Green | A | B | C | D |
|---|---|---|---|---|---|---|
| SHDP300O | SHDP300R | SHDP300G | #0 | 1/8 | 3 | 5 13/16 |
| SHDP301O | SHDP301R | SHDP301G | #1 | 3/16 | 3 | 5 13/16 |


SHDP204O

### Pocket

| Orange | A | D | B | C |
|---|---|---|---|---|
| SHDP204O | #1 | 4 7/8 | 1/8 | 2 |

## SOFT GRIP Blue-Point®


BSGD7


BSGDP52

### Flat Tip

| Stock No. | Tip Size | Blade Length, inches | Length, inches |
|---|---|---|---|
| BSGD3 | 1/8 | 3 | 6 1/2 |
| BSGD4 | 7/32 | 5 | 9 |
| BSGD5 | 1/4 | 6 | 10 1/4 |
| BSGD6 | 5/16 | 7 | 11 1/4 |
| BSGD7 | 3/8 | 8 | 12 3/8 |

### Standard *Phillips*

| Stock No. | Tip Size | Blade Length, inches | Length, inches |
|---|---|---|---|
| BSGDP41 | #1 | 4 | 8 |
| BSGDP52 | #2 | 5 | 9 1/4 |

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Read safety precautions on pages W1 to W4

# SOFT GRIP Blue-Point®

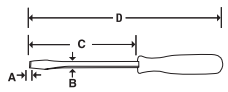


BSGDX70

## Soft Grip Combination Sets

| | Stock No. | Set Contains: BSGDX70 |
|---|---|---|
| Flat Tip | BSGD3 | • |
| | BSGD4 | • |
| | BSGD5 | • |
| | BSGD6 | • |
| | BSGD7 | • |
| Phillips® | BSGDP41 | • |
| | BSGDP52 | • |

# ELECTRONIC SERVICE






SSDEP61C

## Electronic Thin Blade

- Recessed ends for fingertip pressure

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| SSDE42C | .018 x 1/8 | 1/8 | 2 | 5 5/16 |
| SSDE43C | .018 x 1/8 | 1/8 | 3 | 6 5/16 |
| SSDE44C | .018 x 1/8 | 1/8 | 4 | 7 5/16 |
| SSDE46C | .018 x 1/8 | 1/8 | 6 | 9 5/16 |
| SSDE48C | .018 x 1/8 | 1/8 | 8 | 11 5/16 |
| SSDE63C | .030 x 3/16 | 3/16 | 3 | 9 9/16 |
| SSDE64C | .028 x 3/16 | 3/16 | 4 | 7 9/16 |
| SSDE66C | .030 x 3/16 | 3/16 | 6 | 6 9/16 |
| SSDE68C | .028 x 3/16 | 3/16 | 8 | 11 9/16 |
| SSDE610C | .030 x 3/16 | 3/16 | 10 | 13 9/16 |
| SSDEP30C | #0 | 1/8 | 3 | 6 3/8 |
| SSDEP31C | #1 | 3/16 | 3 | 6 5/8 |
| SSDEP60C | #0 | 1/8 | 6 | 9 3/8 |
| SSDEP61C | #1 | 3/16 | 6 | 9 5/8 |

## Electronic Miniature

- Rotating handle mechanism ideal for precise, detailed electronics work
- Blades manufactured to exacting tolerances from special heat-treated alloy steel
- Blade tip finish is industrial black



SGDE70

## Flat/*Phillips*

| Stock No. | A | B | C | D | Set Contains: SGDE70 |
|---|---|---|---|---|---|
| SGDE215 | 1.5 | 3/32 | 2 | 5 3/4 | • |
| SGDE220 | 2.0 | 3/32 | 2 | 5 3/4 | • |
| SGDE225 | 2.5 | 3/32 | 2 | 5 3/4 | • |
| SGDE230 | 3.0 | 1/8 | 2 | 5 3/4 | • |
| SGDEP200 | #00 | 1/8 | 2 | 5 3/4 | • |
| SGDEP20 | #0 | 1/8 | 2 | 5 3/4 | • |
| SGDEP21 | #1 | 3/16 | 3 | 6 1/2 | • |



SSDE33C

## Potentiometer Adjuster

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| SSDE33C | .015 x 3/32 | 3/32 | 3 | 5 9/16 |



SGDET70

## TORX®

| Stock No. | A | B | C | D | Set Contains: SGDET70 |
|---|---|---|---|---|---|
| SGDET26 | T6 | 1/8 | 2 | 5 1/2 | • |
| SGDET27 | T7 | 1/8 | 2 | 5 1/2 | • |
| SGDET28 | T8 | 1/8 | 2 | 5 1/2 | • |
| SGDET29 | T9 | 1/8 | 2 | 5 1/2 | • |
| SGDET210 | T10 | 1/8 | 2 | 5 1/2 | • |
| SGDET215 | T15 | 3/16 | 3 | 6 1/2 | • |
| SGDET220 | T20 | 3/16 | 3 | 6 1/2 | • |

Blow molded case included.



SGDEH70

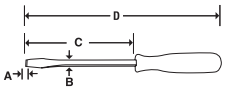
## Hex/Miniature

| Stock No. | A | B | C | D | Set Contains: SGDEH70 |
|---|---|---|---|---|---|
| SGDEH304 | 1/16 | 3/32 | 2 | 5 1/2 | • |
| SGDEH306 | 3/32 | 1/8 | 3 | 6 1/2 | • |
| SGDEH307 | 7/64 | 3/16 | 3 | 6 1/2 | • |
| SGDEH315 | 1.5 mm | 3/32 | 2 | 5 1/2 | • |
| SGDEH320 | 2.0 mm (5/64) | 3/32 | 2 | 5 1/2 | • |
| SGDEH325 | 2.5 mm | 3/32 | 3 | 6 1/2 | • |
| SGDEH330 | 3.0 mm | 3/16 | 3 | 6 1/2 | • |

Blow molded case included.

## Electronic Miniature/Long

- Extra long shanks for improved reach
- Small diameter shanks provide excellent clearance in tight applications
- Rotating handle mechanism for easy turning, important when working on detailed electronics work
- Bimold handle for a comfortable, nonslip gripping surface



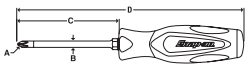

### Flat/Phillips®

| Stock No. | A | B | C | D | Set Contains: SGDEL40 |
|---|---|---|---|---|---|
| SGDEL8 | — | 1/8 | 8 | 11 3/8 | • |
| SGDEL10 | — | 3/16 | 10 | 13 3/8 | • |
| SGDELP8 | #0 | 1/8 | 8 | 11 3/8 | • |
| SGDELP10 | #1 | 3/16 | 10 | 13 3/8 | • |



SGDEL40

## TORX® TIP SOFT HANDLE INSTINCT®




### *TORX* Standard

- Designed for internal type *TORX* fasteners used in automotive and appliance industries

| Red | Green | Orange | A | B | C | D | Set Contains: SGDTX90BR | SGDTX90BO | SGDTX90BG | SGDTX50BR |
|---|---|---|---|---|---|---|---|---|---|---|
| SGDTX38BR | SGDTX38BG | SGDTX38BO | T8 | 3/16 | 3 | 7 1/4 | • | • | • | |
| SGDTX310BR | SGDTX310BG | SGDTX310BO | T10 | 3/16 | 3 | 7 1/4 | • | • | • | |
| SGDTX315BR | SGDTX315BG | SGDTX315BO | T15 | 3/16 | 3 | 7 1/4 | • | • | • | • |
| SGDTX320BR | SGDTX320BG | SGDTX320BO | T20 | 3/16 | 3 | 7 1/4 | • | • | • | • |
| SGDTX425BR | SGDTX425BG | SGDTX425BO | T25 | 1/4 | 4 | 8 7/8 | • | • | • | • |
| SGDTX427BR | SGDTX427BG | SGDTX427BO | T27 | 1/4 | 4 | 8 7/8 | • | • | • | • |
| SGDTX430BR | SGDTX430BG | SGDTX430BO | T30 | 1/4 | 4 | 8 7/8 | • | • | • | • |
| SGDTX640BR | SGDTX640BG | SGDTX640BO | T40 | 5/16 | 6 | 10 7/8 | • | • | • | |
| SGDTX645BR | SGDTX645BG | SGDTX645BO | T45 | 5/16 | 6 | 10 7/8 | • | • | • | |



SGDTX90BR

### Long

- Offers more torque with less cam-out
- Longer exposed lengths provide access to difficult-to-reach fasteners such as headlight assemblies
- Thin blade diameters provide optimal clearance while alloy offers strength to handle torque/turning force
- Solid *TORX* tip is stronger than a tamper-resistant *TORX* tip

| Red | Green | Orange | A | B | C | D | Set Contains: SGDTXL70BR | SGDTXL70BG | SGDTXL70BO |
|---|---|---|---|---|---|---|---|---|---|
| SGDTX1008BR | SGDTX1008BG | SGDTX1008BO | T8 | 3/16 | 10 | 14 1/8 | • | • | • |
| SGDTX1010BR | SGDTX1010BG | SGDTX1010BO | T10 | 3/16 | 10 | 14 1/8 | • | • | • |
| SGDTX1015BR | SGDTX1015BG | SGDTX1015BO | T15 | 3/16 | 10 | 14 1/8 | • | • | • |
| SGDTX1020BR | SGDTX1020BG | SGDTX1020BO | T20 | 3/16 | 10 | 14 1/8 | • | • | • |
| SGDTX1225BR | SGDTX1225BG | SGDTX1225BO | T25 | 1/4 | 12 | 16 7/8 | • | • | • |
| SGDTX1227BR | SGDTX1227BG | SGDTX1227BO | T27 | 1/4 | 12 | 16 7/8 | • | • | • |
| SGDTX1230BR | SGDTX1230BG | SGDTX1230BO | T30 | 1/4 | 12 | 16 7/8 | • | • | • |

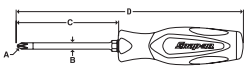


SGDTXL70BR

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Read safety precautions on pages W1 to W4

# TORX® TIP SOFT HANDLE INSTINCT®






SGTX40BR

## *TORX* Mini Tip

- Designed for internal type *TORX* fasteners used in automotive and appliance industries

| Red | Green | Orange | A | B | C | D | Set Contains: SGTX40BR | SGTX40BO | SGTX40BG |
|---|---|---|---|---|---|---|---|---|---|
| SGDT308BR | SGDT308BG | SGDT308BO | T8 | 3/16 | 3 | 5 7/8 | • | • | • |
| SGDT310BR | SGDT310BG | SGDT310BO | T10 | 3/16 | 3 | 5 7/8 | • | • | • |
| SGDT315BR | SGDT315BG | SGDT315BO | T15 | 3/16 | 3 | 5 7/8 | • | • | • |
| SGDT320BR | SGDT320BG | SGDT320BO | T20 | 3/16 | 3 | 5 7/8 | • | • | • |



SGDTRX50BR

## Tamper Resistant

- Hole in the end of each bit tip fits over center peg in *TORX* tamper-resistant fasteners

| Red | A | B | C | D | Set Contains: SGDTRX50BR |
|---|---|---|---|---|---|
| SGDTRX315BR | T15 | 3/16 | 3 | 7 1/4 | • |
| SGDTRX320BR | T20 | 3/16 | 3 | 7 1/4 | • |
| SGDTRX425BR | T25 | 3/16 | 4 | 8 7/8 | • |
| SGDTRX427BR | T27 | 7/32 | 4 | 8 7/8 | • |
| SGDTRX430BR | T30 | 1/4 | 4 | 8 7/8 | • |



SGDTRXL70BR

## Tamper Resistant/Long

- Hole in the end of each bit tip fits over center peg in *TORX* tamper-resistant fasteners

**Applications:**
VW®/Audi® door and interior trim panels plus headlight assemblies. GM® engine sensors/components and steering column multiswitches.

| Red | A | B | C | D | Set Contains: SGDTRXL70BR |
|---|---|---|---|---|---|
| SGDTRX608BR | T8 | 3/16 | 6 | 10 | • |
| SGDTRX610BR | T10 | 3/16 | 6 | 10 | • |
| SGDTRX615BR | T15 | 3/16 | 6 | 10 | • |
| SGDTRX620BR | T20 | 3/16 | 6 | 10 | • |
| SGDTRX825BR | T25 | 1/4 | 8 | 12 3/4 | • |
| SGDTRX827BR | T27 | 1/4 | 8 | 12 3/4 | • |
| SGDTRX830BR | T30 | 1/4 | 8 | 12 3/4 | • |



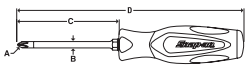
SGTRXL40BR

## Tamper Resistant/Mini Tip

- Hole in the end of each bit tip fits over center peg in *TORX* tamper-resistant fasteners

**Applications**:
*VW/Audi* door and interior trim panels plus headlight assemblies.

| Red | A | B | C | D | Set Contains: SGTRXL40BR |
|---|---|---|---|---|---|
| SGDTR608B | T8 | 3/16 | 6 | 8 7/8 | • |
| SGDTR610B | T10 | 3/16 | 6 | 8 7/8 | • |
| SGDTR615B | T15 | 3/16 | 6 | 8 7/8 | • |
| SGDTR620B | T20 | 3/16 | 6 | 8 7/8 | • |



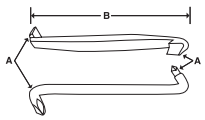

## TORX Standard

| Stock No. | A | B | C | D | Set Contains: SHDTX900 |
|---|---|---|---|---|---|
| SHDTX380 | T8 | 3/16 | 3 | 7 1/4 | • |
| SHDTX3100 | T10 | 3/16 | 3 | 7 1/4 | • |
| SHDTX3150 | T15 | 3/16 | 3 | 7 1/4 | • |
| SHDTX3200 | T20 | 3/16 | 3 | 7 1/4 | • |
| SHDTX4250 | T25 | 1/4 | 4 | 8 7/8 | • |
| SHDTX4270 | T27 | 1/4 | 4 | 8 7/8 | • |
| SHDTX4300 | T30 | 1/4 | 4 | 8 7/8 | • |
| SHDTX6400 | T40 | 5/16 | 6 | 10 7/8 | • |
| SHDTX6450 | T45 | 5/16 | 6 | 10 7/8 | • |



SHDTX900

# SPECIAL APPLICATION




## 90° Offset Screwdrivers

| Stock No. | Tip | A | B | Set Contains: ST50A |
|---|---|---|---|---|
| 120SSDP | Phillips® | #1 and #2 | 4 3/4 | • |
| 340SSDP | *Phillips* | #3 and #4 | 6 | • |
| 10SSD | Flat Tip | .040 x 1/4 | 4 | • |
| 20SSD | Flat Tip | .050 x 5/16 | 4 11/16 | • |
| 30SSD | Flat Tip | .060 x 3/8 | 5 1/2 | • |



ST50A

## Dzus® Fastener

• For *Dzus* type fasteners used in aircraft and auto racing applications

| Stock No. | Tip Thickness, inches | Tip Width, inches | Blade Length, inches | Length, inches |
|---|---|---|---|---|
| S6180 | 3/64 | 31/2 | 2 | 6 13/32 |
| S6189 | 1/32 | 19/64 | 2 | 5 47/64 |



S6180



S6189

## Reversible Blade Screwdriver and Sets

**SDDD101 Reversible Blade Screwdriver Set**

• Includes four reversible bits for eight different tip sizes: 1/4" and 3/16" flat tip, #1 and #2 *Phillips* tip, T15, T20, T25 and T30 *TORX* tip
• Individual 1/4" and 5/16" nut drivers
• ASME® B107
• Durable, classic hard handle is textured for a sure grip



SDDD101

**SDDD41 Reversible Blade Screwdriver Set**

• Includes two reversible bits for four different tip sizes: 9/32" and 13/64" flat tip, #1 and #2 *Phillips* tip
• *ASME* B107
• Durable, classic hard handle is textured for a sure grip



SDDD41

## Miniature Screwdriver/Awl Set

**CM6551 Miniature Screwdriver Set**

• Includes four blades in the following flat tip sizes: .055", .070", .080" and .100"
• Includes awl and plastic pouch



CM6551

**⚠WARNING**

• Do not use screwdrivers as pry bars, chisels or punches
• Read safety precautions on pages W1 to W4

# SPECIAL APPLICATION



SGDQ16KT

## Pop up Screwdriver and Diamond Bits

**SGDQ6 Pop up Screwdriver**

- Easy to use, spring-loaded shank can adjust to different lengths for clearance as well as compact storage (Approximately 6 1/2" and 8 1/2" lengths)
- Shank can be fully released to allow use with cordless drills
- Highly engineered collet incorporates both a magnetic and mechanical locking system to securely hold bits
- Rotating collet sleeve for "spinning" when quickly setting/removing fasteners
- Instinct® handle provides maximum turning power and greater comfort
- Diamond particles in bits "bite" into fasteners which minimizes stripping
- Diamond bits are extremely hard for long lasting performance and minimal wear
- Can accept all conventional 1/4" hex shank insert and power bits

**SGDQ16KT Pop up Screwdriver Kit**

**Kit includes:** SGDQ6 Pop up Screwdriver, SDMD221 – SDMD223 Phillips® Diamond Bits (#1, #2, #3), SDMD213 Flat Tip Diamond Bit, SDMDT10 – SDMDT30 TORX® Diamond Bits (T10 – T30) and SDMD321 – SDMD323 Power *Phillips* Diamond Bits (#1, #2, #3) in PAKSC062 Nylon Pouch.

**PAKSC062 Nylon Pouch**



SDDR40

## Square Tip

- Square tip screwdrivers offer excellent fastener engagement
- Tips are precision cut and vapor blasted for optimal grip

| Set Contains: | SDDR40 |
|---|---|

| Stock No. | Color | Tip | C | D | |
|---|---|---|---|---|---|
| SDDROB30Y | Yellow | #0 | 3 | 6 21/32 | • |
| SDDROB31G | Green | #1 | 3 | 6 21/32 | • |
| SDDROB42R | Red | #2 | 4 | 8 13/32 | • |
| SDDROB43 | Black | #3 | 4 | 8 13/32 | • |



SSFP1



SSFP2



SSF1

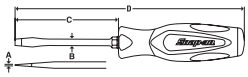
## Low-Profile Screwdrivers

- Screwdriver provides ability to turn screws in extremely limited access areas where other products cannot reach
- Special alloy steel screwdriver bits are the shortest bits possible (10 mm) but still allow for full engagement of the screw
- Flat, low-profile design fits in extremely tight areas
- Uses found in the aviation, aerospace and automotive industries
- Can be used in assembly, on motorcycles and small engine repairs
- Tether hole in handle to help prevent FOD (Foreign Object Damage)
- 4.27" long

**SSFP1 #1 *Phillips* Tip**

**SSFP2 #2 *Phillips* Tip**

**SSF1 Flat Tip**





SGD153BR



SGD155BR



SPRG618O



SPRG625O

## Marine Plug Screwdrivers

- Instinct® screwdriver handles offer a unique combination of power, comfort and versatility
- Chrome-plated blade for corrosion resistance and easy cleanup

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| SGD153BR | .050 | 3/8 | 2 3/4 | 8 1/4 |
| SGD155BR | .050 | 1/2 | 2 29/32 | 10 3/8 |

**SGD153BR Marine Plug Screwdriver**

- Blade is turned from 3/8" diameter alloy stock for strength and uniformity
- Used on medium marine plugs and medium slotted fasteners

**SGD155BR Marine Plug Screwdriver**

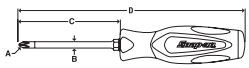
- Blade is turned from 1/2" diameter alloy stock for strength and uniformity
- Used on large marine plugs and large slotted fasteners

## Push-Pull Spring Tools

- Designed to securely hold and maneuver small to medium size springs
- Deep "V-groove" tip and "C-groove" capture prevents spring from sliding off
- Use to remove light duty to medium duty compression or extension springs such as door springs, latch springs, brake adjuster springs, throttle return springs plus deck tensioner and stabilizer springs on tractors/mowers

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| SPRG618O | 3/32 | 3/16 | 5 29/32 | 9 9/16 |
| SPRG625O | 7/64 | 1/4 | 5 29/32 | 10 5/16 |

## POZIDRIV® HARD HANDLE INSTINCT®





SHDZ40R

### *Pozidriv*/Hard Handle

- Walls on tips are less tapered than Phillips® tips
- Tips have wedges for a tight fit on *Pozidriv* fasteners
- *Phillips* tip drivers should not be used on *Pozidriv* fasteners (and vice versa), as they will ride out of the recess and round tool and screw recess corners

| Stock No. | A | B | C | D | Set Contains: SHDZ40R |
|---|---|---|---|---|---|
| SHDZ22R | #2 | 1/4 | 1 1/2 | 3 3/4 | |
| SHDZ31R | #1 | 3/16 | 3 | 7 1/4 | • |
| SHDZ42R | #2 | 1/4 | 4 | 8 7/8 | • |
| SHDZ63R | #3 | 5/16 | 6 | 10 7/8 | • |
| SHDZ84R | #4 | 3/8 | 8 | 13 7/16 | • |

## RATCHETING SCREWDRIVERS Blue-Point®

### BSGDMR6 Ratcheting Screwdriver

- 45-tooth ratcheting mechanism ensures precise positioning and movement
- Bits are stored in a bit magazine inside the handle
- Includes 6 1/4" hex bits: flat tip (4.5 and 5.5), *Phill*ips (#1 and #2) plus TORX® (T15 and T20)
- Bits are considered a consumable and carry no warranty



BSGDMR6

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# RATCHETING SCREWDRIVERS/SOFT GRIP HANDLE SYSTEM

Red, orange or green – pick your preference with a complete screwdriver from the Soft Grip Ratcheting Screwdriver System. Perfectly matched combinations of magnetic bit holding shanks and handles means a perfect match to the technician's particular requirements.



SGDMRCE44



SGDMRCE44G



SGDMRC44G



SGDMRC44O



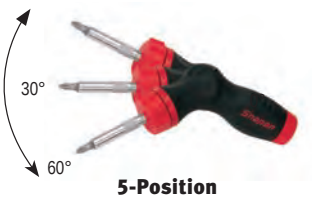
SGDMRC11A



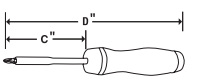
SGDMRC11G



SGDMRC11O




5-Position




## All Handles

- Soft, solvent resistant cover material to provide a positive gripping surface
- "Thumbs up" forward/reverse lever for quick directional changes
- High quality knurled stainless steel shanks
- Contoured thumb stop at base of handle helps user apply maximum pressure to the fastener
- Smooth ratcheting mechanism
- Use with any SGDMRC series interchangeable blades and shanks
- Patented ergonomic handle shape provides comfort and control
- Comfort crown of handle cap provides low-friction surface for palm while turning

## Standard Handle

- Cap functions as a bit holder when working in tight quarters
- Handle stores up to ten bits

## 5-Position Soft Grip

- Features 0°, 30° and 60° locking positions at the push of a button
- Designed for right- or left-hand operation
- Patented ergonomic handle shape provides comfort and control
- Cap functions as a bit holder for storage of up to seven bits
- TransDrive™ ratchet mechanism provides twice the strength of previous mechanism

## Ratcheting Soft Grip

| | Stock No. | Handle | Shank | Flat Tip Bit | Phillips® Bit | C | D |
|---|---|---|---|---|---|---|---|
| 5-Position | SGDMRCE44 | SGDMRCE4 | SGDMRC1-10 | SDM213B | SDM222IRB | 2 5/8 | 8 1/2 |
| Standard | SGDMRC44B | SGDMRC4 | SGDMRC4-40 | SDM213B | SDM222IRB | 3 7/8 | 9 3/4 |
| Stubby | SGDMRC11A | SGDMRCA1 | SGDMRC1-10 | – | SDM2221RB | 2 | 4 1/2 |



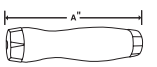
SGDMRC1A



SGDMRCE4G

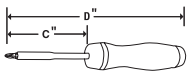


SGDMRC4AO




## Handles

| Red | Green | Orange | Handle | A |
|---|---|---|---|---|
| SGDMRC1A | SGDMRC1AG | SGDMRC1AO | Stubby | 2 5/8 |
| SGDMRC4A | SGDMRC4AG | SGDMRC4AO | Standard | 6 |
| SGDMRCE4 | SGDMRCE4G | SGDMRCE4O | 5-Position | 5 7/8 |




## Standard Handle

| Stock No. | Handle | Color | C | D |
|---|---|---|---|---|
| SSDMR1A | Stubby | Black | 1 15/16 | 4 5/16 |
| SSDMR1AO | Stubby | Orange | 1 15/16 | 4 5/16 |

Includes SDM222IRB #2 Phillips® ACR® Bit.

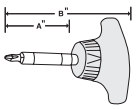
| Stock No. | Handle | Color | C | D |
|---|---|---|---|---|
| SSDMR4B | Standard | Black | 3 25/32 | 8 3/4 |
| SSDMR4BO | Standard | Orange | 3 25/32 | 8 3/4 |
| SSDMR4BR | Standard | Red | 3 25/32 | 8 3/4 |
| SSDMR4BG | Standard | Green | 3 25/32 | 8 3/4 |

Includes SDM211B (3/16") and SDM213B (9/32") Flat Tip bits plus SDM221IRB (#1), SDM222IRB (#2) and SDM223IRB (#3) *Phillips*® ACR bits.

**RKRSSDMR4AC Service Kit**
Order for servicing all the above drivers.

| Stock No. | Handle | Color | C | D |
|---|---|---|---|---|
| SSDMR8A | Long | Black | 7 7/16 | 12 15/16 |
| SSDMR8AO | Long | Orange | 7 7/16 | 12 15/16 |

Includes SDM211B (3/16") and SDM213B (9/32") Flat Tip bits plus SDM221IRB (#1), SDM222IRB (#2) and SDM223IRB (#3) *Phillips ACR* bits.




## T-Handle

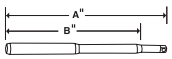
| Stock No. | Handle | Color | A | B |
|---|---|---|---|---|
| SSDMRT4R | Standard | Red | 3 7/8 | 5 27/32 |
| SSDMRT4O | Standard | Orange | 3 7/8 | 5 27/32 |

| Stock No. | Handle | Color | A | B |
|---|---|---|---|---|
| SSDMRT1R | Stubby | Red | 2 | 3 15/16 |
| SSDMRT1O | Stubby | Orange | 2 | 3 15/16 |

| Stock No. | Handle | Color | A | B |
|---|---|---|---|---|
| SSDMRT8A | Long | Black | 8 | 10 |

Includes the following bit: SDM222IRB #2 *Phillips ACR*.

**RKRSSDMR4AC Service Kit**
Order for servicing all the above drivers.




## Interchangeable Shanks

- Use with handles in the soft grip ratcheting screwdriver system
- Neodymium magnet in shank holds bit securely
- 1/4" square drive shanks in standard and flexible styles allow attachment of a wide range of 1/4" drive sockets and accessories

| Stock No. | Description | C | D |
|---|---|---|---|
| SGDMRC1-10 | Magnetic Bit Holder | 3 1/4 | 2 |
| SGDMRC4-40 | Magnetic Bit Holder | 5 | 3 3/4 |
| SGDMRC4-80 | Magnetic Bit Holder | 9 | 7 3/4 |
| SGDMRC4-TM4 | 1/4" Sq. Dr. Shank | 5 | 3 3/4 |
| SGDMRC4-TMF4 | Flexible 1/4" Sq. Dr. Shank | 6 1/4 | 5 |
| SGDMRC4-C6* | Non-Conductive Composite Magnetic Bit Holder | 7 1/4 | 6 |
| SGDMRC-SP | 1/4" Speeder Shank | 13 | — |

**SGDMRC-SP Speeder Shank**
- Ideal for aviation technicians and other applications where accessibility is limited

* Individually tested to protect up to 1,000 volts AC, 1,500 volts DC. SGDMRC4-C6 is not UL® Listed.


SSDMR1A


SSDMR4BR

SSDMR4BG


SSDMR8AO


SSDMR4R


SSDMRT1O


SSDMRT8A


SGDMRC1-10


SGDMRC4-40


SGDMRC4-80


SGDMRC4-TM4


SGDMRC4-TMF4


SGDMRC4-C6


SGDMRC-SP



⚠WARNING
• Do not use screwdrivers as pry bars, chisels or punches
• Read safety precautions on pages W1 to W4

# RATCHETING SCREWDRIVER SETS

## Soft Grip Ratcheting Screwdriver Sets

- SGDMRC starter sets include standard handle, medium and long magnetic bit holding shanks plus two flat tip bits, two Phillips® bits and one TORX® bit to meet most basic job requirements



SGDMRC103A



SGDMRC108AO

## SGDMRC103A Red Ratcheting Screwdriver Set

| Stock No. | Description |
|---|---|
| SGDMRC4A | Ratcheting Handle |
| SGDMRC4-40 | Magnetic Shank/Bit Holder |
| SGDMRC4-80 | Magnetic Shank/Bit Holder |
| SDM211B | 3/16" Flat Tip Bit |
| SDM213B | 9/32" Flat Tip Bit |
| SDM221IRB | #1 *Phillips* ACR® Bit |
| SDM222IRB | #2 *Phillips ACR* Bit |
| SDMT15D | T15 *Torx* Bit |
| PB146A | Storage Case |

**SGDMRC103AO Orange Ratcheting Screwdriver Set**

- Same as SGDMRC103A set except has SGDMRC4O orange ratcheting handle

**SGDMRC103AG Green Ratcheting Screwdriver Set**

- Same as SGDMRC103A set except has SGDMRC4AG green ratcheting handle

## SGDMRC108AO Orange Ratcheting Screwdriver Set

| Stock No. | Description |
|---|---|
| SGDMRC1A | Ratcheting Handle |
| SGDMRC4A | Ratcheting Handle |
| SGDMRC1-10 | Magnetic Shank/Bit Holder |
| SGDMRC4-40 | Magnetic Shank/Bit Holder |
| SGDMRC4-80 | Magnetic Shank/Bit Holder |
| SGDMRC4-TM4 | 1/4" Drive Shank |
| SDM400A | Master Bit Kit |
| PB146A | Storage Case |

**SGDMRC108A Red Ratcheting Screwdriver Set**

- Same as SGDMRC108AO set except has SGDMRC1A and SGDMRC4A ratcheting handles

**SGDMRC108AG Green Ratcheting Screwdriver Set**

- Same as SGDMRC108A set except has SGDMRC1AG and SGDMRC4AG green ratcheting handles




DHW1




SHORTORX

## SHORTORX Bit Set (Blue-Point®)

**Vehicle Applications:**
BMW® vehicles: Under dash and sensors in engine compartment. Cadillac® vehicles: Water pumps; *Cadillac* CTS, 3.2 L, 2003–2004/*Cadillac* Catera 3.0 L, 1997 – 2001: oil drain plug; Ford® vehicles: Escort, early model: Door hinge bolts; GM® vehicles: Fender applications; Jeep® vehicles: Cherokee, 1997 – 1998: Door hinge bolts; VW® vehicles, prior to 1999: Exterior and interior door hinge bolts.

| Stock No. | Description | Size | Set Contains: SHORTORX |
|---|---|---|---|
| SDMTAS15 | T15 | 5/16 | • |
| SDMTAS20 | T20 | 5/16 | • |
| SDMTAS25 | T25 | 5/16 | • |
| SDMTAS27 | T27 | 5/16 | • |
| SDMTAS30 | T30 | 5/16 | • |
| SDMTAS40 | T40 | 5/16 | • |
| SDMTAS45 | T45 | 5/16 | • |
| DHW1 | Reversible Ratcheting Bit Wrench | — | • |

**DHW1 Reversible Ratcheting Bit Wrench *Blue-Point***

- Overall length: 10.75" (273 mm)
- Low head clearance for access to tight spots
- Internal ring in square drive provides more secure bit retention than magnetic models

## Magnetic Ratchet and Bit Set

**TM72SET Magnetic Ratchet and Bit Set**

- Ideal for accessing fasteners in tight areas
- Ratchet features magnetic retention for 1/4" hex bits
- SDM211 (3/16") Flat Tip bit
- SDM213B (9/32") Flat Tip bit
- SDM221IRB (#1) Phillips® ACR® bit
- SDM222IRB (#2) *Phillips ACR* bit
- SDM15D (T15) TORX® bit
- Use RKRTM72A Service Kit



TM72SET

**Includes:**

| Stock No. | ◯ | ◯ 5° | A | B | C | D |
|---|---|---|---|---|---|---|
| TM72SET | 72 | 5° | 7/16 | 15/16 | 1 3/4 | 4 7/16 |



YA480B



BTWSMPK



BTWOSK

## Ratcheting Offset Screwdrivers (Blue-Point®)

**YA480B Right Angle Ratcheting Screwdriver**

**Includes one each:**

- Flat Tip, #2 *Phillips*®, #2 Pozidriv® bits

**BTWSMPK Miniature Ratcheting Handle Set**

**Includes:**

- BTWSM, BTWOS and BTWROS mini ratcheting handles
- SDM213B (9/32") flat tip bit
- SDM213B (9/32") flat tip bit
- SDM221IRB (#1)
- SDM222IRB (#2) *Phillips ACR* bits
- SDMT150D (T15) *TORX* bit

**BTWOSK Miniature Ratcheting Handle Set**

**Includes:**

- BTWOS mini ratcheting handle
- SDM213B (9/32") flat tip bit
- SDM221IRB (#1)
- SDM222IRB (#2) *Phillips ACR* bits
- SDMT15D (T15) *TORX* bit

**BTWS Miniature Ratcheting Handle** Straight

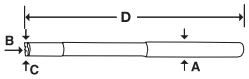
**BTWOS Miniature Ratcheting Handle** 25° Offset

**BTWROS Miniature Ratcheting Handle** 25° Reverse Offset

**Features:**

- 72-tooth ratchet engagement with only 5° movement to engage the next tooth
- 25° offset handles help avoid knuckle injuries
- Magnetic holder keeps bits in place






## Aluminum Starters

- Spring loaded steel bits grip screw slot wall to withstand an 8 lb pull
- Bits release automatically when applied torque reaches a certain level

| Stock No. | A | B | C | D |
|---|---|---|---|---|
| SS5A | 5/16 | Flat Tip | .032 x 9/32 | 5 |
| SSM3* | 5/16 | Flat Tip | .032 x 9/32 | 2 1/2 |
| SSM5A* | 5/16 | Flat Tip | .032 x 9/32 | 5 1/4 |
| SSM6A* | 9/32 | *Phillips* | #3 | 5 1/2 |
| GA260A | 9/32 | *Phillips* | #2 | 2 5/8 |
| GA261B | 9/32 | *Phillips* | #3 | 5 5/8 |
| GA199A | 9/32 | Combination | .032 x 9/32, #2 | 5 7/8 |

*Aluminum handle with magnet.



SS5A SSM5A SSM6A



GA260A GA199A



SSR7

**SSR7 Recessed Screw and Nut Starter**

- Round aluminum body with knurled gripping area in center
- Designed to accommodate the most popular sizes of recessed screws: *TORX*, Socket Head, *Phillips*, etc.
- Opposite end handles #3, #4, #6, #8 and #10 nuts
- Overall length is 6 3/4"

**⚠WARNING**

- Do not use screwdrivers as pry bars, chisels or punches
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# NUT DRIVERS

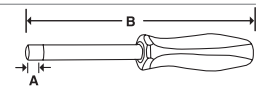


NDDM900A

## Hard Handle, mm, 6-Point

| mm | Stock No. | A* | B | Set Contains: NDDM900A |
|---|---|---|---|---|
| 5 | NDDM50A | 7.5 | 169 | • |
| 6 | NDDM60A | 7.5 | 169 | • |
| 7 | NDDM70A | 9.1 | 169 | • |
| 8 | NDDM80A | 9.9 | 169 | • |
| 9 | NDDM90A | 9.9 | 188 | • |
| 10 | NDDM100A | 13.1 | 207 | • |
| 11 | NDDM110A | 13.1 | 207 | • |
| 12 | NDDM120A | 13.1 | 221 | • |
| 13 | NDDM130A | 13.1 | 221 | • |

*Socket Length






NDD900B

## Hard Handle, inches, 6-Point

| Stock No. | Color | A* | B | Set Contains: NDD900B |
|---|---|---|---|---|
| 3/16 | NDD106B | Black | 19/64 | 6 21/32 | • |
| 7/32 | NDD107BBR | Brown | 19/64 | 6 21/32 | • |
| 1/4 | NDD108BR | Red | 19/64 | 6 21/32 | • |
| 9/32 | NDD109BO | Orange | 23/64 | 6 21/32 | • |
| 5/16 | NDD110BY | Yellow | 23/64 | 6 21/32 | • |
| 11/32 | NDD111BG | Green | 25/64 | 6 21/32 | • |
| 3/8 | NDD112BB | Blue | 25/64 | 7 13/32 | • |
| 7/16 | NDD114BBR | Brown | 33/64 | 8 5/32 | • |
| 1/2 | NDD116BR | Red | 33/64 | 8 21/32 | • |
| 9/16 | NDD118BO | Orange | 47/64 | 9 1/4 | |
| 5/8 | NDD120BY | Yellow | 47/64 | 9 1/4 | |

*Socket Length



NDSGM600

## Ergonomic Soft Grip Handle, mm, 6-Point

| mm | Stock No. | Handle Color | Length | Set Contains: NDSGM600 |
|---|---|---|---|---|
| 7 | NDSGM7 | Blue | 160 | • |
| 8 | NDSGM8 | Blue | 160 | • |
| 10 | NDSGM10 | Blue | 160 | • |
| 12 | NDSGM12 | Blue | 160 | • |
| 13 | NDSGM13 | Blue | 160 | • |
| 14 | NDSGM14 | Blue | 160 | • |



NDSG600

## Ergonomic Soft Grip Handle, inches, 12-Point

| Stock No. | Handle Color | Length | Set Contains: NDSG600 |
|---|---|---|---|
| 1/2 | NDSG12 | Red | 6 3/8 | • |
| 1/4 | NDSG14 | Red | 6 3/8 | • |
| 3/8 | NDSG38 | Red | 6 3/8 | • |
| 5/16 | NDSG516 | Red | 6 3/8 | • |
| 7/16 | NDSG716 | Red | 6 3/8 | • |
| 9/32 | NDSG932 | Red | 6 3/8 | • |



102NDL10

## Locking Nut Drivers (Blue-Point®)

- Tools lock onto hex screws
- Great for hose clamp and other hard-to-reach applications

| Stock No. | Size | Length | Set Contains: 102NDL10 | 102NDLM10 |
|---|---|---|---|---|
| NDL1410 | 1/4 | 10 | • | |
| NDL51610 | 5/16 | 10 | • | |
| NDLM610 | 6 mm | 10 | | • |
| NDLM710 | 7 mm | 10 | | • |



SDM400A

## Master Bit Set (1/4" Hex)

**SDM400A Master Bit Kit**

- 37pc set
- 1/4" hex shank bits
- SDM11 magnetic insert bit holder for quick hex bit changes when using cordless drill or screw gun
- TMBS8A 1/4" hex magnetic socket for use with 1/4" drive handles
- GMB3042 1/4" power hex to square adaptor

**Includes all bits below:**

| | Stock No. | # |
|---|---|---|
| Flat Tip Bit | SDM211B | .031" x .187" |
| | SDM212B | .035" x .219" |
| | SDM213B | .038" x .250" |
| | SDM214C | .046" x .312" |
| | SDM215C | .055" x .375" |
| Hex Bit | SDM2704D | 1/16" |
| | SDM2705D | 5/64" |
| | SDM2706D | 3/32" |
| | SDM2707D | 7/64" |
| | SDM2708D | 1/8" |
| | SDM2709D | 9/64" |
| | SDM2710D | 5/32" |
| | SDM2712D | 3/16" |
| | SDM2714D | 7/32" |
| | SDM2716D | 1/4" |
| Phillips® ACR® Bit | SDM221IRB | #1 |
| | SDM222IRB | #2 |
| | SDM223IRB | #3 |
| TORX® Bit | SDMT8D | T8 |
| | SDMT9D | T9 |
| | SDMT10D | T10 |
| | SDMT15D | T15 |
| | SDMT20D | T20 |
| | SDMT25D | T25 |
| | SDMT27D | T27 |
| | SDMT30D | T30 |
| | SDMT40D | T40 |
| POZIDRIV® *ACR* Bit | SDM251IRC | #1 |
| | SDM252IRB | #2 |
| | SDM253IRC | #3 |
| Scrulox® Bit | BTS0 | #0 |
| | BTS1 | #1 |
| | BTS2 | #2 |
| | BTS3 | #3 |
| Storage Case | PB90A | |



SDM410

## Master Bit Set (1/4" Hex)

**SDM410 Metric Bit Set**

- Popular array of adaptors allowing use with hand or cordless tools
- Blow molded parts case to keep components organized (PB900)

| | Stock No. | # |
|---|---|---|
| Flat Tip Bit | SDM211B | .031" x .187" |
| | SDM212B | .035" x .219" |
| | SDM213B | .038" x .250" |
| | SDM214C | .046" x .312" |
| | SDM215C | .055" x .375" |
| *Phillips ACR* Bit | SDM221IRB | #1 |
| | SDM222IRB | #2 |
| | SDM223IRB | #3 |
| *POZIDRIV ACR* Bit | SDM251IRC | #1 |
| | SDM252IRB | #2 |
| | SDM253IRC | #3 |
| *Phillips* Limited Clearance Bit | SDM222CZ | #2 |
| Metric Hex Bit | SDMM2702.5B | 2.5 mm |
| | SDMM2702B | 2 mm |
| | SDMM2703B | 3 mm |
| | SDMM2704C | 4 mm |
| | SDMM2705C | 5 mm |
| | SDMM2706C | 6 mm |
| | SDMM2708B | 8 mm |
| | SDMM2710B | 10 mm |
| *TORX* Bit | SDMT8D | T8 |
| | SDMT9D | T9 |
| | SDMT10D | T10 |
| | SDMT15D | T15 |
| | SDMT20D | T20 |
| | SDMT25D | T25 |
| | SDMT27D | T27 |
| | SDMT30D | T30 |
| | SDMT40D | T40 |
| *TORX* Tamper-Resistant Bit | SDMTR10 | T10 |
| | SDMTR15 | T15 |
| | SDMTR20 | T20 |
| | SDMTR25 | T25 |
| | SDMTR27 | T27 |
| | SDMTR30 | T30 |
| | SDMTR40 | T40 |
| | SDMTR8 | T8 |
| 1/4" Hex opening, 1/4" drive | TMBS8A | |
| 1/4" Hex to 1/4" Square | GMB3042 | |
| Insert Bit Magnetic Holder | SDM11 | |
| Storage Case | PB900 | |



WARNING

• Read safety precautions on pages W1 to W4

# BIT SETS



SDM32KT

## Ball Hex Bit Sets (1/4" Hex)

**SDM32KT Ball Hex Set (Blue-Point®)**
- 1/4" shank bits for use in difficult access applications where fastener cannot be approached straight on
- 32pc set

| | Stock No. | # |
|---|---|---|
| Metric | SDMBMH2702 | 2 mm |
| | SDMBMH2702.5 | 2.5 mm |
| | SDMBMH2703 | 3 mm |
| | SDMBMH2704 | 4 mm |
| | SDMBMH2705 | 5 mm |
| | SDMBMH2706 | 6 mm |
| | SDMBMH2707 | 7 mm |
| | SDMBMH2708 | 8 mm |
| | SDMBMH2709 | 9 mm |
| | SDMBMH2710 | 10 mm |
| Fractional | SDMBH2706 | 3/32" |
| | SDMBH2707 | 7/64" |
| | SDMBH2708 | 1/8" |
| | SDMBH2709 | 9/64" |
| | SDMBH2710 | 5/32" |
| | SDMBH2712 | 3/16" |
| | SDMBH2714 | 7/32" |
| | SDMBH2716 | 1/4" |
| | SDMBH2720 | 5/16" |
| | SDMBH2724 | 3/8" |

| | Stock No. | # |
|---|---|---|
| TORX® | SDMBT10 | T10 |
| | SDMBT15 | T15 |
| | SDMBT20 | T20 |
| | SDMBT25 | T25 |
| | SDMBT27 | T27 |
| | SDMBT30 | T30 |
| | SDMBT40 | T40 |
| | SDMBT45 | T45 |
| | SDMBT50 | T50 |
| | SDMBT55 | T55 |
| Bit Holder | SDM13 | — |
| 1/4" Fem Hex to 1/4" Fem Sq Dr. Adaptor | TMBS108 | — |



SDM11KT

**SDM11KT *TORX* Ball Hex Set *(Blue-Point)***
- 1/4" shank bits for use in difficult access applications where fastener cannot be approached straight on
- 11pc set
- Includes storage case with belt clip

| | Stock No. | # |
|---|---|---|
| *TORX* | SDMBT10 | T10 |
| | SDMBT15 | T15 |
| | SDMBT20 | T20 |
| | SDMBT25 | T25 |
| | SDMBT27 | T27 |
| | SDMBT30 | T30 |
| | SDMBT40 | T40 |
| | SDMBT45 | T45 |
| | SDMBT50 | T50 |
| Bit Holder | SDM13 | — |
| 1/4" Fem Hex to 1/4" Fem Sq Dr. Adaptor | TMBS108 | — |



SDMC8D



SDMC8GT

## Ratcheting Screwdriver Bit Sets

- All bits are 1/4" hex shank

**SDMC8D Screwdriver Bit Set**
- Set includes one Flat Diamond Tip Bit (1 mm), three Phillips® Diamond Tip Bits (#1, #2, #3) and four *TORX* Diamond Tip Bits (T15, T20, T25, T30) in SDMC8 Storage Case

**SDMC8RD Screwdriver Bit Set**
- Set includes one Flat Diamond Tip Bit (1 mm), three *Phillips* Diamond Tip Bits (#1, #2, #3) and four *TORX* Diamond Tip Bits (T15, T20, T25, T30) in SDMC8R Storage Case

**SDMC8T Screwdriver Bit Set**
- Set includes eight *TORX* Bits (T8–T30) in SDMC8 Storage Case

**SDMC8GT Screwdriver Bit Set**
- Set includes eight *TORX* Bits (T8–T30) in SDMC8G Storage Case

**SDMC8OT Screwdriver Bit Set**
- Set includes eight *TORX* Bits (T8–T30) in SDMC8O Storage Case

**SDMC8RT Screwdriver Bit Set**
- Set includes eight *TORX* Bits (T8–T30) in SDMC8R Storage Case

| | Stock No. | # |
|---|---|---|
| Flat Tip Diamond Bit | SDMD213 | 1 mm/5.5 mm |
| *Phillips* Diamond Bit | SDMD221 | #1 |
| | SDMD222 | #2 |
| | SDMD223 | #3 |
| *TORX* Diamond Bit | SDMDT15 | T15 |
| | SDMDT20 | T20 |
| | SDMDT25 | T25 |
| | SDMDT30 | T30 |
| *TORX* Bit | SDMT8D | T8 |
| | SDMT9D | T9 |
| | SDMT10D | T10 |
| | SDMT15D | T15 |
| | SDMT20D | T20 |
| | SDMT25D | T25 |
| | SDMT27D | T27 |
| | SDMT30D | T30 |

## Ratcheting Screwdriver Bit Sets

- All bits are 1/4" hex shank

**SDMC8P Screwdriver Bit Set**
- Set includes two Flat Tip Bits (.031", .038"), three Phillips® Bits (#1, #2, #3), one Limited Clearance *Phillips* Bit (#2), one Scrulox® Bit (#2) and 1" Adaptor in SDMC8 Storage Case

**SDMC8GP Screwdriver Bit Set**
- Same as SDMC8P but uses SDMC8G Green Storage Case

**SDMC8OP Screwdriver Bit Set**
- Same as SDMC8P but uses SDMC8O Orange Storage Case

**SDMC8RP Screwdriver Bit Set**
- Same as SDMC8P but uses SDMC8R Red Storage Case

**SDMC8H Screwdriver Bit Set**
- Set includes eight Hex Bits 3/32"–5/16" in SDMC8 Storage Case

**SDMC8RH Screwdriver Bit Set**
- Same as SDMC8H but uses SDMC8R Red Storage Case

**SDMC8MH Screwdriver Bit Set**
- Set includes eight Metric Hex Bits 2 mm–10 mm in SDMC8 Storage Case

**SDMC8RMH Screwdriver Bit Set**
- Same as SDMC8MH but uses SDMC8R Red Storage Case

**Storage Case**
- Case is designed to fit the shank of Snap-on® ratcheting screwdriver allowing the tools to be stored together
- Indexable tray has good bit spacing and pivots up to make bit selection/removal easy
- Case available in Red, Black, Green and Orange

**SDMC8 Bit Storage Case** Black



SDMC8GP



SDMC8OP

| Description | Stock No. | Size |
|---|---|---|
| Flat Tip Bit | SDM211B | .031" x .187" |
| | SDM213B | .038" x .250" |
| *Phillips* ACR® Bit | SDM221IRB | #1 |
| | SDM222IRB | #2 |
| | SDM223IRB | #3 |
| *Phillips* Limited Clearance Bit | SDM222CZ | #2 |
| *Scrulox* Bit | BTS2 | #2 |
| Hex-to-Square Adaptor | GMB3041 | 1/4" Hex to 1/4" Square |
| Hex Bit | SDM2706D | 3/32" |
| | SDM2708D | 1/8" |
| | SDM2709D | 9/64" |
| | SDM2710D | 5/32" |
| | SDM2712D | 3/16" |
| | SDM2714D | 7/32" |
| | SDM2716D | 1/4" |
| | SDM2720D | 5/16" |
| Metric Hex Bit | SDMM2702B | 2 mm |
| | SDMM2702.5B | 2.5 mm |
| | SDMM2703B | 3 mm |
| | SDMM2704C | 4 mm |
| | SDMM2705C | 5 mm |
| | SDMM2706C | 6 mm |
| | SDMM2708B | 8 mm |
| | SDMM2710B | 10 mm |

## Power Bit Set

**SDMEXT27K Adaptor and Bit Set (27pc)**

| Description | Stock No. | |
|---|---|---|
| Flat Tip Bit | SDM211B | .031" x .187" |
| | SDM212B | .035" x .219" |
| | SDM213B | .038" x .250" |
| *Phillips ACR* Bit | SDM221IRB | #1 |
| | SDM222IRB | #2 |
| | SDM223IRB | #3 |
| *Phillips* Power Bit | SDM321B | #1 |
| | SDM322B | #2 |
| | SDM323A | #3 |
| Magnetic Nutsetter | SDMN25 | 1/4" Hex x 1/4" |
| | SDMN31 | 1/4" Hex x 5/16" |
| *Scrulox* Bit | BTS1 | #1 |
| | BTS2 | #2 |
| | BTS3 | #3 |
| *TORX* Bit | SDMT10D | T10 |
| | SDMT15D | T15 |
| | SDMT20D | T20 |
| | SDMT25D | T25 |
| | SDMT27D | T27 |
| | SDMT30D | T30 |
| Hex-to-Square Adaptor, 1/4" Hex to 1/4" Square | GMB3041 | 1" Long |
| | GMB3042 | 2" Long |
| | GMB3046 | 6" Long |
| Hex-to-Square Adaptor, 1/4" Hex to 3/8" Square | AB3042 | 2" Long |
| | AB3046 | 6" Long |
| Insert Bit Magnetic Holder | SDM11 | — |
| Quick-Change Coupler, 1/4" Drive | TMC109A | — |



SDMEXT27K



**⚠WARNING**

• Read safety precautions on pages W1 to W4

# BIT SETS



SDML19KT



SDMEXT19K



CTS561BITXL



YA52PBSQC

## Power Bit Sets

**SDML19KT Long Power Bit Set**
- Includes an assortment of popular sized bits to cover a wide range of applications
- Helps avoid costly damage to work surface by eliminating chuck contact

**Includes:**
- Four flat tip bits: two 3" long, (2) 6" long
- Six Phillips® bits: three 2 3/4" long, three 6" long
- Eight TORX® bits: four 2 3/4" long, four 6" long
- TMC109A quick change coupler

**SDMEXT19K Adaptor and Bit Set**
- Complete set includes the most popular sizes and lengths of extensions, adaptors and bits
- 1/4" hex to 1/4" or 3/8" square drives hex-to-square adaptors for use with sockets (2" and 6" long)
- Magnetic bit holder for use with insert bits and quick change coupler for use with 1/4" hex power bits

**Includes:**
- Three flat tip
- Three *Phillips*
- Three *Phillips* insert bits
- Three *TORX* power bits

**CTS561BITXL Adaptor and Bit Set**
- Comprehensive set offering including stainless steel insert bit adaptor
- Additional length provides greater access and minimizes drill contact with work surface
- Ideal for use with cordless drills and screwdrivers
- Power bits made from tough S2 steel
- Overmolded bit case with indexable trays for easy storage

**Set includes:**
- T8, T10, T15, T20, T25, T27, T30
- *Phillips* #1, #2, #3
- Square #1, #2
- Slotted
- 6" Stainless Adaptor with magnet retention
- SDM611 Adaptor, 6" Magnetic Bit
- CTS561BITCS indexable case

**YA52PBSQC Power Bit Set (Blue-Point®)**
- Ideal for use with cordless drills and screwdrivers

**Includes:**
- Seven six-lobe star (tamper-proof) insert bits
- Three square insert bits
- Four *Phillips* ACR® insert bits
- Four slotted insert bits
- Seven hex insert bits
- Two clutch insert bits
- Six six-lobe star (tamper-proof) power bits
- Three square power bits
- Three *Phillips ACR* power bits
- Three slotted power bits
- Three hex power bits
- Three socket adaptors
- Quick change chuck
- Two *Phillips* double end bits
- Square bit holder
- Storage case

## Magnetic Insert Bit Holders

**SDM11 Insert Bit Magnetic Holder**
- For quick hex bit changes when used with electric drill or screw gun
- Magnetic and lock ring bit retention
- 2 7/8" long

**SSDM10A Bits Pocket Box**
- Pocket sized storage system for SDM series bits
- Includes quick change bit holder

**SSDM28 Magnetic Hex Bit Organizer**
- Holds eight 5/16" and (18) 1/4" hex bits
- Five clips slide on rail to easily access bit
- Magnets on base of holder for attachment to any ferrous metal surface
- Plastic material helps protect finished surface from scratches

**SDM611 Insert Bit Magnetic Holder**
- For quick hex bit changes when used with electric drill or screw gun
- Magnetic bit retention
- 6" long


SDM11



SSDM10A


SSDM28


SDM611

## Screwdriver Bit Holders

**SDM12 Insert Bit Holder**
- Lock ring bit retention for quick hex bit changes
- 1 1/8" long

**TMC109A Quick Change Coupler**
- Use with any 1/4" drive handle
- Spring release shell retracts to accept 1/4" hex power type bits
- Ideal for production situations where positive bit retention is required


SDM12


TMC109A

## Screwdriver Bit Sockets

- For use with standard 1/4" hex SDM series screwdriver bits

| Stock No. | Description |
|---|---|
| FBS8 | 3/8" Drive, Socket for 1/4" Hex Shanks |
| FBS9 | 3/8" Drive, Socket for 5/16" Hex Shanks |
| CFSSB8 | Insulating Universal Bit Socket, 1/4" hex opening, 3/8" drive |


FBS8


CFSSB8

## Magnetic Screwdriver Bit Sockets

- For use with standard 1/4" hex SDM series screwdriver bits

| Stock No. | Description |
|---|---|
| TMBS8A | 1/4" hex opening, 1/4" drive |
| GTMBS8A | 1/4" hex opening, 1/4" drive. Black industrial finish |
| TMUBS8 | 1/4" hex opening, 1/4" drive |
| FBSM8A | 1/4" hex opening, 3/8" drive |


TMBS8A


TMUBS8

## Magnetic Nut Drivers

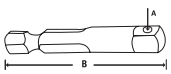
- Allows ratcheting screwdrivers (with 1/4" hex end) to be used as a nut driver
- Magnet securely holds nut during use

| Stock No. | Size | Hex Size, inches | Length, inches |
|---|---|---|---|
| SDMN25 | 1/4 | 1/4 | 1 3/4 |
| SDMN31 | 5/16 | 1/4 | 1 3/4 |


SDMN31

## Hex-to-Square Adaptors (Power)

- 1/4" hex size; 1" length of hex




| Stock No. | A | B |
|---|---|---|
| GMB3041* | Friction Ball | 1 |
| GMB3042 | Friction Ball | 2 |
| GMB3046 | Friction Ball | 6 |
| AB3042 | Ball Detent | 2 |
| AB3044 | Ball Detent | 4 |
| AB3046 | Ball Detent | 6 |

*Insert Bit Style, non-impact


GMB3046


AB3042

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 1/4" HEX SHANK BITS

| | Stock No. | # |
|---|---|---|
| Flat Tip | SDM211B** | .031" x .187" |
| | SDM212B** | .035" x .219" |
| | SDM213B** | .038" x .250" |
| | SDM214C** | .046" x .312" |
| | SDM215C** | .055" x .375" |
| Phillips® | SDM221C | #1 |
| | SDM222ZB | #2 |
| | SDM222CZ* | #2 |
| | SDM223C | #3 |
| Reed & Prince | SDM231A | #2 |
| Clutch A | SDM242 | 3/32" |
| | SDM243 | 1/8" |
| | SDM244 | 5/32" |
| | SDM245 | 3/16" |
| | SDM246 | 1/4" |
| | SDM247 | 5/16" |
| Clutch G | SDM242G | 3/32" |
| | SDM243G | 1/8" |
| | SDM244G | 5/32" |
| | SDM245G | 3/16" |
| | SDM246G | 1/4" |
| Hex, inches | SDM2704D** | 1/16" |
| | SDM2705D** | 5/64" |
| | SDM2706D** | 3/32" |
| | SDM2707D** | 7/64" |
| | SDM2708D** | 1/8" |
| | SDM2709D** | 9/64" |
| | SDM2710D** | 5/32" |
| | SDM2712D** | 3/16" |
| | SDM2714D** | 7/32" |
| | SDM2716D** | 1/4" |
| | SDM2720D | 5/16" |
| | SDM2724D | 3/8" |
| Hex, mm | SDMM2702B | 2 mm |
| | SDMM2702.5B | 2.5 mm |
| | SDMM2703B | 3 mm |
| | SDMM2704C | 4 mm |
| | SDMM2705C | 5 mm |
| | SDMM2706C | 6 mm |
| | SDMM2708B | 8 mm |
| | SDMM2710B | 10 mm |
| Pozidriv® | SDM251C** | #1 |
| | SDM252C** | #2 |
| | SDM253C** | #3 |


SDM221IRB


SDM221IRB

## *Phillips* ACR® Installer/Remover

- Anti-camout ribs bite into fasteners and help prevent camout

| Stock No. | # |
|---|---|
| SDM221IRB*** | #1 |
| SDM222IRB*** | #2 |
| SDM223IRB*** | #3 |

***Part of SDM400A Master Bit Set

| | Stock No. | # |
|---|---|---|
| Torx® | SDMT6A | T6 |
| | SDMT7A | T7 |
| | SDMT8D** | T8 |
| | SDMT9D** | T9 |
| | SDMT10D** | T10 |
| | SDMT15D** | T15 |
| | SDMT20D** | T20 |
| | SDMT25D** | T25 |
| | SDMT27D** | T27 |
| | SDMT30D** | T30 |
| | SDMT40D** | T40 |
| Square | BTS0** | #0 |
| | BTS1** | #1 |
| | BTS2** | #2 |
| | BTS3** | #3 |
| Tri-Wing | BTW0A | #0 |
| | BTW1A | #1 |
| | BTW2A | #2 |
| | BTW3A | #3 |
| | BTW4A | #4 |
| | BTW5A | #5 |
| | BTW6A | #6 |
| Double Square | BTSS2 | #2 |

*Small profile/narrow tip **Included as part of SDM400A Master Bit Set

- BTS and BTSS Series bits can be used on recessed double square fasteners used on trailer and RV exteriors
- Bit size varies by application


SDMTW8A


SDMW221A

## Wobble Bits

- Give up to an 18° angle of "wobble"

| Stock No. | # |
|---|---|
| SDMTW8A | T8 |
| SDMTW9A | T9 |
| SDMTW10A | T10 |
| SDMTW15A | T15 |
| SDMTW20A | T20 |
| SDMTW25A | T25 |
| SDMTW27A | T27 |
| SDMTW30A | T30 |
| SDMTW40A | T40 |
| SDMW221A | #1 |
| SDMW222A | #2 |
| SDMW223A | #3 |



SDMTR8

## Tamper - Resistant *TORX*

- Bits SDMTR8 through SDMTR40 are all 1/4", bits SDMTR45 and SDMTR50 are 5/16"

| Stock No. | # |
|---|---|
| SDMTR8 | T8 |
| SDMTR10 | T10 |
| SDMTR15 | T15 |
| SDMTR20 | T20 |
| SDMTR25 | T25 |
| SDMTR27 | T27 |
| SDMTR30 | T30 |
| SDMTR40 | T40 |
| SDMTR45 | T45 |
| SDMTR50 | T50 |

## *Pozidriv ACR* Installer/Remover

- Anti-camout ribs bite into fasteners and help prevent camout


SDM252IRA

| Stock No. | # |
|---|---|
| SDM251IRC*** | #1 |
| SDM252IRC*** | #2 |
| SDM253IRC*** | #3 |

***Part of SDM400A Master Bit Set

## Diamond Tip Insert Bits

- Diamond particles "bite" into fasteners which minimizes slipping
- Diamond particles are extremely hard for long-lasting performance and minimal wear

| | Stock No. | # |
|---|---|---|
| Phillips® | SDMD221 | #1 |
| | SDMD222 | #2 |
| | SDMD223 | #3 |
| Flat Tip | SDMD212 | .8 mm/5.5 mm |
| | SDMD213 | 1 mm/5.5 mm |
| | SDMD214 | 1.2 mm/6.5 mm |
| TORX® | SDMDT10 | T10 |
| | SDMDT15 | T15 |
| | SDMDT20 | T20 |
| | SDMDT25 | T25 |
| | SDMDT30 | T30 |
| | SDMDT40 | T40 |

## Diamond Tip Power Bits

| | Stock No. | # |
|---|---|---|
| Power Bit | SDMD321 | #1 |
| | SDMD322 | #2 |
| | SDMD323 | #3 |

## Mortorq® Bits

- Typically used on aerospace applications
- Low-profile head design, high-strength torque acceptance and lighter weight

| | Stock No. | # |
|---|---|---|
| *Mortorq* | SDMMT00 | #00 |
| | SDMMT0 | #0 |
| | SDMMT1 | #1 |
| | SDMMT2 | #2 |
| | SDMMT3 | #3 |

# INSERT BITS

## *TORX*

| | Stock No. | # | II | Length, inches |
|---|---|---|---|---|
| *TORX* | SDMTA40 | T40 | .312 | 1 1/4 |
| | SDMTA45 | T45 | .312 | 1 1/4 |
| | SDMTA50 | T50 | .312 | 1 1/4 |
| | SDMTA55 | T55 | .312 | 1 1/4 |

## Specialty Bit

| | Stock No. | II |
|---|---|---|
| | SDM3D24 | .312 |

**SDM3D24 Flat Tip/#2 Phillips® Insert Bit**

- Double end bit #2 *Phillips* and .05" slotted tip
- For use with SDDDM series pocket screwdrivers



**BLPTMBS1414**

## Bit Holder and 1/4" Bits (Blue-Point®)

| Stock No. | Description | Size |
|---|---|---|
| BLPTMBS1414 | Bit Holder (for 1/4" hex bits) | — |
| BLPTMBS3814 | Bit Holder (for 1/4" hex bits) | 3/8" |
| BLPHB18 | Hex Bit | 1/8" |
| BLPHB964 | Hex Bit | 9/64" |
| BLPHB532 | Hex Bit | 5/32" |
| BLPHB316 | Hex Bit | 3/16" |
| BLPHB732 | Hex Bit | 7/32" |
| BLPHB14 | Hex Bit | 1/4" |
| BLPHBM3 | Metric Hex Bit | 3 mm |
| BLPHBM4 | Metric Hex Bit | 4 mm |
| BLPHBM5 | Metric Hex Bit | 5 mm |
| BLPHBM6 | Metric Hex Bit | 6 mm |
| BLPTB10TP | Tamper-Resistant *TORX* Bit | T10 |
| BLPTB15TP | Tamper-Resistant *TORX* Bit | T15 |
| BLPTB20TP | Tamper-Resistant *TORX* Bit | T20 |
| BLPTB25TP | Tamper-Resistnat *TORX* Bit | T25 |
| BLPTB30TP | Tamper-Resistant *TORX* Bit | T30 |
| BLPFB532 | Flat Tip Bit | 5/32" |
| BLPFB732 | Flat Tip Bit | 7/32" |
| BLPFB932 | Flat Tip Bit | 9/32" |
| BLPFB316 | Flat Tip Bit | 3/16" |
| BLPFB14 | Flat Tip Bit | 1/4" |
| BLPPB0 | *Phillips* Tip Bit | #0 |
| BLPPB1 | *Phillips* Tip Bit | #1 |
| BLPPB2 | *Phillips* Tip Bit | #2 |
| BLPPB3 | *Phillips* Tip Bit | #3 |
| BLPSQB1 | Square Tip Bit | #1 |
| BLPSQB2 | Square Tip Bit | #2 |



**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# POWER BITS

## Phillips®

| | Stock No. | # | | A | B |
|---|---|---|---|---|---|
| Phillips | SDM220A | #0 | 1/4 | — | 1 |
| | SDM320A | #0 | 1/4 | .125 | 1 15/16 |
| | SDM321B | #1 | 1/4 | .187 | 1 15/16 |
| | SDM322B | #2 | 1/4 | .234 | 1 15/16 |
| | SDM323A | #3 | 1/4 | .234 | 1 15/16 |
| | SDM421B | #1 | 1/4 | .187 | 2 3/4 |
| | SDM422B | #2 | 1/4 | .234 | 2 3/4 |
| | SDM423B | #3 | 1/4 | .234 | 2 3/4 |
| | SDM521A | #1 | 1/4 | .187 | 3 1/2 |
| | SDM522A | #2 | 1/4 | .234 | 3 1/2 |
| | SDM523A | #3 | 1/4 | .234 | 3 1/2 |
| | SDM621A | #1 | 1/4 | .187 | 6 |
| | SDM622A | #2 | 1/4 | .234 | 6 |
| | SDM623A | #3 | 1/4 | .234 | 6 |
| | SDMA421 | #1 | 5/16 | .250 | 3 |
| | SDMA422A | #2 | 5/16 | .250 | 3 |
| | SDMA423A | #3 | 5/16 | .296 | 3 |
| | SDMB422A | #2 | 7/16 | .312 | 3 |
| | SDMB423A | #3 | 7/16 | .312 | 3 |
| | SDMB424A | #4 | 7/16 | .375 | 3 |
| | SDMB522A | #2 | 7/16 | .312 | 4 1/2 |
| | SDMB523A | #3 | 7/16 | .312 | 4 1/2 |
| | SDMB524A | #4 | 7/16 | .375 | 4 1/2 |
| | SDMB622 | #2 | 7/16 | .312 | 6 |
| | SDMB623A | #3 | 7/16 | .312 | 6 |
| | SDMB624A | #4 | 7/16 | .312 | 6 |

## Flat Tip

| | Stock No. | # | | A | B |
|---|---|---|---|---|---|
| Flat Tip | SDM311B | .026" x .122" | 1/4 | .187 | 1 15/16 |
| | SDM312B | .028" x .134" | 1/4 | .187 | 1 15/16 |
| | SDM313B | .032" x .154" | 1/4 | .187 | 1 15/16 |
| | SDM314B | .034" x .187" | 1/4 | .187 | 1 15/16 |
| | SDM315A | .036" x .215" | 1/4 | .234 | 1 15/16 |
| | SDM316A | .038" x .250" | 1/4 | .234 | 1 15/16 |
| | SDM317A | .042" x .275" | 1/4 | .234 | 1 15/16 |
| | SDM318A | .046" x .312" | 1/4 | .234 | 1 15/16 |
| | SDM319A | .050" x .360" | 1/4 | .234 | 1 15/16 |
| | SDM411B | .026" x .122" | 1/4 | .234 | 3 |
| | SDM412B | .028" x .134" | 1/4 | .187 | 3 |
| | SDM413B | .032" x .154" | 1/4 | .187 | 3 |
| | SDM414A | .034" x .187" | 1/4 | .187 | 3 |
| | SDM415A | .036" x .215" | 1/4 | .250 | 3 |
| | SDM416A | .038" x .250" | 1/4 | .234 | 3 |
| | SDM417A | .042" x .275" | 1/4 | .234 | 3 |
| | SDM418A | .046" x .312" | 1/4 | .234 | 3 |
| | SDM419A | .050" x .360" | 1/4 | .234 | 3 |
| | SDM511A | .026" x .122" | 1/4 | .187 | 3 1/2 |
| | SDM512A | .028" x .134" | 1/4 | .187 | 3 1/2 |
| | SDM513A | .032" x .154" | 1/4 | .187 | 3 1/2 |
| | SDM514A | .034" x .187" | 1/4 | .187 | 3 1/2 |
| | SDM515A | .036" x .215" | 1/4 | .234 | 3 1/2 |
| | SDM516A | .038" x .250" | 1/4 | .234 | 3 1/2 |
| | SDM517A | .042" x .275" | 1/4 | .234 | 3 1/2 |
| | SDM518A | .046" x .312" | 1/4 | .234 | 3 1/2 |
| | SDM519A | .050" x .360" | 1/4 | .234 | 3 1/2 |
| | SDM614 | .034" x .187" | 1/4 | .187 | 6 |
| | SDM616 | .038" x .250" | 1/4 | .234 | 6 |




SDM361IA

## Phillips ACR® Installer Bits

| Stock No. | # | | A | B |
|---|---|---|---|---|
| SDM361IA | #1 | 1/4 | .187 | 1 15/16 |
| SDM362IA | #2 | 1/4 | .234 | 1 15/16 |
| SDM363IA | #3 | 1/4 | .234 | 1 15/16 |



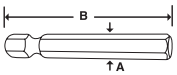
SDM361RA

## Phillips ACR Removal Bits

| Stock No. | # | | A | B |
|---|---|---|---|---|
| SDM361RA | #1 | 1/4 | .187 | 1 15/16 |
| SDM362RA | #2 | 1/4 | .234 | 1 15/16 |
| SDM363RA | #3 | 1/4 | .234 | 1 15/16 |

## TORX®

| | Stock No. | # | | A | B |
|---|---|---|---|---|---|
| TORX | SDMT307A | T7 | 1/4 | .140 | 1 15/16 |
| | SDMT308A | T8 | 1/4 | .140 | 1 15/16 |
| | SDMT309A | T9 | 1/4 | .140 | 1 15/16 |
| | SDMT310A | T10 | 1/4 | .140 | 1 15/16 |
| | SDMT315A | T15 | 1/4 | .140 | 1 15/16 |
| | SDMT320A | T20 | 1/4 | .203 | 1 15/16 |
| | SDMT325B | T25 | 1/4 | .203 | 1 15/16 |
| | SDMT327A | T27 | 1/4 | .203 | 1 15/16 |
| | SDMT330A | T30 | 1/4 | .250 | 1 15/16 |
| | SDMT340A | T40 | 1/4 | .250 | 1 15/16 |
| | SDMT407 | T7 | 1/4 | .140 | 2 3/4 |
| | SDMT408 | T8 | 1/4 | .140 | 2 3/4 |
| | SDMT409 | T9 | 1/4 | .140 | 2 3/4 |
| | SDMT410 | T10 | 1/4 | .140 | 2 3/4 |
| | SDMT415 | T15 | 1/4 | .140 | 2 3/4 |
| | SDMT420 | T20 | 1/4 | .203 | 2 3/4 |
| | SDMT425 | T25 | 1/4 | .203 | 2 3/4 |
| | SDMT427 | T27 | 1/4 | .203 | 2 3/4 |
| | SDMT430 | T30 | 1/4 | .250 | 2 3/4 |
| | SDMT440 | T40 | 1/4 | .250 | 2 3/4 |
| | SDMT507 | T7 | 1/4 | .140 | 3 1/2 |
| | SDMT508 | T8 | 1/4 | .140 | 3 1/2 |
| | SDMT509 | T9 | 1/4 | .140 | 3 1/2 |
| | SDMT510 | T10 | 1/4 | .140 | 3 1/2 |
| | SDMT515 | T15 | 1/4 | .140 | 3 1/2 |
| | SDMT520 | T20 | 1/4 | .203 | 3 1/2 |
| | SDMT525 | T25 | 1/4 | .203 | 3 1/2 |
| | SDMT527 | T27 | 1/4 | .203 | 3 1/2 |
| | SDMT530 | T30 | 1/4 | .250 | 3 1/2 |
| | SDMT540 | T40 | 1/4 | .250 | 3 1/2 |
| | SDMT607 | T7 | 1/4 | .140 | 6 |
| | SDMT608 | T8 | 1/4 | .140 | 6 |
| | SDMT609 | T9 | 1/4 | .140 | 6 |
| | SDMT610 | T10 | 1/4 | .156 | 6 |
| | SDMT615 | T15 | 1/4 | .156 | 6 |
| | SDMT620 | T20 | 1/4 | .187 | 6 |
| | SDMT625 | T25 | 1/4 | .234 | 6 |
| | SDMT627 | T27 | 1/4 | .250 | 6 |
| | SDMT630 | T30 | 1/4 | .250 | 6 |
| | SDMT640 | T40 | 1/4 | .250 | 6 |






SDM351B

## Pozidriv®, inches

| Stock No. | # | | A | B |
|---|---|---|---|---|
| SDM351B | #1 | 1/4 | .187 | 1 15/16 |
| SDM352B | #2 | 1/4 | .234 | 1 15/16 |
| SDM353B | #3 | 1/4 | .234 | 1 15/16 |
| SDM451A | #1 | 1/4 | .187 | 2 3/4 |
| SDM452A | #2 | 1/4 | .234 | 2 3/4 |
| SDM453A | #3 | 1/4 | .234 | 2 3/4 |
| SDM551A | #1 | 1/4 | .187 | 3 1/2 |
| SDM552A | #2 | 1/4 | .234 | 3 1/2 |
| SDM553A | #3 | 1/4 | .234 | 3 1/2 |
| SDM651A | #1 | 1/4 | .187 | 6 |
| SDM652A | #2 | 1/4 | .234 | 6 |
| SDM653A | #3 | 1/4 | .234 | 6 |



SDMTR325



SDMTS302

## Tamper-Resistant TORX®

| Stock No. | # | Length, inches |
|---|---|---|
| SDMTR308 | T8 | 1 15/16 |
| SDMTR310 | T10 | 1 15/16 |
| SDMTR315 | T15 | 1 15/16 |
| SDMTR320 | T20 | 1 15/16 |
| SDMTR325 | T25 | 1 15/16 |
| SDMTR327 | T27 | 1 15/16 |
| SDMTR330 | T30 | 1 15/16 |

## Square

| Stock No. | # | Length, inches |
|---|---|---|
| SDMTS301 | #1 | 1 15/16 |
| SDMTS302 | #2 | 1 15/16 |
| SDMTS601 | #1 | 6 |
| SDMTS602 | #2 | 6 |



SDMM3702



SDM3704

## Hex, mm

| Stock No. | mm | A | B |
|---|---|---|---|
| SDMM3702 | 2 | .09 | 1 15/16 |
| SDMM37025 | 2.5 | .11 | 1 15/16 |
| SDMM3703 | 3 | .13 | 1 15/16 |
| SDMM3704 | 4 | .18 | 1 15/16 |
| SDMM3705 | 5 | .22 | 1 15/16 |
| SDMM3706 | 6 | .27 | 1 15/16 |
| SDMM3707 | 7 | .31 | 1 15/16 |
| SDMM3708 | 8 | .36 | 1 15/16 |
| SDMM3710 | 10 | .45 | 1 15/16 |

## Hex, inches

| Stock No. | # | | A | B |
|---|---|---|---|---|
| SDM3704 | 1/16 | 1/4 | .115 | 1 15/16 |
| SDM3705 | 5/64 | 1/4 | .234 | 1 15/16 |
| SDM3706 | 3/32 | 1/4 | .234 | 1 15/16 |
| SDM3707 | 7/64 | 1/4 | .234 | 1 15/16 |
| SDM3708 | 1/8 | 1/4 | .234 | 1 15/16 |
| SDM3709 | 9/64 | 1/4 | .234 | 1 15/16 |
| SDM3710 | 5/32 | 1/4 | .234 | 1 15/16 |
| SDM3712 | 3/16 | 1/4 | .234 | 1 15/16 |
| SDM3714 | 7/32 | 1/4 | .250 | 1 15/16 |
| SDM3716 | 1/4 | 1/4 | .250 | 1 15/16 |
| SDMA4708 | 1/8 | 5/16 | .234 | 3 |
| SDMA4710 | 5/32 | 5/16 | .234 | 3 |
| SDMA4712 | 3/16 | 5/16 | .234 | 3 |
| SDMA4714 | 7/32 | 5/16 | .281 | 3 |
| SDMA4716 | 1/4 | 5/16 | .281 | 3 |
| SDMA4720 | 5/16 | 5/16 | .312 | 3 |
| SDMA4724 | 3/8 | 5/16 | .312 | 3 |

**⚠WARNING**

- Do not use bits with impact drivers
- Read safety precautions on pages W1 to W4

# AWLS, HOOKS AND PICKS



SGASA104BR

## Awls and Hooks/Soft Grip

- Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning crevices

Set Contains: SGASA104BR

| Red | Description | Blade Length, inches | Overall Length, inches | Red |
|---|---|---|---|---|
| SG4ASABR | Awl | 3 3/4 | 8 | • |
| SG4ASHBR | Hook Tool | 3 3/4 | 8 | • |
| SG5ASABR | Awl | 4 3/4 | 9 5/8 | • |
| SG7ASABR | Awl | 5 | 10 5/8 | • |

Set includes storage tray.



SGASA204AO

## Miniature Awls, Hooks and Picks/Soft Grip

- Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning crevices
- 3 1/8" blade length, 6" long

Set Contains: SGASA204A, SGASA204AO, SGASA204AG

| Red | Orange | Green | Description | Red | Orange | Green |
|---|---|---|---|---|---|---|
| SG3ASABR | SG3ASABO | SG3ASABG | Mini-Awl | • | • | • |
| SG3ASHBR | SG3ASHBO | SG3ASHBG | Mini-Hook | • | • | • |
| SG3ASH45BR | SG3ASH45BO | SG3ASH45BG | Mini-Pick, 45° tip | • | • | • |
| SG3ASH90BR | SG3ASH90BO | SG3ASH90BG | Mini-Pick, 90° tip | • | • | • |

Sets include storage tray.



SGLASA204G

**Hard Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS

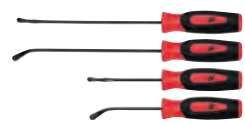
## Long Small Size Awls, Hooks and Picks/Soft Grip

- Use for scribing, alignment, O-ring removal, piercing holes in leather or fabric and cleaning crevices
- Blade length 8", 9 23/32" overall length

Set Contains: SGLASA204A, SGLASA204AO, SGLASA204AG

| Red | Orange | Green | Description | Red | Orange | Green |
|---|---|---|---|---|---|---|
| SGL3ASABR | SGL3ASABO | SGL3ASABG | Long Mini-Awl | • | • | • |
| SGL3ASHBR | SGL3ASHBO | SGL3ASHBG | Long Mini-Hook | • | • | • |
| SGL3ASH45BR | SGL3ASH45BO | SGL3ASH45BG | Long Mini-Pick, 45° tip | • | • | • |
| SGL3ASH90BR | SGL3ASH90BO | SGL3ASH90BG | Long Mini-Pick, 90° tip | • | • | • |

Set includes storage tray.



SGSR104AR

**Hard Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS



SH6ASA

## Awl/Hard Grip

| Stock No. | Blade Length, inches | Overall Length, inches |
|---|---|---|
| SH6ASA | 4 3/4 | 6 5/8 |

## Seal Removal Tools/Soft Grip

Set Contains: SGSR104AR, SGSR104AO, SGSR104AG

| Red | Green | Orange | Tip Style | Blade Length, inches | Overall Length, inches | Red | Orange | Green |
|---|---|---|---|---|---|---|---|---|
| SGSR1AR | SGSR1AG | SGSR1AO | Spoon | 5 1/4 | 8 | • | • | • |
| SGSR2AR | SGSR2AG | SGSR2AO | Spoon | 2 1/2 | 5 11/32 | • | • | • |
| SGSR3AR | SGSR3AG | SGSR3AO | Contoured | 2 1/2 | 5 11/32 | • | • | • |
| SGSR4AR | SGSR4AG | SGSR4AO | Contoured | 5 1/4 | 8 | • | • | • |



PSLR6



PSLR4LT

## Picks and Scribes/Extra Long (Blue-Point®)

- Use to separate wires, remove small fuses and O-rings, retrieve washers and/or to mark metal or plastic surfaces
- Heavy duty shank diameter is 0.02" thicker than standard picks for added durability and extended tool life
- Each pick is 9 3/4" (247.7 mm) long

| Stock No. | Description | Set Contains: PSLR4 | PSLR6 |
|---|---|---|---|
| PSLR4-1 | Hook Pick | • | • |
| PSLR4-2 | 90° Hook Pick | • | • |
| PSLR4-3 | Straight Pick | • | • |
| PSLR4-4 | Complex Pick | • | • |
| PSLR4-5 | Combination Pick | | • |
| PSLR4-6 | Double Angle Pick | | • |

Sets include vinyl storage pouch

## Picks and Scribes/Extra Long/Lighted (*Blue-Point*)

- LED lighted hook and pick set allows easier viewing in dark and hard-to-reach areas
- Made of durable carbon heat-treated steel
- Ergonomic soft grip contoured handle
- Each pick measures 9 3/4" long (247.7 mm)
- Push button LED switch on end of handle
- Each pick requires three LR41 batteries (included). Replacement battery P/N RSND384392PK (one battery)

| Stock No. | Description | Set Contains: PSLR4LT |
|---|---|---|
| PSLR4LT-1 | Hook Pick | • |
| PSLR4LT-2 | 90° Hook Pick | • |
| PSLR4LT-3 | Straight Pick | • |
| PSLR4LT-4 | Complex Pick | • |

## Picks and Scribes/Interchangeable

- Quick-change collet allows picks and hooks to be interchanged fast and without tools
- Six LEDs illuminate dark work areas
- Black oxide finish protects the strong chrome-vanadium steel shafts
- Includes PSLRQC4LT-1 – PSLRQC4LT-4 picks/hooks, durable roll-up nylon pouch and three AAA batteries



PSLRQC4LT

| Stock No. | Description | Set Contains: PSLRQC4LT |
|---|---|---|
| PSLRQC4LT-1 | Straight Pick | • |
| PSLRQC4LT-2 | Complex Pick | • |
| PSLRQC4LT-3 | 90° Pick | • |
| PSLRQC4LT-4 | Hook Pick | • |



YA145



YA149



YA339



YA338

## Picks and Scribes (*Blue-Point*)

| Stock No. | Description | Overall Length, inches (assembled to handle) | Set Contains: YA145 | YA149 |
|---|---|---|---|---|
| YA145-1 | Straight Tip Pick | 7.26 | • | |
| YA145-2 | O-Ring, 90° Tip Pick | 7.20 | • | |
| YA145-3 | Hook Tip Pick | 7.30 | • | |
| YA145-4 | Angle Tip Pick | 7.34 | • | |
| YA149-1 | Straight Pointed Pick | — | | • |
| YA149-2 | Curved With 90° Point Pick | — | | • |
| YA149-3 | 45° with Flat Tip Pick | — | | • |
| YA149-4 | 90° Pointed Pick | — | | • |
| YA149-5 | Double Ended Short Pick | — | | • |
| YA149-6 | Double Ended Long Curve Pick | — | | • |
| YA149-7 | Half Circle Pointed Pick | — | | • |

**YA338 Scribe**
- One straight end, one hooked end for picking O-rings and small parts

**YA339 Scribe**
- One straight end and one 90° angle end for detail work around small objects



WARNING • Read safety precautions on pages W1 to W4

# PRYBARS



PPN300

## Prying/Smoothing Tools

- Intended for spreading/smoothing epoxy, adhesives and silicone uniformly
- Other uses include: cleaning small parts, removing/installing O-rings and gaskets, prying dashboard parts and vents, and prying apart electronic key fobs to access the battery for replacement

| Stock No. | Length, inches | Tip Profile | Set Contains: PPN300 |
|---|---|---|---|
| PPN1030 | 7 | Narrow | • |
| PPN2040 | 7 | Medium | • |
| PPN4050 | 7 | Wide | • |



PBFG415

## PBFG415 Fiberglass Prybar

- Drop forged rust -resistant, hardened steel wedge end is chemically bonded to fiberglass handle
- 50,000 strands of fiberglass are sleeved by a polypropylene jacket for comfort and variable hand placement during use
- About one-half the weight of a steel prybar of the same length and less flexible than a steel prybar for greater leverage
- Polypropylene sleeve is resistant to heat and cold for greater comfort in all temperatures

## Heavy Duty/Striking Crown Handle

- Durable crown handle offers protection from off center hammer strikes
- Handle is 10 3/8" long for a comfortable, secure grip (long handle ensures that two hands can fit for high leverage applications)
- Cylindrical design with taper allows user to find a comfortable grip regardless of hand size



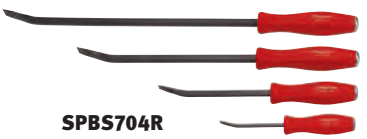
SPBH48R

- 3/4" square bar manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- High leverage flared tip (1 1/8") with precision ground edge
- Handle resists extreme temperatures

| Stock No. | Handle Color | Square Shank, inches | Tip Width, inches | Length, inches |
|---|---|---|---|---|
| SPBH30R | Red | 3/4 | 1 1/8 | 30 |
| SPBH30G | Green | 3/4 | 1 1/8 | 30 |
| SPBH30O | Orange | 3/4 | 1 1/8 | 30 |
| SPBH48R | Red | 3/4 | 1 1/8 | 48 |
| SPBH48O | Orange | 3/4 | 1 1/8 | 48 |
| SPBH48G | Green | 3/4 | 1 1/8 | 48 |
| SPBH54R | Red | 3/4 | 1 1/8 | 54 |
| SPBH54O | Orange | 3/4 | 1 1/8 | 54 |
| SPBH54G | Green | 3/4 | 1 1/8 | 54 |

## Standard Duty/Striking Handle

- Ergonomic shape and contour handle matched to blade length for optimum leverage
- Blade extends through handle and makes contact with end cap to provide solid striking force
- Metal end cap allows hammer striking while reducing chance of damage to handle
- High leverage design with smooth radius head provides maximum leverage when lifting and pulling back



SPBS704R

- Blade manufactured from special alloy steel, precision forged and heat treated for strength and durability
- Industrial finish to protect against corrosion

| Black | Red | Orange | Green | Square Shank, inches | Tip Width, inches | Length, inches | Set Contains: SPBS704 | SPBS704R | SPBS704O | SPBS704G |
|---|---|---|---|---|---|---|---|---|---|---|
| SPBS8 | SPBS8R | SPBS8O | SPBS8G | 1/4 | 7/16 | 8 | • | • | • | • |
| SPBS12 | SPBS12R | SPBS12O | SPBS12G | 3/8 | 5/8 | 12 | • | • | • | • |
| SPBS18 | SPBS18R | SPBS18O | SPBS18G | 7/16 | 23/32 | 18 | • | • | • | • |
| SPBS24 | SPBS24R | SPBS24O | SPBS24G | 7/16 | 13/16 | 24 | • | • | • | • |
| SPBS36 | SPBS36R | SPBS36O | SPBS36G | 5/8 | 1 1/8 | 36 5/8 | | | | |
| – | SPBS42R | SPBS42O | – | 5/8 | 1 1/8 | 42 1/4 | | | | |

## Demolition Chisels/Crown Handle

- Exclusive crown handle offers protection from off-center hammer strikes
- Handle provides a comfortable secure grip in a variety of environments
- Engineered composite handle offers excellent temperature resistance and bar retention

| Stock No. | Handle Color | Hex Shank, inches | Tip Width, inches | Length, inches |
|---|---|---|---|---|
| SPDC18R | Red | 3/4 | 1 1/8 Double Edge | 18 |
| SPDC18G | Green | 3/4 | 1 1/8 Double Edge | 18 |
| SPDC18O | Orange | 1 | 1 1/8 Double Edge | 18 |



SPDC18R

## Striking/40° Offset Blade

| Stock No. | Handle Length, inches | Exposed Bar Length, inches | Square Shank, inches | Tip Width, inches | Tip Type |
|---|---|---|---|---|---|
| MPBS1140O | 5 1/2 | 5 1/2 | 3/8 | 3/8 | Straight |

**MPBS1140O Prybar/Brake Tool**

- Strong 3/8" square alloy steel bar with straight tip
- 11" total length with 40° offset ensures access into tight wheel wells
- Large, comfortable, high-visibility orange handle with striker cap allows good grip versus small, hard-to-hold brake adjustment tools
- Ideal for general prybar applications



MPBS1140O

## Striking/Straight Blade

| Stock No. | Square Shank, inches | Tip Width, inches | Length, inches | Set Contains: MPBS703 |
|---|---|---|---|---|
| MPBS12 | 3/8 | 5/8 | 12 | • |
| MPBS24 | 7/16 | 13/16 | 24 | • |
| MPBS36 | 5/8 | 1 1/8 | 36 5/8 | • |



MPBS703

## Multi-Position

- Each prybar features 17 incremental angles of 15° to provide great flexibility
- High-leverage design with smooth radius head provides maximum leverage when lifting
- Manufactured from special alloy steel, precision-forged and heat-treated for strength and durability
- Industrial finish helps protect against corrosion

| Stock No. | Tip Width, inches | Length, inches | Set Contains: PBMP703A |
|---|---|---|---|
| PBMP8A | 1/2 | 8 | • |
| PBMP12A | 5/8 | 12 | • |
| PBMP16A | 5/8 | 16 | • |
| PBMP24A | 1 | 24 | |
| PBMP36A | 1 | 36 | |



PBMP703A

## Non-marring Prybars

- Made from tough, reinforced nylon
- Ideal for removing clips, fasteners, molding or gaskets from interior/exterior applications
- Will not damage delicate surfaces unlike metal removal tools
- Lightweight and resistant to most automotive fluids
- Block end allows use with hammer

| Stock No. | Length | Tip Width | Tip Profile | Set Contains: PBN500 |
|---|---|---|---|---|
| PBN1 | 6 3/4 | 5/8 | Narrow Wedge | • |
| PBN2 | 6 3/4 | 15/16 | Wide Wedge | • |
| PBN3 | 6 3/4 | 7/8 | Narrow Fork | • |
| PBN5 | 6 3/4 | 1 3/16 | Wide Fork | • |
| PBN7 | 6 3/4 | 1 3/8 | Flat Fork | • |




PBN500



PBN1

**⚠WARNING**

• Read safety precautions on pages W1 to W4

# PRYBARS



PBHG48



PBHC48



NPB124B



PBS704



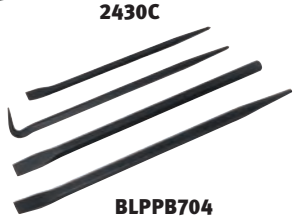
3260B



7030A



2430C



BLPPB704

## Heavy Duty

- Bars feature a rubber grip that eliminates contact with rust and damaged surfaces and protects the bar from damage during transit
- Grip offers a non-slip surface that provides a secure gripping surface/ leverage, when hands are wet, sweaty or oil covered

| Stock No. | Tip Style | Weight, lb | Radius Curves, inches | Length, inches | Diameter, inches |
|---|---|---|---|---|---|
| PBHG48 | 1 1/2" Offset Chisel, 2 1/4" Offset Claw | 9.5 | 5 1/8 | 48 | 1" Hex |
| PBHC48 | 1 1/8" Straight Chisel, 2" Offset Chisel | 11.25 | — | 48 | 1" Hex |
| PBHC60 | 1 1/8" Straight Chisel, 2" Offset Chisel | 14.25 | — | 60 | 1" Hex |

PBHC1 - 48" Replaceable rubber grip.

## Wrecking Bar (Blue-Point®)

- Slotted claw on "gooseneck" end and a chisel configuration on opposite end

| Stock No. | Sq. Stock, inches | Length, inches |
|---|---|---|
| NPB124B | 3/4 | 24 |

## Prybars

- "Rolling head" acts as fulcrum and provides leverage
- Pointed end is useful in many aligning applications

| Stock No. | Sq. Stock, inches | Length, inches | Set Contains: PBS704 |
|---|---|---|---|
| 650 | 5/16 | 6 | • |
| 1250 | 7/16 | 12 | • |
| 1650 | 9/16 | 16 | • |
| 2050 | 11/16 | 20 | • |

## Slate Bar (*Blue-Point*)

| Stock No. | Sq. Stock, inches | Edge, inches | Length, inches |
|---|---|---|---|
| 3260B | 1 | 1/2 | 60 |

## Close Quarter Bars (*Blue-Point*)

- Powerful leverage where space is at a premium
- Ideal for aligning molds

| Stock No. | Sq. Stock, inches | Tip Width, inches | Length, inches |
|---|---|---|---|
| 7030A | 3/8 | 7/16 | 9 |
| 7031A | 1/2 | 9/16 | 16 |
| 7032 | 5/8 | 3/4 | 18 |

## Pinch Bars (*Blue-Point*)

- Pinch bar has a tapered point on one end and a chisel type edge on the other

| Stock No. | Sq. Stock, inches | Edge, inches | Length, inches |
|---|---|---|---|
| 1412A | 1/2 | 5/8 | 14 |
| 1658C | 1/2 | 5/8 | 16 |
| 2420A | 3/4 | 15/16 | 20 |
| 2430C | 3/4 | 5/8 | 30 |
| 2438C | 3/4 | 7/8 | 38 |
| 2842C | 7/8 | 1 | 42 |

**BLPPB704 Prybar Set**
Includes 1412A (14") and 2420A (20") Pinch Bars, 7031A Close Quarter Bar (16") plus BPPC1878 Flat Chisel (18")

## Die Setter Bars (*Blue-Point*)

- Designed for separating, scraping or prying

| Stock No. | Sq. Stock, inches | Tip Width, inches | Length, inches |
|---|---|---|---|
| 7035 | 5/8 | 7/16 | 18 |
| 7037 | 3/4 | 9/16 | 30 |

## Utility Bars (*Blue-Point*)

**UB222PK Miniature Utility Bar**
- 5 3/8" length • Pack of ten



7035



UB222PK

## Prybar Rack

**KR294AAPV**
**Hang-On Prybar Rack**
- Hang up to four prybars or long tools with handles
- Notched angle plate keeps tools from shifting
- Suspend from roll cab or tool chest with 1/4" or more lip



KR294AAPV

# GRIP OR CUT. ALWAYS A CUT ABOVE.

All Snap-on® pliers and cutters undergo a precision manufacturing process to provide the quality and performance the job demands.

**Alloy Steel —** Every set of pliers and cutters is made with our special alloy steel.

**Cold-Forged Process —** Increased strength from top to bottom.

**Joints —** Positioned close to the cutting edge, making it much easier to cut heavy wire with less user fatigue.

**TALON GRIP™ SERIES**

Diamond serrated jaws provide a better grip and increased pulling power.

Ramped tips provide stronger jaws and increased accessibility.

Longer contoured handle with new joint location provides higher leverage and increased comfort.

Rounded jaw edges minimize nicks to wires when making loops or bends.

**VECTOREDGE™ BLADE TECHNOLOGY**

Parallel blades designed to ensure full, clean cuts of all materials – from fine wire and cable ties, to hardened music wire and spring steel, at all locations along the cutting edges.

Precision machining delivers superior edge properties and performance producing hassle-free cuts of smaller soft materials and wire.

*VectorEdge* pliers employ a high-leverage design by positioning the joint closer to the blades.

After thousands of cuts through hardened music wire, cutting edges remain aligned and still provide clean and easy cuts.



# PLIERS/CUTTERS SETS



PL300CF



PLR300



PL400B



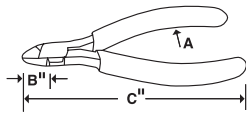
102LHCP

## Pliers and Cutters Sets

| Stock No. | Description | Set Contains: PL300CF | PLR300 | PL400B | 102LHCP | Talon Grip™ | Long Reach |
|---|---|---|---|---|---|---|---|
| 96ACF | Needle Nose Pliers | • | | • | | • | |
| 97CF | Needle Nose Pliers, 8” | | • | | | | |
| 915CP | Needle Nose Pliers | | | | • | | • |
| 415CP | Needle Nose Pliers, 35° Bent Nose | | | | • | | • |
| 47CF | Combination Slip Joint Pliers | • | | • | | • | |
| 91ACP | Adjustable Joint Pliers | | | • | | | |
| 57AHLP | Lineman’s Pliers | | • | | | | |
| 86CF | Diagonal Cutters | | • | | | | |
| 87ACF | Diagonal Cutters | | | | | | |

See product details on following pages

Sets include storage tray




## Standard Diagonal Cutters

- Quality forged steel ensures tools that will provide years of service
- Differential heat treatment produces the strength and toughness in desired areas to withstand repeated tough cutting jobs
- Handles are designed for comfort and to deliver leverage needed to tackle demanding jobs

| | Stock No. | Description | Handle Style (A) | Jaw Length, inches (B) | Length, inches (C) |
|---|---|---|---|---|---|
| Standard Diagonal | 184CF | Diagonal Cutters | Bowed | 13/32 | 4 3/4 |
| | 85CF | Cutter | Bowed | 9/16 | 5 |
| | 86EP | Pistol Grip Cutter | Pistol | 3/4 | 6 5/16 |
| | 86CF | Diagonal Cutters | Bowed | 3/4 | 6 5/16 |
| | 87ACF | Diagonal Cutters | Bowed | 13/16 | 7 3/8 |


85CF


86CF


86EP


87ACF

## Diagonal Cutters

- Ergonomic contour cushion grip handle provides up to 22% increased cutting leverage for superior comfort and control
- Induction hardened, precision sharpened, offset cutting edges produce a shearing cut (not a pinching cut) to stay sharp longer and cut with less effort
- Differential heat treatment produces strength and toughness

| | Stock No. | Description | Handle Style (A) | Jaw Length, inches (B) | Lenght, inches (C) |
|---|---|---|---|---|---|
| High Leverage Diagonal | 388CF | High Leverage Cutter | Bowed | 1 1/16 | 8 5/16 |
| Diagonal Cutters | 312CP | High Leverage Cutter | Long Handle | 1 1/8 | 11 |
| | 808ACP | Mini | Bowed | 9/16 | 6 15/16 |


388CF


312CP

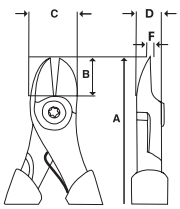
### 312CP Heavy Duty Diagonal Cutter

- 11" length provides maximum reach and access
- Offset jaws easily make flush cuts
- Offset cutting edge produces a shearing cut (not a pinching cut) to stay sharp longer and cut with less effort
- Bowed nonslip handle design for increased leverage and comfort


808ACP

## Special Purpose Cutter

- Manufactured from 1% carbon/chrome ball bearing steel to provide strength without brittleness
- Adjustable screw joint minimizes friction and maximizes cutting edge alignment
- Precision hardened cutting edge provides superior durability
- Unique jaw design of the EPC160 makes it ideal for cutting plastic, rubber and vinyl




| Stock No. | Description | Length, inches (A) | Cutting Edge Length, inches (B) | Jaw Width, inches (C) | Jaw Thickness, inches (D) | Tip Width, inches (F) |
|---|---|---|---|---|---|---|
| EPC160 | Plastic and Cable Cutter | 6.3 | 0.7 | 0.85 | 0.39 | 0.059 |

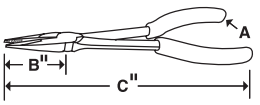

EPC160

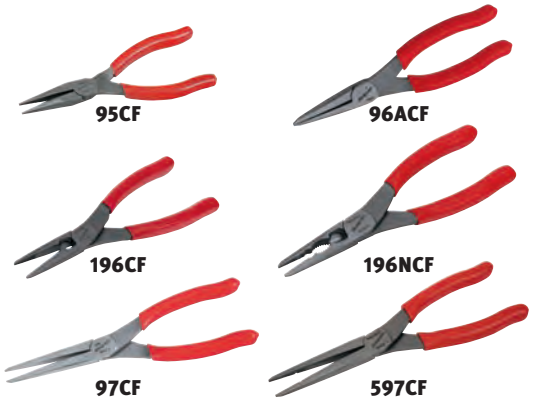


**⚠WARNING**

- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# NEEDLE NOSE/LONG/SPECIAL PURPOSE



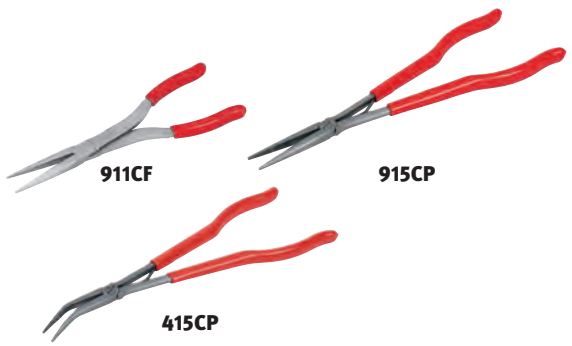




## Needle Nose Pliers

- Rounded jaw edges minimize nicks to wire when making loops or bends
- Jaw tips are perfectly aligned and feature machined teeth for precise gripping strength with positive control

| Stock No. | Description | B | C | Set Contains: Talon Grip™ |
|---|---|---|---|---|
| 95CF | Needle Nose | 1 11/16 | 6 | |
| 96ACF | Needle Nose Pliers | 2 1/4 | 8 | • |
| 196CF* | Long Needle Nose | 2 1/4 | 8 | • |
| 196NCF* | Long Needle Nose | 2 1/4 | 8 | • |
| 97CF | Needle Nose Pliers, 8" | 3 3/16 | 9 | |
| 597CF** | Pin Gripping | 3 3/16 | 9 | |

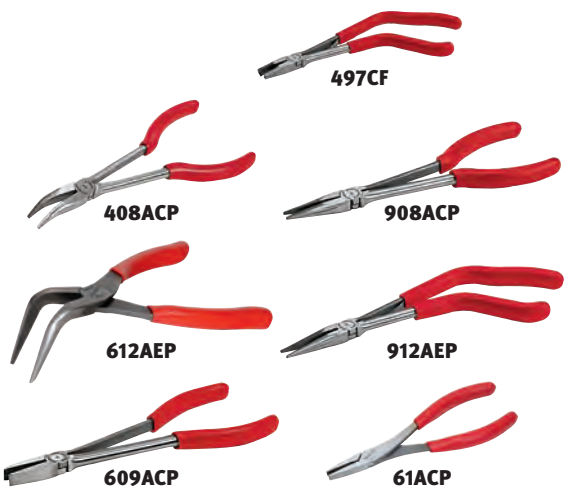
*Rated to cut .049" diameter music wire
**Jaws feature matched parallel and cross grooves




## Long Reach Pliers

- Long, slim jaws and flush riveted joints for increased reach into recessed areas
- Ideal for electric and electronic work, holding pins or small components

| Stock No. | Description | B | C |
|---|---|---|---|
| 911CF | Needle Nose Pliers | 3 3/16 | 11 |
| 915CP | Needle Nose Pliers | 3 1/2 | 14 1/2 |
| 415CP | Needle Nose Pliers, 35° Bent Nose | 2 7/8 | 14 5/16 |
| 411CF | 35° Bent | 2 7/8 | 10 7/8 |

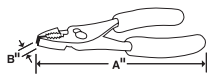



## Special Purpose Pliers

- Bent Nose Pliers – Angled jaws for better access to hard-to-reach areas
- Pistol Grip – Angled handle for access to hard-to-reach areas
- Duck Bill – Specially designed for electronics work

| | Stock No. | Description | B | C |
|---|---|---|---|---|
| Bent | 497CF | 90° Angle Jaws | 3 3/16 | 7 1/4 |
| | 490CF | 90° Bent | 1 7/8 | 9 3/4 |
| | 408ACP | 35° Mini Bent | 1 1/2 | 7 7/8 |
| Straight | 908ACP | Mini | 1 5/8 | 8 1/8 |
| Pistol Grip | 612AEP | Pistol Grip | 1 3/8 | 9 3/4 |
| | 912AEP | Pistol Grip | 2 1/8 | 10 5/8 |
| Duck Bill | 609ACP | 3/8" Jaw Width | 1 3/8 | 9 1/4 |
| | 61ACP | 15/32" Jaw Width | 1 5/16 | 7 3/4 |

## Combination Slip Joint Pliers




- Slip joints for adjustable jaw width

| Stock No. | Description | Length, inches (A) | Jaw Thickness, inches (B) | Talon Grip™ | Shear Cutter |
|---|---|---|---|---|---|
| 44CF | Combination Slip Joint | 4 1/2 | 15/64 | | |
| 46CF | Combination Slip Joint | 6 7/16 | 23/64 | | |
| 47CF* | Combination Slip Joint | 8 1/4 | 7/16 | • | |
| 49CF | Combination Slip Joint | 9 1/4 | 1/2 | | |
| 137CF* | Heavy Duty Combination Slip Joint | 8 3/16 | 27/64 | • | • |

*Third position gives a wider jaw spread for tough-to-get-ahold-of jobs


44CF


47CF


137CF

## Special Purpose Pliers

- High Leverage Combination Pliers require 1/4 the effort normally needed for cutting/gripping
- Midget Pliers with serrated jaws are ideal for extremely small work

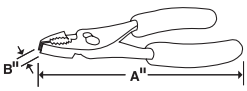
| Stock No. | Description | Length, inches (A) | Jaw Thickness, inches (B) |
|---|---|---|---|
| HL138ACP | High Leverage Combination | 7 7/8 | 1 1/16 |
| 5ACP | Midget Pliers | 4 3/4 | 1/4 |


HL138ACP


5ACP

## LINEMAN'S

## Lineman's Pliers



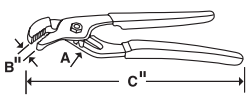

- Machined cutter heads for perfectly matched blades
- Induction hardened head for extra strength and durability
- Gripper teeth behind the head can be a useful crushing area

| Stock No. | Description | Length, Inches (A) | Jaw Thickness, inches (B) |
|---|---|---|---|
| 57AHLP | Lineman's Pliers | 7 3/8 | 1/2 |
| 59AHLP | Lineman's Pliers | 9 1/4 | 1/2 |


57AHLP

## ADJUSTABLE JOINT






AWP404


CHN410

## Tongue and Groove Pliers

- Special tongue and groove design assures non-slip jaw action
- Unique fastener system inhibits side-to-side jaw wobble for added strength and smoother operation

| Stock No. | Description | A | B | C | Set Contains: AWP404 |
|---|---|---|---|---|---|
| AWP45 | Straight Serrated Jaws | 3 | 1/2 | 4 3/4 | • |
| AWP65 | Straight Serrated Jaws | 5 | 7/8 | 7 | • |
| AWP120 | Straight Serrated Jaws | 7 | 2 3/16 | 12 3/4 | • |
| AWP160 | Adjustable Joint, Tongue & Groove Pliers | 8 | 3 13/16 | 16 3/4 | • |
| CHN410* | Parrot Jaws | 5 | 1 1/2 | 10 1/8 | |

*Blue-Point®

Set shown includes storage tray


91ACP

## Standard Pliers

- Specially hardened jaw teeth provide long life and a solid grip on work objects
- Vinyl covered handles for a secure, comfortable grip

| Stock No. | Description | A | B | C |
|---|---|---|---|---|
| 91ACP | Adjustable Joint Pliers | 5 | 1 3/8 | 9 1/4 |

**⚠WARNING**

- Plastic coated handle s on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# LOCKING PLIERS




LP404



LP5SLIM



LP7SLIM



LP6LN



LP10WR



LP10GRV



BLP7




BLP404



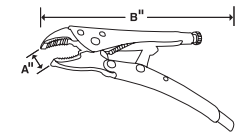
BSGLP6LN




BSGLP404

A "V" groove houses round objects, preventing lateral movement.






## LP Series

- Spring loaded release lever allows quick "no-pinch" release
- Locking nut secures jaw opening for repeat jobs
- Larger jaw capacity to hold larger objects
- Jaws feature greater surface area and broader teeth for more secure gripping

| Stock No. | Description | Jaw Capacity, inches (A) | Length, inches (B) | Set Contains: LP404 |
|---|---|---|---|---|
| LP5SLIM | Thin Curved Jaw | 1 5/32 | 5 | |
| LP7SLIM | Thin Curved Jaw | 1 5/8 | 7 | |
| LP5WR | Curved Jaw w/cutter | 1 5/32 | 5 | • |
| LP6LN | Long Nose | 2 1/8 | 6 | • |
| LP7WR | Curved Jaw w/cutter | 1 5/8 | 7 | • |
| LP10WR | Curved Jaw w/cutter | 2 7/16 | 10 | • |
| LP7R | Straight Jaw | 1 5/8 | 7 | |
| LP10R | Straight Jaw | 2 7/16 | 10 | |
| LP10LN | Long Nose | 2 3/4 | 10 | |
| LP10GRV | 10" Grooved Joint Locking Pliers | 1 5/8 | 10 | |

### LP5SLIM, LP7SLIM Locking Pliers

- Use for removal of socket style sway bar links
- Thinner jaws fit between stabilizer bar and stabilizer link to allow a socket to be used for nut removal
- **LP7SLIM Applications:** 2002–2004 Dodge® Caravans, Chrysler® Town and Country and any other vehicles with non-greaseable sway bar links

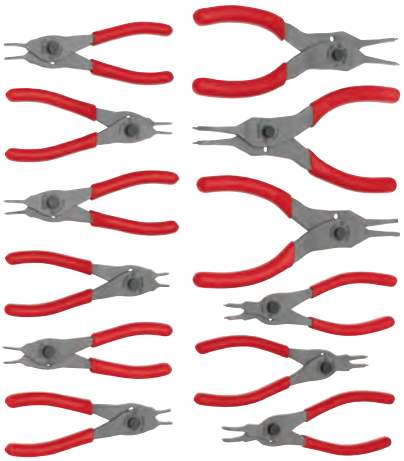
### LP10GRV Grooved Jaw Locking Pliers

- Longitudinal V groove section provides three points of contact preventing lateral movement while working
- Specially tapered groove means the larger the work piece, the larger the groove section that holds it
- Convex tooth section of mobile jaw pushes flat work pieces against the large, flat fixed jaw for tighter clamping
- Recessed area of mobile jaw allows angled objects to be held and clears small obstacles
- Serrated milled teeth provide a positive grip on different shaped objects

## Locking Pliers (Blue-Point®)

- Made from high grade, heat-treated steel alloys, the hardened precision ground jaws "lock" onto work pieces that are tough to hold
- Adjusting screws ensure fine adjustments for precise gripping
- Soft grip series improves comfort while resisting damage from oil and grease

| Stock No. | Description | Grip Style | Jaw Capacity, inches (A) | Length, inches (B) | Set Contains: BLP404 | BSGLP404 |
|---|---|---|---|---|---|---|
| BLP5 | Curved Jaw | Standard | 1.125 | 5 | • | |
| BLP7 | Curved Jaw | Standard | 1.625 | 7 | • | |
| BLP10 | Curved Jaw | Standard | 1.875 | 10 | • | |
| BLP6LN | Long Nose | Standard | 2.25 | 6 | • | |
| BSGLP5 | Curved Jaw | Soft | 1.125 | 5 | | • |
| BSGLP7 | Curved Jaw | Soft | 1.625 | 7 | | • |
| BSGLP10 | Curved Jaw | Soft | 1.875 | 10 | | • |
| BSGLP6LN | Long Nose | Soft | 2.25 | 6 | | • |



SRPC112



SRPC3845



SRPC4700



SRPC3890

## Fixed Tip/Convertible, Forged Pliers

- Longer 45° and 90° jaws make it easier to access hard to reach retaining rings
- Pivot screw converts pliers from internal to external
- Wide cushion grip provides more comfort and control

| Stock No. | Length, inches | Ring Size Range, inches | Jaw Angle | Tip Diameter, inches | Set Contains: SRPC112 | SRPC107 | SRPC105 |
|---|---|---|---|---|---|---|---|
| SRPC3800 | 6 7/16 | 1/8–1 | 0° | .038 | • | • | • |
| SRPC4700 | 6 7/16 | 3/16–1 3/8 | 0° | .047 | • | • | • |
| SRPC7000 | 7 7/16 | 7/16–2 | 0° | .070 | • | • | • |
| SRPC9000A | 8 3/4 | 1 1/2–3 1/2 | 0° | .090 | • | | |
| SRPC3845 | 6 7/16 | 1/8–1 | 45° | .038 | • | | |
| SRPC4745 | 6 7/16 | 3/16–1 3/8 | 45° | .047 | • | | |
| SRPC7045 | 7 7/16 | 7/16–2 | 45° | .070 | • | • | |
| SRPC9045A | 8 3/4 | 1 1/2–3 1/2 | 45° | .090 | • | • | |
| SRPC3890 | 6 7/16 | 1/8–1 | 90° | .038 | • | | • |
| SRPC4790 | 6 1/2 | 3/16–1 3/8 | 90° | .047 | • | | |
| SRPC7090 | 7 1/2 | 7/16–2 | 90° | .070 | • | • | • |
| SRPC9090A | 8 3/4 | 1 1/2–3 1/2 | 90° | .090 | • | • | |

ASME®/ANSI® B107.500

Sets shown include storage tray



PRH406

## Fixed Tip/Convertible Pliers

Unique dial feature eliminates the need to take apart pliers when changing from internal to external.

| Stock No. | Length, inches | Ring Size Range, inches | Jaw Angle | Tip Dianmeter, inches | Set Contains: PRH406 |
|---|---|---|---|---|---|
| PRH12 | 5 3/4 | 1/8–1 | 18° | .038 | • |
| PRH32 | 6 | 5/16–1 3/8 | 18° | .047 | • |
| PRH34 | 7 1/2 | 7/16–2 | 18° | .070 | • |
| PRH129 | 5 3/4 | 1/8–1 | 90° | .038 | • |
| PRH329 | 5 7/8 | 5/16–1 3/8 | 90° | .047 | • |
| PRH349 | 7 1/2 | 7/16–2 | 90° | .070 | • |

*ASME/ANSI* B107.500

Sets shown include storage tray

**⚠WARNING**

- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# RETAINING RING Blue-Point®


PRH57A


PR7A


PR8A


PR36


PRH502A


PR54


PRH503

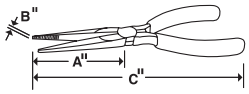

PR50A


PR215

## Interchangeable Tip/Convertible Pliers

| Internal | External | Length, inches | Ring Size Range, inches | Tip Kit Included | Tip Sizes Included Inches/Degree | Optional Kits | Optional Tip Sizes | Set Contains: PR36 | PRH502A | PRH503 | PR50A | PR215 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PR37** | – | 6 1/4 | 3/8–2 | **PR5 (For PR36 only)** | 2 pair each in PR36 set: .047" 0°, .070" 0°, .047" 45°, .038" 90° | **PR5** | .047" 0°, .070" 0°, .047" 45°, .038" 90° | • | | | | |
| – | **PR38** | 6 1/4 | 1/4–2 | – | — | **PR5** | .047" 0°, .070" 0°, .047" 45°, .038" 90° | • | | | | |
| **PRH56A (Convertible)** | – | 6 3/8 | Internal 1/4–1 External 1/8–1 | **PRH56A-1** | 1 pair each: .023" 0°, .036" 0°, .047" 0°, .036" 90°, .047" 90° | – | — | | • | • | | |
| **PRH57A (Convertible)** | – | 8 | Internal 3/8–2 External 1/4–2 | **PRH57A-1** | 1 pair each: .036" 0°, .047" 0°, .070" 0°, .036" 90 °, .047" 90° | – | — | | • | • | | |
| **PRC65A (Convertible)** | – | 10 | Internal 1 13/64–4 External 1 1/3–4 | **PRC65A-1** | 1 pair each: .090", .108", .120" (15° and 90°) | – | — | | | • | | |
| **PR51** | – | 9 1/2 | 2 7/16–4 | **PR502** | .108", 15° | **PR501** | .108", 0° | | | | • | |
| – | – | — | — | **PR503** | .108", 45° | **PR504** | .108", 90° | | | | | |
| – | **PR52** | 9 1/2 | 1 1/2–3 11/32 | **PR507** | .120", 45° | **PR505** | .120", 0° | | | | • | |
| – | – | — | — | **PR508** | .120", 90° | **PR506** | .120", 15° | | | | | |
| **PR7A** | – | 15 11/16 | 3 1/16–6 1/4 | **PR7A-1** | .120", 0° | **PR7A-2** | .120", 45° | | | | | • |
| – | – | — | — | – | — | **PR7A-3** | .120" 90° | | | | | |
| – | **PR8A** | 15 11/16 | 3 1/16–6 1/4 | **PR7A-1** | .120", 0° | **PR7A-2** | .120", 45° | | | | | • |
| – | – | — | — | – | — | **PR7A-3** | .120" 90° | | | | | |
| **PR54** | – | 29 | 6 1/2–10 | **PR54-1** | .150", 0° | **PR54-2** | .150", 45° | | | | | |
| – | – | — | — | – | — | **PR54-3** | .150" 90° | | | | | |
| – | **PR53** | 19 | 6 1/2–10 | **PR53-1** | .170", 0° | **PR53-2** | .170", 45° | | | | | |
| – | – | — | — | – | — | **PR53-3** | .170" 90° | | | | | |

PR36 Set includes PR5 tip kit. Individual PR37 and PR38 units do not include tips and require PR5 tip kit.
PR51 and PR52 work with tip kits PR501 – PR508
PRH503-1 Replacement Case for PRH503




Snap-on® manufactured pliers with plastisol or cushion grip handles meet the electrostatic discharge (ESD) specifications in MIL-B-81705C.

- Spring jaw opening
- Cutter models have a small hole at the base of the blades to relieve pressure on the cutting edges
- Innovative cushion grip handles result in a very comfortable, yet durable handle grip


E700BCG


E703BCG


E704BCG


E708BCG


E712BCG


E713BCG


E715BCG


E718BCG


E721BCG


E770BCG


E790BCG

## E Series Pliers

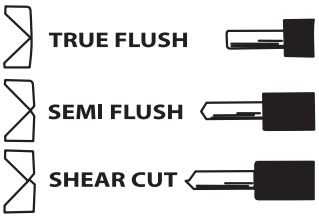
| Stock No. | Description | Jaw Length, inches (A) | Tip Width, inches (B) | Length, inches (C) |
|---|---|---|---|---|
| E700BCG | Round Wire Looper Jaws Taper from 3/16"–1/32" | 1 | 1/16 | 6 1/8 |
| E703BCG | Long Serrated Jaws | 2 3/16 | 1/16 | 6 9/16 |
| E704BCG | Angled (45°) Serrated Jaws | 2 1/4 | 1/16 | 6 5/8 |
| E708BCG | Short Non-Serrated Jaws | 13/16 | 1/16 | 5 15/16 |
| E712BCG | Serrated Jaw | 1 11/16 | 1/16 | 6 1/8 |
| E713BCG | Short Serrated Jaws | 7/8 | 1/16 | 4 5/8 |
| E715BCG | Extra Slim Serrated Jaws | 1 3/16 | 1/16 | 5 1/8 |
| E718BCG | Curved (90°) Serrated Jaws | 1 1/8 | 1/16 | 5 9/16 |
| E721BCG | Extra-Slim Non-Serrated Jaws | 1 23/32 | 1/16 | 6 7/8 |
| E770BCG | Needle Thin Serrated Jaws | 1 1/8 | 1/32 | 5 |
| E790BCG | Flat Nose Non-Serrated Jaws | 1 | 1/16 | 6 1/8 |

Pliers in this chart use the E74X1 Coil Replacement Spring.

**⚠WARNING**

- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# ELECTRONIC SERVICE CUTTERS

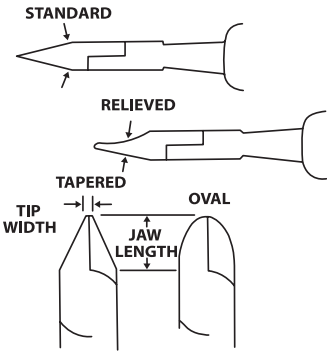



**True Flush** ground blades cut wire ends flat and allow protruding wire ends to be trimmed flush.

**Semi Flush** ground blades cut slightly pointed wire ends and can be used where an exact flush cut is not required.

**Shear Cut** ground blades (on standard cutters) are designed for general cutting with less hand pressure and extended blade life.

**Head Shapes** Always select a cutter with the largest head that will meet your requirement. The oval head design has more material behind the cutting edges and gives the longest tool life.





E706BCG


E707BCG


E709BCG


E710BCG


E711BCG


E719BCG


E740BCG

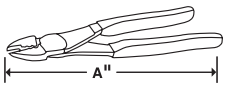

E742BCG

## Cutters (E Series)

| Stock No. | Cut | Head Style | Cutting Capacity | Tip Width, inches | Cutting Edge Length, inches | Length, inches |
|---|---|---|---|---|---|---|
| **E706BCG** | True Flush | End Cut | AWG #19 | 1/16 | 15/32 | 5 7/8 |
| **E707BCG** | True Flush | Tapered | AWG #17 | 1/16 | 7/16 | 4 3/8 |
| **E709BCG** | True Flush | Tapered | AWG #17 | 1/16 | 7/16 | 4 7/16 |
| **E710BCG*** | True Flush | Tapered | AWG #16 | 3/32 | 11/16 | 5 3/16 |
| **E711BCG** | Semi Flush | Tapered | AWG #12 | 3/16 | 7/16 | 5 3/4 |
| **E719BCG** | True Flush | Tapered | AWG #17 | 1/16 | 7/16 | 6 3/8 |
| **E740BCG** | Semi Flush | Oval | AWG #16 | 1/16 | 7/16 | 5 3/4 |
| **E742BCG** | True Flush | Oval | AWG #16 | 1/16 | 7/16 | 5 3/4 |

These cutters use the E74X1 Replacement Spring
*E710BCG uses E71XL1 Replacement Spring, E710BCG also available as E710BCGCT Cushion Throat model

## Crimpers



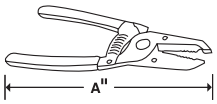

| Stock No. | Description | Length, inches (A) | Crimps |
|---|---|---|---|
| 29CF | Terminal Crimping Pliers with Cutter | 9 3/8 | 10, 12, 14, 16, 18, 20, 22 AWG Insulated and Non-Insulated |



29CF

**29CF Cold Forged Wire Terminal Crimping Tool**
- Cold formed heat treated rivet for smooth action and long life
- Precision machined joint and cutting edges, hardened wire cutter with "Knife to Anvil" design, never needs sharpening

## Wire Stripper/Cutter/Crimper




| Stock No. | Description | Length, inches (A) | Strips AWG Sizes |
|---|---|---|---|
| PWCS7CF | Wire Stripper/Cutter/Crimper | 6 3/4 | 12, 14, 16, 18, 20 |
| PWCS9 | Wire Stripper/Cutter/Crimper/Bolt Cutter | 8 3/4 | AWG20 – 10 (stranded wire), AWG16 – 8 (solid wire) |
| PWCSS7CF | Wire Stripper/Cutter/Crimper | 6 3/4 | 14 – 24 AWG |



PWCS7CF

**PWCS7CF Wire Stripper/Cutter/Crimper**
- Unique smaller wire stripper/crimper that strips 12, 14, 16, 18 and 20 gauge insulated wire
- Crimps insulated and bare wire connectors
- Wire cutter in the jaw and handle
- Ideally suited for work in confined areas such as under dash or within electrical service enclosures



PWCS9A

**PWCS9 Wire Stripper/Cutter/Crimper/Bolt Cutter**
- Cold forged from special alloy steel and induction heat treated for superior performance and durability
- Bi-molded, soft grip handle provides comfort and helps reduce fatigue
- Pliers tip for grabbing or pulling wire
- Cuts #6 and #8 soft bolts
- Crimps both insulated and non-insulated terminals
- Includes shears in throat area for general cutting applications

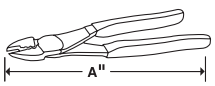


PWCSS7CF

**PWCSS7CF Wire Stripper/Crimper/Cutter (7")**
- Cutting wire and crimping terminals for: speaker wire, wire for navigation and entertainment systems, data wires that connect to computers, body control modules, power windows and door locks, dash gauges and running lights for boats

# WIRE TOOLS Blue-Point®

## Crimpers




| Stock No. | Description | Length, inches (A) | Crimps |
|---|---|---|---|
| PWC30 | Terminal Crimping Pliers with Cutter | 10 1/4 | 10, 12, 14, 16, 18, 20, 22 AWG Insulated and Non-Insulated |
| PWC47 | Computer/Sensor Terminal Crimping Tool | 8 | Open barrel and Wether-Pac terminals 14 – 24 AWG |



PWC30



PWC47



PWC34

## Ratcheting Crimpers

**PWC48 Ratcheting Crimper Kit**
- Versatile quick change jaw system allows work on many kinds of terminals
- Exclusive patented quick installation for easy jaw change, no tools required
- Jaws are precision investment casting made of AISI 4140 alloy steel
- Easy adjustment for changing the pressure of the crimp

**PWC48NJ Ratcheting Crimper**
Ratcheting crimper without jaw set

**PWC48-1 Crimping Jaw Set**
Jaw Set A. Use on Insulated 10–22 connectors

**PWC48-2 Crimping Jaw Set**
Jaw Set B. Use on non-insulated 8–20 connectors

**PWC48-3 Crimping Jaw Set**
Jaw Set C. Use on Open Barrel 10–20 connectors

**PWC48-4 Crimping Jaw Set**
Jaw Set H. Use on Open Barrel D-Sub connectors



PWC48

## Modular Connectors

**PWC34 Crimping Tool**
- Double compound action with ratchet control for almost effortless operation
- Use with insulated connectors on 10–22 gauge wire
- Easy, efficient, single-squeeze crimping of modular connectors

**⚠WARNING**
- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# WIRE TOOLS Blue-Point®



PWC39



PWC80A



PWC52A

## Miscellaneous Wire Tools

**PWC39 Cable Slitter**
- Slits and removes insulation on single or multiple conductor cables up to 1.25" OD
- Adjustable blade allows for varying insulation thickness up to .187"
- Lightweight, fiberglass reinforced nylon body
- Extra blade in handle. 5 1/4" long

**PWC39-1 Replacement Blade**
Replacement blade for PWC39

**PWC80A Cable Cutter**
- For cutting battery cables and other soft metal cables
- Vinyl covered handles
- 7 1/2" long

**PWC52A Connector Pliers**
- For gripping round and irregularly shaped objects such as cannon plugs or plated pipe
- Range is 3/4"–2 1/2"
- 9 3/4" long

**PWC52A1 Vinyl Jaw Inserts**
For PWC52A (set of two)

**PWC52A2L Replaceable Hinge Bolt**
For PWC52A



PWC12A



PWC28A



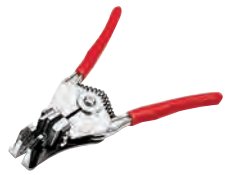
PWC14



PWC16A



PWC27



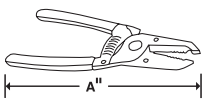
PWC42



PWC24



PWC5






PWC8



PWC19



PWC6



PWC22A

## Strippers/Cutters/Crimpers

| Stock No. | Description | Length, inches (A) | Strips AWG Sizes | Strips Metric Sizes, mm | Application | Replacement Blades |
|---|---|---|---|---|---|---|
| PWC12A | Wire Stripper/ Cutter/Crimper | 9 1/2 | 10, 12, 14, 16, 18 | 10–18 Insulated and Non-Insulated 7 mm–8 mm Ignition Terminals | — | – |
| PWC28A | Wire Stripper/Cutter/ Crimper/Bolt Cutter | 8 1/4 | 10, 12, 14, 16, 18, 20, 22 Stranded, 8, 10, 12, 14, 16, 18 Solid | 10–22 Non-Insulated Terminals and Crimp Sleeves | — | – |
| PWC14 | Wire Stripper/Cutter/ Crimper/Bolt Cutter | 8 3/4 | 10, 12, 14, 16, 18, 20, 22 | 10–22 Insulated and Non-Insulated 7 mm–8 mm Ignition Terminals | — | – |
| PWC16A | Wire Cutter/Stripper | 5 | 10–18 | Adjustable | Strips PVC, THHN and THWN | – |
| PWC27 | Automatic Wire Stripper | 6 1/4 | 10, 12, 14, 16, 18, 20, 22 | — | Strips PVC, THHN, and THWN | PWC27-7 |
| PWC42 | Automatic Wire Stripper | 5 1/2 | 16, 18, 20, 22 | 1.5, 1.0, .5, .42 | Cotton Coated PVC Wire, and Silicone Coated Wire | PWC42-17 |
| PWC24 | Automatic Wire Stripper | 6 1/4 | 16, 18, 20, 22, 24, 26 | — | Strips Teflon® Type E Wire | PWC24-1 |
| PWC5 | Mini Wire Cutter/Stripper | 5 1/16 | 26–14 | — | Copper Wire | – |
| PWC8 | Wire Stripper/Cutter | 5 7/8 | 14–10 AWG | — | Copper Wire | – |
| PWC19 | Micro Shear Wire Cutters | 5 1/8 | Up to 20 | Up to .80 | — | – |
| PWC6 | Wire Stripper/Cutter Pliers | 6 | 10, 12, 14, 16, 18, 20 | 2.6, 2.0, 1.6, 1.3, 1.0, .80 | Strips PVC, THHN and THWN | – |
| PWC22A | Automatic Wire Stripper with Cutter | 7 1/4 | 12, 14, 16, 18, 20 | — | Strips PVC, THHN and THWN | – |

## Dipped Grips

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGPL800 |
|---|---|---|---|---|
| BDGAWP100 | Adjustable Joint Pliers | 1 3/4 | 10 | • |
| BDG48CP | Slip Joint Pliers | 1 27/32 | 8 | • |
| BDG98CP | Long Needle Nose Pliers | 3 | 8 | • |
| BDG9845CP | 45° Bent Needle Nose Pliers | 2 13/16 | 7 3/4 | • |
| BDG57CP | Lineman's | 1 1/4 | 7 1/2 | • |
| BDGEC7 | End Cutter | 7/16 | 7 | • |
| BDG86CP | Diagonal Cutter | 21/32 | 6 1/2 | • |
| BDG88CP | Diagonal Cutter | 15/16 | 8 1/8 | • |



BDGPL800

## Standard

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BPL501 |
|---|---|---|---|---|
| B48CP | Slip Joint Pliers | 2 3/32 | 8 13/32 | • |
| B58HLP | Lineman's Pliers | 1 1/2 | 8 31/32 | • |
| B96CP | Needle Nose Pliers | 2 1/32 | 6 5/16 | • |
| BAWP100 | Adjustable Joint Pliers | 1 3/8 | 10 5/32 | • |
| B87CP | Diagonal Cutters | 31/32 | 6 19/32 | • |



BPL501

## Miniature

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BMPL1000 |
|---|---|---|---|---|
| B45CMP | Combination Pliers | 1 | 4 11/16 | • |
| B65CMP | Duckbill Pliers | 1 5/32 | 4 7/8 | • |
| B75CMP | Round Nose Pliers | 1 5/32 | 5 | • |
| B85CMP | Diagonal Cutter | 21/32 | 4 11/32 | • |
| B85CTMP | Thin Diagonal Cutter | 23/32 | 4 5/8 | • |
| B945CMP | 45° Bent Nose Pliers | 1 | 4 11/16 | • |
| B95CMP | Long Nose Pliers | 1 1/8 | 4 7/8 | • |
| B95CLMP | Long Needle Nose Pliers | 2 1/16 | 5 25/32 | • |
| B960CMP | 60° Bent Nose Pliers | 15/16 | 4 11/16 | • |
| BMPEC5 | End Cutter | 5/16 | 4 1/32 | • |

Sets shown include storage tray



BMPL1000

## Miniature Pliers and Cutters/Vinyl Grips

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGMPL845 | BDGCPL700 |
|---|---|---|---|---|---|
| BDG45CMP | Combination Pliers | 1 | 4 11/16 | • | • |
| BDG85CMP | Diagonal Cutter | 21/32 | 4 11/32 | • | |
| BDG85CTMP | Thin Diagonal Cutter | 23/32 | 4 5/8 | • | • |
| BDG945CMP | 45° Bent Nose Pliers | 1 | 4 11/16 | • | • |
| BDG65CMP | Duckbill Pliers | 1 5/32 | 4 7/8 | • | |
| BDG95CMP | Long Nose Pliers | 1 1/8 | 4 7/8 | • | |
| BDG95CLMP | Long Needle Nose Pliers | 2 1/16 | 5 25/32 | • | • |
| BDGMPEC5 | End Cutter | 5/16 | 4 1/32 | • | |



BDGMPL845



BDGCPL700

**BDGMPL845 Miniature Pliers and Cutters Set**
- Includes eight commonly used mini pliers for precision work in confined spaces

**BDGCPL700 Pliers and Cutters Set**
- Set includes: BDG48CP 8" Slip Joint Pliers, BDG88CP 8 1/8" Diagonal Cutters and BDG98CP 8" Needle Nose Pliers plus the three miniature pliers and cutter indicated in the chart to cover a large range of jobs
- BDG98CP Needle Nose Pliers features a fastener-turning jaw and cutter

**⚠WARNING**

- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

# PLIERS AND CUTTERS Blue-Point®



BDGPL400LMP

## Long Reach Miniature

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGPL400LMP |
|---|---|---|---|---|
| BDG96LMP | Long Nose | 1 5/16 | 6 | • |
| BDG97LMP | Needle Nose | 2 13/32 | 7 | • |
| BDG9645LMP | 45° Bent Needle Nose | 1 7/32 | 6 | • |
| BDG86LMP | Diagonal Cutters | 3/4 | 5 1/2 | • |



BDGPL300HG

## Extended Reach Hose Grip

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGPL300HG |
|---|---|---|---|---|
| BDGPL410HG | Small Hose Grip Pliers | 2 1/4 | 11 | • |
| BDGPL411HG | Medium Hose Grip Pliers | 2 1/4 | 11 | • |
| BDGPL412HG | Large Hose Grip Pliers | 2 | 11 | • |



BDGPL300LR

## Long Reach

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGPL300LR |
|---|---|---|---|---|
| BDG311CP | Diagonal Cutter | 1 9/16 | 11 | • |
| BDG91145CP | 45° Bent Needle Nose | 3 3/16 | 11 | • |
| BDG911CP | Needle Nose | 3 9/16 | 11 | • |



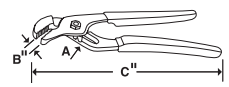
BDGPL200XLR

## Extra Long Reach

| Stock No. | Description | Jaw Length, inches | Length, inches | Set Contains: BDGPL200XLR |
|---|---|---|---|---|
| BDG91645CP | 45° Bent Needle Nose | 3 3/16 | 16 | • |
| BDG916CP | Needle Nose | 3 9/16 | 16 | • |



AP10




## Adjustable Joint

| Stock No. | Description | Max. Jaw Postions (A) | Parallel Opening, inches (B) | Length, inches (C) |
|---|---|---|---|---|
| AP7 | Adjustable Joint | 9 | 1 1/2 | 7 |
| AP10 | Adjustable Joint | 11 | 1 3/4 | 10 |
| AP12 | Adjustable Joint | 13 | 2 1/16 | 12 |



BLPBC30

## Heavy Duty Bolt Cutters

Drop forged, alloy steel jaws are precision ground to provide a long-lasting cutting edge. Lightweight, tubular steel handles deliver extra leverage for tough jobs. Comfortable, heavy duty grips resist slippage.

| Stock No. | Capacity (Soft Material), inches | Capacity (Hard Material), inches | Length, inches | Weight, lb (kg) | Replacement Jaw Assembly |
|---|---|---|---|---|---|
| BLPBC18 | 3/8 | 1/4 | 18 | 3.4 (1.55) | BLPBC18-1 |
| BLPBC24 | 7/16 | 5/16 | 24 | 5.6 (2.55) | BLPBC24-1 |
| BLPBC30 | 1/2 | 3/8 | 30 | 8.6 (3.9) | BLPBC30-1 |
| BLPBC36 | 9/16 | 7/16 | 36 | 14.2 (6.45) | BLPBC36-1 |



CNSGDX60

## Screwdrivers (Soft Grip)

- Slim tip design accesses fasteners in tight areas faster and easier
- No conductive path to user
- No insulation to puncture, tear or wear through
- Exceeds ANSI®, ISO® and ASME® strength and performance requirements for standard steel tools
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC
- Snap-on® nonconductive tools are UL® listed, assuring compliance to IEC® 60900

| | Stock No. | Tip Size | Shank Length, inches | Length, inches | Set Contains: CNSGDX60 |
|---|---|---|---|---|---|
| Flat Tip | CNSGDF66 | 3/16 | 6 | 11 1/2 | • |
| | CNSGDF68 | 1/4 | 6 | 11 1/2 | • |
| | CNSGDF69 | 9/32 | 6 | 11 1/2 | • |
| Phillips® Tip | CNSGDP61 | #1 | 6 | 11 1/2 | • |
| | CNSGDP62 | #2 | 6 | 11 1/2 | • |
| | CNSGDP63 | #3 | 6 | 11 1/2 | • |



IHTP62



IHTS6



IHT60K

## Screwdrivers (Screwdriver Handle)

- No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC

| | Stock No. | Tip Size | Shank Length, inches | Length, inches | Replacement Bit | Set Contains: IHT60K |
|---|---|---|---|---|---|---|
| Flat Tip | IHTS3 | 3/16 | 3 1/4 | 8 3/16 | IHTS65 | • |
| | IHTS37 | 7/32 | 3 1/4 | 8 3/16 | IHTS375 | |
| | IHTS38 | 1/4 | 3 1/4 | 8 3/16 | IHTS685 | |
| | IHTS6 | 1/4 | 6 | 11 | IHTS685 | • |
| | IHTS610 | 5/16 | 6 | 11 | IHTS6105 | |
| | IHTS9 | 5/16 | 9 | 14 | IHTS6105 | • |
| | IHTS912 | 3/8 | 9 | 14 | IHTS9125 | |
| *Phillips* TIp | IHTP31 | #1 | 3 1/4 | 8 3/16 | IHTP315 | • |
| | IHTP62 | #2 | 6 | 11 | IHTP625 | • |
| | IHTP63 | #3 | 6 | 11 | IHTP635 | • |



CSSC9



SGDMRC4-C6

## Screwstarters and Screwdriver Shanks

- No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC
- *Snap-on* nonconductive tools are *UL* listed, assuring compliance to *IEC* 60900

| Stock No. | Handle Type | Handle Diameter, inches | Tip Style | Tip Style | Length, inches |
|---|---|---|---|---|---|
| CSSC9 | Composite* | 9/32 | Flat Tip/*Phillips* | .032" x 9/32", #2 | 9 |
| SGDMRC4-C6 | Composite Magnetic Bit Holder | 3/8 | — | — | 7 1/4 |

*Rated shock resistant up to 1,000V.

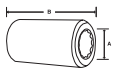
**⚠WARNING**

- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Do not use damaged nonconductive tools
- Read safety precautions on pages W1 to W4

# NONCONDUCTIVE COMPOSITE TOOLS



207CFDSY





IHT208K

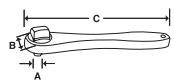
## 3/8" Drive Sockets, inches, 12-Point

| Set Contains: 207CFDSY | | | | |
|---|---|---|---|---|
| | 12 | Outside Diameter, inches (A) | Length, inches (B) | 12 |
| 1/4 | CFDS8B | 15/16 | 1 3/4 | |
| 5/16 | CFDS10B | 15/16 | 1 3/4 | |
| 3/8 | CFDS12B | 1 | 1 3/4 | • |
| 7/16 | CFDS14B | 1 | 1 3/4 | • |
| 1/2 | CFDS16B | 1 3/16 | 2 | • |
| 9/16 | CFDS18B | 1 3/16 | 2 | • |
| 5/8 | CFDS20B | 1 3/16 | 2 | • |
| 11/16 | CFDS22B | 1 3/8 | 2 1/4 | • |
| 3/4 | CFDS24B | 1 3/8 | 2 1/4 | • |

**IHT208K Nonconductive Composite Ratchet and Socket Set**
CFDS12B – CFDS24B sockets (3/8"–3/4") (8-piece) plus CFS949A ratchet in C0800 kit bag.



CFS949A



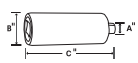
## Ratchets

- No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC
- *Snap-on* nonconductive tools are *UL* listed, assuring compliance to *IEC* 60900

| Stock No. | Square Drive, inches (A) | Head Width, inches (B) | Length, inches (C) | Repair Kit |
|---|---|---|---|---|
| CFS949A | 3/8 | 1 19/32 | 8 3/4 | RKRCFS949A |
| CSS949A | 1/2 | 1 19/32 | 8 3/4 | RKRCSS949 |



CFX6



## Extensions

| Stock No. | Square Drive, inches (A) | Outside Diameter, inches (B) | Length, inches (C) |
|---|---|---|---|
| CFX3 | 3/8 | 1 | 3 |
| CFX6 | 3/8 | 2 | 6 |
| CFX12 | 3/8 | 2 | 12 |
| CSX5 | 1/2 | 1 5/16 | 5 21/32 |
| CSX10 | 1/2 | 1 5/16 | 10 21/32 |



CFDSM15B

## 3/8" Drive Sockets, mm, 12-Point

**Nonconductive Composite Socket**

- No conductive path to user
- No insulation to puncture, tear or wear through
- Strong as steel
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC
- Snap-on® nonconductive tools are UL® listed, assuring compliance to IEC® #60900

| mm | 12 | Outside Diameter, mm (A) | Length, mm (B) |
|---|---|---|---|
| 10 | CFDSM10B | 25.1 | 44.9 |
| 12 | CFDSM12B | 29.6 | 51.2 |
| 13 | CFDSM13B | 29.6 | 51.2 |
| 14 | CFDSM14B | 29.6 | 51.2 |
| 15 | CFDSM15B | 29.6 | 51.2 |
| 16 | CFDSM16B | 33.5 | 57.4 |
| 17 | CFDSM17B | 33.5 | 57.4 |
| 18 | CFDSM18B | 33.5 | 57.4 |
| 19 | CFDSM19B | 33.5 | 57.4 |



CSN24B

## Breaker Bar

- Features the comfort and control of a *Snap-on* screwdriver style handle
- *UL* listed
- Each tool is individually tested to protect up to 1,000V AC and 1,500V DC
- Meets *IEC* 60900 and ASTM® 1505 standards for insulating hand tools
- Exceeds ASME®/ANSI® B107.10M strength requirements for standard steel tools

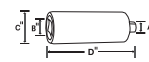
| Stock No. | Head Width, inches | Length, inches | Head Diameter, inches |
|---|---|---|---|
| CSN24B | 1 1/8 | 24 1/2 | 1 |



CA1MF



CFSSB8

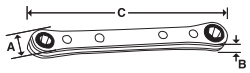


## Adaptors

- No conductive path to user
- No insulation to puncture, tear or wear through
- Strong as steel
- Every tool is individually tested to protect up to 1,000V AC and 1,500V DC
- Only *Snap-on* nonconductive tools are *UL* listed, assuring compliance to *IEC* #60900

| Stock No. | Description | External Square Drive, inches (A) | Internal Square Drive, inches (B) | Outside Diameter, inches (C) | Length, inches (D) |
|---|---|---|---|---|---|
| CA1MF | 1/2" Square Drive Adaptor | 3/8 | 1/2 | 1 5/16 | 3 25/32 |
| CA2A | 3/8" Square Drive Adaptor | 1/2 | 3/8 | 1 | 3 7/8 |

**CFSSB8 Nonconductive Composite Universal Bit Socket**
Composite (insulating) universal bit socket for holding 1/4" bits. 3/8" square drive, 1" O.D., 1 3/4" long.



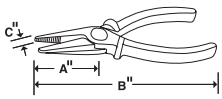



CRB1824

## Ratcheting Box Wrench

- UL® listed
- Individually tested to protect up to 1,000V AC and 1,500V DC
- Meets IEC® 60900 ASTM® standards for insulating hand tools

| Stock No. | | Finish | Head Diameter, inches (A) | Head Depth, inches (B) | Length, inches (C) |
|---|---|---|---|---|---|
| CRB1824 | 9/16–3/4 | Composite | 1 9/16–1 13/16 | 5/8–5/8 | 9 1/16 |






C97CP

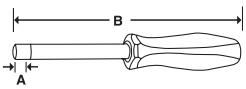


C59AHLP

## Pliers

- Nonconductive needle nose pliers feature all composite jaw and handle
- Spring loaded joint returns pliers to comfortable working position
- Durable jaw teeth aid in gripping and twisting
- Integral thumb guard for user protection
- Each tool is individually tested to protect up to 1,000V AC and 1,500 VDC
- Snap-on® nonconductive tools are *UL* listed, assuring compliance to *IEC* 60900 *ASTM* standards for insulating hand tools
- Nonconductive lineman pliers have same quality as standard lineman pliers for performance and durability
- Nonconductive handles are soft grip for comfort and control
- Handles feature thumb guards, two-position grip and tether hole
- Each tool is individually tested to ensure protection up to 1,000V AC and 1,500V DC

| Stock No. | Description | Jaw Length, inches (A) | Length, inches (B) | Tip Width, inches (C) |
|---|---|---|---|---|
| C97CP | Needle Nose Pliers | 2 | 8 1/2 | 5/32 |
| C59AHLP | Lineman's Pliers | 1 13/32 | 10 | — |






107CNDD

## Nut Drivers

- *Snap-on* nonconductive composite nut drivers have the 6-point Flank Drive® wrenching system for greater turning power with less fastener damage. Nut drivers feature narrow, nonconductive composite shanks for greater access and a full 5" bolt clearance depth
- Screwdriver style handles provide maximum comfort and control
- Handles are color coded for easy size reference
- Sizes are stamped on the handle crown for better visibility when wearing a tool pouch
- Each tool is individually tested to ensure protection up to 1,000V AC and 1,500V DC
- *Snap-on* nonconductive tools are *UL* listed, assuring compliance to *IEC* 60900 *ASTM* standards for insulating hand tools
- US Pate nt #6,427,563

| Stock No. | | Bolt Clearance Diameter, inches (A) | Length, inches (B) | Set Contains: 107CNDD |
|---|---|---|---|---|
| CNDD106 | 3/16 | 5/32 | 7 5/8 | • |
| CNDD107 | 7/32 | 5/32 | 7 5/8 | • |
| CNDD108 | 1/4 | 5/32 | 7 5/8 | • |
| CNDD110 | 5/16 | 5/32 | 7 5/8 | • |
| CNDD112 | 3/8 | 11/32 | 8 3/8 | • |
| CNDD114 | 7/16 | 11/32 | 8 17/32 | • |
| CNDD116 | 1/2 | 11/32 | 9 1/16 | • |

**⚠WARNING**

- Do not use damaged nonconductive tools
- Do not use "cheater bars" on handles
- Do not use with impact drivers
- Read safety precautions on page W1 to W4

# THE POWER IS IN YOUR HAND.

No matter what your style or needs – from finesse to power – Snap-on® offers a range of hammers, punches, and chisels to fit every one. And they come in both hard and soft grips, featuring a soft, more comfortable energy-absorbing material.

## PUNCHES AND CHISELS THAT PACK A PUNCH.

The anvil end on the heads of our punches and chisels are machined to a modified parabolic curve. This directs the striking force to the center of the tool head to help control mushrooming, allow slow metal displacement, and reduce chipping and splitting. The steel alloy is machined and differentially heat-treated for optimum performance, and the hardness of the striking head is reduced – enhancing toughness, and resulting in slower mushrooming.

## WE'VE NAILED HAMMERS.

*Snap-on* offers a line of hammers that are made from a non-sparking, thermoplastic urethane material resistant to most shop chemicals. And these hammers feature the works: dry-rot prevention, warp prevention, balanced hammerheads, multi-grips, and more.

## HBFE SERIES DEAD BLOW HAMMERS

Free-flowing shot, head design improves dead blow action while reducing rebound. Compact heads have a larger surface striking area and heavier caps – improving delivered force by as much as 40%.

## HBBD SERIES BALL PEEN HAMMERS

Steel-canister head design, with free-flowing shot, improves dead blow action, while reducing rebound. Soft-grip handle with ribbed, textured elastomer grip prevents hand slippage. Composite handle shank improves balance while defusing shock and dampening vibration.

## HBSE SERIES SLIMLINE DEAD BLOW HAMMERS

Smaller face for more concentrated blows. Longer head profile for extended reach. Internal steel canister with free-flowing shot design delivers maximum dead blow action. Wide flare at end of handle helps prevent hand slippage. Microcellular soft-grip handle features a softer, more comfortable energy-absorbing material.



## Punches and Chisels

The anvil end on heads of Snap-on® punches and chisels are machined to a modified parabolic curve. This design directs the striking force to the center of the tool head to allow slow metal displacement. The parabolic curve controls mushrooming to reduce chipping and splitting. Heads should be redressed to their original shape with hand files as necessary. The tough alloy steel is machined and differentially heat treated for optimum performance. The hardness of the striking head is reduced to help toughness and add qualities that result in a slower mushrooming of the striking surface.



**PPC250BK Punch and Chisel Set**
Includes 24 pcs in KB2179 kit bag:
PPC1A PPC106A PPC205A PPC820B
PPC3A PPC108A PPC206A PPC824B
PPC4A PPC110A PPC208A PPC12B
PPC103A PPC112 PPC210A PPC14B
PPC104A PPC203A PPC812B PPC15B
PPC105A PPC204A PPC816B PPC19B



**PPC250BK**

**PPC210BK Punch and Chisel Set**
Includes 22 pcs in KB2178 kit bag:
PPC1A PPC105A PPC204A PPC816B
PPC3A PPC106A PPC205A PPC820B
PPC4A PPC108A PPC206A PPC824B
PPC5A PPC110A PPC208A PPC828B
PPC103A PPC112 PPC210A
PPC104A PPC203A PPC812B



**PPC210BK**

**PPC715BK Punch and Chisel Set**
Includes 16 pcs in KB2182 kit bag:
PPC1A PPC104A PPC203A PPC208A
PPC3A PPC105A PPC204A PPC812B
PPC4A PPC106A PPC205A PPC816B
PPC103A PPC108A PPC206A PPC820B



**PPC715BK**

**PPC710BK Punch and Chisel Set**
Includes 11 pcs in KB2181 kit bag:
PPC1A PPC105A PPC205A PPC816B
PPC4A PPC106A PPC206A PPC820B
PPC103A PPC203A PPC812B



**PPC710BK**

**PPSD120BK Pin and Starter Punch Set**
Includes 12 pcs in KB2187 kit bag:
PPC103A PPC106A PPC203A PPC206A
PPC104A PPC108A PPC204A PPC208A
PPC105A PPC110A PPC205A PPC210A



**PPSD120BK**

**PPC100AK Punch and Chisel Set**
Includes ten pcs in KB2175 kit bag:
PPC812B PPC828B PPC15B
PPC816B PPC12B PPC19B
PPC820B PPC13B
PPC824B PPC14B



**PPC100AK**

**PPCD70BK Pin Punch Set**
Includes seven pcs in KB2183 kit bag:
PPC103A PPC106A PPC110A
PPC104A PPC107A
PPC105A PPC108A



**PPCD70BK**

**PPCS60BK Starter Punch Set**
Includes six pcs in KB2185 kit bag:
PPC203A PPC205A PPC208A
PPC204A PPC206A PPC210A



**PPCS60BK**

**PPC50AK Flat Chisel Set**
Includes five pcs in KB2173 kit bag:
PPC812B PPC820B PPC828B
PPC816B PPC824B



**PPC50AK**

**PPCM60BK Metric Pin Punch Set**
Includes six pcs in KB2189 kit bag:
PPCM103B PPCM104B PPCM105B
PPCM106B PPCM107B PPCM108B



**PPCM60BK**

| | Stock No. | Hex Size, inch | Point/Edge, inch (mm) | Length, inch (mm) |
|---|---|---|---|---|
| **Punch and Chisel Accessories** | **PPC1A** Chisel Gauge | — | — | 2 5/8 |
| | **PPC5A** Punch/ Chisel Holder | — | — | 6 15/16 |
| **Center Punches** | **PPC3A** | 5/16 | 1/8 | 5 |
| | **PPC4A** | 7/16 | 3/16 | 6 |
| | **PPC6B** | 5/8 | 5/16 | 7 |
| | **PPC714B** | 9/16 | 5/32 | 14 |
| **Pin Punches** | **PPC103A** | 9/32 | 3/32 | 4 7/32 |
| | **PPC104A** | 5/16 | 1/8 | 4 3/4 |
| | **PPC105A** | 3/8 | 5/32 | 5 |
| | **PPC106A** | 3/8 | 3/16 | 5 1/4 |
| | **PPC107A** | 3/8 | 7/32 | 5 1/4 |
| | **PPC108A** | 7/16 | 1/4 | 5 3/4 |
| | **PPC110A** | 1/2 | 5/16 | 5 1/4 |
| | **PPC112** | 9/16 | 3/8 | 5 1/4 |
| **Metric Pin Punches** | **PPCM103B** | 5/16 | (3) | (159) |
| | **PPCM104B** | 5/16 | (4) | (159) |
| | **PPCM105B** | 3/8 | (5) | (159) |
| | **PPCM106B** | 3/8 | (6) | (159) |
| | **PPCM107B** | 3/8 | (7) | (159) |
| | **PPCM108B** | 7/16 | (8) | (159) |
| **Starter Punches** | **PPC203A** | 5/16 | 3/32 | 5 1/2 |
| | **PPC204A** | 3/8 | 1/8 | 5 3/4 |
| | **PPC205A** | 3/8 | 5/32 | 6 |
| | **PPC206A** | 7/16 | 3/16 | 6 1/4 |
| | **PPC208A** | 1/2 | 1/4 | 6 3/4 |
| | **PPC210A** | 9/16 | 5/16 | 7 1/4 |

| | Stock No. | Hex Size, inch | Point / Edge, inch (mm) | Length, inch (mm) |
|---|---|---|---|---|
| **Flat Chisels** | **PPC808A** | 1/4 | 1/4 | 5 |
| | **PPC812B** | 5/16 | 3/8 | 5 1/2 |
| | **PPC816B** | 7/16 | 1/2 | 6 |
| | **PPC820B** | 1/2 | 5/8 | 6 1/2 |
| | **PPC824B** | 5/8 | 3/4 | 7 1/4 |
| | **PPC828B** | 11/16 | 7/8 | 8 |
| | **PPC832B** | 7/8 | 1 | 9 |
| | **BPPC1878*** | 7/8 | 1 | 18 |
| **Long Flat Chisels** | **PPC820LB** | 1/2 | 5/8 | 16 |
| **Half Round Nose Cape Chisels** | **PPC12B** | 3/8 | 5/16 | 6 |
| **Cape Chisels** | **PPC13B** | 5/16 | 1/4 | 5 5/8 |
| | **PPC14B** | 3/8 | 5/16 | 6 |
| **Diamond Point Chisels** | **PPC15B** | 7/16 | 7/32 | 6 |
| | **PPC19B** | 3/8 | 1/8 | 5 3/4 |

*Blue-Point®

**WARNING**

- Use the proper punch or chisel for the job
- Do not use punches or chisels having chipped or mushroomed end; discard or dress to original shape with a hand file
- Use hammer with head about 3/8" larger in diameter than head of punch or chisel
- Read safety precautions on pages W1 to W4

# PUNCHES AND CHISELS



PPRG80

**PPRG80 Roll Pin Punch Guide Set**
- Companion tool for the PPR708BK roll pin punch set
- Provides faster, safer pin installation
- Pin guide is a vinyl sleeve uniting pin and punch to achieve perfect alignment during installation
- Ideal for pin installation in tight quarters where two hands can't reach
- Use with Snap-on® roll pin punches PPR2–PPR8 (1/16"–1/4")
- Can also be used with *Snap-on* pin punches PPC103A–PPC108A (3/32"–1/4") and long pin punches PPC104LA–PPC108LA (1/8"–1/4")



PPR708BK

**PPR708BK Roll Pin Punch Set**
Includes eight pcs in KB2186 kit bag:
PPR2 PPR4 PPR7
PPR2-1/2 PPR5 PPR8
PPR3 PPR6



PPCL60BK

**PPCL60BK Long Pin Punch Set**
Includes six pcs in KB2184 kit bag:
PPC104LA PPC106LA PPC108LA
PPC105LA PPC107LB PPC110LA



PPVP70BK

**PPVP70BK Midget Punch and Chisel Set**
Includes seven pcs in KB2188 kit bag:
PPC402A PPC406B PPC403A
PPC407B PPC404A PPC408B
PPC405A



PPLT40AK

**PPLT40AK Drift Pin Punch Set**
Includes four pcs in KB2174 kit bag:
PPC905B PPC908B PPC910B
PPC912B



LP30A

**LP30A Drift Pin Punch Set**
Includes three pcs in KB2177 kit bag:
1210B 1512B 1816B



PPBL30AK

**PPB30AK Bronze Punch Set**
Includes three pcs in KB2171 kit bag:
PPB408A PPB612A PPB816A

**PPBL30AK Bronze Punch Set**
Includes three pcs in KB2172 kit bag:
PPB1012A PPB1226A PPB826A

**PPB20AK Bronze Tapered Punch Set**
Includes two pcs in KB2170 kit bag:
PPB1012A PPB1414A

| | Stock No. | Hex Size, inch | Point/ Edge, inch | Length, inch |
|---|---|---|---|---|
| Roll Pin Punches | PPR2 | — | 1/16 | 3 5/32 |
| | PPR2-1/2 | — | 5/64 | 3 1/2 |
| | PPR3 | — | 3/32 | 3 29/32 |
| | PPR4 | — | 1/8 | 4 1/4 |
| | PPR5 | — | 5/32 | 4 5/8 |
| | PPR6 | — | 3/16 | 5 |
| | PPR7 | — | 7/32 | 5 3/8 |
| | PPR8 | — | 1/4 | 5 3/4 |
| | PPR10 | — | 5/16 | 6 1/8 |
| | PPR12 | — | 3/8 | 6 1/8 |
| | PPR14 | — | 7/16 | 6 1/8 |
| | PPR16 | — | 1/2 | 6 1/8 |
| Long Pin Punches | PPC104LA | 5/16 | 1/8 | 5 5/16 |
| | PPC105LA | 3/8 | 5/32 | 6 1/2 |
| | PPC106LA | 3/8 | 3/16 | 7 1/16 |
| | PPC107LB | 3/8 | 7/32 | 7 5/8 |
| | PPC108LA | 7/16 | 1/4 | 8 3/16 |
| | PPC110LA | 1/2 | 5/16 | 8 3/4 |
| Midget Punches and Chisels | PPC402A Pin Punch | 9/32 | 1/16 | 3 |
| | PPC403A Pin Punch | 9/32 | 1/8 | 3 1/4 |
| | PPC404A Center Punch | 9/32 | 3/32 | 3 5/8 |
| | PPC405A Starter Punch | 9/32 | 1/16 | 3 3/4 |
| | PPC406B Cape Chisel | 9/32 | 3/16 | 3 7/8 |
| | PPC407B Cape Chisel | 9/32 | 5/32 | 4 |
| | PPC408B Flat Chisel | — | 5/16 | 4 1/8 |

| | Stock No. | Hex Size, inch | Point/ Edge, inch | Length, inch |
|---|---|---|---|---|
| Drift Pin Punches | PPC905B | 3/8 | 5/32 | 8 |
| | PPC908B | 7/16 | 1/4 | 8 1/2 |
| | PPC910B | 1/2 | 5/16 | 9 |
| | PPC912B | 9/16 | 3/8 | 9 1/2 |
| | 1210B | 5/8 | 5/16 | 12 |
| | 1512B | 3/4 | 3/8 | 15 |
| | 1816B | 7/8 | 1/2 | 18 |
| Bronze Pin Punches | PPB408A | — | 1/4 | 4 |
| | PPB612A | — | 3/8 | 6 |
| Bronze Drift Punches | PPB816A | — | 1/2 | 8 |
| | PPB826A | — | 13/16 | 8 |
| | PPB1226A | — | 13/16 | 12 |
| Bronze Tapered Punches | PPB1001A | 5/8 | 3/8 | 8 |
| | PPB1012A | — | 3/8 | 10 |
| | PPB1414A | — | 7/16 | 14 |
| Bronze Round Punch | PPB1002A | — | 3/4 | 10 |

## Soft Grip

- Ergonomic soft grip handle provides a powerful grip, improves the thermal sensation in cold work environments and reduces strike vibration
- Semispherical striking area controls mushrooming to help reduce chipping and splitting
- Cutting edges on chisels are hand ground to consistently produce a quality edge
- Black oxide coated
- Manufactured from special alloy steel that is differentially heat treated to increase durability



PPCSG710

| Stock No. | Description | Point/Edge, inch | Length, inch | PPCSG710 Set Contains: |
|---|---|---|---|---|
| PCSG812 | Flat Chisel | 3/8 | 6 1/8 | • |
| PCSG816 | Flat Chisel | 1/2 | 6 1/8 | • |
| PCSG820 | Flat Chisel | 5/8 | 6 1/8 | • |
| PPSG4 | Center Punch | 3/16 | 6 1/8 | • |
| PPSG103 | Pin Punch | 3/32 | 6 1/8 | • |
| PPSG105 | Pin Punch | 5/32 | 6 1/2 | • |
| PPSG106 | Pin Punch | 3/16 | 6 1/2 | • |
| PPSG203 | Starter Punch | 3/32 | 6 1/8 | • |
| PPSG205 | Starter Punch | 5/32 | 6 1/8 | • |
| PPSG206 | Starter Punch | 3/16 | 6 1/8 | • |



PPC14LB

## Oval Bearing Race Punches

High alloy steel makes these tools ideal for stubborn bearing races.

**PPC6LB Oval Bearing Race Punch**
7/16" hex stock, 7/16" x 15/64" oval point, 6" long.

**PPC10LB Oval Bearing Race Punch**
1/2" hex stock, 1/2" x 17/64" oval point, 10" long.

**PPC14LB Oval Bearing Race Punch**
9/16" hex stock, 9/16" x 19/64" oval point, 14" long.

**PPC20LB Oval Bearing Race Punch**
9/16" hex stock, 5/8" x 5/16" oval point, 20" long.

**PPC704BK Punch Set**
Includes PPC6LB–PPC20LB (four-piece).



PGH8A

## Gasket Punch Set

**PGH8A Gasket Punch Set**

- Cuts holes in gaskets and other soft materials
- Includes 5 3/8" long mandrel and (ten) punches: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4", 7/8" and 1" in a storage case



GA1

## Bushing Cutter

**GA1 Bushing Cutter (7 1/4" long)**

- Made of 1/2" octagonal stock with a 7/16" x 1/8" bit
- Curved bit pushes material away from work



YA900



YA879A

## Automatic Centering Punches *(Blue-Point)*

**YA900 Automatic Center Punch (4 3/4" long)**

- Strikes blow when pressure is applied, no hammer needed
- Cap adjusts force of blow
- 7/16" diameter

**YA879A Heavy Duty Automatic Center Punch (5" long)**

- Single hand operation
- Design eliminates need for striking with hammer
- Adjustable spring tension cap
- Hardened steel point is replaceable
- 1/2" diameter



DPFT528B

## Transfer Punch Set (Blue-Point®)

**DPFT528B Transfer Punch Set**

- For transferring hole patterns
- Set includes 31 punches from 3/32"–1/2" in 1/64" increments plus 17/32"
- Each punch is marked with its size and manufactured from tempered steel to promote long tool life
- Roll bag provides convenient storage
- Punches are 4 7/8" in length



GA237

## Steel Stamping Sets *(Blue-Point)*

- Heat treated square stamp bodies
- Stored in two-piece wooden containers

| Set Stock No. | Characters | Number Stamps | Figure Size, inches | Square Body, inches | Length, inches |
|---|---|---|---|---|---|
| GA237 | 0–9* | 9 | 3/16 | 5/16 | 2 7/16 |
| YA817 | 0–9* | 9 | 1/8 | 1/4 | 2 3/8 |
| GA238 | A–Z** | 27 | 3/16 | 5/16 | 2 7/16 |
| YA818 | A–Z** | 27 | 1/8 | 1/4 | 2 3/8 |

*One stamp serves as both 6 and 9. **Also includes stamp for period.

**⚠WARNING**

- Use the proper punch or chisel for the job
- Do not use punches or chisels having chipped or mushroomed end; discard or dress to original shape with a hand file
- Use hammer with head about 3/8" larger in diameter than head of punch or chisel
- Read safety precautions on pages W1 to W4

# DEAD BLOW


HBFE32

## HBFE Series Dead Blow Hammers

- Free flowing shot design to improve dead blow action while reducing rebound
- Compact head has larger surface striking area and heavier caps to improve delivered force by as much as 40%
- Soft grip handle with ribbed, textured elastomer grip prevents hand slippage
- Composite handle shank improves balance while diffusing shock and dampening vibration
- Improved thermoplastic urethane material is non-sparking and resistant to most shop chemicals

**Applications:** Brake rotors, brake drum removal, ball joints (tie rod removal), tires, seal installation, loosen oil pans and covers, OE rims, axle insertion, piston installation and crank shaft end play

| Stock No. | Weight, oz | Head Length, inches | Face Diameter, inches | Length, inches | Set Contains: HBFE103 |
|---|---|---|---|---|---|
| HBFE16 | 16 | 3 1/4 | 1 9/16 | 12 | |
| HBFE24 | 24 | 3 3/4 | 1 3/4 | 12 3/4 | • |
| HBFE32 | 32 | 4 1/4 | 2 | 13 1/2 | • |
| HBFE48 | 48 | 4 3/4 | 2 1/4 | 15 | • |
| HBFE56 | 56 | 5 7/16 | 2 3/4 | 15 3/4 | |


HBBD24

## HBBD Series Ball Peen Hammers

- Freeflowing steel canister shot design to improve dead blow action while reducing rebound
- Soft grip handle with ribbed, textured elastomer grip prevents hand slippage
- Composite handle shank improves balance while defusing shock and dampening vibration

**Applications:** Rear drums, tie rods, U-joints rounded end, track bar rounded end, rivets, punch and chisel applications

| Stock No. | Weight, oz | Head Length, inches | Face Diameter, inches | Length, inches |
|---|---|---|---|---|
| HBBD8 | 8 | 4 | 1 | 11 5/8 |
| HBBD16 | 16 | 4 3/8 | 1 1/4 | 12 1/4 |
| HBBD24 | 24 | 4 3/4 | 1 3/8 | 12 3/4 |
| HBBD32 | 32 | 5 3/4 | 1 3/4 | 13 5/8 |
| HBBD40 | 40 | 5 3/4 | 1 3/4 | 15 1/8 |

## Dual Face Drilling

- Sustained impact and maximum striking force with almost no rebound
- Composite handle shank improves the hammer balance while defusing shock
- Free flowing steel head canister design improves dead blow action and reduces rebound
- Non-sparking, chemical-resistant molded urethane covering
- Ribbed thumb rest allows user to choke up in tighter work areas


HBSE20

## HBSE Series Slimline Dead Blow Hammers

- Smaller face – For more concentrated blows
- Longer head profile – For extended reach
- Internal steel canister with free flowing shot design – Delivers maximum dead blow action
- Multi-position hand grip – Helps user “choke up” in tighter work areas
- Wide flare at end of handle – Helps prevent hammer from slipping out of hand
- Microcellular grip and composite shank – Comfortable, secure grip and dampens the vibration to the user’s hand

**Applications:** Main bearing caps, dust caps, smalller objects, custom bikes and tighter applications that standard dead blow hammers will not fit

| Stock No. | Weight, oz | Head Length, inches | Face Diameter, inches | Length, inches |
|---|---|---|---|---|
| HBSE10 | 10 | 3 1/2 | 1 1/4 | 10 5/8 |
| HBSE20 | 20 | 4 1/8 | 1 3/8 | 11 1/8 |
| HBSE30 | 30 | 5 1/8 | 1 1/2 | 12 3/8 |


BC110B

## Sledge

| Stock No. | Weight, lb | Head Length, inches | Face Diameter, inches | Length, inches |
|---|---|---|---|---|
| BC7B | 5 | 7 | 2 3/4 | 20 |
| BC110B | 8 | 7 | 2 3/4 | 30 |
| BC114B | 11 lb 8 oz | 8 | 3 1/4 | 36 |


HLE24

## Piston

- One-piece urethane construction
- Full length canister increases head strength
- Made of material that will not damage the piston
- Shot filled head drastically reduces rebound

| Stock No. | Weight, oz | Head Length, inches | Face Diameter, inches | Length, inches |
|---|---|---|---|---|
| HLE24 | 24 | 7 3/4 | 5 1/2 | 12 3/4 |


HSSD32

| Stock No. | Weight, oz | Head Length, inches | Face Diameter, inches | Length, inches |
|---|---|---|---|---|
| HSSD32 | 32 | 5 3/8 | 1 3/4–1 3/8 | 11 1/2 |



HBBT32

## HBBT Series

- Bronze tipped non-marring hammer ideally suited for work on bushings, gears and transmissions
- Microcellular grip

**Applications:** Bearings and race install, pinion and half shafts, distributor rebuilds, alternator and starter rebuilds, seal installation, body moldings and non-spark applications

| Stock No. | Weight, oz | Head Length, inches | Head Diameter inches | Length, inches |
|---|---|---|---|---|
| HBBT16 | 16 | 3 3/4 | 1 3/8 | 12 |
| HBBT24 | 24 | 4 1/4 | 1 3/8 | 12 |
| HBBT32 | 32 | 4 1/2 | 1 1/2 | 12 3/4 |



BF623



BF620C

## Soft Blow (Blue-Point®)

- Designed to reduce marring and denting
- Use in assembly applications and on surfaces including metal, glass, plastic and wood
- Special polymer head resists dynamic fatigue, creep and compression set, even at extreme temperatures

| Stock No. | Face Dimensions, inches | Head Color | Length, inches |
|---|---|---|---|
| BF623 | 1 7/8 x 2 1/8 | Blue | 12 1/2 |

**BF620C Rubber Head Mallet**

- Solid rubber head is 3 3/4" long, 2 1/4" diameter
- 11" hardwood handle





HSPI6KT

## Interchangeable Head *(Blue-Point)*

- Shot loaded, dead blow hammer adds more striking force by eliminating rebound and dampening vibration shock
- 1 1/2" striking face diameter on each hammer head
- Six interchangeable heads meet a number of various applications
- Comfortable, nonslip handle grip
- Set includes 10" fiberglass handle and storage case
- 1" head extender is optional

| Stock No. | Description | Color | Weight, oz | Set Contains: HSPI6KT |
|---|---|---|---|---|
| HSPI6KT1 | Hammer Handle | — | 22 | • |
| HSPI6KT2 | Soft Face | Brown | 1.5 | • |
| HSPI6KT3 | Medium Face | Red | 1.4 | • |
| HSPI6KT4 | Medium Hard Face | Cream | 1.3 | • |
| HSPI6KT5 | Hard Face | Black | 1.3 | • |
| HSPI6KT6 | Steel Face | Steel | 2.2 | • |
| HSPI6KT7 | Brass Face | Brass | 2.2 | • |
| HSPI6KT8 | Plastic Storage Case | Black | — | • |
| HSPI6KT9 | 1" Head Extender | — | — | |



HBPT24

## HBPT Series

- Plastic tipped hammers used where metal to metal scratching or marring needs to be eliminated

**Applications:** Transmission work, rear end work, metal body moldings and light tapping

| Stock No. | Head Length, inches | Weight, oz | Length, inches | Soft Tip Stock No. (Black) | Hard Tip Stock No. (Gray) |
|---|---|---|---|---|---|
| HBPT16 | 3 3/4 | 16 | 12 | HPTS16 | HPTH16 |
| HBPT24 | 4 3/4 | 24 | 12 3/4 | HPTS24A | HPTH24A |



HSPD16



BH232A

## Combination

- Combination steel and soft face dead blow
- One-piece urethane construction
- Replaceable tips

| Stock No. | Head Length, inches | Weight, oz | Tip Diameter, inches | Length, inches | Soft Tip Stock No. | Hard Tip Stock No. |
|---|---|---|---|---|---|---|
| HSPD16 | 4 3/8 | 16 | 1 1/4 | 12 1/8 | HPTS16 | — |
| BH232A* | — | 32 | 1 5/8 | 13 | BH232-2 | BH232-3 |
| BH232-4 | Optional nylon tip (also available) | | | | | |

**Blue-Point*



HBR15

## Brass (Fiberglass Handle) *(Blue-Point)*

- Non-sparking/non-marring surface for many applications
- Brass head absorbs blow and reduces rebound
- Flat surface for even distribution of blow
- Comfortable, nonslip handle grip

| Stock No. | Weight, lb | Length, inches |
|---|---|---|
| HBR15 | 1 1/2 | 12 |
| HBR25 | 2 1/2 | 12 |
| HBR4 | 4 | 12 |



HCL16

## Claw Hammer

**HCL16 Claw Hammer, 16 oz**

- Drop forged carbon steel head
- Oversized striking surface
- Polyurethane leather improves grip and offers abrasion resistance and low temperature flexibility for unparalleled comfort
- Antishock core reduces vibration and hand fatigue
- One-piece construction delivers increased strength

**⚠WARNING**

- Do not use urethane hammers near liquid oxygen
- Do not strike another hammer or hardened object
- Do not use chipped, mushroomed or cracked hammer
- Strike squarely, avoid glancing blows
- Read safety precautions on pages W1 to W4

# BALL PEEN



BP16B

## Ball Peen (Hickory Handle)

| Stock No. | Weight, oz | Handle Length, inches | Replacement Handle | BP1004S Set Contains: |
|---|---|---|---|---|
| BP2B | 2 | 9 1/2 | BPH2C | |
| BP4B | 4 | 10 1/2 | BPH4C | |
| BP8B | 8 | 12 1/2 | BPH8C | • |
| BP12B | 12 | 13 1/2 | BPH12C | • |
| BP16B | 16 | 14 1/2 | BPH16C | • |
| BP20B | 20 | 15 | BPH20C | |
| BP24B | 24 | 16 | BPH20C | • |
| BP32B | 32 | 16 | BPH40C | |
| BP40B | 40 | 16 1/4 | BPH40C | |
| BP48B | 48 | 16 1/4 | BPH40C | |

ASME®/ANSI® B107.400



BPN16B

## Ball Peen (Fiberglass Handle)

| Stock No. | Weight, oz | Handle Length, inches | Replacement Handle | Previous Model Handle |
|---|---|---|---|---|
| BPN8B | 8 | 11 | BPNH8B | BPN8-1 |
| BPN12B | 12 | 12 | BPNH12B | BPN12-1 |
| BPN16B | 16 | 13 | BPNH12B | BPN16-1 |
| BPN24B | 24 | 14 | BPNH24B | BPN24-1 |
| BPN32B | 32 | 16 | BPNH24B | BPN24-1 |

*ASME/ANSI* B107.400

# HEAVY DUTY Blue-point®



HCB2SG



HCS2SG

## Dual Face Dead Blow (Fiberglass Handle)

- 100% cast polyurethane face is designed to withstand the most severe striking applications
- Non-sparking/non-marring brass face for multiple applications
- Non-ferrous shot loaded cavity delivers more power and less rebound than any hammer of its kind
- Abrasion- and impact-resistant
- Chemical resistant
- Comfortable, nonslip handle grip

**Applications:** aerospace, automotive, metal fabrication, petrochemical, electronics, industrial assembly, construction, oil and mining

| Stock No. | Weight, lb (kg) | Face Diameter, inch (mm) | Handle Length, inch (mm) | Overall Length, inch (mm) |
|---|---|---|---|---|
| HCB2SG | 2 (.91) | 2 (50.8) | 10 5/8 (270) | 13 3/4 (349) |
| HCS2SG | 2 (.91) | 2 (50.8) | 10 5/8 (270) | 13 3/4 (349) |

Meets or exceeds all *ANSI* specifications



BC4SG



BD4SG



HD4SG

## Heavy Duty (Fiberglass Handle)

- Dampens vibration and provides strength and safety
- Handle is resistant to dry rot, warp and splintering
- Fiberglass handle dampens vibration and provides extra strength and safety
- Handle is epoxy welded to hammer head and will withstand 8,000 lb of separation force
- Comfortable, nonslip handle grip
- Materials will resist most shop chemicals

| Stock No. | Description | Weight, lb | Striking Face Diameter, inches | Handle Length, inches | Overall Length, inches | Replacement Handle |
|---|---|---|---|---|---|---|
| BC4SG | Cross Peen | 4 | 1 1/2 | 12 | 14 | BD4SG-1 |
| BD4SG | Engineer | 4 | 1 1/2 | 12 | 14 | BD4SG-1 |
| HD4SG | Hand Drilling | 4 | 1 1/2 | 8 3/4 | 10 3/4 | HD4SG-1 |



BD10ESG

## BD Series Sledge Hammers (Fiberglass Handle)

- Drop forged carbon steel heads – Heat treated for durability and safety
- Fiberglass handles – Chemically bonded the sledge eyehole to withstand 8,000 lb of separation force
- Ergonomic grip – Provides a superior gripping surface, helping to dampen and absorb vibration
- Handles – Tensile strength of 200,000 lb per square inch

| Stock No. | Weight, lb (kg) | Face Diameter, inch (mm) | Handle Length, inch (mm) | Overall Length, inch (mm) | Replacement Handle |
|---|---|---|---|---|---|
| BD6ESG | 6 (2.7) | 1 5/8 (41.1) | 16 (406.4) | 18 (457.2) | BD6ESG-1 |
| BD10ESG | 10 (4.5) | 2 (50.8) | 29 (736) | 32 (812.8) | BD8ESG-1 |



BH122D



BH141A



BH133B

## BH Series Heavy Duty (Hickory Handle)

- Durable handles – Will not dry rot, warp or splinter from exposure to the elements and resists most shop chemicals

| Stock No. | Description | Weight, oz | Head Length, inches | Overall Length, inches | Replacement Handle |
|---|---|---|---|---|---|
| BH122D | Engineer | 40 | 4 1/2 | 15 | BPH40C |
| BH123D | Engineer | 48 | 4 3/4 | 15 | BPH40C |
| BH141A | Cross Peen | 32 | 4 1/2 | 15 | BPH20C |
| BH142A | Cross Peen | 40 | 5 | 15 | BPH40C |
| BH143A | Cross Peen | 48 | 5 1/2 | 15 | BPH40C |
| BH133B | Hand Drilling | 48 | 4 1/2 | 10 | BPH133 |

# THE TOOLS OF EVERY TECH'S DREAM.

Techs love tools. But with Snap-on, there is just more to love. We make literally thousands of tools, so when techs shop Snap-on, the possibilities are endless.

**THE RANGE.**

It does not get any bigger than this. Snap-on offers an incredible range of products, running the gamut from entry-level tools all the way up to pro. And our product line just keeps growing; Snap-on is constantly evolving – and innovating – to outpace ever-changing industry needs.

**THE BASICS.**

Even our most basic tools possess a certain amount of sophistication. Over the years, we've designed – and then refined – just about everything: files, scrapers, spark plug sockets, pullers, extractors, special service tools, heavy-duty tools and more. The list is exhaustive. So, basically, we have everything you need.



# HACKSAWS



HSG325



HSG319



HS5A



HS151

## Hacksaw Blades

- Shatter-resistant bimetal for a long life and fast, efficient cutting

| Stock No. | Length, inches | Teeth per inch |
|---|---|---|
| HSBM1018B | 10 | 18 |
| HSBM1024B | 10 | 24 |
| HSBM1032B | 10 | 32 |
| HSBM1214B | 12 | 14 |
| HSBM1218B | 12 | 18 |
| HSBM1224B | 12 | 24 |
| HSBM1232B | 12 | 32 |

*Available in packages of ten only

## Hacksaws

**HSG325 Professional Hacksaw**
- Ergonomic front grip for increased comfort and control
- Thermoplastic comfort grip handle
- Spring loaded tensioning mechanism for quick blade changes
- Dual blade positioning, for normal flush cutting or 55° angle
- High blade tension for straighter, more accurate and faster cuts

**HSG319 Bi mold Handle Hacksaw**
- Solid steel frame overmolded with soft grip for comfortable use
- Designed for 12" (300 mm) blades
- Blade tensioner discretely blends with handle
- Positions for normal flush cutting or 55° angle
- Includes HSBM1224B ten-pack blades

**HS5A Mini Hacksaw**
- Designed for 10" (250 mm) blades
- 8 1/4" frame fits in limited access areas
- Includes HSBM1024B 10" blade

**HS151 Junior Frame Hacksaw**
- Designed for 6" blades
- 9 1/2" long
- HSB632B blade included

**HSM632 6" Replacement Blade (32 TPI)**
- 1/4" wide, 32 teeth per inch, 6" length
- Package of five



HS50



HSEXRL



HSKIT

## Quick Cutter Hand Saws

- Features contoured screwdriver type handle for a secure grip
- Saw holder keeps a tight hold on any of the three included blades
- Turn the knurled knob and easily switch blades
- All components neatly packaged in CO417 kit bag

**HS50 Quick Cutter Hand Saw**
- Includes: HS14X1, HS18X1 and HS24X1

**HS14X1 General Purpose Blade**
- For metal over 1/8", hard rubber and fiber

**HS18X1 Fine Metal Cutting Blade**
- For metal 18 gauge to 1/8", nail embedded wood

**HS24X1 Heavy Metal Cutting Blade**
- For metal 18 gauge and under trim and tubing, plus galvanized pipe under 18 gauge

**HSKIT Handsaw Kit**
- Ergonomic handle design reduces pressure points and stops hand from sliding
- Handle angle and position of handle to blade teeth reduces sawing forces and increases efficiency
- High quality aluminum body ensures rigidity and retaining/protecting locking mechanism
- Locking system helps reduce play between handle and blade when assembled
- Easy access to lever through handle opening
- Long lever for easy lock and release: security spring locks lever

**HSEXRL Handle**

**HSEX16 General Purpose Blade**

**HSEX22 Coarse Wood Blade**

# SCISSORS



YA114



KER1120

## Scissors

**YA114 Stainless Scissors Blue-Point®**
- High quality stainless-steel
- Compact: 3" long

**KER1120 Taskmaster Shears**
- High carbon stainless-steel blades designed to hold their edge longer and sharpen quickly
- Blades are permanently bonded to comfortable, nonslip handles
- Overall length 9"

## SEK74MAK Series Specialty Knives

- Japanese AUS 8 high carbon steel provides superior cutting performance and incredible edge retention
- Modified hollow ground drop-point blade reduces resistance when cutting
- Versatile blade shape is ideal for cutting, skinning, scraping and stabbing
- Ambidextrous flipper and IKBS bearing system ensure smooth, fast opening without springs
- Friction grooves provide positive engagement of thumb or index finger when needed
- 6061 T6 cold forged anodized aluminum handle is durable, lightweight and built to withstand the abuse of a shop environment
- Liner-lock design with recessed liners and barrel spacers create a knife that is safe, strong and thin but still easy to close and clean
- Stainless pocket clip enables tip-down carry for safety and security
- Lanyard hole can be utilized for additional security when cutting

**SEK74MAKG Large Wrinkle™ Knife (Green)**
**SEK74MAKK Large *Wrinkle* Knife (Black)**
**SEK74MAKO Large *Wrinkle* Knife (Orange)**
**SEK74MAKR Large *Wrinkle* Knife (Red)**
**SEK67MAKK Small *Wrinkle* Knife (Black)**
**SEK67MAKR Small *Wrinkle* Knife (Red)**



**SEK74MAKG**



**SEK74MAKK**



**SEK74MAKO**



**SEK74MAKR**

## SEK76LMN Series Specialty Knives

- Satin finish blade with laser cut Snap-on® logo
- Unique modified tanto blade is flat ground – provides a durable edge for easy cutting of tough materials in a shop environment
- Friction grooves on blade spine provide traction for thumb or index finger during cutting
- Tried and true lockback design ensures safety with an ambidextrous thumb stud for easy one-handed opening
- Unique reversible stainless-steel pocket clip for easy carry
- Nylon/fiberglass injection-molded handles are strong and extremely lightweight
  - –Nylon/fiberglass handles resist corrosive shop fluids
  - –Contoured for an ergonomic grip
  - –Slim profile for easy carry
  - –Unique checkered design offers a secure grip in any condition

**SEK76LMNG Kommer Lockback Knife (Green)**
**SEK76LMNK Kommer Lockback Knife (Black)**
**SEK76LMNO Kommer Lockback Knife (Orange)**
**SEK76LMNR Kommer Lockback Knife (Red)**


**SEK76LMNG**


**SEK76LMNK**


**SEK76LMNO**


**SEK76LMNR**

## SEK86MGN Series Specialty Knives

- Unique modified Tanto-type blade shape ensures a strong tip for multiple cutting tasks
- Razor sharp non-glare bead-blasted 440C stainless steel blade
- Two-tone machined textured G-10 handle provides a secure grip and is virtually indestructible
- Liner lock construction for one-handed opening and closing
- Quick deploy flipper for easy one-handed opening
- Handy pocket clip can be customized to either a tip up or tip down, left-handed or right handed position
- Ambidextrous thumb stud
- Designed by Russ Kommer

**SEK86MGNK Black Sniper Knife**
**SEK86MGNS Sand Sniper Knife**


**SEK86MGNK**


**SEK86MGNS**

**⚠WARNING**

- Keep away from children
- Read safety precautions on pages W1 to W4

## CUTTING: KNIVES


SO88G


SO88BLK


SO88OR


SO88R

### SO88 Series Specialty Knives

- Equipped with a big, slightly drop-pointed blade that offers both excellent slicing and piercing capabilities
- High-performance stainless-steel blade offers excellent corrosion resistance and enhanced looks
- Lightweight machined 6061-T6 anodized aluminum handles, with Trac-Tec inserts, ensure extremely solid grip
- Equipped with SpeedSafe® knife assisted opening technology
  - –A short push on the index point overcomes the resistance built into the torsion bar in the mechanism
  - –*SpeedSafe* knife technology takes over and the blade moves out of the handle quickly and easily
- Inset Liner Lock® mechanism – an inset steel plate functions like a locking liner, in one side of the handle
  - –Upon blade deployment, the steel plate moves behind the blade securely locking it open without all the weight and bulk of full liners
- Includes reversible deep carry pocket clip so the knife can sit all the way down in the pocket

**SO88G DASH Knife (Green)**
**SO88BLK DASH Knife (Black)**
**SO88O DASH Knife (Orange)**
**SO88R DASH Knife (Red)**

## LANDSCAPE TOOLS


PRN75SFS


PRN8P

### Pruning Tools

**PRN75SFS Folding Pruning Saw**
- General purpose folding saw for cutting wood or plastics
- Two component plastic handles for firm grip
- Blade specially coated for low friction and rust protection
- Blade locks in both open and closed position

**PRN8P Hand Pruner**
- Slicing cutting action requires minimal effort
- High quality carbon steel blades with precision ground edges keep the blade sharp longer
- Glass fiber handle is lighter than aluminum yet stronger than steel
- Strong rubber bumper absorbs shock
- Smooth spring keeps blade in open position while providing minimal resistance in cutting action
- Blades can be locked in closed position

## UTILITY KNIVES


YA580A


YA581A

### Multipurpose Cutters (Blue-Point®)

**YA580A Multipurpose Cutter**
- Auto locking, fully retractable blade
- Metal body is black with blue cap and pocket clip
- Includes (one) premium steel 13-point snap blade
- Overall length of 5 3/8"
- Uses YA580A-1 replacement blades

**YA581A Multipurpose Cutter**
- Three blades with eight snap-off points
- Minimum blade wobble
- Fully retractable

**YA580A-1 Replacement Blades**
- Individual break-off replacement blades for the YA580A and YA584A multipurpose cutters
- Five-pack

**YA581A-1 Blades**
- Replacement blades for YA581A
- Ten-pack




UTK100




UTK100SB



UKBU10




UKBU50PK



LBUK1

## Utility Knives

**UTK100 Utility Knife**
- Retractable blade
- Quick release, spring-loaded handle provides fast, sure blade changes
- Integrated hinge handle means no handle parts to lose and no tools required to change blades
- Rubber grip for comfort and control
- Three blade positions: open, half closed and closed

**UTK100SB Utility Knife**
- Auto retracting
- Quick release, spring loaded handle provides fast, sure blade changes
- Rubber grip for comfort and control
- Includes one safety point, two-notch blade

**UKBU10 Utility Knife Blades**
- Two-notch double-pointed blades (ten-pack)
- Use with UTK100, UTK100SB, UTK150, LBUK1 and LBUK2 utility knives

**UKBU50PK Utility Knife Blades**
- Two-notch double-pointed blades (50-pack)
- Dispenser ejects blades one at a time
- Blade guard in the ejector
- Use with UTK100, UTK100SB, UTK150, LBUK1 and LBUK2 utility knives

**YA1850A Utility Knife Blades (Blue-Point®)**
- 100 three-notch, double-pointed utility blades in bulk packaging

**YA1800A Single Edge Razor Blades *(Blue-Point)***
- 100 blades in a plastic dispenser
- Blades have aluminum backs that can be shaped for special applications

**LBUK1 Lock Back Utility Knife *(Blue-Point)***
- Folding lock back blade, hardwood handle with belt clip and thumb stud for one-hand opening
- Includes utility knife and leather pouch (both with *Blue-Point* logo) plus ten replacement blades
- Uses UKBU10 (ten-pack) or UKBU50PK (50-pack) replacement blades

⚠WARNING
• Keep away from children
• Read safety precautions on pages W1 to W4

# CUTTING: UTILITY KNIVES



LBUK2




UTK150

## Utility Knives

**LBUK2 Lock Back Utility Knife (Blue-Point®)**
- Thumb pad allows controlled application of pressure
- Blades are easily replaced with a flip of the switch
- Blade storage under spring-loaded door
- Includes leather pouch with belt loop plus five replacement blades
- Uses UKBU10 (ten-pack) or UKBU50PK (50-pack) replacement blades

**UTK150 Auto Loading Utility Knife**
- Exposed blade is easily removed or reversed with the push of a button
- New blade is auto loaded from five blade magazine
- Cushioned handle provides comfort and control
- Three blade positions: 1" and 1/4" exposures and closed
- Uses standard two-notch replacement blades



YA405A

## Hobby Knife *(Blue-Point)*

**YA405A Hobby Knife**
- 5 1/2" long aluminum handle with bottom knurl and knurled brass nose cap
- Includes the following blades: YA405-1, YA405-2, YA405-3, YA405-4

**YA405-1 23° Angle Blade**
**YA405-2 50° Angle Blade**
**YA405-3 Curved Edge Blade**
**YA405-4 Straight Chisel Edge Blade**



KER2535




SCKS1

## Knife Sharpeners

**KER2535 Blade Sharpener**
- Embedded with 600 grit diamond coating, bonded with nickel plating to a lightweight tube
- Length is 8.5" (20.3 cm): sheath is 5.5" (12.7 cm)

**SCKS1 Carbide Knife Sharpener**
- Preset angle simplifies sharpening of all blades (except serrated)
- Slip resistant rubber base pads increase steadiness in sharpening position
- Lightweight 1.7 oz
- Compact, 1.8" x 2.2" x .25"
- Strong 6061-T-6 aircraft aluminum frame
- Tungsten carbide sharpening element will sharpen the toughest blades

## Comfort



SGFRD104



SGFMA104



SGFHR104

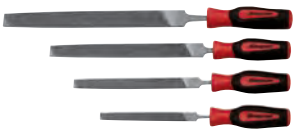


SGFMX104

## Instinct®



SGHBF200A



SGHBF300A



SGHBF400A



SGHBF500A

## Bastard Cut Individual Files

Additional mill file sizes are also available

| | Stock No. | Uses Handle | Diameter, inches | Cut | Length, inches | SGFRD104 Comfort Grip | SGFMA104 Comfort Grip | SGFHR104 Comfort Grip | SGFMX104 Comfort Grip | SGHBF200A *Instinct* | SGHBF300A *Instinct* | SGHBF400A *Instinct* | SGHBF500A *Instinct* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Round Files | 6R* | SGHF614BR | 7/32 | — | 6 | | | | | • | | | |
| | 8R* | SGHF614BR | 9/32 | — | 8 | | | | | • | | | • |
| | 10R* | SGHF615BR | 3/8 | — | 10 | | | | | • | | | |
| | 12R* | SGHF616BR | 1/2 | — | 12 | | | | | • | | | |
| | SGF6R | – | — | — | 6 | • | | | | | | | |
| | SGF8R | – | — | — | 8 | • | | | • | | | | |
| | SGF10R | – | — | — | 10 | • | | | | | | | |
| | SGF12R | – | — | — | 12 | • | | | | | | | |
| Mill Files | 6MA* | SGHF614BR | — | 5 1/2 | 6 | | | | | | • | | |
| | 8MA* | SGHF615BR | — | 7 1/2 | 8 | | | | | | • | | • |
| | 10MA* | SGHF616BR | — | 9 1/2 | 10 | | | | | | • | | • |
| | 12MA* | SGHF617BR | — | 11 1/2 | 12 | | | | | | • | | |
| | 14MA* | | — | 13 1/2 | 14 | | | | | | | | |
| | SGF6MA | – | — | — | 6 | | • | | • | | | | |
| | SGF8MA | – | — | — | 8 | | • | | • | | | | |
| | SGF10MA | – | — | — | 10 | | • | | | | | | |
| | SGF12MA | – | — | — | 12 | | • | | | | | | |
| Half Round Files | 6HR* | SGHF614BR | — | — | 6 | | | | | | | • | |
| | 8HR* | SGHF615BR | — | — | 8 | | | | | | | • | |
| | 10HR* | SGHF616BR | — | — | 10 | | | | | | | • | |
| | 12HR* | SGHF617BR | — | — | 12 | | | | | | | • | |
| | SGF6HR | – | — | — | 6 | | | • | | | | | |
| | SGF8HR | – | — | — | 8 | | | • | | | | | |
| | SGF10HR | – | — | — | 10 | | | • | | | | | |
| | SGF12HR | – | — | — | 12 | | | • | | | | | |
| Three Square File | 6T* | SGHF614BR | — | 5 1/2 | 6 | | | | | | | | • |
| | SGF6T | – | — | 6 | 6 | | | | • | | | | |
| | 10T* | SGHF616BR | — | 9 1/2 | 10 | | | | | | | | |
| *Instinct* Handles | SGHF614BR | – | — | — | | | | | | 2 | 1 | 2 | 2 |
| | SGHF615BR | – | — | — | | | | | | 1 | 1 | 1 | 1 |
| | SGHF616BR | – | — | — | | | | | | 1 | 1 | 1 | 1 |
| | SGHF617BR | – | — | — | | | | | | | 1 | | |
| Kit Bag | | | | | | PAKKB069 | PAKKB069 | PAKKB069 | PAKKB069 | C0413A | C0413A | C0413A | C0413A |

*Handle ordered separately

## Miniature Files

| Stock No. | Description | SGFMN106 Set Contains: |
|---|---|---|
| SGF4MA | Hand | • |
| SGF4W | Warding | • |
| SGF4HR | Half Round | • |
| SGF4SQ | Square | • |
| SGF4R | Round | • |
| SGF4T | Triangular, Slim Taper | • |



SGFMN106

WARNING

- Keep away from children
- Read safety precautions on pages W1 to W4

# FILES



HBFN120A

## Swiss Needle

**HBFN120A Set**
- 12 needle files with round, knurled handles
- Each is 5 1/2" long and "0" cut for coarse filing
- Packaged in a plastic pouch

**HF611A File Handle**
- Plastic screwdriver collet style handle for holding individual files in HBFN120 set

| Stock No. | Description |
|---|---|
| 5NRA | Round |
| 5NHRA | Half Round |
| 5NFA | Flat |
| 5NCA | Crossing |
| 5NKA | Knife |
| 5NSQA | Square |
| 5NTSB | 3 Square |
| 5NEA | Equaling |
| 5NBA | Barrette |
| 5NJA | Joint |
| 5NSA | Slitting |
| 5NMA | Marking |



6T

## 3 Square Files

**6T** 6" long, 5 1/2" cut length.
**10T** 10" long, 9 1/2" cut length.



6CR

## Single Cut Chain Saw Files

**6CR** 6" long, 5/32" diameter. Uses HF611A file handle.
**8CR** 8" long, 7/32" diameter.



10FMK

## Multicut Flat File

**10FMK Multicut Flat File**
10" long.

# ACCESSORIES



SGHF616BR

## Soft Grip Handles

- For all bastard cut files that use replacement soft grip handle
- Feature twist-on threads for securely holding files

| Stock No. | For Files |
|---|---|
| SGHF614BR | 4MA, 6CR, 6R, 6T, 6MA, 6HR, 8CR, 8R |
| SGHF615BR | 8T, 8MA, 8HR, 10R |
| SGHF616BR | 10T, 10MA, 10HR, 12R |
| SGHF617BR | 12MA, 12HR |



GA613

## Wooden Twist-on Handles

- Wooden twist-on handles with case hardened, threaded steel inserts
- Use on all bastard cut files on this page

| Stock No. | For Files |
|---|---|
| GA613 | 4MA, 8CR, 6R |
| GA614 | 6T, 6MA, 6HR, 8R |
| GA615 | 8T, 8MA, 8HR, 10R |
| GA616 | 10T, 10MA, 10HR, 12R |
| GA617 | 12MA, 12HR |
| GA618 | 14MA, 16MA |



GA98A

## GA98A Plastic Adjustable Jaw Handle (Blue-Point®)

- Provides a large, comfortable grip for all bastard cut files
- Adjustable jaws grip the file so it can't turn
- Use on files 4"–16" long
- 4 1/2" long, 1" in diameter, 3/8" maximum opening



YA337A

## YA337A File Cleaner

- Bristle area of 3 1/2" x 1 1/2" with .013" (33 ga.) wire
- Wooden handle
- 7 1/2" long

# SCRAPERS AND PUTTY KNIVES



PKN90



PKNG90

## Large Surface Scrapers

**PKN90 Non-marring Large Scraper**
- Glass reinforced nylon offers great blend of flexibility and strength
- Non-marring composite material will not scratch soft metals, paint or composites
- Large handle for easy grip
- Ideal for use on cylinder blocks or other large gasket mating surfaces
- Removal of corrosion on flat metals (aluminum, steel, etc.) with suitable etch cleaners and rust removal solutions, primer preparation and cleaning of stainless steel surfaces
- Can be used with suitable chemicals in removal of paint coatings, gel coats, etc.
- Ideal for lacquer/paint stripping and final smoothing on wood surfaces

**PKNG90 Glass/Acrylic Large Scraper**
- Designed for use on glass and acrylic surfaces
- Will not scratch those surfaces like metal tools
- Large handle for easy grip
- Orange color to visually identify difference from black nylon glass-filled products
- Works well when removing dirt/debris, windshield decals, adhesive mounts for mirrors, dealer sticker removal, tree sap, algae removal from fiberglass boats, and during the removal of window tinting



PKNC300



PKNC301

## Striking Scrapers

- Striking cap is designed for hammering
- Heavy duty blade extends through the handle and meets the cap to equally distribute the striking force
- Thick, polished, high carbon steel for durability
- Ergonomic soft grip handle for secure grip when striking
- Can be used as a chisel or scraper

| Stock No. | Description | Blade Width, inches | PKNC301 | PKNC300 |
|---|---|---|---|---|
| PKNC150 | Single Bevel | 1 1/2 | | • |
| PKNC125C2 | Dual Bevel | 1 1/4 | | • |
| PKNC200 | Single Bevel | 2 | | • |
| PKNC050 | Single Bevel | 1/2 | • | |
| PKNC075C2 | Dual Bevel | 3/4 | • | |
| PKNC075 | Single Bevel | 3/4 | • | |

Set Contains:

**PKNC125C2 Striking Scraper (1 1/4")**
Dual bevel design for two distinct blade lengths.



PSN500



PKN500

## Non-marring Tool Sets

- Unique selection of tip profiles for numerous prying, scraping, aligning, cutting and shielding applications
- Includes a cloth kit bag to organize and store tools
- Intended for general automotive use
- Do not use on surfaces such as glass or clear acrylics
- Glass-reinforced nylon provides strength
- Lightweight and resistant to most automotive fluids
- Useable with hammers (block end/tap into position)
- Avoids scratching or gouging of soft materials

| Stock No. | Blade Style/Tip Profile | Blade Width, inches | PKN500 Scrapers | PSN500 Tools |
|---|---|---|---|---|
| PKN1 | Straight Blade | 7/8 | • | |
| PKN2 | Straight Blade | 1 1/4 | • | |
| PKN3 | Curved Blade | 1 1/8 | • | |
| PKN4 | Angle Blade | 3/4 | • | |
| PKN5 | Curved Blade | 5/8 | • | |
| PBN10 | 90° L | — | | • |
| PBN11 | Narrow Wedge | — | | • |
| PBN12 | Curve Cup | — | | • |
| PBN14 | Narrow Point | — | | • |
| PKN7 | Curve Tube | — | | • |
| Kit Bag | | | C0100 | C0100 |

Set Contains:



CSA300AR



CSA8CO

## Rigid Carbon Scrapers

- 1/4" square shanks are flared to form scraping edge
- Classic screwdriver type handle

| Stock No. | Handle Color | Length, inches | Blade Width, inches | Blade Style | CSA300A | CSA300AO | CSA300AR |
|---|---|---|---|---|---|---|---|
| CSA8C | Black | 7 5/8 | 7/8 | Straight | • | | |
| CSA8CO | Orange | 7 5/8 | 7/8 | Straight | | • | |
| CSA8CR | Red | 7 5/8 | 7/8 | Straight | | | • |
| CSA12C | Black | 12 7/8 | 1 | Straight | • | | |
| CSA12CO | Orange | 12 7/8 | 1 | Straight | | • | |
| CSA12CR | Red | 12 7/8 | 1 | Straight | | | • |
| CSA14C | Black | 14 1/8 | 1 1/2 | Straight | • | | |
| CSA14CO | Orange | 14 1/8 | 1 1/2 | Straight | | • | |
| CSA14CR | Red | 14 1/8 | 1 1/2 | Straight | | | • |

Set Contains:



USS103

## Knife Blade Scrapers (Blue-Point®)

- Remove gaskets, sealers and other caked-on materials
- Blade edge designed to work effectively in both push and pull directions
- Stainless steel blades for durability
- Polished blades clean up easily
- Comfortable composite handles feature a contour thumb stop for maximum control and a wide hilt for control

| Stock No. | Blade Style | Blade Length, inches | Length, inches | USS103 |
|---|---|---|---|---|
| US710 | Spoon | 3 3/8 | 8 | • |
| US711 | Chisel Tip | 2 1/2 | 7 1/8 | • |
| US712 | Oyster | 2 1/8 | 6 3/4 | • |

Set Contains:

**WARNING**

- Keep away from children
- Read safety precautions on pages W1 to W4

# SCRAPERS AND PUTTY KNIVES



PK500A

## Putty Knives/Scrapers (Blue-Point®)

- Full length steel blades for strength and durability
- Soft molded rubber handles maximize hand grip, are easy to clean and resistant to most solvents
- Broad hilt design helps protect against hand slipping when scraping

| Stock No. | Blade Length, inches | Blade Width, inches | Blade Style | Edge | Set Contains: PK500A |
|---|---|---|---|---|---|
| PK50A | 3 1/2 | 2 | Flexible | Straight | • |
| PK52A | 3 19/32 | 1 1/4 | Flexible | Straight | • |
| PK53A | 3 19/32 | 1 1/4 | Stiff Chisel | Single Bevel | • |



PKB500A

## Brass Putty Knives/Scrapers *(Blue-Point)*

- Spring-tempered, solid brass blades are non-marring, non-sparking, non-magnetic and non-corrosive
- Soft molded rubber handles maximize hand grip, are easy to clean and are resistant to most solvents
- Broad hilt design helps protect against hand slipping when scraping
- Stiff blade style

| Stock No. | Handle Length, inches | Blade Length, inches | Blade Width, inches | Blade Style | Edge | Set Contains: PKB500A |
|---|---|---|---|---|---|---|
| PKB50A | 4 7/8 | 3 1/2 | 2 | Stiff | Straight | • |
| PKB52A | 4 7/8 | 3 19/32 | 1 1/4 | Stiff | Straight | • |
| PKB53A | 4 7/8 | 3 19/32 | 1 1/4 | Stiff | Single Bevel | • |



PKWHD53A

## Walnut Handled Scrapers *(Blue-Point)*

- Quality crafted for hard scraping applications
- Walnut wood handle for comfort
- Full length heavy duty blades for strength
- Large steel cap for striking capability
- Remove gaskets, sealants and body weld breakaway

| Stock No. | Blade Length, inches | Blade Width, inches | Blade Style | Edge | Length, inches | Set Contains: PKWHD53A |
|---|---|---|---|---|---|---|
| PKWBS53A | 3 | 1 1/4 | 30° Bent | Chisel | 7 1/2 | • |
| PKWLR53A | 5 1/2 | 1 1/4 | Straight | Chisel | 9 1/2 | • |
| PKWSS53A | 2 3/4 | 1 1/4 | Straight | Chisel | 6 3/4 | • |



PK23A

## Maple Handle Putty Knife *(Blue-Point)*

- Mirror finished hardened steel blade extends through hardwood handle, solidly riveted for durability
- Maple handle has metal bolster where handle meets blade

| Stock No. | Handle Length, inches | Blade Width, inches | Blade Style | Edge |
|---|---|---|---|---|
| PK23A | 3 7/8 | 1 1/4 | Heavy Chisel | Single Bevel |



CS1



PK70



MS3000



PKRS1

## Scrapers

**CS1 Flexible Wire Carbon Scraper**
- Ten blades made of oil tempered spring steel
- Sliding ferrule is used to adjust to the required flexibility

**PK70 Multipurpose Scraper *(Blue-Point)***
- Use for gasket removal, deburring, car body work and rust removal
- Durable tungsten carbide blades
- Ergonomic handle reduces fatigue
- Thumbgrip allows precision scraping

**PK70TRI Replacement Blade**
For PK70.

**PK70ROUND Replacement Blade**
For PK70.

**PK70DROP Replacement Blade**
For PK70.

**PK70PEAR Replacement Blade**
For PK70.

**MS400 Compact Scraper (4") *(Blue-Point)***
- Removes stickers, molding paint and decals
- Use with standard, single edge steel or plastic razor blades
- Quick and easy blade changes
- Angled head provides maximum leverage
- 4" long

**MS800 Standard Scraper (8") *(Blue-Point)***
- Same as MS400 except 8" long

**MS1300 Long Scraper (13") *(Blue-Point)***
- Same as MS400 except 13" long

**MS3000 Scraper Set *(Blue-Point)***
- Includes MS400, MS800, MS1300 and MSRPACK5 in storage case

**PKRS1 Ergo Grip Razor Scraper *(Blue-Point)***
- Three blade positions: closed, open and loading
- Rubberized contour grip provides comfort and a sure gripping surface
- Uses YA1800 Replacement Blades

## Cutters

**VGP18210 Chain Pipe Cutter**
- Quickly and easily cuts exhaust pipes with 13 alloy cutting wheels in chain
- Cuts stainless-steel, copper and PVC piping from 15 mm up to 75 mm (19/32"–2 15/16") in diameter, up to 2.6 mm (3/32") wall thickness
- Locking mechanism helps avoid lateral movement and misaligned cutting
- Large butterfly screw allows application of greater force to cutting wheels with each series of cut

**VGP18210-1 Replacement Chain**
- For VGP18210

**TC90A Tail Pipe Cutter**
- Handles on the car cutting from 3/4"–3 1/2" diameter
- 16-link cutter chain is 12" long
- Threaded shaft with cross piece provides elasticity to help prevent chain wheels from breaking
- Ideal for cutting the strut assembly to enable servicing of the strut cartridge

**TC90A1 Chain Assembly**
- Includes one wheel and one roll pin



VGP18210



TC90A

## Exhaust Tools

**YA1300 Manifold Jack (set of 2)**
- Use to expand manifold to its original shape and bolt hole alignment
- Use with a 3/4" open end wrench

**YA3202 Exhaust Hanger Removal Pliers**
- Remove hanger brackets from rubber mounting straps by placing jaw behind rubber grommet ring and forcing pin of pliers on the end of steel hanger
- When handles are squeezed, the forcing pin pushes the ring off the hanger
- 14" long



YA1300



YA3202

## Expanders

**PH800 Tailpipe Expander with Collets**
- Simple and convenient set for tailpipe expansion jobs
- Using an impact wrench the pipe stretcher is a convenient, inexpensive alternative to hydraulic pipe expander
- Can be used right on the vehicle
- Includes PH300 and five aluminum collets
- Expands from 1 5/8"–4 1/4"
- Includes molded storage case

**PH300 Tailpipe/Exhaust Stretcher**
- Stretches all types of exhaust pipe, including stainless steel, from 1 5/8"–2 7/16"
- Use with an impact wrench

**CG5560HY Hydraulic Tailpipe/Exhaust Stretcher Conversion Kit**
- Converts PH300 tailpipe/exhaust stretcher to the convenience and power of hydraulic operation
- Includes the CG122 10 ton hydraulic ram and pump set and hydraulic cone adaptor

**CG5560 Tailpipe/Exhaust Stretcher Conversion Kit**
- Add to CG122 10 ton hydraulic ram and pump set to add hydraulic power to the PH300
- Includes exhaust pipe and instructions



PH800



PH300



CG5560HY

# TUBING, CUTTERS, FLARING AND BENDING



TC15A



TC28C




TC123C



TC123CR



TC25A



TBS100



TBS200A



TBS300



GA244

## Cutters

**TC15A Ratcheting Cutter**
- Ratchet action allows cutting all the way around the tubing by simply pumping the handle
- Handles 1/8"–3/8" O.D. copper, plastic and PVC tubing
- Ideal for fuel, vacuum and air conditioning applications
- 3 7/8" long

**TC15-7C Cutting Wheel**
- Standard replacement cutting wheel for TC15A tube cutter

**TC15-HSS Small Cutting Wheel**
- High speed steel cutting wheel

**TC28C Tubing Cutter (Blue-Point®)**
- Cuts soft metal tubing ranging from 1/8"–1" in diameter
- O.D. capacity is 1/8"–1 1/8"
- Micrometer type adjustment
- Retractable locking reamer blade
- Cutter wheel is easily replaceable

**TC28C1 Cutting Wheel**
- Extra cutter wheel for TC28C

**TC123C Tubing Cutter *(Blue-Point)***
- Handles tubing from 1/8"–5/8" O.D.
- Can be used where clearance around tubing is less than 1 3/8"
- 1 1/2" long when closed and 2" long when open; feed knob is 7/8" in diameter

**TC123CR Ratcheting Tube Cutter *(Blue-Point)***
- TC123C cutter and TC123CRH handle combined into one unit

**TC123CRH Ratcheting Tube Cutter Handle**
- Handle for TC123C tube cutter

**TC123C1 Cutting Wheel**
- Extra cutter wheel for TC123C

**TC25A Ratcheting Cutter *(Blue-Point)***
- Designed for automotive, plumbing, air conditioning, marine, chemical laboratories, refineries and hydraulic industries
- Cuts steel, copper, brass, aluminum, plastic and PVC sizes 5/16"–1 1/8" diameter
- Ratcheting tube cutter with unique spring loaded action mechanism allows one or two tightening adjustments to complete the cut in very hard-to-reach places
- Ratchet motion allows operation in close quarters
- High-impact fiberglass handle is strong and lightweight

## Bending Tools

**TBS100 Tubing Bender**
- Bends tubing up to 1/4" O.D.
- Bends copper, brass, bundy weld, noncoated brake lines and more
- Comfort grip handle
- 7" long

**TBS200A Multipurpose Tubing Bender *(Blue-Point)***
- Makes left, right or offset bends up to a 90° angle
- Degrees shown for accurate bending angle
- Handles 3/16", 1/4", 5/16" and 3/8" (4 mm, 6 mm and 8 mm) O.D. aluminum, copper and stainless steel tubing
- Aluminum unit is 8 1/4" long when opened

**TBS300 Tubing Bender *(Blue-Point)***
- Easily bend 1/4, 5/16 and 3/8" O.D. soft copper or aluminum tubing up to 180°
- Degrees, in 15° increments, noted on tool for accurate bends
- Pull lever to easily disengage tool after bending
- Cushioned handles provide comfort and control, even with greasy hands
- Offset handles provide hand clearance when making 180° bends
- Lightweight, die cast aluminum construction
- Overall length is 10 1/2"

**GA244 Tubing Bender**
- Allows smooth bend without denting tubing
- Makes bends to 180° and 13/16"
- Handles 3/16", 1/4" and 5/16" O.D. steel and copper tubing
- Reversible forming pad
- Polypropylene posts minimize friction



TF528D



TF5A



TF275A



TFM428

## Flaring Tool Sets (Blue-Point®)

**TF528D Tube Cutting and Double Flaring Set**
- Contains TC28C tubing cutter and a double flaring set with a flaring bar, rod handle, yoke and five adaptors: 3/16", 1/4", 5/16", 3/8" and 1/2" and storage case

**TF5A Double Flaring Tool Set**
- Makes double or single flares on soft steel, brass or aluminum tubing from 3/16"–1/2" O.D.
- Makes a smooth fitting, crack-free 45° flare
- Set includes five adaptors, yoke assembly, bar assembly and handle
- Storage case included

**TFM5A Metric Double Flaring Tool Set**
- Same design as TF5A except it is for tubing with an O.D. from 4.75 mm–10 mm
- Set includes yoke, bar assembly, handle and five adaptors: 4.75 mm, 5 mm, 6 mm, 8 mm and 10 mm

**TF275A Flaring and Swaging Set**
- 45° flare or swage soft copper, brass or aluminum tubing
- Die blocks handle 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", and 3/4" O.D. tubing
- Swages 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" and 3/4" O.D. tubing
- TF275PB storage case included

**TFM428 Metric Bubble Flaring Set**
- For automotive brake systems
- Designed for crack-free bubble flares on soft wall tubing up to a wall thickness of .028"
- Adaptors included for 4.75 mm, 6 mm, 8 mm and 10 mm flares
- TFM428PB storage case included

**TFM428PB Plastic Box**



TFL500

**TFL500 and TFL800 Flaring Kit**
- Use with a ratchet to make consistent flares faster and easier
- Makes double flares on 3/16" and 4.75 mm tubing
- Low-profile design allows for use on or off the car
- In-line design makes a more accurate flare
- Double clamp and hex screw design keeps tubing locked tightly in position
- For use on thin walled steel and copper tubing



TFL800

**TFLM800 Flaring Kit**
- Use with a ratchet to make consistent flares faster and easier
- Makes double flares on 4.75 mm, 5 mm and 6 mm tubing
- Low-profile design allows for use on the car or off
- In-line design makes a more accurate flare
- Double clamp and hex screw design keeps tubing locked tightly in position
- For use on thin walled steel and copper tubing



TFLM800



WARNING • Read safety precautions on pages W1 to W4

# SPARK PLUG SERVICE TOOLS


YA824C


YA824ASTR


SBP5


SBP3


YA8230

## Boot Pliers

**YA824C Spark Plug Boot Pliers**
- 45° offset jaws
- Vinyl coated jaws and handles assure gripping ability
- Use only on automotive type ignition systems
- 9 1/2" long

**YA824ASTR Boot Pliers**
- Straight jaw version of YA824C
- 9 3/4" long

**SBP5 Boot Pliers**
- Five positions for easy access to restricted spark plugs
- Internal spring keeps pliers in the open position
- Vinyl coated jaws and handles
- Black industrial finish
- 10" long

**SBP3 Boot Pliers**
- Vinyl coated offset jaw tips will pull most US and import spark plug boots, including the back plugs on late model Porsche® and Mercedes-Benz® vehicles
- Vinyl covered handles are cushioned for comfort

**YA8230 Valve Stem Seal Pliers**
- Removes valve stem seals from overhead camshaft engines including four valve-per-cylinder engines that have restricted access to the valve stem seal
- Gripping serrations in the pliers tip easily grab both OEM and aftermarket seals with ease
- Easy-grip handles


FSPK


FSPPRK

## Spark Plug Extractors

**FSPK Spark Plug Extractors**
- Removes broken spark plugs from cylinder head on Ford® Triton 5.4 L three-valve engines, 4.6 L engines and 6.8 L engines without removing head

| Stock No. | Description | Set Contains: FSPK |
|---|---|---|
| FSPK1 | Barrel | • |
| FSPK2 | Threaded Shaft | • |
| FSPK3 | Nut | • |
| FSPK4 | Thrust Washer | • |
| FSPK5 | Vinyl Cap | • |
| T910M | Metric Tap | • |

Optional Tap Holder TDL8-10

**Applications (engines covered):**
4.6 L V8 2005–2008 (*Ford* Mustang, Explorer, Mercury® Mountaineer); 5.4 L V8 2004–2008 (*Ford* F150, F250 Super Duty, F350 Super Duty, E450 Super Duty, Expedition, Lincoln® Navigator, Mark LT); 6.8 L V10 2005–2008 (*Ford* F250 Super Duty, F350 Super Duty, F450 Super Duty, F550 Super Duty, E450 Super Duty, E450 Econoline)

**FSPPRK1 *Ford* Porcelain Repair Kit** washer, center screw, guide, hex nut, end nut

**FSPPRK2 Pins (10pk)**

**FSPPRK3 *Loctite* (680, 5 mil.)**

**FSPPRK4 Clean Out Wire**

**FSPPRKB Storage Case**

## Porcelain Extractors

**FSPPRK Porcelain Extractor Set**
- Used in combination with FSPK spark plug extractor kit for use on *Ford* vehicles to remove any porcelain left behind from the process of extracting the plug
- Tool does not push the porcelain through the sleeve, preventing engine damage
- Four cylinders can be worked on at one time to save time and money
- Set includes porcelain repair kit for use on *Ford* vehicles, pins (10 pack), special Loctite® 680 adhesive (5 mL) to remove broken porcelain, clean out wire and blow molded storage case


YA832A


YA840


HB5PK


FRT10


FRT12


YA6845

## Spark Plug Tools

**YA832A Spark Plug Firing Indicator (Blue-Point®)**
- Test spark plugs, coils and distributors on breaker point and electronic ignition systems
- Blunt nose tip prevents lead puncturing
- High intensity bulb and viewing window for greater flash concentration
- 4 3/4" long

**YA840 In Line Spark Tester *(Blue-Point)***
- Quickly diagnose ignition systems
- Works on all ignition systems including distributorless ignitions
- Status of indicator light shows if problem exists in the ignition system or fuel system

**HB5PK Spark Plug File Set**
- Fine, single cut tungsten file for smoothing or cleaning spark plug and other contact points
- Includes (two) HB5 spark plug files

**FRT10 Spark Plug Insert Installer Set *(Blue-Point)***
- Repairs damaged heads from blown spark plugs with an alloy steel insert in as little as 15–45 minutes
- Services modular cylinder heads on Ford® vehicles 4.6 L, 5.4 L and 6.8 L
- Set Includes tap, Core Drill, Guide, Storage Case, Instructional DVD and Spark Plug Insert

**FRT12 Three Valve Insert Kit for *Ford* Vehicles *(Blue-Point)***
- Repair cylinders without removing the head
- Custom guide, tap and drill for quick and simple repair of damaged threads
- Unique insert installer makes the job quick and easy
- Works on three-valve 5.4 L and 6.8 L engines built before 10/9/2007
- Also works on three-valve 4.6 L engines built before 11/30/2007 found on many 2004–2008 *Ford*, Lincoln® and Mercury® vehicles
- Set includes Tap, Core Drill, Guide, Insert Installer, Insert and Storage Case

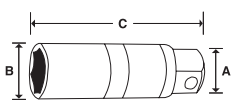
**YA6845 Spark Plug Boot Remover**
- For use on ripped or stuck spark plug boots
- Easily saves time as it is awkward to use a pliers to try to get the stuck boot off, especially when the spark plug is in a recessed or confined area where vision is limited
- Made from high quality heat-treated steel
- High-tech black finish

**Applications for *Ford* vehicle:**
4.6 L V8 two valve heads (1997–1999); 4.6 L V8 two valve heads (2000 and later); 4.6 L V8 three valve heads (2007 and later); 5.4 L V8 two valve heads (1997–2004); 5.4 L V8 three valve heads (2005 and later); 6.8 L V10 two valve heads (1999–2008); 6.8 L V10 three valve heads (2008 and later)

**Applications for Chrysler® vehicle:**
3.7 L V6 2 valve heads (2005 and later); 5.7 L V8 Hemi 2 valve heads (2004 and later)

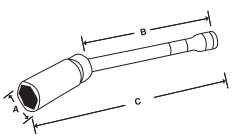
**Other Applications:**
Applications where the diameter of the porcelain on the spark plug is smaller than 0.432 of an inch.

## FLANK DRIVE® SPARK PLUG SOCKETS





S9721A





FSXK320A

### Double Swivel (3/8" Drive), inches
- Use double swivel universals for rear spark plug removal or installation on transverse V6 engines

| | 6 | C | Rubber Insert |
|---|---|---|---|
| 5/8 | S9721A | 4 13/16 | S9706KARI |

### Flexible Extension (3/8" Drive), inches

| | 6 | B | C | Rubber Insert |
|---|---|---|---|---|
| 5/8 | FSXK320A | 2 15/32 | 5 11/32 | S9706KARI |

**⚠WARNING**
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FLANK DRIVE® SPARK PLUG SOCKETS



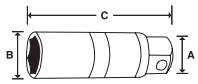
S9706KFUA



S9706KFUAMAG



S9710C




## Universal (3/8" Drive)

| # | 6 | A | B | C | Rubber Insert |
|---|---|---|---|---|---|
| 13/16" | S9704KFUA | 3/8 | 13/16 | 3 9/16 | S9705A2 |
| 5/8" | S9706KFUA | 3/8 | 5/8 | 3 23/32 | S9706KARI |
| 14 mm | S9714MKFUA | 3/8 | 25/32 | 3 1/8 (79.5) | – |
| 9/16" | S9716KFUA | 3/8 | 3/4 | 2 15/16 | S9714MK-2 |
| 5/8" | S9706KFUAMAG | 3/8 | 27/32 | 3 3/4 | – |

## Ball Joint Swivel (3/8" Drive), inches

| # | 6 | C | Rubber Insert |
|---|---|---|---|
| 13/16 | S9709KB | 3 25/32 | S9705A2 |
| 5/8 | S9710KC | 3 25/32 | S9706KARI |

## Magnetic (3/8" Drive), inches

| # | 6 | B | C |
|---|---|---|---|
| 9/16 | S9716KLMAG | 25/32 | 5 7/8 |
| 5/8 | S9706KMAG | 11/16 | 2 19/32 |
| 13/16 | S9704KMAG | 11/16 | 2 11/16 |
| 14 mm | S9714MKMAG | 19.6 | 57.2 |



S9706KMAG



S9716KR



S9706KRFUA



S9704KR



S9714MKR

## Retention Spark Plug Sockets (3/8" Drive)

- Patented tapered hex design (U.S. Patent #6,626,067)
- Securely retains spark plug in socket without rubber insert or magnet
- Patented "Diamond Wedge" design with six wedges equally align plug in the center to avoid damage to the porcelain
- Spark plug is easily disengaged by applying gentle side pressure
- Spark plug socket configuration is cold formed for extended tool life
- External hex on standard models for restricted access applications
- Knurled surface for finger tightening/removal
- Side through hole for secure extension retention for coil on plug applications

**Applications:** 4.7 L engines used on Jeep® Commander and Grand Cherokee®, Dodge® Ram, Durango and Dakota plus Chrysler® Aspen vehicles. General applications on autos, light trucks, motorcycles and power equipment.

| # | 6 | A | B | C |
|---|---|---|---|---|
| 9/16" | S9716KR | 5/8 | 25/32 | 2 3/8 |
| 5/8" | S9706KRFUA | — | 27/32 | 3 3/4 |
| 5/8" | S9706KRA | 11/16 | 27/32 | 2 7/8 |
| 13/16" | S9704KR | 7/8 | 1 1/16 | 2 27/32 |
| 14 mm | S9714MKR | 16 mm | 19.6 mm | 60.3 mm |

ANSI® B107.34M

**S9706KRA/S9706KRFUA**

**S9716KR Applications:** 2005 Ford® Mustang (4.6 L, three-valve engine) and *Ford* 2004 F150 (5.4 L V8, three-valve engine)

**S9714MKR Applications:** 14 mm spark plugs used in Nissan® 1.8 L Versa® and 2.0 L Sentra, Mercedes® and BMW® vehicles

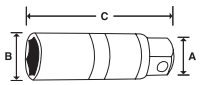


S9720KA

## Extra Deep (3/8" Drive), inches

| # | 6 | C | Rubber Insert |
|---|---|---|---|
| 13/16 | S9719KA | 5 7/8 | S9719-2A |
| 5/8 | S9720KA | 5 31/32 | S9706KARI |
| 9/16 | S9716KL | 5 7/8 | S9714MK-2 |

## Special Application




**S9723 Offset Spark Plug Socket**
- 5/8" offset spark plug socket for limited access situations
- Remove/install the spark plug on the #3 cylinder without interference from the steering column on GM® 4.3 L V6 engines used in GMC® Jimmys, Chevy® Blazers, S10 and S15 pickup trucks (1994–2004) plus Oldsmobile® Bravadas (1996–2001) vehicles
- Use with 11" extension
- 12-point *Flank Drive* wrenching system
- Industrial black finish
- 1 1/2" length, 1 3/4" height, 3/8" drive



S9723

**S9724RHS Low-Profile Spark Plug Socket**
- Low-profile socket easily reaches 5/8" (16 mm) spark plugs on muscle cars, ATVs, motorcycles and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use ratcheting box wrench on 5/8" external hex drive
- 1 1/16" length



S9724RHS

**Applications:**
Harley-Davidson® motorcycles with large gas tanks (1986 and later Sportster® and 1999 and later twin cam models) plus small block *Chevy*, Ford® and Mopar® vehicles and other engines with 5/8" (16 mm) spark plugs and racing exhaust headers

**S9704RHS Low-Profile Spark Plug Socket**
- Low-profile socket easily reaches 13/16" spark plugs on muscle cars, ATVs, motorcycles, RVs and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use with open end or ratcheting box wrench on 13/16" external hex drive
- 1 1/4" length



S9704RHS

**Applications:**
Small or big block *Chevy*, *Ford* and *Mopar* vehicles and other engines with 13/16" spark plugs and racing exhaust headers

## Standard (3/8" Drive), inches

| | 6 | A | B | C | Rubber Insert |
|---|---|---|---|---|---|
| 9/16 | S9716KA* | 5/8 | 23/32 | 2 1/8 | S9714MK-2 |
| 5/8 | S9706KA* | 3/8 | 27/32 | 2 27/32 | S9706KARI |
| 3/4 | S9718KA* | 3/8 | 31/32 | 2 13/32 | S9705A2 |
| 13/16 | S9704KA* | 3/8 | 7/8 | 2 3/4 | S9705A2 |
| 7/8 | S6106KA** | 3/8 | 7/8 | 3 13/64 | S6106-2R |

*ASME®/ANSI® B107.34M
**Designed for aircraft applications



S9716KA



S9706KA



S6106KA

## Standard (3/8" Drive), mm

| mm | 6 | 12 | A | B | C | Rubber Insert |
|---|---|---|---|---|---|---|
| 18 mm | S9711KA | – | 11/16 | 24.3 | 66.9 | S9706KARI |
| 14 mm | – | S9714MK | 5/8 | 18.0 | 60.3 | S9714MK-2 |
| 14 mm | S9714MKL | – | 19.0 | 19.6 | 149.2 | S9714MK-2 |

*ASME/ANSI* B107.34M



S9711KA



S9714MK



S9714MKL

## SPARK PLUG SOCKETS Blue-Point®

## Spark Plug Sockets, inches

| | 6 | Length |
|---|---|---|
| 5/8 | BLPSPS3858 | 2 9/16 |
| 13/16 | BLPSPS381316 | 2 1/4 |



BLPSPS3858



BLPSPS381316

**⚠WARNING**



- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# THREAD RESTORING: RETHREADING TAPS AND DIES



**RTD48**

**RTD48 US/Metric Master Rethreading Kit**
- Includes taps and dies
- Also includes TF1124B and TFM7530B thread restorer files
- All components stored in storage case (48pc)



**TRF3**

**TRF3 US Rethreading Tap Set (NF)**
- Includes six NF taps and 12 NF dies (18pc)
- Black finish



**TRC3**

**TRC3 US Rethreading Tap Set (NC)**
- Includes six NC taps and 12 NC dies (18pc)
- Silver finish



**RTD15M**

**RTD15M Metric Rethreading Tap & Die Set**
- Includes seven metric dies and seven metric taps (14pc)
- Gold finish

## Rethreading Tap and Die Set Components

| | | | Set Contains: RTD48 | TRC3 | TRF3 | RTD15M |
|---|---|---|---|---|---|---|
| | Size, inches (mm) | Stock No. | RTD48 | TRC3 | TRF3 | RTD15M |
| NC Rethreading Taps  | 1/4–20 | TRT2520A | • | • | | |
| | 5/16–18 | TRT3118A | • | • | | |
| | 3/8–16 | TRT3716A | • | • | | |
| | 7/16–14 | TRT4314A | • | • | | |
| | 1/2–13 | TRT5013A | • | • | | |
| | 9/16–12 | TRT5612A | • | • | | |
| NF Rethreading Taps  | 1/4–28 | TRT2528A | • | | • | |
| | 5/16–24 | TRT3124A | • | | • | |
| | 3/8–24 | TRT3724A | • | | • | |
| | 7/16–20 | TRT4320A | • | | • | |
| | 1/2–20 | TRT5020A | • | | • | |
| | 9/16–18 | TRT5618A | • | | • | |
| Metric Rethreading Taps  | (M6 x 1) | TRT51 | • | | | • |
| | (M8 x 1.25) | TRT53 | • | | | • |
| | (M10 x 1.5) | TRT54 | • | | | • |
| | (M10 x 1.25) | TRM1025-2 | • | | | • |
| | (M12 x 1.75) | TRT55 | • | | | • |
| | (M12 x 1.5) | TRT56 | • | | | • |
| | (M12 x 1.25) | TRT57 | • | | | • |
| | (M10 x 1.00) | TRT101 | • | | | |
| | (M11 x 1.50) | TRT11150 | • | | | |
| | (M14 x 1.50) | TRT14150 | • | | | |
| NC Rethreading Dies  | 1/4–20 | TR2520A | • | • | | |
| | 5/16–18 | TR3118A | • | • | | |
| | 3/8–16 | TR3716A | • | • | | |
| | 7/16–14 | TR4314A | • | • | | |
| | 1/2–13 | TR5013A | • | • | | |
| | 9/16–12 | TR5612A | • | • | | |
| | 5/8–11 | TR6211A | • | • | | |
| | 3/4–10 | TR7510A | | • | | |
| | 7/8–9 | TR8759A | | • | | |
| | 1–8 | TR10008A | | • | | |
| | 1 1/8–7 | TR11257A | | • | | |
| | 1 1/4–7 | TR12507A | | • | | |
| NF Rethreading Dies  | 1/4–28 | TR2528B | • | | • | |
| | 5/16–24 | TR3124B | • | | • | |
| | 3/8–24 | TR3724B | • | | • | |
| | 7/16–20 | TR4320B | • | | • | |
| | 1/2–20 | TR5020B | • | | • | |
| | 9/16–18 | TR5618B | • | | • | |
| | 5/8–18 | TR6218B | • | | • | |
| | 3/4–16 | TR7516A | | | • | |
| | 7/8–14 | TR8714A | | | • | |
| | 1–14 | TR10014A | | | • | |
| | 1 1/8–12 | TR11212A | | | • | |
| | 1 1/4–12 | TR12512A | | | • | |
| Metric Rethreading Dies  | (M6 x 1) | TDM51B | • | | | • |
| | (M8 x 1.25) | TDM53B | • | | | • |
| | (M10 x 1.5) | TDM54B | • | | | • |
| | (M10 x 1.25) | TRM1025-1 | • | | | • |
| | (M12 x 1.75) | TDM55B | • | | | • |
| | (M12 x 1.5) | TDM56B | • | | | • |
| | (M12 x 1.25) | TDM57B | • | | | • |
| | (M10 x 1.00) | TR101 | • | | | |
| | (M11 x 1.50) | TR11150 | • | | | |
| | (M14 x 1.50) | TR14150 | • | | | |

# THREAD RESTORING: FILES AND THREAD CHASERS

**TFTFM932A Thread Restorer File Set**
- Includes three commonly needed files
- Files feature a black industrial finish and comfortable vinyl handles
- Files service a range of 9–32 threads per inch and 0.75 mm–3 mm pitches
- Includes TFTFM932-1 vinyl kit bag for storage

**TF1124B Thread Restorer File**
- For any diameter right or left hand threads
- Removable vinyl handles

**TF1124B** 11, 12, 13, 14, 16, 18, 20 and 24 threads per inch
**TF1127B** 9, 10, 12, 16, 20, 27, 28 and 32 threads per inch
**TFM7530B** Pitches: .75 mm, 1 mm, 1.25 mm, 1.50 mm, 1.75 mm, 2 mm and 3 mm



TFTFM932A



TF1124B

# THREAD CHASERS



TR20C



TR21A



TR25B

## U.S. Thread Chaser Sets

| | Stock No. | Threads/inch & Pitch (mm) |
|---|---|---|
| U.S. Chaser | TR20-10 | 4 & 5 |
| | TR20-11 | 6 & 7 |
| | TR20-12 | 8 & 9 |
| | TR20-32 | 8R & 10R |
| | TR20-13 | 10 & 11 |
| | TR20-14 | 11 1/2 & 12 |
| | TR20-15 | 13 & 14 |
| | TR20-16 | 16 & 18 |
| | TR20-17 | 20 & 24 |

## Metric Thread Chaser Sets

| | Stock No. | Threads/inch & Pitch |
|---|---|---|
| Metric Chaser | TR20-25 | 4.5 mm & 5 mm |
| | TR20-26 | 3.5 mm & 4 mm |
| | TR20-27 | 2.5 mm & 3 mm |
| | TR20-28 | 1.75 mm & 2 mm |
| | TR20-29 | 1.25 mm & 1.5 mm |
| | TR20-30 | .75 mm & 1 mm |

**TR20M Metric External Thread Chaser Set**
- Same rethreading tool as the TR20C US set, except it includes six metric chasers (seven-piece)

**TR25M Metric Internal Thread Chaser Set**
- Includes a knurled handle thread chasing tool plus six metric chasers (seven-piece)

## Thread Chaser Set Components

**TR20C US External Thread Chaser Set**
- Includes small rethreading tool with 1/2"–5 3/4" diameter capacity for bolt threads and 1/4"–4" capacity for pipe threads plus nine thread chasers

**TR21A US External Thread Chaser Set**
- Includes large rethreading tool with 5"–14" diameter pipe thread capacity plus nine thread chasers

**TR25B US Internal Thread Chaser Set**
- Includes knurled handle internal thread chasing tool plus nine chasers

# SPECIAL PURPOSE

## Spindle Rethreading Set

| Stock No. | Rethreading Die Size | Set Contains: RD8 |
|---|---|---|
| RD7-1 | M24 x 1.5 | • |
| RD7-2 | M24 x 2 | • |
| RD7-3 | M22 x 1 | • |
| RD7-4 | M22 x 1.5 | • |
| RD7-5 | M20 x 1.5 | • |
| RD7-6 | 3/4"-20 | • |
| RD7-7 | 13/16"-20 | • |
| RD7-9 | M20 x 1.25 | • |
| RD7-8 | Storage Case | • |



RD8

**RD8 Spindle Rethreading Set**
- For most imported or US front wheel drive vehicles

## Light Truck Spindle Rethreading Set

| Stock No. | Rethreading Die Size | Set Contains: RD8LT |
|---|---|---|
| RD7-23 | 2"-16 | • |
| RD7-24 | M38 x 1.5 | • |
| RD7-25 | 1 5/8"-16 | • |
| RD7-26 | 1 13/16"-16 | • |
| RD7-27 | Left Hand, 2"-16 | • |
| RD7-28 | 2 1/8"-16 | • |
| RD7-29 | 2 1/4"-16 | • |
| RD8LT-1 | 2 5/8" Driver | • |
| RD8LT-2 | Storage Case | • |



RD8LT

**RD8LT Light Truck Spindle Retheading Set**
- For use on 4WD front and rear axle housings and medium to heavy duty 2WD trucks (rear axle)
- Restore axle housing and bearing/hub retention threads

**⚠WARNING**
- Rethreading tools are for renewing existing threads, do not use for cutting new threads on hardened steel
- Read safety precautions on pages W1 to W4

# THREAD RESTORING: SPECIAL PURPOSE



RD20



DTRMAS105



DTRCFM114

## Master Spindle Rethreading Set

| Stock No. | Rethreading Die Size | Set Contains: RD20 |
|---|---|---|
| RD7-1 | M24 x 1.5 | • |
| RD7-2 | M24 x 2 | • |
| RD7-3 | M22 x 1 | • |
| RD7-4 | M22 x 1.5 | • |
| RD7-5 | M20 x 1.5 | • |
| RD7-6 | 3/4"-20 | • |
| RD7-7 | 13/16"-20 | • |
| RD7-9 | M20 x 1.25 | • |
| RD7-10 | 3/4"-16 NF | • |
| RD7-11 | 7/8"-14 NF | • |
| RD7-12 | 1"-14 NF | • |
| RD7-13 | 11/16"-24 NF | • |
| RD7-14 | M25-1.5 | • |
| RD7-15 | M27-2 | • |
| RD7-16 | 27/32"-20 NF | • |
| RD7-17 | M16-1 | • |
| RD7-18 | M16-1.5 | • |
| RD7-19 | M18-1.5 | • |
| RD7-20 | M19-1.5 | • |
| RD7-21 | M20-1 | • |
| RD7-22 | Storage Case | • |

**RD20 Master Spindle Rethreading Set**
- Repair and renew damaged threads on stub axles and spindles for most vehicles
- Dies are manufactured from high tempered steel for strength and durability
- Each die size is embossed in the case directly below each die for easy identification and selection
- Application chart included



T14125

## Metric Spark Plug Hole Taps

| Stock No. | Size |
|---|---|
| T10100 | M10 x 1.00 |
| T12125 | M12 x 1.25 |
| T14125 | M14 x 1.25 |
| T18150 | M18 x 1.50 |
| T2818 | 7/8"-18 NF |



DTRC58



DTRF58

## Deep Well Thread Chasers
- Designed to clean and repair threads that are rusted, painted or damaged
- Unique pass through design allows you to thread even the longest bolt or wheel stud
- Back end of chaser is left open so that it can be threaded backwards on a stud to use the interior of the thread chaser as a guide to align the first couple threads
- Flip chaser over and clean threads the remaining distance on the fastener or stud
- Use a socket or wrench on the external hex drive end to operate chaser

| Stock No. | Type | Thread Size | Set Contains: DTRMAS105 | DTRCF110 | DTRCFM114 |
|---|---|---|---|---|---|
| DTRC38 | National Coarse | 3/8"-16 NC | | • | • |
| DTRC716 | National Coarse | 7/16"-14 NC | | • | • |
| DTRC12 | National Coarse | 1/2"-13 NC | | • | • |
| DTRC916 | National Coarse | 9/16"-12 NC | | • | • |
| DTRC58 | National Coarse | 5/8"-11 NC | | • | • |
| DTRF38 | National Fine | 3/8"-24 NF | | • | • |
| DTRF716 | National Fine | 7/16"-20 NF | | • | • |
| DTRF12 | National Fine | 1/2"-20 NF | • | • | • |
| DTRF916 | National Fine | 9/16"-18 NF | | • | • |
| DTRF58 | National Fine | 5/8"-18 NF | | • | • |
| DTRM12.125 | Metric | M12 x 1.25 | • | | • |
| DTRM12.150 | Metric | M12 x 1.50 | • | | • |
| DTRM14 | Metric | M14 x 1.50 | • | | • |
| DTRM16 | Metric | M16 x 1.50 | • | | • |



TDM101

## Thread Gauge

**TDM101 Metric Bolt and Thread Gauge**
- Bolt diameter range of 2.3 mm–24 mm (with inch/decimal equivalents)
- Thread gauge sizes: .35 mm–3 mm

**TDTDM117A Deluxe Combination Set**
Includes all components of the TDTDM500A US/Metric set plus 41pc high-speed steel drill bit set in fractional, metric, wire gauge and letter sizes and five spiral screw extractors. Each drill bit matches to corresponding tap size for correct fit. Set offers a complete assortment of high carbon steel taps and dies in fractional and metric sizes. Tap/drill charts and tool diagrams included. Set packaged in a storage case.


TDTDM117A


TD9902B


TDP6

| Set Contains: | Thread Size | Tap Stock No. | Die Stock No. | Die Type | TD9902B US Set | TD2425 US Set | TDP6 US Set | TDTDM500A US/Metric Set |
|---|---|---|---|---|---|---|---|---|
| National Fine Threads (Adjustable Dies) | 1/4"-28 NF | T105 | D015 | 1" Double Hex Adjustable | | ● | | ● |
| | 5/16"-24 NF | T106 | D016 | 1" Single Hex Non-Adjustable | | ● | | ● |
| | 3/8"-24 NF | T107 | D017 | 1" Double Hex Adjustable | | ● | | ● |
| | 7/16"-20 NF | T108 | D018 | 1" Double Hex Adjustable | | ● | | ● |
| | 1/2"-20 NF | T109 | D019 | 1" Double Hex Adjustable | | ● | | ● |
| | 1/2"-20 NF | – | DR019 | 1 1/2" Round Adjustable | ● | | | |
| | 9/16"-18 NF | T125 | DR035 | 1 1/2" Round Adjustable | ● | | | |
| | 5/8"-18 NF | T126 | DR036 | 1 1/2" Round Adjustable | ● | | | |
| | 3/4"-16 NF | T127 | DR037 | 1 1/2" Round Adjustable | ● | | | |
| | 7/8"-14 NF | T128 | DR042 | 2" Round Adjustable | ● | | | |
| | 1"-14 NF | T129 | DR043 | 2" Round Adjustable | ● | | | |
| National Fine Threads (Non-Adjustable Dies) | 1/4"-28 NF | T105 | GA541-1428 | 1" Single Hex Non-Adjustable | | | | |
| | 5/16"-24 NF | T106 | GA541-51624 | 1" Single Hex Non-Adjustable | | | | |
| | 3/8"-24 NF | T107 | GA541-3824 | 1" Single Hex Non-Adjustable | | | | |
| | 7/16"-20 NF | T108 | GA541-71620 | 1" Single Hex Non-Adjustable | | | | |
| | 1/2"-20 NF | T109 | GA541-1220 | 1" Single Hex Non-Adjustable | | | | |
| National Coarse Threads (Adjustable Dies) | 1/4"-20 NC | T100 | D010 | 1" Double Hex Adjustable | | ● | | ● |
| | 5/16"-18 NC | T101 | D011 | 1" Double Hex Adjustable | | ● | | ● |
| | 3/8"-16 NC | T102 | D012 | 1" Double Hex Adjustable | | ● | | ● |
| | 7/16"-14 NC | T103 | D013 | 1" Double Hex Adjustable | | ● | | ● |
| | 1/2"-13 NC | T104 | D014 | 1" Double Hex Adjustable | | ● | | ● |
| | 1/2"-1 NC | – | DR014 | 1 1/2" Round Adjustable | | | | |
| | 9/16"-12 NC | T120 | DR030 | 1 1/2" Round Adjustable | ● | | | |
| | 5/8"-11 NC | T121 | DR031 | 1 1/2" Round Adjustable | ● | | | |
| | 3/4"-10 NC | T122 | DR032 | 1 1/2" Round Adjustable | ● | | | |
| | 7/8"-9 NC | T123 | DR040 | 2" Round Adjustable | ● | | | |
| | 1"-8 NC | T124 | DR041 | 2" Round Adjustable | ● | | | |
| National Coarse Threads (Non-Adjustable Dies) | 1/4"-20 NC | T100 | GA541-1420 | 1" Single Hex Non-Adjustable | | | | |
| | 5/16"-18 NC | T101 | GA541-51618 | 1" Single Hex Non-Adjustable | | | | |
| | 3/8"-16 NC | T102 | GA541-3816 | 1" Single Hex Non-Adjustable | | | | |
| | 7/16"-14 NC | T103 | GA541-71614 | 1" Single Hex Non-Adjustable | | | | |
| | 1/2"-13 NC | T104 | GA541-1213 | 1" Single Hex Non-Adjustable | | | | |
| Machine Screw Threads (Adjustable Dies) | 4-40 | T111A | D021A | 5/8" Double Hex Adjustable | | ● | | ● |
| | 6-32 | T112 | D022 | 5/8" Double Hex Adjustable | | ● | | ● |
| | 8-32 | T113 | D023 | 5/8" Double Hex Adjustable | | ● | | ● |
| | 10-24 | T114 | D024 | 5/8" Double Hex Adjustable | | ● | | ● |
| | 10-32 | T115 | D025 | 5/8" Double Hex Adjustable | | ● | | ● |
| | 12-24 | T116 | D026 | 5/8" Double Hex Adjustable | | ● | | ● |
| Machine Screw Threads (Non-Adjustable Dies) | 4-40 | T111A | GA541-440 | 5/8" Single Hex Non-Adjustable | | | | |
| | 6-32 | T112 | GA541-632 | 5/8" Single Hex Non-Adjustable | | | | |
| | 8-32 | T113 | GA541-832 | 5/8" Single Hex Non-Adjustable | | | | |
| | 10-24 | T114 | GA541-1024 | 5/8" Single Hex Non-Adjustable | | | | |
| | 10-32 | T115 | GA541-1032 | 5/8" Single Hex Non-Adjustable | | | | |
| | 12-24 | T116 | GA541-1224 | 5/8" Single Hex Non-Adjustable | | | | |
| Pipe Threads (Adjustable Dies) | 1/8"-27 NPT | T110 | – | — | | ● | ● | ● |
| | 1/8"-27 NPT | – | D020 | 1" Double Hex Non-Adjustable | | ● | | ● |
| | 1/4"-18 NPT | T130 | – | — | ● | | ● | |
| | 1/4"-18 NPT | – | DR033 | 1 1/2" Round Adjustable | ● | | | |
| | 3/8"-18 NPT | T131 | – | — | | | ● | |
| | 1/2"-14 NPT | T132 | – | — | | | ● | |
| | 3/4"-14 NPT | T133 | – | — | | | ● | |
| | 1"-11 1/2" NPT | T134 | – | — | | | ● | |
| Pipe Threads (Non-Adjustable Dies) | 1/8"-27 NPT | T110 | GA541-1827 | 1" Double Hex Non-Adjustable | | | | |

**⚠WARNING**

- Rethreading tools are for renewing existing threads, do not use for cutting new threads on hardened steel
- Read safety precautions on pages W1 to W4

# THREADING: TAP AND DIE SETS



TD2425



TDTDM500A



TDM99117B



TDM117A

| Set Contains: | | | TD9902B | TD2425 | TDTDM500A | TDM99117 | TDM99117B | TDM117A | |
|---|---|---|---|---|---|---|---|---|---|
| | Thread Size | Tap Stock No. | Die Stock No. | Die Type | US Set | US Set | US/Metric Set | Metric Set | Metric Set | US/Metric Set |
| Metric Threads | M3-.50 | T305M | D305M | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M4-.70 | T407M | D407MA | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M4-.75 | T4075M | D4075M | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M5-.8 | T508M | D508MA | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M5-.9 | T509M | D509M | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M6-1 | T610M | D610MA | 5/8" Double Hex Adjustable | | | ● | | ● | ● |
| | M7-1 | T710M | D710M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M8-1.00 | T810M | D810M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M8-1.25 | T812M | D812M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M9-1 | T910M | D910M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M9-1.25 | T912M | D912M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M10-1.25 | T1012M | D1012M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M10-1.5 | T1015M | D1015M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M11-1.5 | T1115M | D1115M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M12-1.5 | T1215M | D1215M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M12-1.75 | T1217M | D1217M | 1" Double Hex Adjustable | | | ● | | ● | ● |
| | M14-1.25 | T1412M | DR1412M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M14-1.5 | T1415M | DR1415M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M14-2 | T1420M | DR1420M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M16-1.0 | T1610M | DR1615M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M16-1.5 | T1615M | DR1620M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M16-2 | T1620M | DR1815M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M18-1.5 | T1815M | DR1825M | 1 1/2" Round Adjustable | | | ● | ● | | |
| | M18-2.5 | T1825M | DR2025M | 2" Round Adjustable | | | ● | ● | | |
| | M20-2.5 | T2025M | DR2215M | 2" Round Adjustable | | | ● | ● | | |
| | M22-1.5 | T2215M | DR2420M | 2" Round Adjustable | | | ● | ● | | |
| | M24-2 | T2420M | DR2430M | 2" Round Adjustable | | | ● | ● | | |
| | M24-3 | T2430M | D020M | 1" Double Hex Non-Adjustable | | | ● | | ● | ● |
| Accessories | 1/8"-28 BSP | T110M | – | For 5/8" single hex dies | | | | | | |
| | TD3A Die Stock | – | – | For 5/8" double hex dies | | ● | ● | | ● | ● |
| | GA26-2 Die Stock | – | – | Adjustable for 1" single hex dies | | | | | | |
| | TD10A Die Stock | – | – | Self Centering for 1" double hex dies | | ● | ● | | ● | ● |
| | TD35 Die Stock | – | – | Self Centering for 1 1/2" diameter round dies | ● | | ● | ● | | |
| | TD40 Die Stock | – | – | Self Centering for 2" diameter round dies | ● | | ● | ● | | |
| | TD4 Tap Wrench | – | – | 4 jaw, for 0–1/4" taps | | ● | ● | | ● | ● |
| | TD6 Tap Wrench | – | – | 2 jaw, for 1/16–1/4" taps | | | | | | |
| | TD7 Tap Wrench | – | – | 2 jaw, for 1/4–1/2" taps | | | | | | |
| | TD50 Tap Wrench | – | – | 4 jaw, for 1/4–1/2" (M7 x 1.00 to M12 x 1.75) taps | | ● | ● | | ● | ● |
| | TD88A Tap Wrench | – | – | Clamp type, for 0–1/2" (M3 x 0.50 to M12 x 1.75) taps | | ● | ● | | ● | ● |
| | TD98A Tap Wrench | – | – | Clamp type, for 0–1" (M7 x 10 to M24 x 3.0) taps | ● | | ● | ● | | |
| | TD1040 Thread Pitch Gauge | – | – | US | | ● | | | | ● |
| | TDM100 Thread Pitch Gauge | – | – | Metric | | | ● | | ● | ● |
| | TDS1 Screwdriver | – | – | For adjusting dies | | ● | ● | | ● | ● |



TMA34

## Metric Tap Set

**Metric Tap Set Includes:**

| Stock No. | Thread Size | Stock No. | Thread Size | Stock No. | Thread Size |
|---|---|---|---|---|---|
| **T305M** | M3 x .50 | **T910M** | M9 x 1.00 | **T1420M** | M14 x 2.00 |
| **T306M** | M3 x .60 | **T912M** | M9 x 1.25 | **T1610M** | M16 x 1.00 |
| **T407M** | M4 x .70 | **T1010M** | M10 x 1.00 | **T1615M** | M16 x 1.50 |
| **T4075M** | M4 x .75 | **T1012M** | M10 x 1.25 | **T1620M** | M16 x 2.00 |
| **T508M** | M5 x .80 | **T1015M** | M10 x 1.50 | **T1815M** | M18 x 1.50 |
| **T509M** | M5 x .90 | **T1115M** | M11 x 1.50 | **T18150** | M18 x 1.50 |
| **T610M** | M6 x 1.00 | **T1212M** | M12 x 1.25 | **T1825M** | M18 x 2.50 |
| **T6310M** | M6.33 x 1 | **T1215M** | M12 x 1.50 | **TDM100** | Metric Thread, Pitch Gauge |
| **T710M** | M7 x 1.00 | **T1217M** | M12 x 1.75 | **ATSS** | Adj. Tap Socket, 3 mm–6 mm |
| **T810M** | M8 x 1.00 | **T1412M** | M14 x 1.25 | **ATSL** | Adj. Tap Socket, 6 mm–12 mm |
| **T812M** | M8 x 1.25 | **T14125** | M14 x 1.25 | | |
| **T9075M** | M9 x .75 | **T1415M** | M14 x 1.50 | | |

**TMA34 Metric Tap Set**
Precision ground flutes ensure accurate threading. High carbon steel ensures less breakage. Tap adaptors turn any 3/8" socket drive into a tap driver.



GAM541

**GAM541 Metric Set (Blue-Point®)**
40pc set features 1" single hex nonadjustable dies from 3 mm–12 mm, a 1/8"-28 BSP die plus taps in the same sizes. Also includes a die stock, two T-handle tap wrenches, a thread pitch gauge, a drill/tap chart, a midget screwdriver, and storage case.



GA541

**GA541 U.S. Set *(Blue-Point)***
41pc set features taps and dies from #4–1/2" in both NF and NC threads, a pipe thread tap and die, plus two die stocks and three tap wrenches, a screw pitch gauge and a screwdriver in a storage case.



WARNING • Read safety precautions on pages W1 to W4

# THREADING: SELF-ALIGNING TAPS AND DIES



TSA105

## Self Aligning Taps

- Self aligning taps feature Chip Breaking Technology (CBT) allowing the cutting edge to cut, break and chip cleaner. Up to 30% easier to break chips
- Self aligning taps come with an alignment chamfer that allows the tap to start straight every time, ensuring straight threads and less chance of cross threading
- Increased flute taper increases tap durability up to 20%
- Plug chamfer style for general purpose threading
- High carbon steel is ideal for hand tapping applications

## Self Aligning Taps, US

| Stock No. | Thread Size |
|---|---|
| T110 | 1/8"-27 NPT |
| TSA111 | 4-40 Machine Screw |
| TSA112 | 6-32 Machine Screw |
| TSA113 | 8-32 Machine Screw |
| TSA114 | 10-24 Machine Screw |
| TSA115 | 10-32 Machine Screw |
| TSA116 | 12-24 Machine Screw |
| TSA100 | 1/4"-20 NC |
| TSA105 | 1/4"-28 NF |
| TSA101 | 5/16"-18 NC |
| TSA106 | 5/16"-24 NF |
| TSA102 | 3/8"-16 NC |
| TSA107 | 3/8"-24 NF |
| TSA103 | 7/16"-14 NC |
| TSA108 | 7/16"-20 NF |
| TSA104 | 1/2"-13 NC |
| TSA109 | 1/2"-20 |

## Self Aligning Taps, Metric

| Stock No. | Thread Size |
|---|---|
| T110M | 1/8"-28 BSP |
| TSA305M | M3-.50 |
| TSA4075M | M4-.75 |
| TSA407M | M4-.70 |
| TSA508M | M5-.80 |
| TSA509M | M5-.90 |
| TSA610M | M6-1.00 |
| TSA710M | M7-1.00 |
| TSA810M | M8-1.00 |
| TSA812M | M8-1.25 |
| TSA910M | M9-1.00 |
| TSA912M | M9-1.25 |
| TSA1012M | M10-1.25 |
| TSA1015M | M10-1.50 |
| TSA1115M | M11-1.50 |
| TSA1212M | M12-1.25 |
| TSA1217M | M12-1.75 |



DSA019

## Self Aligning Dies

- Self aligning dies feature CBT ensuring clean cuts in both directions
- Alignment plate design starts straight every time to reduce the chance of cross threading
- Roller threads provide greater thread quality, accuracy and cutting ease
- Made from high carbon steel
- Use dies with the TDALDS1 Die Stock

## Self Aligning Dies, US

| Stock No. | Die Type | Thread Size |
|---|---|---|
| D020 | 1" Double Hex Non-Adjustable | 1/8"-27 NPT |
| DSA010 | Double Hex | 1/4"-20 NC |
| DSA011 | Double Hex | 5/16"-18 NC |
| DSA012 | Double Hex | 3/8"-16 NC |
| DSA013 | Double Hex | 7/16"-14 NC |
| DSA014 | Double Hex | 1/2"-13 NC |
| DSA015 | Double Hex | 1/4"-28 NF |
| DSA016 | Double Hex | 5/16"-24 NF |
| DSA017 | Double Hex | 3/8"-24 NF |
| DSA018 | Double Hex | 7/16"-20 NF |
| DSA019 | Double Hex | 1/2"-20 |
| DSA021 | Double Hex | 4-40 Machine Screw |
| DSA022 | Double Hex | 6-32 Machine Screw |
| DSA023 | Double Hex | 8-32 Machine Screw |
| DSA024 | Double Hex | 10-24 Machine Screw |
| DSA025 | Double Hex | 10-32 Machine Screw |
| DSA026 | Double Hex | 12-24 Machine Screw |

## Self Aligning Dies, Metric

| Stock No. | Die Type | Thread Size |
|---|---|---|
| D020M | 1" Double Hex Non-Adjustable | 1/8"-28 BSP |
| DSA305M | Double Hex | M3 x .50 |
| DSA4075M | Double Hex | M4 x .75 |
| DSA407M | Double Hex | M4 x .70 |
| DSA508M | Double Hex | M5 x .80 |
| DSA509M | Double Hex | M5 x .90 |
| DSA610M | Double Hex | M6 x 1.00 |
| DSA710M | Double Hex | M7 x 1.00 |
| DSA810M | Double Hex | M8 x 1.00 |
| DSA812M | Double Hex | M8 x 1.25 |
| DSA910M | Double Hex | M9 x 1.00 |
| DSA912M | Double Hex | M9 x 1.25 |
| DSA1012M | Double Hex | M10 x 1.25 |
| DSA1015M | Double Hex | M10 x 1.50 |
| DSA1115M | Double Hex | M11 x 1.50 |
| DSA1212M | Double Hex | M12 x 1.25 |
| DSA1217M | Double Hex | M12 x 1.75 |

## Tap and Die Drive Tool System

**TDALDS1 Die Stock**
- Features a twist die lock which means no more set screws are needed
- Simply twist to insert or remove the die
- Ergonomic handles for comfort and control when threading
- Fits 1" double hex dies

**TDALTS1 Adjustable Tap Socket**
- For 0"–1/4" (M3 x .50–M6 x 1.00) taps
- Versatile base can be driven with die stock, 3/8" ratchet or T-bar handle

**TDALTS2 Adjustable Tap Socket**
- For 1/4"–1/2" (M7 x 1.00–M12 x 1.75) taps
- Versatile base can be driven with die stock, 3/8" ratchet or T-bar handle

**TDALDSS Die Spacer**
- 1/8" spacer accommodates standard 1" hex dies
- Drives tools compatible with all 1" hex dies and ANSI® spec taps

**TDALTSB T-Bar Handle**
- For TDALTS1 and TDALTS2 Adjustable Tap Sockets

**TD1040 Thread Pitch Gauge**
- Measures US or sharp "V" threads
- Includes 18 plated blades for the following thread sizes: 8, 9, 10, 11, 11 1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40 and 44 threads per inch

**TDM100 Metric Thread Pitch Gauge**

**TDRSET Tap and Die Drive Tool Set**

**Includes:** TDALDS1 Die Stock, TDALTS1 and TDALTS2 Adjustable Tap Sockets, TDALDSS Die Spacer, TDALTSB T-Bar Handle, TD1040 US Thread Pitch Gauge and TDM100 Metric Thread Pitch Gauge seven-piece in storage box.



TDRSET

## TAP SOCKETS AND DIE SETS

### Tap Sockets (1/4"–3/8" Drive)

| Stock No. | Square Drive, inches | Fits SAE Size Taps | Fits Metric Size Taps | Shank Dia., inches | Square Size, inches | Set Contains: TDL8 |
|---|---|---|---|---|---|---|
| TDL8-1 | 1/4 | #1, #2, #3, #4, #5, #6 | M1.6, M1.8, M2, M2.2, M2.5, M3, M3.15, M3.5 | .141 | .110 | • |
| TDL8-2 | 1/4 | #8 | M4 | .168 | .131 | • |
| TDL8-3 | 1/4 | #10 | M4.5, M5 | .194 | .152 | • |
| TDL8-4 | 1/4 | 1/4" | M6, M6.3 | .255 | .191 | • |
| TDL8-5 | 3/8 | 5/16", 7/16" | M7, M8 | .323 | .242 | • |
| TDL8-6 | 3/8 | 3/8" | M10 | .381 | .286 | • |
| TDL8-7 | 3/8 | 1/2" | M12, M12.5 | .367 | .275 | • |
| TDL8-8 | 3/8 | 1/8" NPT | — | .437 | .328 | • |



TDL8

**TDL8 Tap Socket Set**
- For use with ratchets and handles
- Rubber O-rings hold taps securely in place
- Black industrial finish

### Tap Sockets (1/2" Drive)

| Stock No. | Square Drive, inches | Fits SAE Size Taps | Fits Metric Size Taps | Shank Dia., inches | Square Size, inches | Set Contains: TDL3 |
|---|---|---|---|---|---|---|
| TDL31 | 1/2 | 5/8 | 16 mm | .480 | .360 | • |
| TDL32 | 1/2 | 11/16 | 18 mm | .542 | .406 | • |
| TDL33 | 1/2 | 3/4 | — | .590 | .442 | • |



TDL3

**TDL3 Tap Socket Set**
- Use in restricted areas where a T-Handle will not easily fit
- Manufactured to M.C.T.I. standards
- Black industrial finish

### Bottoming Taps

- Allows blind holes to be tapped within one thread of bottom of hole

| Stock No. | Thread Size | Set Contains: TB300C | TB300F |
|---|---|---|---|
| TB3/8C | 3/8"-16 NC | • | |
| TB3/8F | 3/8"-24 NF | | • |
| TB5/16C | 5/16"-18 NC | • | |
| TB7/16C | 7/16"-14 NC | • | |
| TB5/16F | 5/16"-24 NF | | • |
| TB7/16F | 7/16"-20 NF | | • |



TB300C



⚠WARNING • Read safety precautions on pages W1 to W4

# THREADING: TAP SOCKETS AND DIE SETS



YA577A

## Ratcheting Tap Wrenches (Blue-Point®)

**YA577A T-handle Tap Wrench**
- For taps up to 1/4"
- Ratchet clockwise or counterclockwise
- 3 3/8" long body, 3 15/16" handle

**YA578A T-handle Tap Wrench**
- For 1/4"–1/2" taps
- Ratchet clockwise or counterclockwise
- 4 3/8" long body, 4 3/4" handle

**TDW1000 Ratcheting Tap and Die Wrench**
- Cut and renew threads in confined areas
- Bi-directional ratcheting action
- Holds dies with 1" (25 mm) diameter
- Includes adaptors for hex and double hex
- Also includes adaptors for most popular tap sizes: .250" (6.35 mm), .290" (7.36 mm), .335" (8.5 mm) and .535" (13.58 mm)



TDW1000



ATSS



ATSL

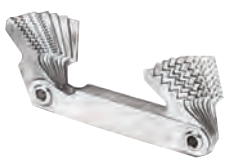
## Adjustable Tap Sockets

- Designed for use with taps, reamers, screw extractors and other tools with a square shank
- Small profile for easier access to tight work spaces
- Adaptor turns any 3/8" square drive ratchet or handle into a tap driver

**ATSS Adjustable Tap Socket**
- Fits common taps from #6–1/4" (3 mm–6 mm)

**ATSL Adjustable Tap Socket**
- Fits common taps from 1/4"–1/2" (6 mm–12 mm)

**ATSSET Adjustable Tap Socket Set**
- ATSS and ATSL (two-piece)



TD1040

## Thread Pitch Gauge

**TD1040 Thread Pitch Gauge**
- Measures US or sharp "V" threads
- Includes 18 plated blades for the following thread sizes: 8, 9, 10, 11, 11 1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40 and 44 threads per inch

# PLUG TAPS AND DIES

## Plug Taps

| | Stock No. | Thread Size | Thread Pitch |
|---|---|---|---|
| Tap | T111 | 4-36 | Right Hand |
| | T6310M | M6.33 x 1 | Right Hand |
| | T1010M | M10 x 1.00 | Right Hand |
| | T1112M | M11 x 1.25 | Right Hand |
| | T1212M | M12 x 1.25 | Right Hand |
| | T1412M | M14 x 1.25 | Right Hand |
| | T1415M | M14 x 1.50 | Right Hand |
| | T1420M | M14 x 2.00 | Right Hand |

## Plug Dies

| | Stock No. | Thread Size | Thread Pitch | Die Type |
|---|---|---|---|---|
| Die | D021 | 4-36 | Right Hand | 5/8" Dbl. Hex |
| | D040 | 1/4"-18 | Right Hand | 1" Dbl. Hex |
| | D147M | M4 x .70 | Right Hand | 1" Dbl. Hex |
| | D158M | M5 x .80 | Right Hand | 1" Dbl. Hex |
| | D161M | M6 x 1.00 | Right Hand | 1" Dbl. Hex |
| | D1010M | M10 x 1.00 | Right Hand | 1" Dbl. Hex |
| | D1112M | M11 x 1.25 | Right Hand | 1" Dbl. Hex |
| | D1212M | M12 x 1.25 | Right Hand | 1" Dbl. Hex |
| | D1615M | M16 x 1.50 | Right Hand | 1 1/4" Hex |
| | D1615ML | M16 x 1.50 | Left Hand | 1 1/4" Hex |
| | D1620M | M16 x 2.00 | Right Hand | 1 1/4" Hex |
| | D1810M | M18 x 1.00 | Right Hand | 1 7/16" Hex |
| | D1815M | M18 x 1.50 | Right Hand | 1 7/16" Hex |
| | D1815ML | M18 x 1.50 | Left Hand | 1 7/16" Hex |
| | D1825M | M18 x 2.50 | Right Hand | 1 7/16" Hex |
| | DR2015M | M20 x 1.50 | Right Hand | 2" Round |
| | D2025M | M20 x 2.50 | Right Hand | 1 7/16" Hex |
| | D2215M | M22 x 1.50 | Right Hand | 1 5/8" Hex |
| | D2215ML | M22 x 1.50 | Left Hand | 1 5/8" Hex |
| | D2415M | M24 x 1.50 | Right Hand | 1 13/16" Hex |
| | D3015M | M30 x 1.50 | Right Hand | 2" Hex |

### EXDMS48 Master Extractor Set

- Quickly and easily extracts the toughest screws from 3/32"–15/16" screw sizes (including metric sizes)
- Includes 16 left hand mechanic's length cobalt drill bits, 13 multispline screw extractors (1/8"–1/2"), six spiral flute screw extractors plus 13 hex head fastener extractors (1/4"–3/4")
- Hex head extractors feature left hand spiral flutes for maximum gripping power
- External hex and square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations
- 48pc in storage case



EXDMS48

### EXD35 Screw Extractor Set

- Quickly and easily extracts tough screws from 3/32"–15/16" (including metric sizes)
- Includes 16 left hand mechanic's length cobalt drill bits, 13 multispline screw extractors and six spiral flute screw extractors in EXD35-1 storage case



EXD35

### EXD10 Right Hand Extractor Set

- Includes five right hand, mechanic's length cobalt drill bits and five spiral flute screw extractors in metal index

### EXDL10 Left Hand Extractor Set

- Includes five left hand, mechanic's length cobalt drill bits and five spiral flute screw extractors in metal index



EXD10

### E1025 Extractor Set (Blue-Point®)

- Extract broken screws from 1/4"–1" diameter and standard pipe sizes 1/8"–1"
- Storage case



EXDL10

### E1020 Extractor Set *(Blue-Point)*

- Extracts broken screws from 1/4"–1/2" diameter
- Storage case



E1025



E1020

| Set Contains: | Stock No. | EXDMS48 | EXD35 | EXD10 | EXDL10 | E1025 | E1020 |
|---|---|---|---|---|---|---|---|
| Right Hand Drill Bits | CSE405B | | | | | ● | |
| | DBCFS5/64 | | | | ● | | |
| | DBCFS7/64 | | | | ● | | |
| | DBCFS5/32 | | | | ● | | |
| | DBCFS1/4 | | | | ● | | |
| | DBCFS19/64 | | | | ● | | |
| | DBF1/8C | | | | | ● | ● |
| | DBF3/16C | | | | | ● | ● |
| | DBF1/4C | | | | | ● | ● |
| | DBF5/16C | | | | | ● | ● |
| | DBF11/32C | | | | | ● | ● |
| | DBF7/16C | | | | | ● | |
| | DBF1/2C | | | | | ● | |
| Left Hand Drill Bits | DBCL5/64 | ● | ● | | ● | | |
| | DBCL7/64 | ● | ● | | ● | | |
| | DBCL5/32 | ● | ● | | ● | | |
| | DBCL3/16 | ● | ● | | | | |
| | DBCL1/4 | ● | ● | | ● | | |
| | DBCL9/32 | ● | ● | | | | |
| | DBCL19/64 | ● | ● | | ● | | |
| | DBCL5/16 | ● | ● | | | | |
| | DBCL11/32 | ● | ● | | | | |
| | DBCL3/8 | ● | ● | | | | |
| | DBCL13/32 | ● | ● | | | | |
| | DBCL7/16 | ● | ● | | | | |
| | DBCL15/32 | ● | ● | | | | |
| | DBCL1/2 | ● | ● | | | | |
| Solid Type Drill Guides | E921 | | | | | ● | |
| | E1021 | | | | | ● | ● |
| | E1121 | | | | | ● | ● |
| | E1221 | | | | | ● | ● |
| | E1321 | | | | | ● | ● |
| | E1421 | | | | | ● | ● |
| | E1521 | | | | | ● | ● |
| | E1621 | | | | | ● | ● |
| | E1721 | | | | | ● | ● |
| | E1821 | | | | | ● | ● |
| Sleeve Type Drill Guides | E34 | | | | | ● | |
| | E33A | | | | | ● | |
| Sleeve Bushings (in pairs) | E3033 | | | | | ● | |

| Set Contains: | Stock No. | EXDMS48 | EXD35 | EXD10 | EXDL10 | E1025 | E1020 |
|---|---|---|---|---|---|---|---|
| Straight Screw Extractors | E1 | | | | | ● | ● |
| | E2 | | | | | ● | ● |
| | E3 | | | | | ● | ● |
| | E4 | | | | | ● | ● |
| | E5 | | | | | ● | ● |
| | E6 | | | | | ● | |
| | E7 | | | | | ● | |
| | E8 | | | | | ● | |
| Pipe Plug Extractors | E80 | | | | | ● | |
| | E81 | | | | | ● | |
| | E82 | | | | | ● | |
| | E83 | | | | | ● | |
| | E84 | | | | | ● | |
| | E85 | | | | | ● | |
| Spiral Flute Screw Extractors | EX1 | ● | ● | ● | ● | | |
| | EX2 | ● | ● | ● | ● | | |
| | EX3 | ● | ● | ● | ● | | |
| | EX4 | ● | ● | ● | ● | | |
| | EX5 | ● | ● | | | | |
| | EX6 | ● | ● | ● | ● | | |
| Multispline Screw Extractors | REX104A | ● | ● | | | | |
| | REX105A | ● | ● | | | | |
| | REX106A | ● | ● | | | | |
| | REX107A | ● | ● | | | | |
| | REX108A | ● | ● | | | | |
| | REX109A | ● | ● | | | | |
| | REX110A | ● | ● | | | | |
| | REX111A | ● | ● | | | | |
| | REX112A | ● | ● | | | | |
| | REX113A | ● | ● | | | | |
| | REX114A | ● | ● | | | | |
| | REX115A | ● | ● | | | | |
| | REX116A | ● | ● | | | | |
| Hex Head Fastener Extractors | BEX081 | ● | | | | | |
| | BEX101 | ● | | | | | |
| | BEX121 | ● | | | | | |
| | BEXM101 | ● | | | | | |
| | BEX141 | ● | | | | | |
| | BEXM121 | ● | | | | | |
| | BEX161 | ● | | | | | |
| | BEXM131 | ● | | | | | |
| | BEX181 | ● | | | | | |
| | BEX201 | ● | | | | | |
| | BEXM171 | ● | | | | | |
| | BEX221 | ● | | | | | |
| | BEX241 | ● | | | | | |

# EXTRACTORS: EXTRACTOR TOOLS


REX25B


REX10B


REX15B

## Multispline Extractors Sets

- Shoulder prevents extractor from entering too deeply and expanding screw

**REX25B Multispline Extractor Set**
REX104A–REX128A (25pc) in REX25BMT storage case.

**REX10B Multispline Extractor Set**
REX104A–REX113A (ten-piece) in REX10BMT storage case.

**REX15B Multispline Extractor Set**
REX104A–REX118A (15pc) in REX15BMT storage case.

## Multispline Extractors

| Stock No. | Drill Size, inches | Bolt Size, inches | Pipe Size, inches | Hex Size, inches | Mark |
|---|---|---|---|---|---|
| REX104A | 1/8 | 1/4 | — | 1/2 | A |
| REX105A | 5/32 | 5/16 | — | 1/2 | B |
| REX106A | 3/16 | 3/8 | — | 1/2 | C |
| REX107A | 7/32 | 7/16 | — | 1/2 | D |
| REX108A | 1/4 | 1/2 | 1/8 | 1/2 | E |
| REX109A | 9/32 | 9/16 | — | 1/2 | F |
| REX110A | 5/16 | 5/8 | — | 1/2 | G |
| REX111A | 11/32 | 11/16 | 1/4 | 1/2 | H |
| REX112A | 3/8 | 3/4 | — | 1/2 | I |
| REX113A | 13/32 | 13/16 | — | 1/2 | J |
| REX114A | 7/16 | 7/8 | — | 5/8 | K |
| REX115A | 15/32 | 15/16 | 3/8 | 5/8 | L |
| REX116A | 1/2 | 1 | — | 5/8 | M |
| REX117A | 17/32 | 1 1/16 | — | 5/8 | N |
| REX118A | 9/16 | 1 1/8 | — | 3/4 | O |
| REX119A | 19/32 | 1 3/16 | — | 3/4 | P |
| REX120A | 5/8 | 1 1/4 | 1/2 | 3/4 | Q |
| REX121A | 21/32 | 1 5/16 | — | 7/8 | R |
| REX122A | 11/16 | 1 3/8 | — | 7/8 | S |
| REX123A | 23/32 | 1 7/16 | — | 7/8 | T |
| REX124A | 3/4 | 1 1/2 | — | 7/8 | U |
| REX125A | 25/32 | 1 9/16 | 3/4 | 1 | V |
| REX126A | 13/16 | 1 5/8 | — | 1 | W |
| REX127A | 27/32 | 1 11/16 | — | 1 | X |
| REX128A | 7/8 | 1 3/4 | — | 1 | Y |

## Power Fastener Extractors (Blue-Point®)

- Extracts hex head, socket head, round head and other fasteners
- 1/4" universal hex shank is ideal for use with cordless, air or electric drills, impact wrenches, nut runners and hand tools
- Power groove for use with quick change adaptors
- Reverse spiral flutes hold on to the most elusive fastener heads
- High carbon steel ensures longer life and greater durability
- High carbon steel shank is larger than most fastener shanks and resists torsional shear


BET7

| Stock No. | Size, inches (mm) | Set Contains: BET7 |
|---|---|---|
| BET76 | 3/16 (5) | ● |
| BET78 | 1/4 (6) | ● |
| BET710 | 5/16 (8) | ● |
| BET712 | 3/8 (10) | ● |
| BETM710 | (10) | ● |
| BET714 | 7/16 (11) | ● |
| BET716 | 1/2 (12) | ● |


BEX13A


BEX5B

## Hex Head Fastener Extractors

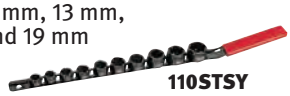
- Use on most popular hex head fasteners from 1/4"–1" (8 mm–24 mm)
- Sockets feature left hand spiral flutes for maximum gripping power
- Manufactured from high carbon steel for maximum strength
- External hex and square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations

| Stock No. | Square Drive, inches | Size, inches (mm) | External Hex, inches (mm) | Outside Dia., inches (mm) | Length, inches (mm) | Set Contains: BEX13A | Set Contains: BEX5B |
|---|---|---|---|---|---|---|---|
| BEX081 | 3/8 | 1/4 (6) | 5/8 (15.9) | 3/8 (9.5) | 1 1/16 (27.0) | ● | |
| BEX101 | 3/8 | 5/16 (8) | 5/8 (15.9) | 7/16 (11.1) | 1 1/16 (27.0) | ● | |
| BEX121 | 3/8 | 3/8 (10) | 5/8 (15.9) | 9/16 (14.3) | 1 1/16 (27.0) | ● | |
| BEXM101 | 3/8 | n/a (10) | 3/4 (19.1) | 5/8 (15.5) | 1 1/16 (27.0) | ● | |
| BEX141 | 3/8 | 7/16 (11) | 3/4 (19.1) | 5/8 (15.9) | 1 1/16 (27.0) | ● | |
| BEXM121 | 3/8 | n/a (12) | 3/4 (19.1) | 23/32 (17.5) | 1 1/16 (27.0) | ● | |
| BEX161 | 3/8 | 1/2 (12) | 3/4 (19.1) | 23/32 (17.9) | 1 1/16 (27.0) | ● | |
| BEXM131 | 3/8 | n/a (13) | 3/4 (19.1) | 23/32 (18.5) | 1 1/16 (27.0) | ● | |
| BEX181 | 3/8 | 9/16 (14) | 7/8 (22.2) | 25/32 (19.4) | 1 1/16 (27.0) | ● | |
| BEX201 | 3/8 | 5/8 (16) | 7/8 (22.2) | 7/8 (21.8) | 1 1/16 (27.0) | ● | |
| BEXM171 | 3/8 | n/a (17) | 1 (25.4) | 29/32 (23.0) | 1 1/16 (27.0) | ● | |
| BEX221 | 3/8 | 11/16 (n/a) | 1 (25.4) | 15/16 (24.2) | 1 1/16 (27.0) | ● | |
| BEX241 | 3/8 | 3/4 (19) | 1 1/16 (27) | 1 1/32 (26.2) | 1 1/16 (27.0) | ● | |
| BEXW241 | 1/2 | 3/4 (19) | 1 1/4 (31.8) | 1 1/8 (28.6) | 1 3/4 (44.5) | | ● |
| BEXW261 | 1/2 | 13/16 (21) | 1 3/8 (34.9) | 1 3/16 (30.2) | 1 3/4 (44.5) | | ● |
| BEXW281 | 1/2 | 7/8 (22) | 1 7/16 (36.5) | 1 1/4 (31.8) | 1 3/4 (44.5) | | ● |
| BEXW301 | 1/2 | 15/16 (24) | 1 7/16 (36.5) | 1 5/16 (33.3) | 1 3/4 (44.5) | | ● |
| BEXW321 | 1/2 | 1 (n/a) | 1 7/16 (36.5) | 1 3/8 (34.9) | 1 3/4 (44.5) | | ● |
| BEX13AMT | Storage Case | | | | | ● | |
| BEX5CASE | Storage Case | | | | | | ● |

## External Drive Hex Head Slim Twist Sockets

**110STSY External Drive Twist Socket Set**

- Quickly and easily remove damaged or rounded nuts and bolts, socket head cap screws in close quarters and nuts threaded on long studs
- Ideal for use for aircraft and exhaust systems applications
- Includes ten external hex drive slim twist sockets for the following hex head fasteners:
  Fractional: 3/8", 7/16", 5/8" and 3/4"
  Metric: 9 mm, 10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm and 19 mm
  Sockets are stored on MSR1 magnetic socket holder


110STSY

| Stock No. | Nut/Bolt Size, inches (mm) | Socket Number | External Hex, inches | Socket Thickness, inches (mm) | Finish |
|---|---|---|---|---|---|
| 110STSY1 | 3/8 (9) | #1 | 5/8 | 0.38 (9.5) | Industrial Black |
| 110STSY2 | (10) | #2 | 5/8 | 0.38 (9.5) | Industrial Black |
| 110STSY3 | 7/16 (11) | #3 | 11/16 | 0.38 (9.5) | Industrial Black |
| 110STSY4 | (12) | #4 | 3/4 | 0.38 (9.5) | Industrial Black |
| 110STSY5 | (13) | #5 | 3/4 | 0.50 (12.7) | Industrial Black |
| 110STSY6 | (14) | #6 | 13/16 | 0.50 (12.7) | Industrial Black |
| 110STSY7 | (15) | #7 | 7/8 | 0.50 (12.7) | Industrial Black |
| 110STSY8 | 5/8 (16) | #8 | 15/16 | 0.62 (15.9) | Industrial Black |
| 110STSY9 | (17) | #9 | 1 | 0.62 (15.9) | Industrial Black |
| 110STSY10 | 3/4 (19) | #10 | 1 1/16 | 0.62 (15.9) | Industrial Black |

## Deep Well Extractors

- External hex and 3/8" square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations
- Deep well design fits over exposed studs and reaches recessed fasteners
- Reverse spiral flutes bite into stubborn fasteners, both fractional and metric, with maximum gripping power
- Reduced profile head enables use in confined spaces



BEXD181



BEXD9

| Stock No. | Size, inches | Length, inches | Set Contains: BEXD9 |
|---|---|---|---|
| BEXD081 | 1/4 | 2 7/16 | • |
| BEXD101 | 5/16 | 2 7/16 | • |
| BEXD121 | 3/8 | 2 7/16 | • |
| BEXD141 | 7/16 | 2 7/16 | • |
| BEXD161 | 1/2 | 2 7/16 | • |
| BEXD181 | 9/16 | 2 7/16 | • |
| BEXD201 | 5/8 | 2 7/16 | • |
| BEXD241 | 3/4 | 2 7/16 | • |
| BEXDM131 | 13 mm | 2 7/16 | • |

## Right Hand Fractional Drill Bits

- Use right hand drill bits to make a hole in the broken screw before the extractor is inserted

| Stock No. | Size, inches | Flute Length, inches | Overall Length, inches |
|---|---|---|---|
| CSE405B | 5/8 | 3 | 6 |
| DBF1/2C | 1/2 | 2 1/4 | 4 3/4 |
| DBF1/4C | 1/4 | 2 1/2 | 4 |
| DBF1/8C | 1/8 | 1 3/8 | 3 |
| DBF11/32C | 11/32 | 2 3/4 | 4 1/2 |
| DBF3/16C | 3/16 | 2 | 3 1/2 |
| DBF5/16C | 5/16 | 2 5/8 | 4 1/2 |
| DBF7/16C | 7/16 | 1 7/8 | 4 1/4 |

## Spiral Flute Screw Extractors

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power



EX1

| Stock No. | Use Drill Size, inches | Removes Bolts and Screws |
|---|---|---|
| EX1 | 5/64 | 3/32"–5/32", 2.5 mm–4 mm, #3–#6 |
| EX2 | 7/64 | 5/32"–7/32", 4 mm–6 mm, #6–#12 |
| EX3 | 5/32 | 7/32"–9/32", 6 mm–8 mm, #12 |
| EX4 | 1/4 | 9/32"–3/8", 1/8" NPT, 1/8" BSP, 8 mm–10 mm |
| EX5 | 19/64 | 3/8"–5/8", 1/4" NPT, 1/4" BSP, 10 mm–16 mm |
| EX6 | 13/32 | 5/8"–7/8", 3/8" NPT, 3/8" BSP, 16 mm–22 mm |

## Solid-Type Drill Guides

- Used for centering drills at a depth not exceeding 1"



E921

| Stock No. | Outside Dia., inches | For Drill Size, inches | Length, inches |
|---|---|---|---|
| E921 | 9/32 | 1/8 | 1 3/16 |
| E1021 | 5/16 | 1/8 | 1 3/16 |
| E1121 | 11/32 | 1/8 | 1 3/16 |
| E1221 | 3/8 | 1/8 | 1 3/16 |
| E1321 | 13/32 | 3/16 | 1 3/16 |
| E1421 | 5/16 | 3/16 | 1 3/16 |
| E1521 | 15/32 | 3/16 | 1 3/16 |
| E1621 | 1/2 | 3/16 | 1 3/16 |
| E1721 | 17/32 | 1/4 | 1 3/16 |
| E1821 | 9/16 | 1/4 | 1 3/16 |



DBLS105A

## Left Hand Fractional Drill Bits (High Speed Steel)

- Left hand drill bits tend to loosen screws for easier removal

| | Stock No. | Size, inches | Flute Length, inches | Overall Length, inches | Set Contains: DBLS105A |
|---|---|---|---|---|---|
| Left-Hand | DBLS1/8A | 1/8 | 1 3/8 | 3 | • |
| | DBLS3/16A | 3/16 | 2 | 3 1/2 | • |
| | DBLS1/4A | 1/4 | 2 1/2 | 4 | • |
| | DBLS5/16A | 5/16 | 2 5/8 | 4 1/2 | • |
| | DBLS11/32A | 11/32 | 2 3/4 | 4 1/2 | • |



DBCL105A

## Left Hand Fractional Drill Bits (Cobalt)

| Stock No. | Size, inches | Set Contains: DBCL105A |
|---|---|---|
| DBCL5/64A | 5/64 | • |
| DBCL7/64A | 7/64 | • |
| DBCL5/32A | 5/32 | • |
| DBCL3/16 | 3/16 | |
| DBCL1/4A | 1/4 | • |
| DBCL9/32 | 9/32 | |
| DBCL19/64A | 19/64 | • |
| DBCL5/16 | 5/16 | |
| DBCL11/32 | 11/32 | |
| DBCL3/8 | 3/8 | |
| DBCL13/32 | 13/32 | |
| DBCL7/16 | 7/16 | |
| DBCL15/32 | 15/32 | |
| DBCL1/2 | 1/2 | |

## Tapered Bit Extractors

**SR40K Tapered Bit Extractor Set**

- Tapered ends have left hand threads to bite deep into drilled studs
- Square shafts for use with wrench
- Four-piece set includes SR4A (1/8"), SR10A (9/64"), SR14 (7/32") and SR20 (5/16") in C0407 kit bag



SR40K

## Sleeve Type Drill Guides

- Use to center 1/4" diameter, 6" long drill bits
- Parts are interchangeable to adapt to different screw or stud holes and depths up to 3 3/4"

**E34** Sleeve Type 5/8" O.D.

**E33A** Sleeve Type 3/4" diameter

**E33B** Sleeve Spacer (set of four) 5/8" diameter

## Sleeve Bushings (in pairs)

| Stock No. | Diameter, inches |
|---|---|
| E2133 | 21/32 |
| E2933 | 29/32 |
| E3033 | 15/16 |
| E3133 | 31/32 |



E2133



WARNING • Read safety precautions on pages W1 to W4

# EXTRACTORS: EXTRACTOR TOOLS



E1



E6

## Straight Screw Extractors

| | Stock No. | For Screw Dia. or Std. Pipe, inches | Drill Size, inches | Length, inches |
|---|---|---|---|---|
| Straight Screw, Hex Nut Type | E1 | 1/4 | 1/8 | 2 5/16 |
| | E2 | 5/16 | 3/16 | 2 3/4 |
| | E3 | 3/8 | 1/4 | 3 1/16 |
| | E4 | 7/16 | 5/16 | 3 5/16 |
| | E5 | 1/2 | 11/32 | 3 3/4 |
| | E6 | 1/2 | 7/16 | 4 1/8 |
| | E7 | 3/4 | 1/2 | 4 1/2 |
| | E8 | 1 | 1/2 | 4 5/8 |



E80

## Pipe Plug Extractors

| Stock No. | For Screw Dia. or Std. Pipe, inches | Drill Size, inches | Length, inches |
|---|---|---|---|
| E80 | 1/8 | 17/64 | 2 1/4 |
| E81 | 1/4 | 3/8 | 2 1/2 |
| E82 | 3/8 | 1/2 | 2 3/4 |
| E83 | 5/8 | 5/8 | 3 |
| E84 | 3/4 | 13/16 | 3 1/4 |
| E85 | 1 | 1 1/16 | 3 1/2 |

## All in one Extractor Set

### YA769 Extractor Set (Blue-Point®)

- Extract broken screws from 1/4"–1/2" diameter
- Drill/extract with one tool
- Left hand drill bit
- For use in 3/8" drive reversible drill




YA769

| Stock No. | Extractor Size Fractional | Drilling Speed, RPM | Extracting Speed, RPM |
|---|---|---|---|
| YA769-1 | 1/4 | 700–800 | 350 |
| YA769-2 | 5/16 | 650–750 | 470 |
| YA769-3 | 3/8 | 600–700 | 350 |
| YA769-4 | 1/2 | 475–575 | 350 |

### YA2019 Screw Remover Set *(Blue-Point)*

- Use to remove damaged Phillips®, TORX®, Pozidriv®, slotted, Internal Hex, Tri-Wing®, Frearson and most tamper-resistant screws and fasteners
- Tool bites into the damaged fastener in the reverse direction allowing the user to easily remove damaged screws
- Use with variable speed reversing drill or 1/4" hex bit screwdriver



YA2019

| Set Contains: YA2019 | Stock No. | Extractor Size Bolt Size | |
|---|---|---|---|
| | YA2019-1 | #6–#8 | • |
| | YA2019-2 | #8–#10 | • |
| | YA2019-3 | #10–#12 | • |

## Cam and Wedge Type Stud Removers

### A50A Stud Remover

- 7/16"–1/2" capacity
- V-shaped rack grips stud
- Grip releases when pressure is relieved
- Uses 1/2" drive handle

### A50-4B Optional Rack

- For 5/16"–3/8" capacity



A50A

### A36A Stud Remover

- 1/2"–3/4" capacity
- Knurled wheel grips stud
- Driving shank extends through both sides of housing for bearing surface on each side of wheel
- Uses 1/2" drive handle



A36A

### A80A Stud Remover

- 1/4"–1/2" capacity
- Jaws grip when pressure is applied
- Built-in ratchet action
- Needs only 1 1/4" clearance
- Use with 1/2" drive handle or 1" wrench



A80A

### LA55A Stud Remover

- 9/16"–1" capacity
- Grip is released by turning tool in reverse direction
- Works on wedge principle
- Use with 3/4" drive handle
- Includes two wedge sizes: LA55A2 and LA55A3



LA55A

### LA54 Stud Remover

- 1/4"–5/8" capacity
- Smaller version of LA55A
- Includes two wedge sizes: LA54-2A and LA54-3A
- Requires 1/2" drive handle

### YA789 Power Extractor Set *(Blue-Point)*

- Place extractor end of tool in drill chuck, set for reverse and hole can be drilled
- Next, insert drill side into chuck, exposing extractor end, and finish the job to remove broken screw
- Packaged in YA789-5 storage case




YA789

| Set Contains: YA789 | Stock No. | Extractor Size Bolt Size | Extractor Size Fractional | Extractor Size Metric | |
|---|---|---|---|---|---|
| | YA789-1 | — | #5, #6 | M3 | • |
| | YA789-2 | — | #8 | M4 | • |
| | YA789-3 | #10, #12 | — | M5 | • |
| | YA789-4 | — | 1/4" | M6 | • |

### YA2020 Screw Extractor Set *(Blue-Point)*

- Easily extracts #6–#14 damaged screws from wood, metal or plastic. Remove hex, *TORX*, *Phillips*, slotted or square head screws
- Use with 1/4" quick disconnect or 1/4" hex hand or power tool
- Works with a variety of screw materials




YA2020

## Stud Removers

- Tapered collets thread onto stud, even if only a few threads are exposed
- Tightening the housing bolt draws the collet into the housing and clamps collet onto stud
- Tools reduce chance of damage to stud threads
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece



CG500



CG500-17



CG500-2

## Stud Removers Set Components

| Stock No. | Collet Size | Housing Stock No. | CG5151 | CG5152 | CG5153 | CG515B | CGM515B | CG500 | CG505 |
|---|---|---|---|---|---|---|---|---|---|
| CG500-17 | #10-24 | CG500-2 | • | | | | | | |
| CG500-18 | #10-32 | CG500-2 | • | | | | | | |
| CG500-2 | Housing | CG500-2 | • | • | • | • | • | • | |
| CG500-3 | 1/4"-20 | CG500-2 | • | • | | • | | | |
| CG500-4 | 1/4"-28 | CG500-2 | • | • | | | | | |
| CG500-5 | 5/16"-18 | CG500-2 | • | • | | • | | | |
| CG500-6 | 5/16"-24 | CG500-2 | • | • | | • | | | |
| CG500-7 | 3/8"-16 | CG500-2 | • | • | | • | | | |
| CG500-8 | 3/8"-24 | CG500-2 | • | • | | • | | • | |
| CG500-9 | 7/16"-14 | CG500-2 | • | • | | • | | | |
| CG500-10 | 7/16"-20 | CG500-2 | • | • | | • | | • | |
| CG500-11 | 1/2"-13 | CG500-2 | • | • | | • | | | |
| CG500-12 | 1/2"-20 | CG500-2 | • | • | | • | | • | |
| CG500-13 | 9/16"-12 | CG500-2 | • | • | | • | | | |
| CG500-14 | 9/16"-18 | CG500-2 | • | • | | • | | | |
| CG500-15 | 5/8"-11 | CG500-2 | • | • | | • | | | |
| CG500-16 | 5/8"-18 | CG500-2 | • | • | | • | | | |
| CG500H1 | 3/8" Hex | CG500-2 | • | | | | | | |
| CG500H2 | 7/16" Hex | CG500-2 | • | | | | | | |
| CG500H3 | 1/2" Hex | CG500-2 | • | | | | | | |
| CG500H4 | 9/16" Hex | CG500-2 | | | | | | | |
| CG505-8 | 11/16"-16 | CG505-1 | | | | | | | |
| CG505-2 | 3/4"-10 | CG505-1 | | | | | | | • |
| CG505-5 | 3/4"-16 | CG505-1 | | | | | | | |
| CG505-3 | 7/8"-9 | CG505-1 | | | | | | | • |
| CG505-6 | 7/8"-14 | CG505-1 | | | | | | | |
| CG505-4 | 1"-8 | CG505-1 | | | | | | | • |
| CG505-7 | 1"-14 | CG505-1 | | | | | | | |
| CG505H1 | 5/8" Hex | CG505-1 | | | | | | | |
| CG505H2 | 11/16" Hex | CG505-1 | | | | | | | |
| CG505H3 | 3/4" Hex | CG505-1 | | | | | | | |
| CG505H4 | 13/16" Hex | CG505-1 | | | | | | | |
| CG505H5 | 7/8" Hex | CG505-1 | | | | | | | |
| CG508-1 | 1 1/8"-7 | CG508 | | | | | | | |

| Stock No. | Collet Size | Housing Stock No. | CG5151 | CG5152 | CG5153 | CG515B | CGM515B | CG500 | CG505 |
|---|---|---|---|---|---|---|---|---|---|
| CG508-9 | 1 1/8"-8 | CG508 | | | | | | | |
| CG508-2 | 1 1/8"-12 | CG508 | | | | | | | |
| CG508-3 | 1 1/4"-7 | CG508 | | | | | | | |
| CG508-10 | 1 1/4"-8 | CG508 | | | | | | | |
| CG508-4 | 1 1/4"-12 | CG508 | | | | | | | |
| CG508-5 | 1 3/8"-6 | CG508 | | | | | | | |
| CG508-11 | 1 3/8"-8 | CG508 | | | | | | | |
| CG508-6 | 1 3/8"-12 | CG508 | | | | | | | |
| CG508-7 | 1 1/2"-6 | CG508 | | | | | | | |
| CG508-12 | 1 1/2"-8 | CG508 | | | | | | | |
| CG508-8 | 1 1/2"-12 | CG508 | | | | | | | |
| CG500-30 | M6-1.00 | CG500-2 | • | | • | | • | | |
| CG500-33 | M7-1.00 | CG500-2 | • | | • | | • | | |
| CG500-36 | M8-1.00 | CG500-2 | • | | • | | • | | |
| CG500-37 | M8-1.25 | CG500-2 | • | | • | | • | | |
| CG500-39 | M9-1.00 | CG500-2 | • | | • | | • | | |
| CG500-40 | M9-1.25 | CG500-2 | • | | • | | • | | |
| CG500-42 | M10-1.25 | CG500-2 | • | | • | | • | | |
| CG500-43 | M10-1.50 | CG500-2 | • | | • | | • | | |
| CG500-48 | M12-1.25 | CG500-2 | • | | • | | • | | |
| CG500-49 | M12-1.50 | CG500-2 | • | | • | | • | | |
| CG500-54 | M14-1.50 | CG500-2 | • | | • | | • | | |
| CG500-55 | M14-2.00 | CG500-2 | • | | • | | • | | |
| CG500-60 | M16-1.50 | CG500-2 | • | | • | | • | | |
| CG500-61 | M16-2.00 | CG500-2 | | | | | • | | |
| CG505-1 | Housing | CG500-2 | | | | | | | • |
| CG508 | Housing | CG500-2 | | | | | | | |
| CG10F | Cross Bar | CG500-2 | • | • | • | | | | |
| CG250-8A | Slide Screw, 5/8"-18 UNF x 18 9/16" | CG500-2 | • | • | • | | | | |
| CG250-9 | Slide Hammer, 2 lb | CG500-2 | • | • | • | | | | |
| CG325-6 | Nut | CG500-2 | • | • | • | | | | |
| CG5151-1 | Plastic Case | | • | • | • | | | | |

# EXTRACTORS: DOWEL PIN PULLERS

## Dowel Pin Puller Set Components



CG503

| Stock No. | Collet Size | Set Contains: CG503 | CGM503 | CG513 | CG503S |
|---|---|---|---|---|---|
| CG503-2 | 1/4" | • | | | |
| CG503-3 | 5/16" | • | | | |
| CG503-4 | 3/8" | • | | | |
| CG503S1 | 3/8" Square | | | | |
| CG503-5 | 7/16" | • | | | |
| CG503-6 | 1/2" | • | | | |
| CG503-7 | 9/16" | • | | | |
| CG503-8 | 5/8" | • | | | |
| CG513-4 | 3/4" | | | • | |
| CG513-5 | 7/8" | | | • | |
| CG513S1 | 1/2" Square | | | | |
| CG513S2 | 5/8" Square | | | | |
| CG513-6 | 1" | | | • | |
| CG503-9 | 6 mm | | • | | |
| CG503-10 | 8 mm | | • | | |
| CG503-11 | 10 mm | | • | | |
| CG503-12 | 12 mm | | • | | |
| CG503-13 | 14 mm | | • | | |
| CG503-14 | 16 mm | | • | | |
| CG503-1 | Housing | • | • | | • |
| CG513-1 | Housing | | | | |
| CG513-2 | Slide Screw | | | • | |
| CG10F | Cross Bar | • | • | | • |
| CG250-8A | Slide Screw, 5/8"-18 UNF x 18 9/16" | • | • | | • |
| CG4567O | Slide Hammer, 10 lb | | | • | |
| CG250-9 | Slide Hammer, 2 lb | • | • | | • |
| CG325-6 | Nut | | • | | • |
| CG513-3 | Nut | | | • | |

## Pipe Nipple Remover Set Components



CG500P



CG505P



CG508P

| Stock No. | Collet Size | Housing Stock No. | Set Contains: CG500P | CG505P | CG508P |
|---|---|---|---|---|---|
| CG500P1 | 1/8" NPT | CG500-2 | • | | |
| CG500P2 | 1/4" NPT | CG500-2 | • | | |
| CG500P3 | 3/8" NPT | CG500-2 | • | | |
| CG505P1 | 1/2" NPT | CG505-1 | | • | |
| CG505P2 | 3/4" NPT | CG505-1 | | • | |
| CG508P1 | 1" NPT | CG508-2 | | | • |
| CG508P2 | 1 1/4" NPT | CG508-2 | | | • |
| CG508 | Housing | CG500-2 | | | • |
| CG500-2 | Housing | CG500-2 | • | | |
| CG505-1 | Housing | CG500-2 | | • | |

Note: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.

## Serrated Collets

- Serrated gripping portions are used to remove unthreaded studs that cannot be removed with standard collets due to lack of gripping surface
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece



CG500-23

| Stock No. | Description |
|---|---|
| CG500-20 | 1/4" Collet |
| CG500-21 | 5/16" Collet |
| CG500-22 | 3/8" Collet |
| CG500-23 | 7/16" Collet |
| CG500-24 | 1/2" Collet |
| CG500-2 | Housing |

## Heavy Duty Housing with Collet

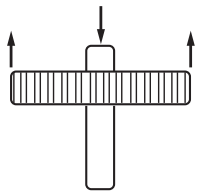
- Collets are threaded to order: specify stud thread size when ordering. Example: CG510 1 3/4"-10 collet
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece

**CG510** For larger stud sizes 1 5/8"–2".
**CG511** For larger stud sizes 2"–2 1/2".
**CG512** For larger stud sizes 2 1/2"–3".

**What Type of Puller do I Want to Use? Will it be the Combination that Works the Best?**

## Tools to Use

*Removing a Gear, Bearing, Pulley, or Other Component from a Shaft*



**Jaw Type Puller.** Two or three jaw style, with three jaw being the best choice. Manual or hydraulic with outside jaw positions.

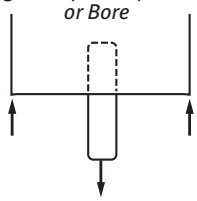
**Push/Pull Puller.** Use male or female adaptors to thread into tapped holes on components.

**Slide Hammer Puller.** Use on light duty applications. For use with attachments.

**Bar Type Puller with Bearing Separator.** Bar type with side rods threaded into bearing separator provides "knife edge" to get behind component or when there is not a good gripping edge.

## Tools to Use

*Pulling a Shaft Out of a Housing or Bore*



**Push/Pull Puller.** Use male or female adaptors.

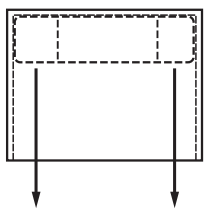
**Bar Type Puller with Bearing Separator.** Use when housing lacks sufficient surface for puller side rods to bear against.

**Slide Hammer Puller.** Use on light duty applications. For use with attachments.

**Slide Hammer Puller.** Use with male or female adaptors. See this section for a full listing of compatible adaptors.

## Tools to Use

*Removing a Bearing or Bushing from a Blind Hole*



**Jaw Type Puller.** For inside jaw positions (inside pulls), a manual or hydraulic jaw type puller can be used with pressure screw or slide hammer variations.

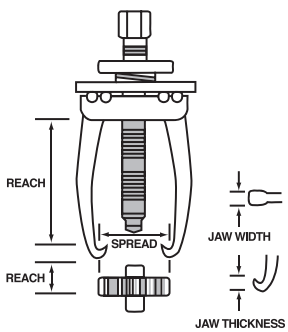
**Expanded Collet Puller.** The inside diameter should range between 1/4 and 7". Pulling can be done with bridge, bar type yokes or slide hammers.

**Bearing Adaptors with Slide Hammer Puller.** CJ127A, CJ128A and CJ137 bearing adaptors with CJ97-3A slide hammer should be used in this application.

**Bar Type Puller with Bearing Separator.** Bar type with side rods threaded into bearing separator provides "knife edge" to get behind components or when there is not a good gripping edge.

## Determine the "Reach" and "Spread" Needed

The puller's reach must equal or exceed the same distance on the part. The puller's spread is the width of the part.




**Estimate the Puller Tonnage**

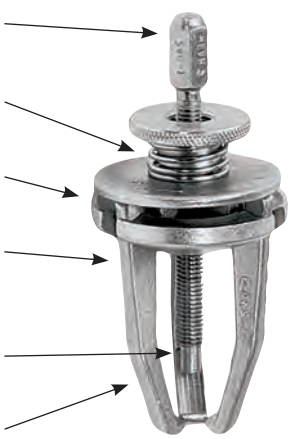
Generally, if you already have the correct "reach and spread," you will usually have the proper tonnage. If in doubt, use the next larger size.

**General Rule to Choose Pullers**

**Manual Pullers.** Pressure screw should be at least half the diameter of the shaft on the pulling/pushing job.

**Hydraulic Pullers.** Maximum tonnage capacity (tons) should be 8 to 10 times the diameter (in inches) of the shaft to be pulled or pushed.

## Snap-on® Puller Features



**Anvil Head:** Curved at the top and features a hex design. The curved head provides a striking surface to handle those tough pulling jobs while the hex allows the pressure screw to be easily turned with a standard hex wrench or a socket.

**Spring Loaded Locking Mechanism:** Snap-on pullers feature a unique spring tension locking mechanism which allows the puller jaws to easily lock onto the work surface for both "outside" and "inside" pulling applications.

**Two Position Yoke:** Allows jaws to be easily reversed to accommodate inside or outside pulling situations. Interchangeable yokes accommodate two and three jaw setups. Yokes are heat treated for additional strength and safety.

**One Piece Jaw Construction:** Provides a stronger, safer jaw. Most competitive puller jaws have holes drilled through them to allow for a bracket attachment. This hole significantly weakens the competitor's puller jaws.

**Forged Jaws:** Resist breakage, prolong tool life and provide additional strength.

**Replaceable Points:** Center pulling power to prevent cocking. Provide less friction and minimum drag for easier turning of pressure screw during the pulling process. If damage occurs, simply replace the point and not the entire pressure screw.

**Curved Jaws:** Provide positive grip on the work surface.

# PULLERS: BAR-TYPE INTERCHANGEABLE



CJ83C



CJ82B



CJ81D



CJ85A



CJ80A

Interchangeable bar style pullers provide high quality pulling equipment with the versatility needed to handle a wide variety of pulling functions. Standardized pressure screw threading, jaw retention and design means that new components can be added to an existing puller to change its reach or spread in order to handle new or different applications.
These Snap-on® bar-style pullers also feature:

- Replaceable pressure screw points help keep the puller safely centered
- Multiposition yokes help keep the jaws properly aligned with the item being pulled
- Adjustable clamp bolts allow jaws to be snugged up against the job for a safer, more convenient pull
- Spring ball pin retention securely holds jaws while allowing quick jaw changes

**CJ83C Pulley and Gear Puller**
Ideal for servicing crankshaft pulleys, gears and timing gears on a wide range of gasoline and diesel engines including Cummins® accessory drives and water pumps. Includes each 3/8"-16 x 3", 5/16"-18 x 2 1/2" and M10-1.5 x 65 mm bolts. Nominal capacity is 3 1/2 tons.

**CJ86-1 Yoke**
**CJ83-3 Pressure Screw**
**CJ66-15-3 Centering Point**
**ME5A54 Washer (1 needed)**
**ME5A55 Washer**
**ME5A45 Studs (2)**
**ME3A44 Studs (2)**
**ME3A75 Studs (2)**

**CJ82B Pitman® Arm Puller**
Handles many *Pitman* arm applications plus a variety of general pulling jobs. Nominal capacity is 6 tons.

**CJ86-1 Yoke**
**CJ83-2 Pressure Screw**
**CJ66-15-3 Centering Point**
**CJ81-2A Jaws (2)**
**CJ86-4A Clamp Bolt**
**CJ85-4 Washer (2)**
**ME4A33 Clamp Nuts (2)**
**CJ105-11 Jaw Pins (2)**

**CJ81D Differential Side Bearing Puller**
Narrow jaws slip into housing grooves in back of bearing and let jaws seat and pull along with inner race. Jaws are locked onto bearing by clamp bolt. Four centering plates are included. Nominal capacity is 6 tons.

**CJ86-1 Yoke**
**CJ83-2 Pressure Screw**
**CJ66-15-3 Centering Point**
**CJ81-2A Jaws (2)**
**CJ86-4A Clamp Bolt (2)**
**ME4A33 Clamp Nuts (2)**
**CJ105-11 Jaw Pins (2)**
**CJ81B1A Adaptors (set of 4)**
**CJ81B2A Adaptors (set of 4)**
**CJ81D1A Adaptors (set of 4)**
**CJ81D2A Adaptors (set of 4)**

**CJ85A Truck Differential Side Bearing Puller**
Similar in appearance to CJ81D but bigger for handling truck applications. Four centering plates included. Nominal capacity is 7 1/2 tons.

**CJ85-1 Yoke**
**CJ83-2 Pressure Screw**
**CJ66-15-3 Centering Point**
**CJ85-2 Jaws (2)**
**CJ85-3A Clamp Bolt (2)**
**CJ85-4 Washer (2)**
**ME4A33 Clamp Nuts (2)**
**CJ105-11 Jaw Pins (2)**
**CJ85-5 Adaptors (set of 4)**
**CJ85-6 Adaptors (set of 4)**
**CJ85-7 Adaptors (set of 4)**
**CJ85-8 Adaptors (set of 4)**

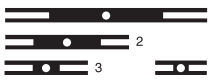
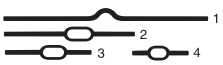
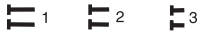
**CJ80A A/C Pulley Puller**
Also excellent for removal of alternator, generator, power steering and crankshaft pulleys, harmonic balancers and fiber timing gears. Includes an extra pair of jaws for versatility. Nominal capacity is 7 1/2 tons.

**CJ85-1 Yoke**
**CJ83-3 Pressure Screw**
**CJ66-15-3 Centering Point**
**CJ81-2A Jaws (2)**
**CJ87-1 Jaws (2)**
**CJ85-3A Clamp Bolt**
**CJ85-4 Washer (2)**
**ME4A33 Clamp Nuts (2)**
**CJ105-11 Jaw Pins (2)**

## Specifications (see chart on next page)

| Stock No. | Nominal Capacity, tons | Maximum Reach, inches | Maximum Spread, inches | Pressure Screw Size, inches | Pressure Screws | Jaws | Centering Points |
|---|---|---|---|---|---|---|---|
| CJ83C | 3.5 | Variable | 5 | 3/4-16 x 3 1/2 | B1, B2 | — | C2 |
| CJ82B | 6 | 2 1/4 | 3 3/8 | 3/4-16 x 4 1/4 | B1, B3 | D1, D2, D4, D5 | C2 |
| CJ81D | 6 | 1 5/8 | 3 3/8 | 3/4-16 x 4 1/4 | B1, B3 | D1, D2, D4, D5 | C2 |
| CJ85A | 7.5 | 1 3/4 | 5 1/2 | 3/4-16 x 4 1/4 | B1, B3 | D1, D2, D3, D5 | C2 |
| CJ80A | 7.5 | D3: 1 5/8, D5: 1 3/8 | 5 | 3/4-16 x 3 1/2 | B1, B2 | D1, D2, D4 | C2 |

## CJ Interchangeable Pullers—Major Components

| | CJ83C | CJ82B | CJ81D | CT85A | CJ80A | Component | Key No. | Stock No. | Specific Dimensions | |
|---|---|---|---|---|---|---|---|---|---|---|
| **A**  | | | | | | | | | **Usable Range, inches** | **Pin Holes per Side** |
| | | | | | | Yoke | A1 | **CJ100-1** | 10 1/2–16 | 4 |
| | | | | | | Yoke | A2 | **CJ118-1** | 6–10 1/2 | 3 |
| | | | | • | • | Yoke | A3 | **CJ85-1** | 3–6 1/2 | 3 |
| | • | • | • | | | Yoke | A4 | **CJ86-1** | 1 3/4–4 1/2 | 2 |
| **B**  | | | | | | | | | **Thread x Length** | **Hex Size, inches** |
| | | | | | | Pressure Screw | B1 | **CJ105-3** | 3/4–16 x 10 1/2 | 7/8 |
| | | • | • | • | | Pressure Screw | B2 | **CJ83-2** | 3/4–16 x 6 11/16 | 7/8 |
| | • | | | | • | Pressure Screw | B3 | **CJ83-3** | 3/4–16 x 5 1/8 | 7/8 |
| **C**  | | | | | | | | | **Head Diameter, inches** | **Point Type** |
| | • | • | • | • | • | Point | C1 | **CJ66-15-3** | 5/8 | 90° Outward |
| | | | | | | Point | C2 | **CJ84-16** | 7/8 | 90° Outward |
| **D**  | | | | | | | | | **Maximum Reach, inches** | |
| | | | | | | Jaws (2 needed) | D1 | **CJ116-1** | 8 1/4 | — |
| | | | | | | Jaws (2 needed) | D2 | **CJ282-1** | 4 3/8 | — |
| | | • | • | | • | Jaws (2 needed) | D3 | **CJ81-2A** | 1 3/8 | — |
| | | | | • | | Jaws (2 needed) | D4 | **CJ85-2** | 1 3/4 | — |
| | | | | | • | Jaws (2 needed) | D5 | **CJ87-1** | 1 3/8 | — |
| **E**  | | | | | | | | | **Maximum Length, inches** | |
| | | | | | | Clamp Bolts | E1 | **CJ100A2** | 18 | — |
| | | | | | | Clamp Bolts | E2 | **CJ118-2A** | 11 1/2 | — |
| | | | | • | • | Clamp Bolts | E3 | **CJ85-3A** | 7 1/2 | — |
| | | • | • | | | Clamp Bolts | E4 | **CJ86-4A** | 5 | — |
| **F**  | | | | | | | | | **Inside Diameter, inches** | **Outside Diameter, inches** |
| | | • | • | • | • | Washer (2 needed) | F1 | **CJ85-4** | 15/32 | 7/8 |
| | • | | | | | Washer (1 needed) | F2 | **ME5A54** | 11/32 | 3/4 |
| | • | | | | | Washer (1 needed) | F3 | **ME5A55** | 9/32 | 3/4 |
| **G**  | | | | | | | | | **Thread Size** | |
| | | • | • | • | • | Clamp Nuts (2 Needed) | G1 | **ME4A33** | 7/16 x 20 | — |
| **H**  | | | | | | | | | **Diameter, inches** | **Length, inches** |
| | | • | • | • | • | Jaw Pins (2 needed) | H1 | **CJ105-11** | 5/16 | 1 15/32 |
| **J**  | | | | | | | | | **Outside Diameter, inches** | **Step Diameter, inches** |
| | | | • | | | Adaptors (Set of 4) | J1 | **CJ81B1A** | 1 1/2 | 1 1/8 |
| | | | • | | | | | **CJ81B2A** | 1 5/8 | 1 1/4 |
| | | | • | | | | | **CJ81D1A** | 1 3/4 | 1 1/8 |
| | | | • | | | | | **CJ81D2A** | 1 11/32 | 15/16 |
| | | | | • | | Adaptors (Set of 4) | J2 | **CJ85-5** | 2 | 1 1/2 |
| | | | | • | | | | **CJ85-6** | 2 1/8 | 1 21/32 |
| | | | | • | | | | **CJ85-7** | 2 1/2 | 1 27/32 |
| | | | | • | | | | **CJ85-8** | 3 1/16 | 2 3/8 |
| **K**  | | | | | | | | | **Thread x Length** | |
| | • | | | | | Studs (2 needed) | K1 | **ME3A44** | 3/4-16 x 3 | — |
| | • | | | | | Studs (2 needed) | K2 | **ME3A45** | 5/16-18 x 2 1/2 | — |
| | • | | | | | Studs (2 needed) | K3 | **ME3A75** | M10-1.5 x 65 mm | — |

Letters in chart refer to Key No. in chart below (A3, B1, C1, etc.)

## CJ Series Major Components

| Stock No. | A Yoke | B ressure Screw | C Point | D Jaws (2) | E Clamp Bolt | F Washers (2) | G Clamp Nuts (2) | H Jaw Pins (2) | J Adaptors | K Studs (2) | Pressure Screws | Jaws | Points |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CJ83C** | A4 | B3 | C1 | — | — | F2, F3 | — | — | — | K1, K2, K3 | B1, B2 | — | C2 |
| **CJ82B** | A4 | B2 | C1 | D3 | E4 | F1 | G1 | H1 | — | — | B1, B3 | D1, D2, D4, D5 | C2 |
| **CJ81D** | A4 | B2 | C1 | D3 | E4 | F1 | G1 | H1 | J1 | — | B1, B3 | D1, D2, D4, D5 | C2 |
| **CJ85A** | A3 | B2 | C1 | D4 | E3 | F1 | G1 | H1 | J2 | — | B1, B3 | D1, D2, D3, D5 | C2 |
| **CJ80A** | A3 | B3 | C1 | D3, D5 | E3 | F1 | G1 | H1 | — | — | B1, B2 | D1, D2, D4 | C2 |

## Other Interchangeable Components

**WARNING**

- Screen puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: BAR-TYPE INTERCHANGEABLE



CJ2000SB

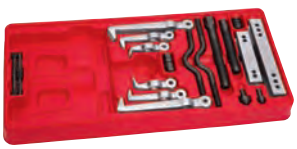
These puller sets are designed to provide the tools you need as your work grows. Start with one or more sets geared to specific tasks and build toward the ultimate set: the CJ2000A with display board and cabinet. No duplication in set contents or jaws. Yokes are interchangeable for added versatility.

## Master Interchange Puller Set

**CJ2000SB Master Interchangeable Puller Set**
Includes all components for the CJ2001, CJ2002, CJ2003A, CJ2004 and CJ2005 puller sets on VE200A tool control board and KRA276D locking wall storage cabinet.

**CJ2000S Master Interchangeable Puller Set**
Same as CJ2000SB without the wall cabinet.

**CJ2000A Master Interchangeable Puller Set**
Same as CJ2000SB without the wall cabinet or the tool control board.



CJ2002

## Gear Puller Set

**CJ2002 Gear Puller Set**

**CJ2002 Gear Puller Set**
Use on Pitman® arms, timing gears, carrier side bearings and more. Combine to create ten different pullers. Capacity from 6–10 tons depending on yoke and jaws used. Includes:

**CJ105-11 Long Jaw Pin (4)**
**CJ87-1 3" Jaw (2)**
**CJ282-1 6" Jaw (2)**
**ME4A33 Hex Nut (4)**
**CJ82B *Pitman* Arm Puller**
**CJ66-15-3 Centering Point**
**CJ83-3 Pressure Screw (9/16" hex)**
**CJ81-2A Jaw (2)**
**CJ84-16 Centering Point**
**CJ83-2 Pressure Screw**
**CJ85-1 Yoke (3"-6 1/2")**
**CJ86-4A Bolt**
**CJ85-3A Bolt**
**CJ86-1 Yoke (1 3/4"–4 1/2")**
**CJ85-4 Washer (4)**



CJ2003A

## Rear Axle Puller Set

**CJ2003A Rear Axle Puller Set**
Slide hammer power pulls many flange type rear axles as well as axle bearings. Includes:

**CJ105-4B Slide Screw, 3/4"-16 x 22 1/2"**
**CJ137 Bearing Adaptor**
**CJ97-3A Slide Hammer, 3 3/4 lb**
**CJ123-1 Axle Yoke**
**ME4A8 Lock Nut (3/4")**
**CJ127A Bearing Adaptor**
**CJ66-19 Bearing Hook**
**CJ128A Bearing Adaptor**

## CJ Series Bearing Adaptors

| Stock No. | Swivel Head Width, inches | Swivel Head Length, inches | Overall Length, inches |
|---|---|---|---|
| CJ127A | 1.2 | 2.03 | 3.02 |
| CJ128A | 1.2 | 2.31 | 3.15 |
| CJ137 | 1.2 | 2.9 | 3.24 |



CJ2004

## Interchangeable Puller Set

**CJ2004 Interchangeable Puller Set**
Use on bearings, bearing races, gears, bushing retainers, etc. Builds any of 12 different pullers. Two and three jaw capability with three sets of jaws. All jaws reverse for inside and outside pulls. Pulling capacity: (short jaws) 4 1/2 ton, (medium jaws) 6 1/2 ton, (large jaws) 8 ton. Includes:

**CJ105A8 3-Way Jaw Control**
**CJ105-3 Pressure Screw (3/4"-16 x 13")**
**CJ105A9 2-Way Jaw Control**
**CJ105-1 Yoke**
**CJ105-5 Small Jaw (3)**
**CJ105-10 Short Jaw to Control Pin (3)**
**CJ105-6 Medium Jaw (3)**
**CJ105-11 Long Jaw Pin (4)**
**CJ105-7 Large Jaw (3)**
**CJ105-12 Cross Bar**
**CJ66-15-3 Centering Point**
**CJ86-1 Yoke (1 3/4"–4 1/2")**



CJ2005

## Accessory Set

**CJ2005 Accessory Set**
Boost the versatility of the CJ2000A components with a bearing separator, a variety of centering adaptors, and a 12" yoke and clamp bolt to add spread to your bar type set. Includes:

**CJ81B1A Adaptor ( 1 1/8"–1 1/2" Diameter)**
**CJ85-6 Adaptor (1 21/32"–2 1/8" Diameter)**
**CJ81B2A Adaptor (1 1/4"–1 5/8" Diameter)**
**CJ85-7 Adaptor (1 27/32"–2 1/2" Diameter)**
**CJ81D1A Adaptor (1 1/8"–1 5/8" Diameter)**
**CJ85-8 Adaptor (2 3/8"–3 1/16" Diameter)**
**CJ81D2A Adaptor (13/16"–1 11/32" Diameter)**
**CJ118-1 Yoke (6"–10 1/2")**
**CJ85-5 Adaptor (1 1/2"–2" Diameter)**
**CJ85-2 Jaw (1 3/4" Maximum reach)**
**CJ950 Bearing Separator**
**CJ118-2A Bolt**

## Pressure Screws

**CJ83-9 Pressure Screw**
Optional pressure screw for bar style intechangeable pullers. Applications include heavy duty truck transmissions like Eaton® transmissions found on Kenworth® heavy duty trucks. Can also be used with: CJ2000A, CJ2000S, CJ2000SB, CJ2002 and CJ2004. Thread: 3/4"-16. Length: 8 3/4".

## Bolt Grip Puller Set

**CJ2001P Bolt Grip Puller Set**
Services steering wheels, flywheels, pulleys and gears with tapped holes. Includes a four-position two- and three-way yoke, three different pressure screw tips and an assortment of fractional and metric bolts. Approximate spread to bolt is 1 1/4"–3 13/16". Includes PB54B storage case.



CJ2001P

**CJ2001FBK Bolt and Washer Set**
Replaces all fractional bolts and washers in CJ2001P bolt grip puller set.

**CJ2001MBK Bolt and Washer Set**
Replaces all metric bolts and washers in CJ2001P bolt grip puller set.

## Small/Pilot Bearing Pullers

**A78 Small Bearing Puller**
For bearings and bushings typically found in small electric motors. Includes large jaw set for bronze and oilite bushings and small jaw set for smaller bearings and bushings. Up to 3 tons of pulling power. Working range is 1/2"–2".



A78

**SP2031A Pilot Bearing Puller**
- Attaches to slide hammer shafts with 3/4"-16 or 5/8"-18 threads
- Pressure screw adaptor is made of stress-resistant steel
- Industrial finish



SP2031

## Small Slide Hammer Puller Set

**CJ93B Small Slide Hammer Puller Set**
Remove bushings, seals, sleeves, bearings, bearing races, bronze and oilite bushings and pressed-in studs. Includes two sets of jaws, grease retainer adaptor, bearing hook, body dent puller, stud pulling head and 2 lb slide hammer. Thread size is 3/8-16.



CJ93B

## Tapped Hole Puller Set

**CG60GB Tapped Hole Puller Set**
Use on steering wheels with tapped holes. Includes two- and three-way yoke, pressure screw and adaptor plus four sets of studs.



CG60GB

## Rear Axle Bearing Puller

**CJ9180 Rear Axle Bearing Puller**
No slide hammer required. Removes axle bearing on free-floating axle designs. Use with impact gun or by hand. Uniquely designed to brace against axle housing for complete removal of bearing assembly. Smooth, steady operation. Kit contains interchangeable feet to allow pulling of bearings with an I.D. from 1"–2 7/8"



CJ9180

# AUTOMOTIVE

## Steering Wheel Pullers

**CJ134 Tilt Steering Pivot Pin Puller**
Allows efficient removal of the two pivot pins on all tilt steering columns used on Chrysler®, Ford® and GM® vehicles.



CJ134

**CG95B Steering Wheel Lock Plate Remover**
Designed for airbag equipped Saginaw steering columns found on *GM*, *Chrysler* LH Series (LHS®, Intrepid®, Concorde and Eagle Vision), some Toyota® and Saab® vehicles. Includes one narrow bridge, one wide bridge, two pressure screws: one has 9/16"-18 threads, the other has M14-1.5 threads. The puller is zinc plated. Overall length is 4 7/8".



CG95B

**CG6095A Master Steering Wheel Puller Set**
Combines the CG60GB Tapped Hole Puller and CG95B Lock Plate Remover. Lock Plate Remover is designed for servicing airbag equipped Saginaw steering columns found on *GM*, *Chrysler* LH Series (*LHS*, *Intrepid*, Concorde and Eagle Vision), some *Toyota* and *Saab* vehicles.



CG6095A

**CJ145 Steering Wheel Puller for *GM* Vehicles**
Use on new *GM* steering wheels with air bags including tilting and telescoping styles. Handle attachment facilitates puller setup and can be removed when working in confined areas. Applications: Buick® (1997 and later Park Avenue/Regal), Cadillac® (1997 and later Catera), Chevrolet®/GMC® (1997 and later Corvette®/Malibu®, 1998 C & K series trucks, 1998 full size vans, 1998 Astro/Safari® vans), Oldsmobile® (1997 and later Cutlass) and Pontiac® (1988–1993 LeMans, 1997 and later Grand Prix®/Trans Sport van).



CJ145

**CJ131P Steering Wheel Puller and Lock Plate Depressor Set**
Includes a selection of bolts and a handle in PB72 storage case for servicing *GM*, *Ford*, *Chrysler* and AMC® vehicles. Adaptors are included for servicing lock plates on all *GM* and *AMC* vehicles with tilt wheel. Detachable handle helps hold puller when turning force is applied to pressure screw. Industrial finish.



CJ131P

**⚠WARNING**

- Screen puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: AUTOMOTIVE



YA6490A



CJ146

## Harmonic Damper Pulley Pullers

**YA6490A Harmonic Damper Pulley Puller**
- New spring-loaded legs allow for leg position retention
- Provides greater ease and control when installing the puller in confined areas
- Removes harmonic damper pulleys found on many Chrysler® and GM® engines
- Used on autos, pickups, SUVs and vans

**YA6491A Harmonic Damper Pulley Puller Update Kit**
- Updates earlier YA9740 pullers to the same applications as the new YA6490A
- Kit updates other pulley pullers that are similar to the YA9740 series of pullers
- Add YA6491 Update Kit to existing YA9740 series pullers to add these new applications: GM*:* 4.2 L straight 6 cylinder: Chevy® Trailblazer®, GMC® Envoy®, Oldsmobile® Bravada® (2003 and later), Buick® Rainier (2004 and later), 3.5 L Straight 5 cylinder: *Chevy* Colorado®, *GMC* Canyon® (2004 and later), Hummer® H3 (2006 and later), 2.8 L straight 4 cylinder: *Chevy Colorado*, *GMC Canyon* (2005 and later)

**CJ146 Harmonic Damper Pulley Puller**
- Remove the crankshaft harmonic balancer on 1990 and later 3.3 L and 3.8 L *GM* engines
- Shoulder bolt adaptors provide correct installation depth, preventing damage to the crank sensor and interrupter rings
- Includes three CJ146-1 adaptors and one CJ146-2 extension plus vinyl storage pouch; requires Snap-on® CJ98-1 yoke and CJ83-3 pressure screw for use (not included)



CJ117C



CJ124A



CJ3PSA



CJ147A

**CJ117C Power Steering and Alternator Pulley Puller**
Includes short adaptor to remove small flange type pulley; use long adaptor on *GM* 200/Platform vehicles. Can also remove *Chrysler* alternator pulleys that have double grooves. Replace pulleys with CJ113B Installer. Long adaptor included to handle pulleys on *GM* minivans. Nickel/chrome finish, industrial finish screw. Designed for most domestic cars. (Replace pulley with CJ122 sets). Long adaptor included to handle pulleys on *GM* minivans. Nickel/chrome finish, industrial finish screw.

**CJ124A Power Steering/Alternator Pulley Puller**
This is a larger version of CJ117C. Designed for *Chrysler*, Ford® and earlier *GM* vehicles.

**CJ3PSA Power Steering and Alternator Pulley Puller/Installer Set**
Set includes CJ113B, CJ117C, and CJ124A pullers.

**CJ147A Power Steering Gear Lower Pinion Bearing Puller**
- Required tool to comply with GM *R*ecall Bulletins #02049 and #03062 regarding power steering gear lower pinion bearing separation

**Applications:**
*Buick*:
Regal® 1996–1998
*Chevrolet*:
Cavalier 1996–1998
Lumina 1997–1998
Lumina APV 1996
Monte Carlo® 1997–1998
Venture 1997–1998
*Oldsmobile*:
Cutlass 1997–1998
Cutlass Supreme 1996–1998 Silhouette 1996–1998
Intrigue 1998
Pontiac®:
Grand Prix® 1996–1998
Sunfire® 1996–1998
Trans Sport 1996–1998



CJ122



CJ138



CJ113B

## Power Steering and Alternator Pullers

**CJ122 Power Steering Pulley Installer Set**
Includes CJ113B Installer and CJ113C4 Pulley Installer Shaft. Thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end).

**CJ138 Pulley Installer**
8 mm pulley installer features a black industrial finish and a thrust bearing for easier installation.
**Applications:** power steering pulley on *Ford* 4.6 L V8 (1991 and later), *Ford* 2.5 L V6 (1995 and later) plus the installation of water pump drive pulleys on *GM* 4.6 L (1992 and later *Oldsmobile* Aurora).

**CJ113B Power Steering/Alternator Pulley Installer**
Designed for domestic cars. 1" pulley driver hex, 7/16" pressure screw hex, thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end). 4 5/8" long.

**CJ113B3 Bushing**
Included with CJ113B.

**CJ113C4 Pulley Installer Shaft**
- Thread size of 5/8"-18UNF (puller end), 3/8"-16UNC (alternator end)

**CJ132A Master Power Steering Pump/Alternator Puller/Installer Set**
*GM* Quad 4, *GM* 3.1 L and Ford® 4.6 L applications. Removes/installs press on, belt driven accessory pulleys. Removal housing for grooved hub diameters of 1 1/8", 1 5/16" and 1 3/8". Includes components for 3/8"-16 threaded shaft. Housing holding bar prevents main housing from spinning during use with an impact wrench. Quad 4 installation nut simplifies usage with 4 cylinder *GM* vehicles. Includes instructions and carrying case.

**CJ132-1 Pulley Tool**
**CJ132-2 Sleeve**
**CJ132-3 Installation Nut**
**CJ132-4 Quad 4 Removal Pin**
**CJ132-5 Quad 4 Installer**
**CJ132-6 *GM* 3.1L Installer**
**CJ132-7 Installer (3/8"-16)**
**CJ132-8 *Ford* 4.6L Installer**
**CJ1329 Universal Removal Pin**
**CJ13210 Housing Holding Bar**
**CJ13211 Quad 4 Installation Nut**
**CJ13212 Threaded Shaft**
**CJ13213 Removal Housing**
**CJ13214 Bearing**
**CJ13215 Washer**
**CJ132AIS Instruction Sheet**



**CJ132A**

## Pitman® Arm Pullers

**CJ119B *Pitman* Arm Puller**
- Designed for most US cars and light trucks. Pressure screw size: 3/4"-16 x 6 7/8". Industrial finish

**CJ115 *Pitman* Arm Puller**
- Similar in design to CJ119B except it is designed for compact and intermediate size cars

**PAR1188 Heavy Duty Pitman Arm Puller**
- Removal of large pitman arms on ¾ to 1 ton pick up trucks

**Applications:** *Ford* F-250/350 (2000 and later), Dodge 2500/3500 (2011 and later), Chevrolet/GMC 2500/3500 (2011 and later)

**YA6880 Low-Profile *Pitman* Arm Puller**
- Fits in the confined space on most *GM* 1988–2000 C & K chassis trucks and SUVs. Also fits 2001–present trucks and SUVs with steering gear box/ *Pitman* arms. Forged chromoly steel for strength and durability. Design allows the technician to remove the arm off the steering gear box without altering the boxes position as a substantial time saver. Patent pending



**CJ119B**



**YA6880**

## GENERAL PURPOSE INTERCHANGEABLE

### Light Duty Builds Pullers:

| Stock No. | Puller Type | Maximum Reach, inches | Outside Spread, inches | Inside Spread, inches |
|---|---|---|---|---|
| CG240 | 2-Jaw | 2 1/2 | 0–3 | 7/8–3 1/4 |
| CG240H | 2-Jaw | 2 1/2 | 0–3 | 7/8–3 1/4 |
| CG243 | 3-Jaw | 2 1/2 | 0–3 | 7/8–3 1/4 |
| CG243H | 3-Jaw | 2 1/2 | 0–3 | 7/8–3 1/4 |

**CG2400B Light Duty Puller Set**
This versatile set provides two- or three-jaw pulling with pressure screw or slide hammer options. Interchange parts to build any of the four puller combinations.
- Up to 2 1/2 tons of pulling power
- 3" diameter capacity for outside pulls



**CG2400B**

### Medium Duty Builds Pullers:

Medium duty pullers deliver up to 7 1/2 tons of pulling power, 4 1/2" diameter capacity for outside pulls and from 3/4"–8" diameter capacity for inside pulls. CG6223 hydraulic conversion set converts CG250 and CG253 manual pullers to hydraulic power. The manual components of the indicated medium duty pullers are included in the heavy duty (CG2500/CG2510 Series) sets.

| Stock No. | Puller Type | Maximum Reach, inches | Outside Spread, inches | Inside Spread, inches |
|---|---|---|---|---|
| CG250 | 2-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG250H | 2-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG250HL | Long Jaw, 2-Jaw | 6 | 0–8 1/2 | 3/4–8 |
| CG253 | 3-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG253H | 3-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG253L | 3-Jaw | 6 | — | 3/4–8 |



**CG250**

**⚠WARNING**
- Screen puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: GENERAL PURPOSE INTERCHANGEABLE




CG2510BSHY

## Heavy Duty

Builds Pullers:

| Stock No. | Puller Type | Maximum Reach, inches | Outside Spread, inches | Inside Spread, inches |
|---|---|---|---|---|
| CG654HY | Hydraulic, 2-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG655HY | Hydraulic, 3-Jaw | 3 | 0–4 1/2 | 1 1/2–3 1/2 |
| CG270 | 2-Jaw | 5 1/2 | 0–8 1/2 | 2 1/2–7 |
| CG270H | 2-Jaw | 5 1/2 | 0–8 1/2 | 2 1/2–7 |
| CG270S | Special Grip, 2-Jaw | 5 1/2 | 0–8 1/2 | 2 1/2–7 |
| CG273 | 3-Jaw | 5 1/2 | 0–8 1/2 | 2 1/2–7 |
| CG273H | 3-Jaw | 5 1/2 | 0–8 1/2 | 2 1/2–7 |
| CG280 | Long Jaw, 2-Jaw | 8 | 0–10 | 3–8 |
| CG283 | Long Jaw, 3-Jaw | 8 | 0–10 | 3–8 |
| CG274HY | Hydraulic, 2-Jaw | 8 3/4 | 10 | 3–8 |
| CG275HY | Hydraulic, 3-Jaw | 8 3/4 | 0–10 | 3–8 |

**The CG2510 and CG2500 Series deliver:**
- Up to 12 1/2 tons of pulling power
- 10" diameter capacity for outside pulls
- From 3/4"–8" diameter capacity for inside pulls

**CG2510BSBHY Heavy Duty Manual/Hydraulic Puller Set**
Includes 40 interchangeable components, including the CG1224 10 ton hydraulic power kit. All components are displayed on a VE213 tool control board, which is mounted inside a KRA276D wall cabinet.

**VE213 Tool Control Board**
Tool control board for the CG2500BSBHY manual/hydraulic puller set.



CG2500BSB

## CG2150BSBHY

The big CG2510BSBHY set builds 45 different pullers with dozens of pulling variations from the included 40 components and 10 ton hydraulic set. Without hydraulics (CG2500BS Manual Set), 32 separate pullers are still possible. Add the Snap-on® CG6223 6 ton hydraulic power kit and add seven puller combinations to each set.

**CG2510BSHY Heavy Duty Manual/Hydraulic Set**
Same as CG2510BSBHY set mounted on a VE213 tool control board. Does not include the wall cabinet.

**CG2510BHY Heavy Duty Manual/Hydraulic Puller Set**
Same as CG2510BSBHY Set except it does not include either the tool control board or the wall cabinet.

**CG2500BSB Heavy Duty Manual Puller Set**
This is the CG2510BSBHY set less the 10 ton hydraulic power kit components. Tool control board for this set is VE113B; wall cabinet is KRA276D.

**VE113B Tool Control Board**
Panel "A" is designed to hold the components for CG2500BS interchangeable puller set (6, 7 1/2, 10 and 12 1/2 ton capacity). Also used as the tool control board for the CG2500BSB manual puller set.

**CG2500BS Heavy Duty Manual Puller Set**
Same as CG2500BSB set mounted on a VE113B tool control board, without the KRA276D wall cabinet.

**CG2500B Heavy Duty Manual Puller Set**
Same as CG2500BSB set, without the tool control board or the wall cabinet.



YA13450



YA13350

## Pulley Pullers

**YA13450 Harmonic Dampener Pulley Puller**
- Use on 3.5L and 5.7L Dodge® engines
- Unique design accesses pulley on internal pulley ledges

**YA13350 Harmonic Dampener Pulley Puller**
- Use on 3.6L Camaro® engines
- Unique design accesses pulley on internal pulley ledges

# PULLERS: 2-JAW PRESSURE SCREW

## 2 Ton Capacity (1.8 t), 2-Jaw

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| CG240 | 2 1/2 (64) | 7/8–3 1/4 (22–83) | 3 (76) | 3/8-16 x 5 1/16 | 3/16 (5) | 3/8 (10) |
| CG240L | 3 1/2 (89) | 7/8–3 3/4 (25–95) | 4 (102) | 3/8-16 x 6 1/16 | 3/16 (5) | 3/8 (10) |



CG240

## 6 Ton Capacity (5.4 t), 2-Jaw

| | | | | | | |
|---|---|---|---|---|---|---|
| CG250 | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 6 7/8 | 1/4 (6) | 3/4 (19) |
| CG250A* | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 6 7/8 | 1/4 (6) | 3/4 (19) |



CG250



CG270A

## 10 Ton Capacity (9.1 t), 2-Jaw

| | | | | | | |
|---|---|---|---|---|---|---|
| CG270 | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 9 13/16 | 1/4 (6) | 15/16 (24) |
| CG270A* | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 9 13/16 | 1/4 (6) | 15/16 (24) |
| CG272** | 5 1/2 (140), 8 3/4 (222) | 2 1/2–7 1/2 (64–178), 3–8 (76–203) | 8 1/2 (216), 10 (254) | 3/4-16 x 9 13/16, 3/4-16 x 12 1/8 | 1/4 (6) | 15/16 (24) |
| CG270S | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 9 13/16 | 1/4 (6) | 15/16 (24) |
| CG280 | 8 3/4 (222) | 3–8 (76–203) | 10 (254) | 3/4-16 x 12 1/8 | 1/4 (6) | 15/16 (24) |
| CG284*** | 15 (381) | 4 3/4–11 1/2 (121–292) | 13 3/4 (349) | 3/4-16 x 18 15/16 | 3/8 (10) | 1 (25) |

*Includes CG1 pulling plate. **Two jaw lengths. ***Includes pressure screw extension.



CG280

# 3-JAW PRESSURE SCREW

## 2 1/2 Ton Capacity (2.3 t), 3-Jaw

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| CG243 | 2 1/2 (64) | 7/8–3 1/4 (22–83) | 3 (76) | 3/8-16 x 5 1/16 | 3/16 (5) | 3/8 (10) |
| CG243L | 3 1/2 (89) | 7/8–3 3/4 (22–95) | 4 (102) | 3/8-16 x 6 1/16 | 3/16 (5) | 3/8 (10) |



CG243

## 6 Ton Capacity (5.4 t), 3-Jaw

| | | | | | | |
|---|---|---|---|---|---|---|
| CG253L | 6 (152) | 3/4–8 (19–203) | 5/8-18 x 6 7/8 | 5/8-18 x 6 7/8 | 5/16 (8) | 3/8 (10) |



CG253L

## 7 1/2 Ton Capacity (6.8 t) 3-Jaw

| | | | | | | |
|---|---|---|---|---|---|---|
| CG253 | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 6 7/8 | 1/4 (6) | 3/4 (19) |

## 12 1/2 Ton Capacity (11.3 t), 3-Jaw

| | | | | | | |
|---|---|---|---|---|---|---|
| CG273 | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 9 13/16 | 1/4 (6) | 15/16 (24) |
| CG273A | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 9 13/16 | 1/4 (6) | 15/16 (24) |
| CG283 | 8 (203) | 3–8 (76–203) | 10 (254) | 3/4-16 x 12 1/8 | 1/4 (6) | 15/16 (24) |
| CG285 | 15 (381) | 4 3/4–11 1/2 (121–292) | 13 3/4 (254) | 3/4-16 x 18 15/16 | 3/8 (10) | 1 (25) |



CG285



CG1

## Pulling Plate

**CG1 Pulling Plate**
Ideal where there is no gripping surface for the puller alone. Attach plate to item being pulled – puller clamps behind the plate. Includes four each of the following screws: 1/4"-20 x 3/4" and 1/4"-28 x 1". Plate has a 3 5/8" diameter.

## Flat Points

**CG270-21 Flat Point**
Fits CG270 and CG280 series pullers.

**CG300-21 Flat Point**
Fits CG300 and CG305 series pullers.

**CG70 Flat Point Set**
Includes CG270-21, CG300-21 and CG325-21 flat points.

**⚠WARNING**

- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: 2-JAW SLIDE HAMMER



CG240H

## 2 Ton Capacity (1.8 t)–1 1/16 lb Hammer

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Slide Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| CG240H | 2 1/2 (63) | 7/8–3 1/4 (22–82) | 3 (76) | 3/8-16 x 12 5/8 | 3/16 (5) | 3/8 (10) |
| CG240HL | 3 1/2 (88) | 7/8–3 3/4 (25–95) | 4 (102) | 3/8-16 x 12 5/8 | 3/16 (5) | 3/8 (10) |



CG250HL

## 6 Ton Capacity (5.4 t)–2 1/8 lb Hammer

| | | | | | | |
|---|---|---|---|---|---|---|
| CG250C* | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 18 1/16 | 1/4 (6) | 3/4 (19) |
| CG250H | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 18 1/16 | 1/4 (6) | 3/4 (19) |
| CG250HL | 6 (152) | 3/4–8 (19–203) | — | 5/8-18 x 18 9/16 | 7/32 (5) | 5/16 (8) |

*Includes CG250H puller, CG1 pulling plate and pressure screw



CG270C

## 10 Ton Capacity (9.1 t)–3 1/2 lb Hammer

| | | | | | | |
|---|---|---|---|---|---|---|
| CG270C** | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 23 3/8 | 1/4 (6) | 15/16 (24) |
| CG270H | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 23 3/8 | 1/4 (6) | 15/16 (24) |

**Includes CG1 pulling plate and pressure screw

# PULLERS: 3-JAW SLIDE HAMMER



CG243H

## 2 1/2 Ton Capacity (2.3 t)–1 1/16 lb Hammer

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Slide Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| CG243H | 2 1/2 (64) | 7/8–3 1/4 (22–83) | 3 (76) | 3/8-16 x 12 5/8 | 3/16 (5) | 3/8 (10) |
| CG243HL | 3 1/2 (89) | 7/8–3 3/4 (25–95) | 4 (102) | 3/8-16 x 12 5/8 | 3/16 (5) | 3/8 (10) |



CG253H

## 7 1/2 Ton Capacity (6.8 t)–2 1/8 lb Hammer

| | | | | | | |
|---|---|---|---|---|---|---|
| CG253H | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-18 x 18 1/16 | 1/4 (6) | 3/4 (19) |

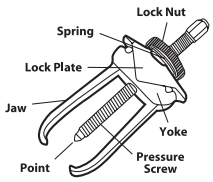


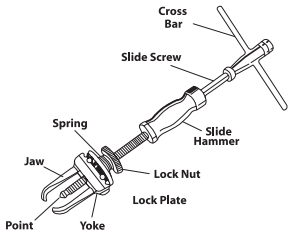
CG273C

## 12 1/2 Ton Capacity (11.3 t)–3 1/2 lb Hammer

| | | | | | | |
|---|---|---|---|---|---|---|
| CG273C* | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 23 3/8 | 1/4 (6) | 15/16 (24) |
| CG273H | 5 1/2 (140) | 2 1/2–7 1/2 (64–178) | 8 1/2 (216) | 3/4-16 x 23 3/8 | 1/4 (6) | 15/16 (24) |

*Includes CG273H puller, CG1 pulling plate and pressure screw




## 2 and 2 1/2 Ton Puller Group (CG240 Series): 1 1/16 lb Hammer (CG240H Series)

| Stock No. | 2-Jaw Yoke CG240-2 | 3-Jaw Yoke CG243-2 | Std. Pres. Screw CG240-1 | Long Pres. Screw CG240-11 | Slide Screw CG240-8 | Slide Hammer CG240-9 | 2-Jaw Lock Plate CG240-5 | 3-Jaw Lock Plate CG243-5 | Spring CG240-6 | Adj. Nut CG240-7 | Std. Jaw CG240-3 | Long Jaw CG240-10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG240 | 1 | — | 1 | — | — | — | 1 | — | 1 | 1 | 2 | — |
| CG240L | 1 | — | — | 1 | — | — | 1 | — | 1 | 1 | — | 2 |
| CG240H | 1 | — | — | — | 1 | 1 | 1 | — | 1 | 1 | 2 | — |
| CG240HL | 1 | — | — | — | 1 | 1 | 1 | — | 1 | 1 | — | 2 |
| CG243 | — | 1 | 1 | — | — | — | 1 | 1 | 1 | 1 | 3 | — |
| CG243L | — | 1 | — | 1 | — | — | — | 1 | 1 | 1 | — | 3 |
| CG243H | — | 1 | — | — | 1 | 1 | — | 1 | 1 | 1 | 3 | — |
| CG243HL | — | 1 | — | — | 1 | 1 | — | 1 | 1 | 1 | — | 3 |

## 6 and 7 1/2 Ton Puller Group (CG250 Series): 2 1/8 lb Hammer (CG250H Series)

| Stock No. | 2-Jaw Yoke CG250-2 | 3-Jaw Yoke CG253-2 | Pressure* Screw CG250-1A | Slide* Screw CG250-8A | Slide Hammer CG250-9 | Cross Bar CG10F | Lock Plate CG250-5 | Spring CG250-6 | Adj. Nut CG250-7 | Std. Jaw CG250-3 | Long Jaw CG250-10 | Pulling Plate CG1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG250 | 1 | — | 1 | — | — | — | 1 | 1 | 1 | 2 | — | — |
| CG250A | 1 | — | 1 | — | — | — | 1 | 1 | 1 | 2 | — | 1 |
| CG250C | 1 | — | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | — | 1 |
| CG250H | 1 | — | — | 1 | 1 | 1 | 1 | 1 | 1 | 2 | — | — |
| CG250HL | 1 | — | — | 1 | 1 | 1 | 1 | 1 | 1 | — | 2 | — |
| CG253 | — | 1 | 1 | — | — | — | 1 | 1 | 1 | 3 | — | — |
| CG253H | — | 1 | — | 1 | 1 | 1 | 1 | 1 | 1 | 3 | — | — |
| CG253L | — | 1 | 1 | — | — | — | 1 | 1 | 1 | — | 3 | — |
| CG2500B** | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | — |

**CG2500B continued in next chart

**CG2500B Heavy Duty Manual Puller Set** Same as CG2500BSB set, without the tool control board or the wall cabinet.
**CG250-20 Replacement Point** replacement point.
**CG250-8A Slide Screw** has 5/8" UNF threads.

## 10 and 12 1/2 Ton Puller Group (CG270, CG280 Series): 3 1/2 lb Hammer (CG270H Series)

| Stock No. | 2-Jaw Yoke CG270-2 | 3-Jaw Yoke CG273-2 | Std. Pres.* Screw CG270-1A | Long Pres.* Screw CG270-11A | Man. Adaptor CG270-13 | Slide* Screw CG270-8A | Slide Hammer CG66-2 | 2-Jaw Lock Plate CG270-5 | 3-Jaw Lock Plate CG273-5 | Spring CG270-6 | Lock Nut CG270-7 | Std. Jaw CG270-3 | Long Jaw CG270-10 | Special Jaw CG270-3S | Extra Long Jaw CG270-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG270 | 1 | — | 1 | — | — | — | — | — | — | 1 | 1 | 2 | — | — | — |
| CG270A | 1 | — | 1 | — | — | — | — | — | — | 1 | 1 | 2 | — | — | — |
| CG270C | 1 | — | 1 | — | — | 1 | 1 | — | — | 1 | 1 | 2 | — | — | — |
| CG270H | 1 | — | — | — | — | 1 | 1 | — | — | 1 | 1 | 2 | — | — | — |
| CG270S | 1 | — | 1 | — | — | — | — | 1 | — | 1 | 1 | — | — | 2 | — |
| CG272 | 1 | — | — | 1 | — | — | — | 1 | — | 1 | 1 | — | 2 | — | — |
| CG273A | — | 1 | 1 | — | — | — | — | — | 1 | 1 | 1 | 3 | — | — | — |
| CG273C | — | 1 | 1 | — | — | 1 | 1 | — | — | 1 | 1 | 3 | — | — | — |
| CG273H | — | 1 | — | — | — | 1 | 1 | — | 1 | 1 | 1 | 3 | — | — | — |
| CG280 | 1 | — | — | 1 | — | — | — | — | — | 1 | 1 | — | 2 | — | — |
| CG283 | — | 1 | — | 1 | — | — | — | — | 1 | 1 | 1 | — | 3 | — | — |
| CG284 | 1 | — | — | 1 | 1 | — | — | — | — | 1 | 1 | — | — | — | 2 |
| CG285 | — | 1 | — | 1 | 1 | — | — | — | — | 1 | 1 | — | — | — | 3 |
| CG2500B | 1 | 1 | 1 | 1 | — | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | — |

**CG270-20** Replacement point for CG270/CG280 series pullers.
**CG270-21** Fits CG270 and CG280 series pullers.
**CG270-8A** Has 3/4-16" UNF threads.

**⚠WARNING**

- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: INDUSTRIAL

VE113B Panel A




VE138-3B Panel B

VE138-2B Panel C




VE138-1B Panel D

CG1038KA

## Industrial Puller Sets

**CG1038KA Industrial Puller Set**
Includes more than 35 basic pullers that will assemble into more than 165 puller combinations. Standard pullers in this set have a range from 2–20 tons. The hydraulic power components provide up to 20 tons of easy pulling power. Optional 10 and 50 ton hydraulic accessories are available. Components are mounted on (four) 24" x 32" x 3/4" tool control panels (labeled "A," "B," "C" and "D" below) with white silhouettes. The panels are mounted on KRA213E A-frame.

**CG1038K Industrial Puller Set**
This is the CG1038KA set but does not include the KRA213E A-frame.

**CG1050KA Expanded Industrial Puller Set**
Includes CG1038KA set plus the CG1224 power kit for converting 10 ton manual pullers to hydraulic power; CG300-1, CG305-8 and CG350-1 pressure screws; CG343-1 4" plug; CG350-2 manual yoke for converting the 20 ton hydraulic pullers to manual power; and CG555 basic hydraulic set for building a 50 ton hydraulic bar type puller. Also includes CG420-5C pressure gauge, CG420-6 gauge mounting adaptor, ten CG250-20 small centering adaptors and ten CG270-20 large centering adaptors.

**KRA213E A-Frame**
Mobile unit features 23,220 cu in, 1,260 sq in of storage for convenient access and orderly storage. Measures 26 1/2" x 52 3/8" x 32 3/8".

## Tool Control Boards

**VE113B Tool Control Board**
Panel "A" is designed to hold the components for CG2500BS interchangeable puller set (6, 7 1/2, 10 and 12 1/2 ton capacity). Also used as the tool control board for the CG2500BSB manual puller set.

**CG250 Pressure Screw Puller**
**CG250H Slide Hammer Puller**
**CG250HL Slide Hammer Puller**
**CG253 Pressure Screw Puller**
**CG253H Slide Hammer Puller**
**CG270 Pressure Screw Puller**
**CG270H Slide Hammer Puller**
**CG270S Pressure Screw Puller**
**CG273 Pressure Screw Puller**
**CG273H Slide Hammer Puller**
**CG280 Pressure Screw Puller**
**CG283 Pressure Screw Puller**

**VE138-3B Tool Control Board**
Panel "B" is designed to hold CG2400 light duty puller set, CJ840C tapped hole puller set, CJ949 bearing separator and CJ9500 bearing separator set components

**CG240 Pressure Screw Puller**
**CG240H Slide Hammer Puller**
**CG243 Pressure Screw Puller**
**CG243H Slide Hammer Puller**
**CJ93B Small Slide Hammer Puller Set**
**CJ840C Manual Tapped Hole Puller**
**CJ949 Bearing Separator**
**CJ950 Bearing Separator**
**CJ951 Bearing Separator**
**CJ952 Bearing Separator**

**VE138-2B Tool Control Board**
Panel "C" is designed to hold CG450HYA 20 ton hydraulic bar type puller components and the components of CG2545AB blind hole bearing puller set.

**CG40C Blind Hole Bearing Puller**
**CG45 (1-1 3/4") Puller Set**
**CG450 Manual Push-Pull Puller**
**CG450HYA Hydraulic Push-Pull Puller**

**VE138-1B Tool Control Board**
Panel "D" is designed to hold components of CG400 20 ton jaw type puller, three CG305-9 long jaws, CG455 and CG455A threaded adaptor sets, plus CG455-18 and CG455-19 pressure screw adaptors. The adaptors are for use with the bar-type pullers on tool control panel "C."

**CG400 Combination Manual Puller**
**CG400HYA Combination Hydraulic Puller**
**CG405 Combination Manual Puller**
**CG450HYA Hydraulic Push-Pull Puller**

**Features of Two Stage Hydraulic Pumps**
- Two stage design will advance 20–50 ton rams in the low pressure stage in less than 1/3 the strokes required on other models
- CG520 Ram extends in 60–70 strokes
- CG420 Ram extends in 17–19 strokes
- When high pressure is required, the low-pressure stage automatically kicks out to leave the high-pressure stage to do the work


CG650


CG420-1A


CG720


CG520

## Ram (Cylinder) Specifications

| Capacity, tons | Stock No. | Stroke, inches | Collapsed Height, inches | Extended Height, inches | Effective Area (piston) | Oil Capacity, cu in | Pressure Screw Size, inches |
|---|---|---|---|---|---|---|---|
| 4 | **CG220** | 2 1/4 | 6 | 8 1/4 | .966 | 2.174 | 1/2-13 x 14 1/4 |
| 6 | **CG650** | 1 1/2 | 4 11/16 | 6 3/16 | 1.473 | 2.210 | 5/8-11 x 13 1/4 |
| 10 | **CG120** | 1 | 4 3/4 | 5 3/4 | 2.440 | 2.440 | 3/4-10 x 16 1/4 |
| 20 | **CG420-1A** | 2 | 6 | 8 | 4.418 | 8.836 | 1 1/8-8 x 20 1/2 |
| 35 | **CG720** | 2 1/2 | 7 | 9 1/2 | 7.903 | 19.758 | 1 3/8-8 x 25 |
| 50 | **CG520** | 3 | 8 1/8 | 11 1/8 | 11.066 | 33.198 | 1 5/8-5 1/2 x 30 |

**CG222 4 Ton Set**
**Includes:**
**CG120-3-1 Hose**
**CG120-4 Coupler Set**
**CG220 4 Ton Ram**
**CG220-13 Pressure Screw**
**CG4-2A 4 to 10 Ton Hyd. Pump**

**CG652 6 Ton Pump and Ram Set**
**Includes:**
**CG120-3-1 Hose**
**CG120-4 Coupler Set**
**CG250-20 Replacement Point**
**CG4-2A 4–10 Ton Hyd. Pump**
**CG650 6 Ton Ram**

**CG122 10 Ton Pump and Ram Set**
**Includes:**
**CG120 10 Ton Ram**
**CG120-13 Pressure Screw**
**CG120-3-1 Hose**
**CG120-4 Coupler Set**
**CG270-20 Replacement Point**
**CG4-2A 4–10 Ton Hyd. Pump**

**CG420A 20 Ton Set**
**Includes:**
**CG420-1-14 Centering Adaptor**
**CG420-1A 20 Ton Ram**
**CG420-2A 1 Stage Pump**
**CG420-3-1 Hose**
**CG420-4 Coupler Set**
**CG420A2S 20 Ton Set**
Same as CG420A with the CG420-2S two stage pump.


CG4-2A


CG420-2A


CG420-2S

## HYDRAULIC ACCESSORIES

**CG6223 6 Ton Power Kit**
Converts CG250 and CG253 manual pullers to hydraulic power.
**Includes:**
**CG652 6 Ton Pump and Ram Set**
**CG250-15 2-Jaw Yoke**
**CG250-16 Hand Wheel Adaptor**
**CG253-15 3-Jaw Yoke**


CG1224


CG420-5C


CG420-6

**CG1224 Hydraulic Conversion Kit**
Both conversion kits provide hydraulic power for the pullers, which are included in the CG2500B puller sets. 10 ton. Converts CG270, CG273, CG280 and CG283 manual pullers (on Tool Control Panel "A") and CG1700/CG2500B puller sets to hydraulic power.
**CG122 10 Ton Pump and Ram Set**
**CG270-15 2-Jaw Yoke**
**CG270-16 Hand Wheel Adaptor**
**CG273-15 3-Jaw Yoke**

**CG420-5C Pressure Gauge**
Can be used with 6, 10, 20, 35 and 50 ton hydraulic equipment. Use CG4-2A, CG420-2A or CG420A-2S pumps. Indicates hydraulic pressure in tons of pressure as well as PSI. Adaptor CG420-6 is required to attach gauge to pumps.
**CG420-6 Gauge Mounting Adaptor**
Mounts CG420-5C pressure gauge to 6, 10, 20, 35 and 50 ton hydraulic systems.

**⚠WARNING**
- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: 2-AND 3-JAW HYDRAULIC



CG654HY



CG655HY



CG274HY



CG277HY



CG400HYA



CG343



CG405HYA



CG425HYA



CG560HY

## 6 Ton Capacity (5.4 t)

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| **CG654HY†** Hydraulic, 2 Jaw | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-11 x 13 3/4 | 1/4 (6) | 3/4 (19) |
| **CG655HY*†** Hydraulic, 3 Jaw | 3 (76) | 1 1/2–3 1/2 (38–89) | 4 1/2 (114) | 5/8-11 x 13 3/4 | 1/4 (6) | 3/4 (19) |

†Includes hydraulic ram and pump set.
*To convert to manual power, use pressure screw, adjusting nut and yoke from either CG250 or CG253 Pullers.

## 10 Ton Capacity (9.1 t)

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) inside | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|---|
| **CG274HY†** 2 Jaw Model | 8 3/4 (222) | 3–8 (76–203) | 3–8 (76–203), 10 1/2 (266) | 3/4-10 x 16 1/4 | 1/4 (6) | 15/16 (24) |
| **CG275HY†** 3 Jaw Model | 8 3/4 (222) | 3–8 (76–203) | 10 (254) | 3/4-10 x 16 1/4 | 1/4 (6) | 15/16 (24) |
| **CG276HY†** 2 Jaw Model | 15 (381) | 4 3/4–11 1/2 (121–292) | 13 3/4 (349) | 3/4-10 x 23 3/8 | 3/8 (9) | 1 (25) |
| **CG277HY*** 3 Jaw Model | 15 (381) | 4 3/4–11 1/2 (121–292) | 13 3/4 (349) | 3/4-10 x 23 3/8 | 3/8 (9) | 1 (25) |

†Includes hydraulic ram and pump set.
*To convert to manual power, use pressure screw, adjusting nut and yoke from either CG270 or CG273 Pullers.

## 20 Ton Capacity (18.1 t) - Combination 2-and 3-Jaw

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|
| **CG400HYA*** | 9 1/2 (241) | 13 (330) | 1 1/8-8 x 20 1/2 | 7/16 (11) | 1 1/4 (32) |
| **CG400HYA2S** | CG400HYA with two stage pump | | | | |
| **CG400** | CG400HYA less hydraulic ram and pump | | | | |
| **CG343** | Manual version of CG400HYA. Includes CG343-1 4" Plug and CG300-1 1-14 Pressure Screw in place of ram and pump | | | | |
| **CG343-1** | 4" Plug | — | — | — | — |
| **CG300-1** | 1-14 Pressure Screw | — | 1 x 14 x 14 5/8 | — | — |
| **CG405HYA*** | 14 (355) | 15 (381) | 1 1/8-8 x 20 1/2 | 9/16 (14) | 1 1/4 (32) |
| **CG405HYA2S** | CG405HYA with two stage pump | | | | |
| **CG405** | CG405HYA less hydraulic ram and pump | | | | |
| **CG348** | Manual version of CG405HYA. Includes CG343-1 4" Plug and CG305-8 1-14 Pressure Screw in place of ram and pump | | | | |
| **CG305-8** | 1-14 Pressure Screw | — | 1-14 x 18 3/8 | — | — |
| **CG425HYA*** | 19 (482) | 20 (508) | 1 1/8-8 x 20 1/2 | 1 1/8 (29) | 1 1/2 (38) |
| **CG425HYA2S** | CG425HYA with two stage pump | | | | |
| **CG425** | CG425HYA less hydraulic ram and pump | | | | |
| **CG325** | Manual version of CG425HYA. Includes 1 3/8-8 x 20 1 1/16" pressure screw in place of pump, ram, washer adaptor, ram adaptor and cap screws | | | | |

*Included with hydraulic ram.

## 50 Ton Capacity (45.36 t) - Combination 2-and 3-Jaw

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) outside | Pressure Screw Size, inches | Jaw Thickness, inches (mm) | Jaw Width, inches (mm) |
|---|---|---|---|---|---|
| **CG560HY*** | 28 (711) | 44 (1,118) | 1 5/8–5 1/2 x 30 | 1 7/16 (36) | 2 (51) |
| **CG560HY2S** | CG560HY w/ 2 stage pump | | | | |

*Included with hydraulic ram

# PULLERS: BAR-TYPE MANUAL TAPPED HOLE SETS

## 6 Ton Capacity (5.4 t), Tapped Hole

| Stock No. | Max. Reach, in. (mm) | Max. Spread, in. (mm) | Pressure Screw Size, inches | Side Rods | Side Rod Adaptors (2 each), inches |
|---|---|---|---|---|---|
| **CJ840C** | 33 (838) | 2 5/8–11 5/8 (67–295) | 1-14 x 33 | 5/8-18 | 1/2-20, 1/2-13, 3/4-16, 3/4-10 |
| Complete Puller Set | Side rods in set are provided 2 each in 5" (CJ84-5), 10" (CJ84A2) and 20" (CJ84-3) lengths | | | | 3/8-24, 3/8-16, 5/16-24, 5/16-18, 7/16-20, 5/8-18, 5/8-11, 7/16-14 |
| **CJ84C** | CJ840C less all adaptors and side rods except 5/8-18 x 10. | | | | |
| Basic Puller Set | | | | | 1/2-20, 1/2-13, 5/8-18, 5/8-11, 3/4-16, 3/4-10 |



**CJ840C**

# BAR-TYPE MANUAL PUSH-PULL SETS

## 6 Ton Capacity (5.4 t), Push/Pull

| Stock No. | Max. Reach, in. (mm) | Max. Spread, in. (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches | Side Rod Adaptors, inches |
|---|---|---|---|---|---|---|
| **CG706** Push/Pull Set | 14 1/8 (358) | 2 5/8–7 1/2 (67–191) | 5/8-18 x 10 | — | 7/16-14 x 8 (4 each) | 7/16-14f x 5/8-18m |



**CG706**

## 10 Ton Capacity (9.1 t), Push/Pull

| Stock No. | Max. Reach, in. (mm) | Max. Spread, in. (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches |
|---|---|---|---|---|---|
| **CG710** Push/Pull Set | 17 5/8 (448) | 3 9/16–9 3/8 (90–238) | 3/4-16 x 12 | CG710-3 3/4-16f x 5/8-18m | (2) 5/8-18 x 8, (2) 5/8-18 x 12 |



**CG710**

# BAR-TYPE HYDRAULIC/MANUAL SETS

## 6 Ton Capacity (5.4 t), Hydraulic

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches | Side Rod Adaptors, inches |
|---|---|---|---|---|---|---|
| **CG656HY*** Hydraulic Set | 14 1/8 (358) | 2 5/8–7 1/2 (67–191) | 5/8-11 x 13 3/4 | 5/8-11f x 5/8-18m | 7/16-14 x 8 | 7/16-14f x 5/8-18m |
| **CG656** | CG656HY Set less the hydraulic components | | | | | |

*Included with hydraulic ram

## 10 Ton Capacity (9.1 t), Hydraulic

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches | Side Rod Adaptors, inches |
|---|---|---|---|---|---|---|
| **CG150HY*** Hydraulic Set | 17 5/8 (448) | 3 9/16–9 3/8 (90–238) | 3/4-10 x 16 1/4 | 3/4-10f x 5/8-18m, 3/4-10f x 3/4-16m | 5/8-18 x 8, 5/8-18 x 12 | — |
| **CG150** | CG150HY Set less the hydraulic components | | | | | |

*Included with hydraulic ram



**CG150HY**

## 20 Ton Capacity (18.1 t), Hydraulic

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches | Side Ride Adaptors, inches |
|---|---|---|---|---|---|---|
| **CG450HYA** Hydraulic Set | 24 (610) | 6–15 (152–381) | 1 1/8-8 x 20 1/2 | — | 7/8-14 x 20, 7/8-14 x 10 | 7/8-14f x 7/8-14m, 7/8-14f x 5/8-18m |
| **CG450HYA2S*** | CG450HY Set with 2 stage pump | | | | | |
| **CG450** | CG450HY Set less the hydraulic components | | | | | |
| **CG350*** | Manually operated version of the CG450 | | | | | |

*Included with hydraulic ram



**CG450HYA**

## 35 Ton Capacity (31.7 t), Hydraulic

| Stock No. | Maximum Reach, inches (mm) | Maximum Spread, inches (mm) | Pressure Screw Size, inches | Pressure Screw Adaptor | Side Rods, inches | Side Rod Adaptors, inches |
|---|---|---|---|---|---|---|
| **CG750HY*** Hydraulic Set | 26 (660) | 8 1/2–17 (216–432) | 1 3/8-8 x 25 | 1 3/8-8f x 7/8-14m | 1-14 x 20, 1-14 x 10 | 1-14f x 7/8-14m, 7/8-14f x 3/4-16m |
| **CG750HY2S** | CG750HY Set with 2 stage pump | | | | | |
| **CG750** | CG750HY Set less the hydraulic components | | | | | |

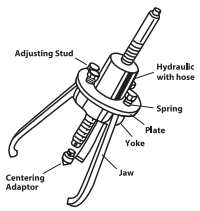
*Included with hydraulic ram

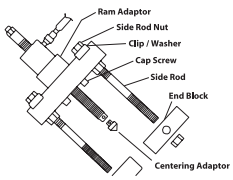
**⚠WARNING**

- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: REFERENCE CHARTS

## Jaw-Style Pullers (Hydraulic and Manual)




| Stock No. | Hydraulic Unit | Ram Adaptor | Hydraulic Adaptor | Yoke | Pressure Screw | 4" Dia. Plug | Plate | Spring | Adj. Stud | Jaws | Side Arms/ Side Plate | Arm Bolts Arm Nuts | Washers/ Cap Screws |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG654HY | CG652 | CG250-16 | – | CG250-15 | * | – | CG250-5 | CG250-6 | – | CG250-3 (2) | – | – | – |
| CG655HY | CG652 | CG250-16 | – | CG253-15 | * | – | CG250-5 | CG250-6 | – | CG250-3 (3) | – | – | – |
| CG274HY | CG122 | CG270-16 | – | CG270-15 | * | – | CG270-5 | CG270-6 | – | CG270-3 (2) | – | – | – |
| CG275HY | CG122 | CG270-16 | – | CG273-15 | * | – | CG273-5 | CG270-6 | – | CG270-10 (3), CG270-3 (3) | – | – | – |
| CG276HY | CG122 | CG270-16 | CG270-14 | CG270-15 | * | – | CG270-5 | CG270-6 (4) | – | CG270-12 (2) | – | – | – |
| CG277HY | CG122 | CG270-16 | CG270-14 | CG273-15 | * | – | CG273-5 | CG270-6 (4) | – | CG270-12 (3) | – | – | – |
| CG400HYA | CG420A | – | – | CG400-2 | * | – | CG400-5 | CG400-6 (4) | CG400-7 (4) | CG300-3 (3) | – | – | – |
| CG343 | – | – | – | CG400-2 | CG300-1 | CG343-1 | CG400-5 | CG400-6 (4) | CG400-7 (4) | CG300-3 (3) | – | – | – |
| CG405HYA | CG420A | – | – | CG400-2 | * | – | CG400-5 | CG400-6 (4) | CG400-7 (4) | CG305-9 (3) | – | – | – |
| CG348 | – | – | – | CG400-2 | CG305-8 | CG343-1 | CG400-5 | CG400-6 (4) | CG400-7 (4) | CG305-9 (3) | – | – | – |
| CG425HYA | CG420A | CG425-9 | – | CG325-2 | * | – | – | – | – | CG325-3 (3) | CG325-4 (3) | CG325-5 (3) | CG425-7 |
| CG325 | – | – | – | CG325-2 | CG325-1 | – | – | – | – | CG325-3 (3) | CG325-4 (3) | CG325-5 (3) | – |
| CG560HY | See Hyd. Unit Chart | – | – | CG560-2 | * | – | – | – | – | CG560-3 (3) | CG560-4 (6) | CG560-5 (9) | – |

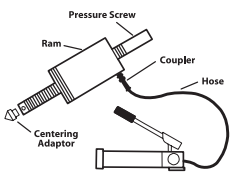
*Included with hydraulic ram (see chart below).

## Bar-Style Pullers (Hydraulic and Manual)

| Set Stock No. | Hyd. Unit Ram Adapt. | Yoke | Pressure Screw | Centering Adaptor | Pressure Screw Adaptor | Thrust Nut Thrust Washer | Side Rods (2) | Side Rod Hex Nuts (6) | Clip/ Washer | Side Rod Conn. Nuts (2) | End Blocks (2) | Side Rod Adaptors (2) | Cap Screw (2 ea) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CJ84C | – | CJ84-1B | CJ84-4 | CJ84-16 | – | – | 5/8-18 x 10 | – | ME5A16 (2) | – | – | – | – |
| CG706 | – | CG656-2 | CG706-1 | C250-20 | – | CG325-6, CG706-2 | CG656-3 (4) (8") | CG656-7 | CG656-8 (4) | CG656-6 | CG656-6 | CG656-12 | – |
| CG710 | – | CG150-2 | CG710-1 | CG270-20 | CG710-3 | CG45-2, CG710-2 | CG150-3 (12"), CG150-4 (8") | – | – | – | CG150-6 | – | – |
| CG656HY | CG654, CG656-9 | CG656-2 | * | – | CG656-13 | – | CG656-3 (8") | CG656-7 | CG656-8 (2) | CG656-5 | CG656-6 | CG656-12 | CG656-11, CG656-10 |
| CG656 | – | CG656-2 | – | – | CG656-13 | – | CG656-3 (8") | CG656-7 | CG656-8 (2) | CG656-5 | CG656-6 | CG656-12 | CG656-11, CG656-10 |
| CG150HY | CG122, CG150-9 | CG150-2 | * | * | CG150-12 (5/8"), CG150-13 (3/4") | – | CG150-3 (12"), CG150-4 (8") | – | – | – | CG150-6 | – | CG150-11, CG150-10 |
| CG150 | – | CG150-2 | – | – | CG150-12 (5/8"), CG150-13 (3/4") | – | CG150-3 (12"), CG150-4 (8") | – | – | – | CG150-6 | – | CG150-11, CG150-10 |
| CG450HYA | CG420A, CG425-9 | CG450-10 | * | * | – | | CG350-3 (18"), CG350-4 (9") | CG350-7 | CG350-8 (2) | CG350-5 | CG350-6 | CG350-9 | CG450-11, CG450-12 |
| CG450 | – CG425-9 | CG450-10 | – | – | – | | CG350-3 (18"), CG350-4 (9") | CG350-7 | CG350-8 (2) | CG350-5 | CG350-6 | CG350-9 | CG450-11, CG450-12 |
| CG350 | CG420A, CG425-9 | CG350-2 | CG350-1 | – | – | | CG350-3 (18"), CG350-4 (9") | CG350-7 | CG350-8 (2) | CG350-5 | CG350-6 | CG350-9 | CG450-11, CG450-12 |
| CG750HY | See Hyd. Unit Chart | CG750-2 | * | * | CG750-11 (7/8"), CG750-13 (7/8") | – | CG750-3 (20"), CG750-4 (10") | CG750-7 | CG750-8 (2) | CG750-5 | CG750-6 | CG750-9, CG750-10 | CG750-11, CG750-12 |
| CG750 | – CG720-9 | CG750-2, CG550-2 | – | – | CG750-14 (1 1/8") | – | CG750-3 (20"), CG550-3, CG750-4 (10") | CG750-7, CG550-7 | CG750-8 (2) | CG350-5 | CG750-6 | CG750-9, CG750-10 | CG750-11, CG550-10, CG750-12 |

*Included with hydraulic ram (see chart below).

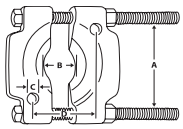
## Hydraulic Power Units




| Stock No. | Capacity, tons | Ram | Included with Ram Pressure Screw | Included with Ram Centering Adaptor | Hose | Coupler | Pump | Optional Pressure Gauge | Items* Gauge Adaptor |
|---|---|---|---|---|---|---|---|---|---|
| CG222 | 4 | CG220 | CG220-13 | – | CG120-3-1 | CG120-4 | CG4-2A | – | – |
| CG652 | 6 | CG650 | CG650-13 | CG250-20 | CG120-3-1 | CG120-4 | CG4-2A | CG420-5C | CG420-6 |
| CG122 | 10 | CG120 | CG120-13 | CG270-20 | CG120-3-1 | CG120-4 | CG4-2A | CG420-5C | CG420-6 |
| CG420A | 20 | CG420-1A | CG420-1-13A | CG420-1-14 | CG420-3-1 | CG420-4 | CG420-2A | CG420-5C | CG420-6 |

*Standard with CG559 Bar-Style Puller Set.

## Bearing Separators



- For separating and pulling double bearings and close fitting gears. Use with tapped hole, two-jaw pullers or floor presses

| Stock No. | A | B | B | C | D |
|---|---|---|---|---|---|
| CJ949 | 1 11/16 | 1 1/8 | 1/4 | 5/16"–18 | 2 5/8 |
| CJ950 | 2 3/8 | 2 3/8 | 3/8 | 3/8"–16 | 3 3/4 |
| CJ951 | 4 3/8 | 4 1/2 | 5/8 | 5/8"–18 | 7 1/4 |
| CJ952 | 5 7/8 | 6 1/8 | 1 1/2 | 5/8"–18 | 9 5/16 |
| CJ953 | 8 3/8 | 8 3/4 | 1 1/4 | 3/4"–16 | 14 7/16 |



CJ950 CJ952



## Male Adaptors

| Stock No. | Female Thread | Male Thread |
|---|---|---|
| CG656-12 | 7/16"-14 | 5/8"-18 |
| CG656-13 | 5/8"-11 | 5/8"-18 |
| CJ84-6 | 5/8"-18 | 5/16"-24 |
| CJ84-15 | 5/8"-18 | 5/16"-18 |
| CJ84-7 | 5/8"-18 | 3/8"-24 |
| CJ84-10 | 5/8"-18 | 3/8"-16 |
| CJ84-8 | 5/8"-18 | 7/16"-20 |
| CJ84-18 | 5/8"-18 | 7/16"-14 |
| CJ84-9 | 5/8"-18 | 1/2"-20 |
| CJ84-11 | 5/8"-18 | 1/2"-13 |
| CJ84-17 | 5/8"-18 | 5/8"-18 |
| CJ84-12 | 5/8"-18 | 5/8"-11 |
| CJ84-13 | 5/8"-18 | 3/4"-16 |
| CJ84-14 | 5/8"-18 | 3/4"-10 |
| CG710-3 | 3/4"-16 | 5/8"-18 |
| CG150-12 | 3/4"-10 | 5/8"-18 |
| CG150-13 | 3/4"-10 | 3/4"-16 |
| CG46-7* | 3/4"-10 | 1"-14 |
| CG46-8** | 3/4"-16 | 1"-14 |
| CG750-9 | 1"-14 | 3/4"-16 |
| CG750-10 | 1"-14 | 7/8"-14 |
| CG455-18 | 1 1/8"-8 | 5/8"-18 |
| CG455-19 | 1 1/8"-8 | 7/8"-14 |
| CG47-420 | 1 1/8"-8 | 1 1/4"-12 |
| CG550-9 | 1 3/8"-6 | 1 3/4"-12 |
| CG455-1 | 7/8"-14 | 5/8"-18 |
| CG455-2 | 7/8"-14 | 5/8"-11 |
| CG455-3 | 7/8"-14 | 3/4"-16 |
| CG455-4 | 7/8"-14 | 7/8"-10 |
| CG455-5 | 7/8"-14 | 7/8"-9 |
| CG455-6 | 7/8"-14 | 1"-14 |
| CG455-7 | 7/8"-14 | 1"-8 |
| CG455-8 | 7/8"-14 | 1 1/8"-12 |

*For attaching CG46 Series Pullers to CG105HY Hydraulic Bar-Style Puller.
**For attaching CG46 Series Pullers to CG710 Push/Pull Set.

**CG455 Male Adaptor Set**
Includes two each of the male adaptors CG455-1 – CG455-8 (16pc).

- Male and female adaptors add versatility to the pulling and pushing capabilities of bar-style pullers
- Adaptors change the diameter and/or thread pitch of pressure screws and side rods to accommodate item being pushed or pulled
- Unthreaded male ends of bull nose adaptors perform many pushing operations



CG455



CG455A

## Female Adaptors

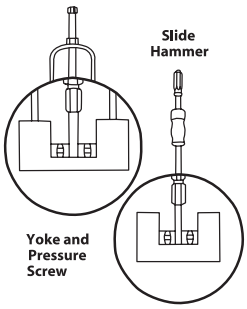
| Stock No. | Female Thread |
|---|---|
| CG455-9 | 7/8"-14 and 5/8"-18 |
| CG455-10 | 7/8"-14 and 3/4"-16 |
| CG455-11 | 7/8"-14 and 1"-14 |
| CG455-12 | 7/8"-14 and 1 1/8"-8 |
| CG455-13 | 7/8"-14 and 1 1/8"-12 |
| CG455-14 | 7/8"-14 and 1 1/4"-8 |
| CG455-15 | 7/8"-14 and 1 1/4"-12 |
| CG455-17 | 7/8"-14 and 1 1/2"-12 |
| CG455-16 | 7/8"-14 and 1 1/2"-8 |

**CG455A Female Adaptor Set**
Includes two each of the female adaptors (18pc).

**WARNING**

- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# PULLERS: BLIND HOLE BEARING




These special pullers will pull blind hole bearings, bushings and sleeves with inside diameters ranging from 1/4"–7" where regular pullers will not reach. The operation is simple. After the special collet is inserted through the bearing or sleeve, a matched expanding rod is threaded into the collet and secured. Pulling can be done through bridge of bar type yokes or with side hammers.

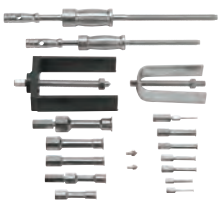


CG40CB

**CG40CB Blind Hole Bearing Puller**
Includes nine collets and yoke. Uses CG250-8A slide screw and CG250-9 slide hammer.

**Includes:**

| | | |
|---|---|---|
| CG40-1 | CG40-3 | CG41-11 |
| CG41-14 | CG41-12 | CG41-13 |
| CG40-4 | CG40-9 | CG40-15 |
| CG40A6 | CG40A10 | CG40-7 |
| CG40-8 | CG40-2 | |



CG2545AB

**CG2545AB Blind Hole Bearing Puller**
Includes CG40C and CG45 sets plus slide screw and hammers.

**Includes:**

| | | |
|---|---|---|
| CG40-1 | CG40-2 | CG40-3 |
| CG41-11 | CG41-14 | CG41-12 |
| CG41-13 | CG40-4 | CG40-9 |
| CG40-15 | CG40A6 | CG40A10 |
| CG40-7 | CG40-8 | CG250-8A |
| CG250-9 | CG270-1A | CG45-2 |
| CG270-8A | CG45-15 | CG45-3 |
| CG45-4 | CG45-6 | CG45-7 |
| CG66-2 | | |



CG45

**CG45 (1"-1 3/4") Puller Set**
Three collets and yoke. Uses CJ105-4B slide screw and CJ97-3A slide hammer.

**Includes:**

| | | |
|---|---|---|
| CG270-1A | CG45-4 | CG45-6 |
| CG45-2 | CG45-15 | CG45-7 |
| CG45-3 | | |



CG46

**CG46 (1" 5/8-3") Puller Set**
Three collets, slide screw and hammer. For large size blind hole bearings, Torrington needle bearings, heavy duty bearings on live center lathes, conveyor belts and rollers.

**Includes:**

| | | |
|---|---|---|
| CG46-1 | CG46-3 | CG46-5 |
| CG46-2 | CG46-4 | CG46-6 |



CG47

**CG47 (3"-7") Puller Set**
Master collet and pads plus slide screw and hammer.
Pulling size is changed by changing pads.

**Includes:**

| | | |
|---|---|---|
| CG4567N | CG47-204 | CG47-209 |
| CG4567O | CG47-205 | CG47-210 |
| CG47-201 | CG47-206 | CG47-211 |
| CG47-202 | CG47-207 | CG47-212 |
| CG47-203 | CG47-208 | |

## Set Components

| Stock No. | Description | Internal Thread Size | External Thread Size |
|---|---|---|---|
| CG40-11 | Collet, 43/64"–53/64" | — | — |
| CG40-12 | Collet, 15 mm–18 mm | — | — |
| CG40-4-1 | Collet Extension, 4" long | — | — |
| CG46-8 | Manual Adaptor | — | — |
| CG46-7 | Hydraulic Adaptor | — | — |
| CG47-420 | Hydraulic Adaptor | — | — |
| CG250-8A | Slide Screw, 5/8"-18 UNF x 18 9/16" | — | — |
| CG250-9 | Slide Hammer, 2 lb | — | — |
| CG40-1 | Pressure Screw, 5/8"-18 x 7 3/4" | — | — |
| CG40-2 | Nut, 15/16" Wrench Size | — | — |
| CG40-3 | Yoke, 3 1/4" Spread | — | — |
| CG41-11 | Expanding Rod | 5/8-18 | 3/8-24 |
| CG41-14 | Collet, 1/4"–5/16" | — | — |
| CG41-12 | Collet, 5/16"–3/8" | — | — |
| CG41-13 | Collet, 3/8"–7/16" | — | — |
| CG40-4 | Expanding Rod | 5/8-18 | 1/2-20 |
| CG40-9 | Collet, 7/16"–1/2" | — | — |
| CG40-15 | Collet, 1/2"–5/8" | — | — |
| CG40A6 | Collet, 5/8"–3/4" | — | — |
| CG40-7 | Collet, 3/4"–7/8" | — | — |
| CG40-8 | Collet, 7/8"–1" | — | — |
| CG40A10 | Collet, 1"–1 1/8" | — | — |
| CJ105-4B | Slide Screw, 3/4"-16 x 22 1/2" | — | — |
| CJ97-3A | Slide Hammer, 3 3/4 lb | — | — |
| CG270-1A | Pressure Screw, 3/4"-16 x 9 1/2" | — | — |
| CG45-2 | Nut, 1 1/8" Wrench Size | — | — |
| CG45-3 | Yoke, 5 3/4" Spread | — | — |
| CG45-4 | Expanding Rod for: | 3/4-16 | 5/8-18 |
| CG45-15 | Collet, 1"–1 1/4" | — | — |
| CG45-6 | Collet, 1 1/4"–1 1/2" | — | — |
| CG45-7 | Collet, 1 1/2"–1 3/4" | — | — |
| CG46-1 | Slide Screw, 1"-14 x 18" | — | — |
| CG46-2 | Slide Hammer, 6 lb | — | — |
| CG46-3 | Expanding Rod | 1-14 | 1 1/8-12 |
| CG46-4 | Collet, 1 5/8"–2" | — | — |
| CG46-5 | Collet, 2"–2 1/2" | — | — |
| CG46-6 | Collet, 2 1/2"–3" | — | — |
| CG4567N | Slide Screw, 1 1/4"-12 x 24" | — | — |
| CG4567O | Slide Hammer, 10 lb | — | — |
| CG47-201 | Expanding Rod for: | 1 1/4-12 | 1 1/8-12 |
| CG47-202 | Master Collet | — | — |
| CG47-203 | Collet Pad, 3"–3 1/2" (3) | — | — |
| CG47-204 | Collet Pad, 3 1/2"–4" (3) | — | — |
| CG47-205 | Collet Pad, 4"–4 1/2" (3) | — | — |
| CG47-206 | Collet Pad, 3 1/2"–5" (3) | — | — |
| CG47-207 | Collet Pad, 5"–5 1/2" (3) | — | — |
| CG47-208 | Collet Pad, 5 1/2"–6" (3) | — | — |
| CG47-209 | Collet Pad, 6"–6 1/2" (3) | — | — |
| CG47-210 | Collet Pad, 6 1/2"–7" (3) | — | — |
| CG47-211 | Screw, 3/4" (3 sets of 2) | — | — |
| CG47-212 | Screw, 1 3/4" (3 sets of 2) | — | — |

## Accessories

**CG40-11 (43/64"–53/64") Collet**
For needle bearings on Leece-Neville® alternators. Use with CG40-4 expanding rod.

**CG40-12 (15 mm–18 mm) Collet**
For pilot bearings on late model Ford® transmissions. Use with CG40-4 expanding rod.

**CG40-4-1 (4" long) Collet Extension**
For CG40 series collets.

**CG46-8 Manual Adaptor**
For attaching CG46 series pullers to CG710 push/pull set.

**CG46-7 Hydraulic Adaptor**
For attaching CG46 series pullers to CG105HY hydraulic bar style puller.

**CG47-420 Hydraulic Adaptor**
For attaching CG47 series pullers to CG450HYA hydraulic bar style puller.

**CG46-3 Expanding Rod**

## Tools Required for Cummins® B and C Series Service Kits

| | | Applications | | | | Set Contents | |
|---|---|---|---|---|---|---|---|
| | | 12 Valve | 24 Valve | | | CUMDS12V | CUMDS24V |
| Stock No. | Description | pre-1994 | 1994–1998 1/2 | 1999–2002 | 2003 | 12 Valve | 24 Valve |
| FB300A | Bent Blade Feeler Gauge | • | • | • | • | • | • |
| EEPD500 | Compression Gauge | • | • | • | • | • | • |
| MB5D | Bronze Injector Brush | • | • | • | • | • | • |
| MB6BTA | Stainless Steel Injector Brush | • | • | • | • | • | • |
| YA9565A | Engine Turnover Tool | • | • | • | • | • | • |
| CJ140-1 | Injector Slide Hammer Puller | • | • | • | | • | • |
| CJ142 | 14 mm Injector Adaptor | • | | | | • | |
| FRHM17 | 17 mm 6-Point Crowfoot | • | | | | • | |
| FRXM17 | 17 mm 6-Point Flare Nut Socket | • | | | | • | |
| M3584 | Compression Adaptor | • | | | | • | |
| SP144 | Injection Pump Wrench | • | | | | • | |
| SP145 | Idle Wrench (10 mm) | • | | | | • | |
| TSM24 | 24 mm 6-point Deep Socket | • | | | | • | |
| FRHM19 | 19 mm 6-Point Crowfoot | | • | • | • | | • |
| FRXM19 | 19 mm 6-Point Flare Nut Socket | | • | • | • | | • |
| EEPV313C | Compression Adaptor | | • | • | • | | • |
| CJ143 | Adaptor | | • | • | | | • |
| CJ144 | Adaptor | | • | • | | | • |
| SP504 | Gear Puller | | • | • | | | • |
| CJ148 | Fuel Line Plug | | | • | • | | • |
| CJ149 | Adaptor | | | | • | | • |
| TB40 | Tote Bag | | | | | • | • |



CUMDS12V



CUMDS24V



TB40

## Optional Tools

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EEDMTACH1 | Digital Tachometer to measure engine rpm | • | • | • | • | | |
| TWM14A | 14 mm 1/2" dr Shallow Socket use with V22A to adjust valves | • | | | | | |
| SP346 | Fan Wrench (36 mm) | • | | | | | |

**CUMDS12V 12 Valve Diesel Set for *Cummins* B and C Series**

- Services *Cummins* B and C Series 12 valve engines from pre-1994
- Additional applications include Dodge® Ram® 250 and 350 pickups, Ford® pickups with 3.9 L, 5.9 L and 8.3 L diesel engines, J.I. Case® tractors and off road equipment
- 14 tools in tote bag

**CUMDS24V 24 Valve Diesel Set for *Cummins* B and C Series**

- Services *Cummins* B and C Series 12 and 24 valve engines 1994 and later
- Additional uses include *Dodge* heavy duty pickups and all applications with ISB and ISC diesel engines
- 14 tools in tote bag

## Diesel Timing Gauge Set (Blue-Point®)

**SP500 Diesel Timing Gauge Set**

- The SP500 diesel gauge set will update existing 2017DSP diesel service sets to handle 1994–1998 *Cummins* "B" engines used in *Dodge Ram* 250/350 pickup trucks and some *Ford* trucks
- Updated 2017DSP set will also service *J.I. Case* tractors and off road equipment

**SP503 Spline Socket (*Blue-Point*)**

- Used to remove and replace the delivery valve on most Bosch® fuel injection pumps
- Wrench size is 34-tooth
- 1/2" drive size

**SP504 Gear Puller (*Blue-Point*)**

- Used to remove the injection pump gear
- Bolt thread is M8 x 1.25
- Bolt length is 44 mm

**SP5001 Dial Indicator (*Blue-Point*)**

- Features rack and pinion construction
- Refer to the pump manufacturer's service manual when using this gauge
- Gauge diameter is 2 1/4"
- Range is 30 mm
- Gauge is marked in .01 mm increments

**SP5002 Gauge Holder (*Blue-Point*)**

- Used in fuel injection pump in place of the #1 delivery valve to locate the base circle of the injection pump cam
- Male thread is M22 x 1.5



SP500



SP503



SP504



SP5002

**⚠WARNING**

- Screen the puller application
- Inspect the puller, do not use damaged parts
- Use the proper type and size puller for the job
- Read safety precautions on pages W1 to W4

# DIESEL: SERVICE TOOLS FOR CUMMINS® ENGINES



CG80HYA



CG80A

## Wet Sleeve Pullers

**CG80HYA Hydraulic Wet Sleeve Puller**
- Provides hydraulic pressure for removing wet sleeves on *Cummins* diesels, trucks and heavy construction and farm equipment with a cylinder diameter of 3"–6"
- Reach of 7"–12"
- Adjustable bridge fits around studs in block
- Includes a 6 ton hydraulic power pack
- Contains one set each of CG80-110-22

**CG80A Wet Sleeve Puller**
Manual version of CG80HYA.

**CG80-11 Insert (1/4")**
For CG80A/CG80HYA Wet Sleeve Pullers.

**CG80-22 Insert (5/16")**
For CG80A/CG80HYA Wet Sleeve Pullers.



CJ83C



M1324

## Pulley Installers and Pullers

**CJ83C Pulley and Gear Puller**
Ideal for servicing crankshaft pulleys, gears and timing gears on a wide range of gasoline and diesel engines including *Cummins* accessory drives and water pumps. Includes two each 3/8"-16 x 3", 5/16"-18 x 2 1/2" and M10-1.5 x 65 mm bolts. Nominal capacity is 3 1/2 tons.

**Includes:**

**CJ86-1** Yoke
**CJ83-3** Pressure Screw
**CJ66-15-3** Centering Point
**ME5A54** Washer (1 needed)
**ME5A55** Washer
**ME3A45** Studs (2)
**ME3A44** Studs (2)
**ME3A75** Studs (2)

**M1324 Pulley Installer**
For installing the accessory drive pulley on the shaft. Includes 7/8"-14 NC threaded adaptor, washer type bearing and installer housing.



PPM516A



SIML200



FTXEL45E



SIMML242

## Engine Sockets

**PPM516A Drain Plug Socket**
1/2" square male end with 1/2" drive. Extra strength to remove drain plugs. 1 7/16" long.

**SIML200 6-Point Extra Deep Impact Socket**
5/8" single hex for the stud used for the rocker box on engines equipped with Jacobs® engine brake. 1/2" drive, 5" long.

**FTXEL45E Extra Long TORX® Socket Driver**
Quickly and easily access intake bolts on *Cummins* N14 diesel engines without removing the air pump. Can also be used on older *Cummins* NH Big Cam four diesel engines. 3/8" square drive.

**SIMML242 6-Point Metric Extra Deep Impact Socket**
- For removing and installing the head bolts on *Cummins* ISX engines



ST669

## Torque Adaptor Set

**ST669 Torque Adaptor Set**
Use to loosen and adjust lock nuts to manufacturing specifications.

**ST669-1 Handle Assembly**
Handle assembly.

**M1302B18 12-Point Deep Socket**
9/16" deep, 12-point socket.

**M1302B24 12-Point Deep Socket**
3/4" deep, 12-point socket.

**M1302A5 Screwdriver**
1/2" x .062 screwdriver.

**TM82 Flat Tip Socket Driver**
1/4" x .036 flat tip driver.



M3540C



M3584



M3585

## Compression Adaptors

These compression adaptors are for use with the EEPD500 compression gauge.

**M3540C Compression Adaptor**
For *Cummins* 855 cu in NH and 903 V8 and L10 diesel engines.

**M3584 Compression Adaptor**
For Case®/*Cummins* series "B" 2.9 L, 3.9 L and 5.9 L diesel engines.

**M3585 Compression Adaptor**
For *Case/Cummins* series "C" 8.3 L engines.



MB5D



MB6BTA



BNH1

## Injector Brushes (Blue-Point®)

**MB5D Injector Brush (*Blue-Point*)**
Bronze, non-abrasive brush cleans carbon from injector tips.

**MB6BTA Injector Brush**
Stainless steel wire brush cleans the injector cavity in the cylinder head. For *Cummins* B series engines and *J.I. Case* equipment. 9" long.

**BNH1 Injector Brush**
For *Cummins* NH series engines.




## Fuel Line Tools




**CJ148 Fuel Line Plug**
For plugging fuel lines.

**CJ149 Fuel Tube Remover**
For fuel inlet tubes on later model vehicles.

**YA6615 Flare Nut Wrench (Blue-Point®)**
- Use on Dodge® trucks with 5.9 L engines (2003 and later) and 6.7 L engines (2007 and later)
- Easily slides into the confined area of the cylinder head
- Wrench is required to hold the 24 mm flare nut while the 19 mm fuel line coupler is loosened
- Helps prevent costly damage to the fuel lines




## Injector Pullers

**CJ125A Injector Puller**
- Slide hammer puller services “D,” “Top Stop,” and small V8 injectors. 10 1/2” long

**CJ140 Diesel Injector Puller Set**
- Use on fuel injectors in *Cummins* “B” and “C” Series 3.9 L, 5.9 L and 8.3 L engines used in Dodge® pickups and Case® tractors/off-road equipment. Will service all 1994–1998-1/2 standard injectors as well as fuel inlet tubes

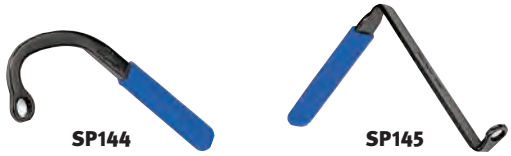
**CJ140-1 Slide Hammer (8 mm)**
- Use to pull injectors from heads on 1998-1/2–2002 *Dodge/Cummins*. 8 mm x 1.25 thread. Use CJ144 Puller to put the fuel inlet tube prior to removing the injector

**CJ141 Diesel Injector Puller Adaptor (12 mm)**
- Use on *Cummins* diesel injectors prior to 1994

**CJ142 Diesel Injector Puller Adaptor**
- Use on *Cummins* diesel injectors from 1994–1998-1/2. M14 X 1.5 threads

**CJ143 Diesel Injector Puller (8 mm)**
- Use on 1998-1/2 *Cummins* diesel injectors in tight access areas

**CJ144 Diesel Injector Puller (15 mm)**
- Use on 1998-1/2–2002 *Cummins* diesel fuel inlet tubes




## Injector Pump/Idle Lock Nut Wrench *(Blue-Point)*

**SP144 Injection Pump Wrench**
13 mm, 12-point box wrench is used to service the injection pump mounting bolts found on 5.9 L *Cummins* engines.

**SP145 Idle Lock Nut Wrench**
- 10 mm, 12-point wrench with 90° angle is designed to remove or install mounting bolts on the diesel injection pump
- For *Cummins* B Series 5.9 L engines




## Air Compressor/Fuel Pump Wrenches

**M1328A Air Compressor/Fuel Pump Wrench**
Includes 5/8", 12-point box wrench on one end for servicing fuel pumps and a specially designed 11/16" open end for access to air compressor bolts.

**M1321 Air Compressor/Fuel Pump Wrench**
- Similar to M1328A but has a 12-point box wrench on both ends
- Accommodates air compressor and fuel pump flange bolts on NH Series Inline 6 cylinder engines

**M1329 Fuel Pump Wrench**
- Includes 7/16", 12-point box end for servicing fuel pump bolts on NH series engines equipped with *Cummins* air compressors
- 6 5/8" long




## Valve Adjusting Wrenches

**M1322 Valve Adjusting Wrench**
- 3/4", 12-point box wrench to tighten lock nuts on rocker arms
- Designed to clear the aftercooler
- 14 3/4" long

**M1319 Valve Adjusting Wrench**
- 7/8", 12-point box wrench to tighten lock nuts on rocker arms
- Designed to clear the aftercooler
- 12" long




## Fan Wrench (Blue-Point®)

**SP346 Fan Wrench**
- 36 mm open end wrench services fan clutch attaching bolts on B Series *Cummins* engines
- Can also be used on fan clutch bolts on Navistar® 6.9 L and 7.3 L engines
- Wrench is 15" long and has a blue, vinyl covered handle




## Engine Turning Tool

**YA9565A Engine Turning Tool**
- Used to rotate the engine for making valve and injection pump adjustments on *Cummins*® and *J.I. Case* 3.9 L, 5.9 L and 8.3 L “B” and “C” Series engines
- 3/8" square drive

# DIESEL TOOLS



FDT1116

## Fuel Line Disconnect Tools

- This set includes a total of four fuel line disconnect tools:
  –a straight and a 90° angle (for 11.8 mm fuel lines)
  –a straight and a 90° angle (for 16 mm fuel lines)
- The OEM tool sets ZTSE4773 and ZTSE4772 do not include the straight tools – the straight tools allow access into tight areas
- All four tool handles are highly visible orange for easy identification

**FDT11 Angled Fuel Disconnect Tool**
- 90° angle for 11.8 mm fuel lines

**FDT11STR Straight Fuel Disconnect Tool**
- For 11.8 mm fuel lines

**FDT16 Angled Fuel Disconnect Tool**
- 90° angle for 16 mm fuel lines

**FDT16STR Straight Fuel Disconnect Tool**
- For 16 mm fuel lines

**FDT1116 Fuel Line Disconnect Tool Set**
Set includes FDT11, FDT11STR, FDT16 and FDT16STR (four-piece)



SP7882

## Injector Height Gauges (Blue-Point®)

- Use height gauges to set injectors during installation and at set service intervals
- Knurled handle screws into gauge at 90° angle for work in close quarters

| Stock No. | Size | Series | Engine | Year |
|---|---|---|---|---|
| SP7882-782 | 78.2 mm | 60/60 and 50 | DDECI/DDECII | 1986–1993/1986–1993 |
| SP7882-788 | 78.8 mm | 60 and 50 | DDECIII | 1994–1997 |
| SP7882-803 | 80.3 mm | 60/60 and 50 | DDECIII/DDECIV | Late 1997/1997–1998 |
| SP7882-810 | 81.0 mm | 60 and 50 | DDECIV/Marine | 1998–1999/2000–2003 |
| SP7882-821 | 82.1 mm | 60 | See service manual | See service manual |

**SP7882 Diesel Injector Height Gauge Set**
- Five-in-one gauge set covers all applications for Detroit Diesel® 50 and 60 series engines
- Includes SP7882-782, SP7882-788, SP7882-803, SP7882-810 and SP7882-821 injector gauges plus SP7882-handle in vinyl storage pouch



M3530



M3531

## Governor Gap Wrenches

**M3530 Governor Gap Adjusting Wrench**
- 3/8" open ends, 4" long
- Special thin design with 30° and 60° angle heads

**M3531 Governor Gap Lock Nut Wrench**
Similar to M3530 but has 7/16" open ends and is 4 1/4" long.





M3525A



M3503B



S6200



MFIMMD10

## Special Application Sockets

| Stock No. | Size, mm | Finish | Style | A | B | D | E |
|---|---|---|---|---|---|---|---|
| MFIMMD10 | 10 | Industral Finish | 12-point | 15.1 | 17.2 | 28.6 | 7.1 |

**M3525A Spanner Socket**
- 1/2" drive, 3 7/32" long
- Includes 1 1/8" internal hex for use on "Fuel Squeezer" series of engines

**M3503B Fuel Line Nut Socket**
- 1/2" wrench opening. Six-point, 3/8" drive
- Shaped for access to fuel line nuts. 3 1/4" long
- Additional applications on the head temperature sensor found on Buell® Motorcycles

**S6200 Engine Bearing Cap Bolt Socket**
- Use to service engine cam bearing cap bolts on both older and newer generation Detroit Diesel® engines. Newer generation *Detroit Diesel* engines use longer cam bolts than earlier generation engines. The S6200 is specially designed to work on both engine generations. 12 mm wrench size. 1/2" drive. 4 3/8" overall length

**MFIMMD10 12-Point Metric Shallow Magnetic Socket**
- For use on *Detroit Diesel* 60 series, the MFIMMD10 is used on the three camshaft gear thrust plate bolts located inside the camshaft gear cover within the front gear case on the engine
- The mechanic has to go through the cover to start the bolts
- If one is dropped, it is very labor intensive and time consuming to retrieve
- Applies to 2002 and later 60 series *Detroit Diesel* engines with the compact gear case
- Please note: Earlier engines with the tall gear case have 13 mm six-point bolts
- Please MFIMM13 for this application



FCT706

## Fan Clutch Wrench (Blue-Point®)

**FCT706 Fan Clutch Wrench**
- Fan clutch wrench for heavy duty truck engines
- Hole pattern on tool aligns with fasteners on fan hub
- Use with open end wrench to remove fan clutch. 24 1/2" length for maximum leverage

**Applications:** International® (VT365, T444E, DT466, DT350 and HT530), Ford® Power Stroke® (7.6 L and 6.0 L), *Detroit Diesel* (Series 40) and John Deere® engines.



BDD1

## Injector Brush

**BDD1 Injector Brush**
Stainless-steel wire brush is for cleaning carbon buildup in the injector cup



FB325A



FB308D



FB328A

## Feeler Gauges *(Blue-Point)*

**FB325A U.S./Metric Feeler Gauge Set**
- For adjusting governor gap
- Includes (25) 1/2 x 3" blades in sizes .0015" plus .002 to .025" in .001" increments

**FB308D Step Feeler Gauge Set and Holder**
- For adjusting valves
- Includes 12-step blades in sizes .008"/.010"–.028"/.030"

**FB328A Step Feeler Gauge Set and Holder**
- For adjusting valves
- Includes 2-step blades: .011"/.013" and .013"/.015"



M3517B



M3518

## Push Rod Wrenches

**M3517B Push Rod Lock Nut Wrench**
1/2" open end, 102° offset handle.

**M3518 Push Rod Adjusting Wrench**
5/16" open end, 102° offset handle.



AWM4D

## Metric Hex Wrenches

**AWM4D Metric L-Shape Hex Wrench**
For adjusting governor gap 4 mm hex

**AWM5D Metric L-Shape Hex Wrench**
For adjusting governor gap 5 mm hex

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# DIESEL: FORD®/NAVISTAR®

## Belt Tensioning Tool (Blue-Point®)



SRD6

**SRD6 Belt Tensioner Release Tool**
- 6" long adaptor with 1/2" male square
- The female triple square drive allows the user more flexibility to work around obstacles by coming in at different angles
- With a 1/2" breaker bar
- Similar to Snap-on® 6" torque adaptors but with a male square
- If using with a torque wrench, please refer to *Snap-on* part #SS306G Torque Chart for formula to obtain the correct applied torque

**Heavy Duty Applications:**
- For serpentine belt tensioners with a 1/2" square drive opening found on Series 60 Detroit Diesel® and Caterpillar® engines
- Other heavy duty applications include buses and delivery vans where the doghouse or engine shrouding can get in the way and make the work area very tight

**Automotive Applications:**
- 1/2" serpentine belt tensioners on Dodge®/Chrysler® vehicles (2.0 L and 3.0 L engines)
- *Ford* vehicles
- Lincoln® and Mercury® vehicles (2.3 L, 3.0 L, 4.2 L and 4.6 L engines)
- GM® vehicles (2.5 L, 4.7 L, 5.0 L and 5.7 L engines)



YA9340

**YA9340 Serpentine Belt Wrench**
- Use to release any serpentine belt tensioner with 1/2" square drive opening
- Ratcheting action allows better positioning of the tool, which allows more swing angle than a solid type serpentine belt wrench
- Reversible ratchet head is only 1" thick so it will fit between tensioner face and fan blades on S Series 60 *Detroit Diesel* and some *Caterpillar* engines
- Also great for working on buses and delivery vans where the doghouse or engine shrouding restrict access
- Compact overall length keeps handle from coming in contact with radiator hoses, charged air cooler pipes, hydraulic lines or frame rails
- Vinyl grip for comfort
- 13" overall length

## Compression Adaptor



M3545B

**M3545B Glow Plug Compression Adaptor**
- For *GM* 4.3 L and 5.7 L plus *Navistar* 6.9 L and 7.3 L diesel engines
- Replacement valve core is M3545A4
- Must be used in conjunction with MT33C Compression Gauge and M3569 or M3570 Quick Couplers

**M3545A4 Replacement Valve Core**
Replaces valve core on M3545B.

## Sensor and Filter Sockets



S6196KR

**S6196KR Sensor Socket for *Ford* ICP**
- Easily remove and install the ICP Sensor on 2002 and 2003 *Ford* 6.0 L diesel truck engines
- Spring retention securely holds sensor during use
- Six-point configuration with Flank Drive® wrenching system
- Wrench Size: 1 1/16". Drive Size: 3/8"
- O.D.: 1 7/16" (36.2 mm). Length: 2 9/16" (64.8 mm)

## Glow Plug Tool



FGPT

**FGPT Glow Plug Harness Tool**
- Prevents damage to harness and connector rail
- Removes and installs glow plug connectors
- Orange color for easy identification in dark engine compartments

## Fuel Filter Wrench *(Blue-Point)*



FFW2

**FFW2 Dual Fuel Filter and Oil Filter Cap Socket**
- Dual Purpose 36 mm hex and six notches allows the tool to work as both a fuel filter and oil cap socket
- 3/8" drive

## Diesel Pulse Adaptor

**MT257B Diesel Pulse Adaptor**
- Test injector timing or engine RPM on diesel engines equipped with 1/4" or 6 mm external steel fuel injector lines
- Enables use with inductive pick up timing light to test engine timing
- MT257B is not for use on diesels with common rail fuel systems



MT257B

## Quick Couplers

**M3569A Quick Coupler**
45° offset

**M3570A Quick Coupler**
90° offset



M3569A



M3570A

## Injector Brushes

**MB5D Injector Brush (Blue-Point®)**
Bronze, non-abrasive brush cleans carbon from injector tips.

**MB73A Injector Brush *(Blue-Point)***
Combination 5/16" and 13/16" diameter stainless steel wire brush to clean the injector bore and injector tip hole in the cylinder head.



MB5D



MB73A

## Diesel Turbo Tools

**PSWT10K Power Stroke Diesel Turbo Wrench for *Ford***
- 10 mm wrench is ideal for accessing the turbo mounting bolts located between the firewall and the turbo with exhaust intake in the way
- Designed for use on 2003 and later 6 L diesel Power Stroke® engines used on *Ford* F250, F350, E250 and E350
- Additional applications on *Navistar* VT365 engines and some International 4000 series of medium duty trucks
- Wrench has a zero degree offset six-point head
- Designed to remove excessively tight fasteners off the intake when removing turbocharger where a conventional 15° offset wrench will not work
- 5 1/2" long



PSWT10K

**S6210 Diesel Turbo Inlet Pipe Socket for *Ford* Vehicles**

**Application:** To access bolts holding the turbo inlet pipes to the turbo on 6.4 L diesel engines. There are six bolts with restricted access between the turbo and firewall. Removal of the two bolts below the EGR OC pipe is especially difficult without a 10 mm pipe socket.



S6210

**TAP1225 Turbo Vane Actuator Puller**
- Specially designed for *Ford* 6.4 L turbo diesel to save the technician time
- Compact size fits on or off the truck
- Self-aligning for easy install
- Remove the actuator link rod from the arm on the turbo of 2008–2010 *Ford* 6.4 L *Power Stroke* diesel engines



TAP1225

## Pulley Puller

**SP448 Pulley Puller**
- For removing the air pump pulley. Fits over pulley flange.



SP448

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# DIESEL: FORD®/NAVISTAR®



YA1140-1



YA1140-21



S6340E

## Fuel Injector Sockets

- Complies with *Ford* TSB 11-10-10
- 12-point, 17 mm crowfoot design allows socket to slip onto the injector easily at any angle
- Design allows you to spin the socket under bent fuel lines
- Nose geometry reduces electrical connection damage
- The depth stop keeps the socket at the specified height
- Thick mass reduces flex and flare nut damage
- Design allows for clearance to torque the fitting without a torque adaptor

**YA1140-1 Long Diesel Injector Crowfoot Socket**

- *Ford* 6.7 L Power Stroke® Diesel
- The in-line design of the YA1140-1 allows accurate torquing of the injector and clears the plastic housing and fuel return line

**YA1140-21 Offset Diesel Injector Crowfoot Socket**

- *Ford* 6.7 L *Power Stroke* Diesel
- The design of the YA1140-21 allows it to rotate under the fuel line while the depth stop keeps it at the specified height to clear the plastic housing

**YA1140 Diesel Injector Crowfoot Socket Set**

Set includes YA1140-1 and YA1140-21 (two-piece)

## Injector Hold Down Fastener Tools

**S6340E TORX® Bit Socket**

- Perfect length of 3 1/8" is ideal for removing and reassembly of *Ford Power Stroke* 6.0 L diesel injectors
- A regular length T40 bit socket is too short and a long T40 bit socket is too long when used with a ratchet or torque wrench and will not fit the application

# AUTOMOTIVE DIESEL



SWR3



S3624



A129



OFSKIT

## Sensor and Filter Sockets

**SWR3 Water Sensor Socket**

- Easily remove/replace water sensor without damage when changing the fuel filter on 2001–present GM® 6.6 L DuraMax® diesel engines
- GM 6.6 L *DuraMax* diesel engine applications include 2001–present Chevy®/GMC® pickups and *Chevy/GMC* medium duty trucks
- Manufactured from high strength, chemical-resistant glass filled nylon. 3/8" square drive
- NOTE: Due to possible sensor distortion from previous incorrect removal/installation methods, the sensor may slip in the SWR3 during removal. Use to reinstall the sensor, when proper hand tightening is used

**S3624 Filter Flip Socket**

- One tool will remove/install all three filter caps on *Ford* 6.0 L *Power Stroke* diesel powered vehicles such as Super Duty Series Pickups, Econoline Vans and Excursions
- Use for removal and installation of the oil filter cap plus primary and secondary fuel filter caps on these vehicles
- Not for impact use
- Requires optional 3/8" drive extension (FX1 or FXWP1 11/2" long).

**Additional 24 mm Applications**

- Buick® vehicles: VVT-V6 Rendezvous Ultra, LaCrosse CSX
- Cadillac® vehicles: VVT-V6 CTS, STS, SRX
- Saturn® vehicles: L-3000 V6

**Additional 35/36 mm Applications**

- Audi®/Volkswagen®: VR6 engine
- BMW®: 6, 8 and 12 cylinder engines
- Mercedes-Benz®: diesel engines
- Mini-Cooper® engines or vehicles
- Volvo®: 40 and 50 series, XC90 with 3.2 L six-cylinder engine

**S3624 Specifications**

- Square Drive Size: 3/8"
- Wrench Sizes: 24 mm and 35 mm/36mm
- Wrenching Configuration: Flank Drive®
- OD Major: 1.80" (45.7 mm)
- OD Minor: 1.38" (34.9 mm)
- Length: 1.73" (43.9 mm)
- Finish: Nickel/Chrome

**A129 Diesel Fuel Filter Socket**

- Use for removing and installing fuel filter housings found on 2002 and later Dodge® Ram® trucks with the 24 valve Cummins® diesel engine
- 11/8" wrench size. 3/8" drive

**OFSKIT Oil/Fuel Filter Socket Set**

- Includes: A127 and A106 oil filter sockets, S3624 filter flip socket and A129 fuel filter socket for *Cummins* Diesel (four-piece) in storage tray

## Fan Clutch Wrench (Blue-Point®)

**YA6180 Fan Clutch Wrench**
- Use on GM® and Ford® diesel and gas engines with a 48 mm fan clutch nut
- Provides the extra leverage needed to remove the fan clutch nut
- Overall length of 20 1/8"
- Head width of 4 1/8"
- Head thickness of 3/8"



YA6180

## Injector Pullers

**IPK1170 Injector Puller Kit**
- Injector Puller Kit for *GM* LB7 Duramax® Engines
- Pulls injector straight
- Pulls far enough to completely remove a stuck injector
- Saves time by reducing the likelihood of loosening the sleeves (up to 1/2 hour per sleeve)
- Removes sleeve from injector without damage



IPK1170

**IPK1220 Injector Puller kit**
- Removes diesel injectors on VW® and Audi® vehicles from 2000–present
- The correct tools all in one kit – no searching for shop tools
- Kit contains three adaptors with 2 lb slide weight on a 10" slide shaft
- Kit includes newest style adaptor that will keep this kit current for the next ten-plus years



IPK1220

## Metric Injector Sockets

**S6128 Metric Injector Socket**
- For Bosch® type injectors on *GM* 6.2 L 6.5 L diesel engines
- 30 mm, six-point. 2 1/16" bolt clearance. 7/16" opening depth, 2 11/16" long
- 7/8" external hex on drive end

**S6104B Metric Injector Socket**
- For diesel engines in *VW* and Mercedes® vehicles
- 27 mm, 12-point
- Clearance bored to fit over fuel injector
- 1/2" drive. 3 1/4" long



S6128



S6104B

## Flywheel Lock *(Blue-Point)*

**YA6925 Flywheel Lock for *GM Duramax* 6.6 Liter Engines**
- Works on 2001 and later 6.6 L *Duramax* diesel truck engines
- Saves time by not removing the starter motor
- Holds the engine in place for high torque requirements
- Handle is visible to remind the technician that the engine is locked



YA6925

## Turbo Vane Socket

**TVS1240 Turbo Vane Socket**
- Split socket made from alloy steel and designed with additional strength
- Correct geometry to reduce the possibility of damaging the sensor
- Fits the confined location between the cold and hot sides of the turbo



TVS1240

**⚠WARNING**

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# DIESEL FUEL SERVICE

**EEDF400 Diesel EGR and Induction Cleaning System**
- The performance of clean diesel engines using cooled EGR and common rail injection can be adversely affected by soot and fuel deposits
- The EEDF400 System safely cleans the Diesel EGR circuit, coolers, intake, injectors, turbo charger and fuel system
- Converts cleaner into foam to better penetrate hard carbon
- Increases Cetane and enhances fuel atomization for more complete combustion
- Lowers emissions, smooths rough idle, improves fuel economy and performance
- Technical Support: 1-877-776-8486



EEDF400

| Stock No. | Fluid Capacity | Input Pressure Min. | Hose Length | Operating Temperature Range | Dimensions | Shipping Weight, lb |
|---|---|---|---|---|---|---|
| EEDF400 | 64 oz | 60 PSI | 7.5 feet | 40 °–120 °F | 16.5"L x 10.5"W x 11.75"H | 10.8 |


EEDF400-1


EEDF400-2


EEDF400-3


EEDF400-4


EEDF400-5


EEDF400-6


EEDF400-7


EEDF400-8


EEDF400-9


EEDF400-10


EEDF400-11


EEDF400-12

## Optional Accessories

**EEDF400-1 EGR Cleaning Adaptor**
- EGR adaptor for Ford® 6.0 L engines

**EEDF400-2 EGR Cleaning Adaptor**
- EGR Adaptor for *Ford* 6.4 L Engines

**EEDF400-3 EGR Cleaning Adaptor**
- EGR Adaptor for Duramax® Engines

**EEDF400-4 EGR Cleaning Adaptor**
- EGR Adaptor for Mercedes®/Universal Engines

**EEDF400-5 EGR Cleaning Adaptor**
- EGR Adaptor for *Duramax* Turbo Boost Engines

**EEDF400-6 EGR Cleaning Adaptor**
- EGR Adaptor for Cummins® Manual Opener Engines

**EEDF400-7 EGR Cleaning Adaptor**
- EGR Adaptor for *Cummins* Engines (2007–2010)

**EEDF400-8 EGR Cleaning Adaptor**
- EGR Adaptor for Izusu®/BMW®/*Mercedes* Engines

**EEDF400-9 EGR Cleaning Adaptor**
- EGR Adaptor for *Mercedes* Sprinter® Engines

**EEFD400-10 EGR S-Tool**
- EGR S-Tool

**EEFD400-11 EGR Cleaning Adaptor**
- EGR Adaptor for *Ford* 6.7 L Engines

**EEFD400-12 EGR Cleaning Adaptor**
- EGR Adaptor for Audi®/VW® Engines (M14 x 1.5)

**EEDF400-EGR Diesel EGR and Induction Cleaner**
- Diesel EGR and Induction Cleaner for the EEDF400. Case of (12) 32 oz bottles

**EEDF400-INJ Diesel Fuel Injector Cleaner**
- Diesel Fuel Injector Cleaner for the EEDF400. Case of (12) 12 oz bottles



EEDF400-EGR


EEDF400-INJ

**⚠WARNING**

- Injector cleaner is flammable, avoid flames and sparks
- Read and follow all instructions
- Wear appropriate gloves and clothing
- Read safety precautions on pages W1 to W4


S6160


S6194


S6190A


S6260


SHR20

## Hand Sockets

**S6160 Extra Long Head Bolt Socket**
- Use on 1986 and later Nissan® engines with 12 mm head bolts
- 8" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank will reach through access hole and past overhead camshaft
- Additional high torque applications include removal and installation of universal joint flange bolts on Ford®/Mercury® cars such as Mustang, Crown Victoria® and Lincoln®, plus *Ford* Explorer, Ranger and F150/F250 trucks
- 12-point, industrial finish, 1/2" sq drive

**S6194 Head Bolt Socket**
- Use on Toyota® and *Nissan* cars and trucks and Honda® cars with 12 mm head bolts
- 4 1/8" length reaches past cam and rocker assembly to service head bolts
- Thin-profile socket and shank reach through the access hole and past overhead camshaft
- Additional high torque applications include removal and installation of universal joint flange bolts on *Ford* Explorer, Ranger and F150/F250 trucks
- 12-point, industrial finish, 1/2" sq drive

**S6190A IPR Sensor Socket for *Ford* vehicles**
- *Ford* 6.0 L diesel injection pressure regulator (IPR) socket
- Use on 1994 and later *Ford* 6.0 L diesel trucks plus International® CT365, 530E and 466F
- Similar to Rotunda® part number 303-1112

**S6260 Heavy Duty Spicer Drive Socket**
- For removal of heavy duty spicer drive shaft bolts that have 1/2" fasteners found on Kenworth®, Peterbilt® trucks and many other heavy duty applications
- 8" long, 12-point, industrial finish, 1/2" sq drive

**SHR20 Oil Galley Drain Plug Socket**
- For removing and installing oil galley drain plug on Caterpillar® 6 cylinder engines
- Galley plugs may leak and need to be removed so a new O-ring can be installed
- Low-profile design to get into tight applications
- Special alloy steel provides corrosion resistance
- 5/8" Hex Socket, six-point, 1 1/4" long


S6197


S6199


S6217


SIMDM212


DW402C


S6216


SIML302


S6230

## Impact Sockets

**S6197 Heavy Duty Driveline Socket**
- Use on *Kenworth/Peterbuilt* heavy duty drivelines that use 1/2" fasteners
- Many other heavy duty 1/2" applications as well
- Example: Socket will clear the weld yoke, when removing the cap screws holding the wing bushings to the end yoke. 1/2" wrench size, 12-point, 1/2" drive, 4 1/8" long

**S6199 U-bolt Impact Socket**
- Most semi trucks use many 5/8" diameter U-bolts for springs and other suspension components
- Saves you time as you do not need to cut off the excess thread compared to using a standard 1 1/8" deep socket that is 3/4" drive
- Up to 2" longer than a standard deep socket to easily accommodate the excess thread length
- 1 1/8" wrench size, six-point, 3/4" drive, 5" long

**S6217 Head Bolt Impact Socket**
- For head bolts on heavy duty trucks and buses with Mercedes® engine MBE900
- Clearance on certain Detroit Diesel® head bolts with the *Mercedes* engine MBE900 require a thin walled socket
- Height of socket helps the technician when using a torque wrench due to the length of torque wrench handle for clearance
- 17 mm, 3/4" drive, 12-point, 4 3/4" long

**SIMDM212 12-Point Metric Deep Impact Socket**

**Application:** Flywheel bolts on Cummins® ISX engines.

**DW402C Dayton Lug Nut Impact Socket**
- 3/4" square drive with a 1 1/4", six-point wrench opening
- Use with socket retainers

**S6216 *Detroit Diesel* Engines Head Bolt Impact Socket**
- For head bolts on *Detroit Diesel* 50 and 60 Series engines
- Tight clearances between some head bolts and the cylinder head casting require a thin walled socket; these engines are found in truck, bus, motor home, marine and heavy equipment
- The increased height of the socket allows for clearance between the drive tool (ratchet, breaker bar or torque wrench) and installed valve train components, allowing technicians access to head bolts from either side of the engine
- 16 mm, 3/4" drive, 12-point, 4" long

**SIML302 6-Point Impact Socket–5 5/8" long**
- Head bolts are sunk in pretty deep and the current method is a large impact socket with an extension to reach the application
- In this scenario, you lose too much power with an extension and 3/4" impact gun for the torque required on this application

**S6230 Impact Socket, 15/16"–6" long**
- Designed for Autocar® and CCC® style dump trucks and garbage trucks that use the 30/36 spring brake chamber made by MGM® brakes
- When doing an emergency repair on the road or changing the diaphragm
- Length of the S6230 is designed to accommodate the very long threaded spring brake release stud assembly (release tool) in the brake chamber

**⚠WARNING**
- Injector cleaner is flammable, avoid flames and sparks
- Read and follow all instructions
- Wear appropriate gloves and clothing
- Read safety precautions on pages W1 to W4

# HEAVY DUTY TRUCK SERVICE TOOLS


IPRD20


S6220


IMFDL242


S6213


S6224


SIMML180


S6314


SIM462TW


IMSLE242A


S6624


SIMM182


S6221

## Impact Sockets

**IPRD20 Low-Profile Swivel Impact Socket, 5/8"**
- Use on starter bolts on Cummins®, Caterpillar® , Detroit Diesel® and International® engines where housing is in the way when backing out the fastener using a standard length impact socket
- 30° uninterrupted swivel action, means greater accessibility in tight quarters, which allows easier and faster removal of stubborn fasteners thus saving time

**S6220 C15 Impact Socket for *Caterpillar* Engines**
- Use on *Caterpillar* C15 engine rocker stud bolts where the length of socket and broach depth of the socket are critical for the application
- 11/16", six-point, 1/2" drive configuration, 3 1/4" long

**IMFDL242 Deep Thin Wall Impact Socket**
- Designed to remove the head bolts on *Caterpillar* C12, C15, C16 and 3406Es where the front two and back two head bolts are positioned under the valve covers
- Clearance on certain *Caterpillar* head bolts requires a thin walled socket that needs to be a certain length
- Additional applications include *Detroit Diesel* main bearing cap bolts and 19 mm head bolts on Mercedes-Benz® MBE904/MBE906 EGR engines (2007 and later)
- 3/4" wrench size, 3/4" drive, 5 3/4" long

**S6213 U-Joint Strap Bolt Socket**
- Use for removal of 13 mm U-Joint strap bolts found on Volvo®, Mack® and other heavy duty applications. 13 mm, 12-point, 1/2" drive, 8" long

**S6224 30/30 Air Brake Chamber Socket**
- Extra-long design allows quick and safe removal of long threaded brake release stud assemblies
- Flank Drive® wrenching system where the socket grips the fastener on the flanks/flats increasing torque by 15%–20%
- Impact sockets are heat treated to a lower hardness to add impact resistance and ductility

**SIMML180 6-Point Metric Extra Deep Impact Socket**
- Remove and install the fuel tank hold down strap on *International* 4400 chassis. The fuel tank must be removed to replace the fuel sending unit
- 5" long to reach through the frame to access the fastener without the need of an extension

**S6314 Extra-Long Impact Socket**
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- *Flank Drive* grips fastener on the flanks/flats, increasing torque by 15%–20% prevents fastener from rounding and increases the life of the socket
- Socket overall length is 3 1/4"

**SIM462TW Deep Impact Socket**
- Designed to remove the lug nuts from *Caterpillar* Model 793 mining trucks
- The 72 lug nuts on each wheel are spaced only 6 mm away from each other and the thin wall design of this socket accommodates easy removal
- *Flank Drive* wrenching system grips the fastener on the flanks/flats, which delivers 15%–20% more turning power

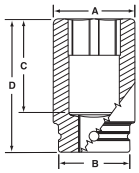
**IMSLE242A Inverted TORX® Impact Socket**
- For removing and installing head bolts on MaxxForce® 11 and 13 engines found on D15 *International* Trucks from 2010–current
- Used for installation of shear type E24 bolts during alignment of suspensions on Hendrickson® and Dayton® trailers
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability

**S6624 Main Cap Bolt Socket**
- For removing and installing the main cap bolts on 2007 and later DD13 and 15 *Detroit Diesel* engines
- Overall length (5 3/4") and square drive (3/4") of this socket is critical due to the torque rating for this application
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- *Flank Drive* wrenching system grips fastener on the flanks/flats, increasing torque by 15%–20%, prevents fastener from rounding and increases the life of the socket

**SIMM182 6-Point Metric Deep Impact Socket**
- For removing and installing the head bolts on VT365 *International* engines found in many delivery vehicles

**S6221 Fuel Injector Adaptor Impact Socket**
- For removing and installing the fuel injector adaptor from the high pressure rail and service the O-rings on Navistar® DT466/570, HT570 (DT9 and 10) engines
- Similar to the *Navistar* OEM tool part number ZTSE4725
- 1 1/16" Hex, 1/2" drive

**IM382CD 6-Point Metric Shallow Impact Socket**
- Assault Breacher Vehicle
- Utility Truck (Tamen: D00347K)
- Abrams M-1 Tank
- Bridge Launcher Carrier
- M1A2 Heavy Assault Bridge (hab)/Wolverine, 5420-01-430-4227
- Armored Vehicle Launch Bridge (M60A1 & M48A5)
- Combat Tank, Ft, 120 mm gun (M1A1)
- 30 mm, 3/4" drive




## Hose Clamp Sockets

| Drive Size, inches | Stock No. | in / mm | A | B | C | D | Set Contains: 204FIHC |
|---|---|---|---|---|---|---|---|
| 7/16 | FIHC140 | 7/16" | 21/32" | 11/16" | 2 1/4" | 2 3/4" | • |
| 3/8 | FIHC160 | 1/2" | 3/4" | 3/4" | — | 2 3/4" | • |
| 3/8 | FIHCM8 | 8 mm | 12.9 mm | 17.2 mm | 57.1 mm | 69.8 mm | • |
| 3/8 | FIHCM10 | 10 mm | 15.9 mm | 17.2 mm | 57.1 mm | 69.8 mm | • |

Set shown includes storage tray



204FIHC

## Torque Adaptors

**SRDM624 Torque Adaptor**
- Services the rear brake caliper mounting bracket assembly on 2007 Ford® F450/550 trucks
- Tool fits between the bracket bolt and frame to allow the use of a torque wrench to properly torque the bracket bolts
- 24 mm, 6" long, 12-point wrench design, 1/2" square drive



SRDM624

**SRD35 Diesel Head Bolt Torque Adaptor**
- Special tool for use on *Ford* F250/F350 Trucks and Excursion® vehicles (2003–2007) plus *Ford* E-Series Vans (2004–2009) including ambulance, law enforcement and shuttle bus conversions using the 6.0 L Power Stroke® diesel engine
- When coupled with an SM18, 18 mm socket, the SRD35 can access all of the head bolts eliminating the need to change tools or remove the adaptor during the job
- Use of 3/4" drive ratchet/torque wrench transmits the high torque necessary to loosen and tighten head bolts, with less strain on the technician
- Eliminates the need to remove the truck/van cab from the chassis to access the rear head bolts, saving time and preventing damage to the rear heat shield
- Eliminates the need to remove the evaporator housing, saving two hours of time and the additional cost of refrigerant added during air conditioning recharging
- Center to center length: 3 1/2"
- Overall length of 4 7/8"



SRD35

## Slack and Valve Adjusters

**BSA916 Slack Adjuster Wrench**
- For brake service and slack adjuster installation on heavy duty trucks equipped with Bendix® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 9/16" hex allows reach to recessed adjusters
- 14 1/2" overall length helps to overcome the anti reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot



BSA916

**HSA716 Slack Adjuster Wrench**
- For brake service and slack adjuster installation on heavy duty trucks equipped with Haldex® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 7/16" hex allows reach to recessed adjusters
- 14 5/8" overall length helps to overcome the anti reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot



HSA716

**S6205 Valve Adjuster Socket**
- See through window in its 14 mm socket to see the position of the 5 mm hex blade
- Faster valve adjustment time
- Sized for low clearance
- Soft grip handle

**Applications:** 2002 and later Mercedes® "900" series diesel engines. 2002 and later trucks and buses.



S6205

**S6206 Valve Adjuster Socket**
- See-through window in its 17 mm socket to see the position of the 6 mm hex blade
- Faster valve adjustment time
- Sized for low clearance
- Soft grip handle

**Applications:** 2002 and later *Mercedes* "4000" series diesel engines. 2002 and later trucks and buses.



S6206

**⚠WARNING**
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# MOTORCYCLE SERVICE TOOLS

## Hand Sockets

| Stock No. | Drive Size, inches | External Hex, (mm) | Outer Dia., inches (mm) | Hex Depth, inches (mm) | Length, inches (mm) |
|---|---|---|---|---|---|
| HXD22 | 1/2 | 22 | 0.94 (23.8) | 0.70 (17.8) | 1.50 (38.1) |
| HXD24 | 1/2 | 24 | 1.03 (26.2) | 0.70 (17.8) | 1.50 (38.1) |



HXD22

**HXD22 Motorcycle Wheel Socket**
- Essential for removing motorcycle front wheels
- Use torque wrench for axle torque specs
- Use breaker bar to remove difficult fasteners

**Applications:** 2002 and later Kawasaki® motorcycles (ZX7R, ZRX1200, ZX12R and ZS6); 2002 and later Honda® motorcycle (CBR954RR); 2002 and later Triumph® motorcycle (955i)



HXD24

**HXD24 Motorcycle Wheel Socket**
- Essential for removing motorcycle front wheels
- Use torque wrench for axle torque specs
- Use breaker bar to remove difficult fasteners

**Applications:** Suzuki® motorcycles (1300GSXR and 1000GSXR); Hayabusa® motorcycles (various models)



S9724RHS

**S9724RHS Low-Profile Spark Plug Socket**
- Low-profile socket easily reaches 5/8" (16 mm) spark plugs on muscle cars, ATVs, motorcycles and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use ratcheting box wrench on 5/8" external hex drive
- 1 1/16" length

**Applications**:
Harley-Davidson® motorcycles with large gas tanks (1986 and later Sportster® and 1999 and later twin cam models) plus small block Chevy®, Ford® and Mopar® vehicles and other engines with 5/8" (16 mm) spark plugs and racing exhaust headers



S9704RHS

**S9704RHS Low-Profile Spark Plug Socket**
- Low-profile socket easily reaches 13/16" spark plugs on muscle cars, ATVs, motorcycles, RVs and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use with open end or ratcheting box wrench on 13/16" external hex drive
- 1 1/4" length

**Application**s:
Small or big block *Chevy, Ford* and *Mopar* vehicles and other engines with 13/16" spark plugs and racing exhaust headers



SAM12LE

**SAM12LE Long Hex Socket Driver**

**Applications:** Essential for removal or installation of bolt found on the lower forks of 2006 and newer *Harley-Davidson* Dyna series. Used when servicing the internal parts of the fork.

## Adjusting Tools



HD6529

**HD6529 Ratcheting Hex Wrench**
- Reversible ratchet lever conveniently located for one-hand operation
- 3/16" hex bit is easily replaced if damaged
- Low-profile design for extra clearance between frame and engine
- Comfortable rubber grip will not scratch chrome
- 9 3/4" overall length for additional reach
- 1/4" hex drive, 3/16" hex bit for *Harley-Davidson* Evolution® motor rocker box cover bolts



NBAT1

**NBAT1 Neck Bearing Adjustment Tool**
- For neck bearing adjustment on *Harley-Davidson* motorcycles
- Easily maneuvers between the triple clamp and frame
- Fits into the star adjustment nut, allowing technician to adjust the neck bearing play
- Tapered end allows easy access to the neck bearing adjusting star
- Screwdriver-style handle offers a comfortable grip
- 18 1/2" overall length
- Neck bearing adjustment is usually checked at the following service intervals: 1,000, 5,000, 15,000 and 25,000 miles or annually



HFTLRT

**HFTLRT Fuel Tank Lock Ring Tool *Harley-Davidson***
- Remove/install the lock ring on 2008 and later FL touring series
- Allows access to the fuel filter and pump as the lock ring is connected to the pump

## Motorcycle Oil Fillers

**OFHARLEY Motorcycle Oil Filler for Harley-Davidson®**
- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- Can fill funnel with almost one quart of oil and work on something else
- ABS plastic
- Smooth surface so not to scratch painted surface
- For *Harley Davidson* Touring bikes and Dyna series motorcycles 2007–present

**Additional KIA® Applications:** Forte® (2013–current), Rio® (2013–current), Soul® (2013–current), Sorento® (2011–current), *Sorento* (2011–current), Sportage® (2014)



**OFHARLEY**

**OFHD Motorcycle Oil Filler for *Harley-Davidson***
- Allows access to the fuel filter and pump as the lock ring is connected to the pump
- Competitive products are metal and can scratch the painted surface of the motorcycle
- Oil filler for 1999–2006 *Harley-Davidson* Touring Motorcycles with the "Push-in Style" oil caps
- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- Can fill funnel with almost one quart of oil and work on something else
- ABS plastic
- Smooth surface will not scratch painted surface



**OFHD**

## Tire Spreader

**TSP813 Motorcycle Tire Spreader**
- Permits one-person installation of tubed tires on motorcycles, ATVs, small farm equipment and industrial equipment
- Easily access valve stem hole when installing difficult 90° valve stems on tubed tires
- Overall length is 23"



**TSP813**

## Fuel Tank Cover

**KAC1224TCA Motorcycle Gas Tank Cover**
- Fits *Harley-Davidson* Dyna, Softail and Touring models
- Fits various models of Yamaha®, Victory®, Triumph® and Kawasaki® motorcycles plus many more
- Non-marring cover uses a non-abrasive inner liner that will not slide off




**KAC1224TCA**

## Service Set

**CYCLESET Motorcycle Tool Set**
- 33pc kit services most US manufactured motorcycles
- From battery service, cable and clutch adjustments, to gas tank and seat removal, this set covers roadside maintenance and emergency repairs
- Conveniently organized and stored in a gas tank shape bag measuring 10"L, 5 1/2"W, and 2 1/4"H and is small enough to fit almost anywhere
- Visit www.snapon.com for the full list of set components and applications



**CYCLESET**

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# MOTORCYCLE SERVICE TOOLS


CPT110A


GF22


YA173B


VT1A


GA599A


SGSR104AR


MT125A


AWHD8K


TA358

## General Service Tools

**CPT110A Drain Plug Socket**
- 17 mm, six-point socket is for VW® transmission drain plugs
- Use on *VW* transmission drain plugs
- Additional applications include removing front wheels on Triumph® Daytona® and America® motorcycles
- 3/8" drive, 1" long

A15A Drag **Link Socket**
- Applications include usage on the engine oil drain plug and rear differential drain plug on Kawasaki® UN1500, UN1600 and UN2000 motorcycles

**GF22 Drag Link Socket**
- Applications include use on the engine oil fill cap on *Kawasaki* UN1500, UN1600 and UN2000 motorcycles

**YA173B Clip on Style Angled Air Chuck (Blue-Point®)**
- 1/4"-18 female NPT
- Spring loaded, trigger operated valve stem clip
- Maximum operating pressure is 200 PSI

**VT1A Valve Stem Inserter**
- Simplify installation of valve stem in tubeless tire rim
- Notched shank to accommodate various rim styles
- Comfortable screwdriver type handle

**GA599A Tread Depth Gauge**
- Measures to a depth of 1" in 1/32" increments
- Plastic body with aluminum probe and sliding gauge
- Includes pocket clip

**SGSR104AR Seal Remover Set**
- For use on transmissions, heater and vacuum hoses, oil pump drive shaft seals, injectors and fuel rail O-rings, inner tie rod rack boot and CV boot removal, fork seals and caliper dust boot assemblies on Harley-Davidson® and other motorcycles and steering racks and pumps

**MT125A Self Powered Timing Light**
- Self powered timing light features a single 6' inductive pick up
- Quick attachment to spark plug wires on motorcycles, marine motors, snowmobiles, jet skis, small engines and other equipment that do not have easy access to a battery power source
- Can be used for automotive applications as well
- On/Off switch is located within thumb reach

**AWHD8K Hex/TORX® Set**
Includes two *TORX* sizes (T27, T40) and six hex sizes (5/32", 3/16", 7/32", 1/4", 5/16" and 3/8"). Fits a wide range of *Harley-Davidson* motorcycles.

**TA358 Torque Angle Gauge**
- Determines angle controlled torque tightening
- Allows user to follow manufacturer's specifications
- Use on automotive, diesel and industrial equipment plus head bolts and rod bolts on motorcycles
- 3/8" square drive


EEPV503


EEWB333A


EEWH310B


YA1715

## Motorcycle Service Equipment

**EEPV503 Motorcycle Compression Gauge Set**
- Test motorcycles and recreational vehicles with hard-to-access spark plug ports
- Gauge assembly includes 2 3/4" diameter gauge and 18" flexible hose with quick coupler
- Includes EEPV5G10L, EEPV5G12L and EEPV5G14L

**EEPV5G10L Compression Gauge Adaptor**
- Long reach (M10 x 1.0 pitch)
- Thread length .70"

**EEWB333A Motorcycle Wheel Balancer**
- Quickly, easily and accurately balance motorcycle tire and wheel assemblies

**EEWH310B Motorcycle Tire Changer**
- Configured to change tires on most motorcycle wheels
- Raised clamping jaws to allow for hub clearance
- Optional safety restraint arm provides additional tire/wheel retention when seating beads

**YA1715 Motorcycle Jack *(Blue-Point)***
- 1,500 lb capacity
- Low height of 4 1/2", maximum height of 14 3/4"
- Double rubber lined pad provides extra protection to motorcycle
- Pull handle assists user to maneuver jack into position
- 1' operation for ease of use
- Safety straps to secure motorcycle

## Motorcycle Special Application

**MTPV1000 Peak Voltage Tester (Blue-Point®)**

**Features**

- Tester automatically selects the best range for taking a measurement on V DC, V AC and ohms
- Use AC/DC voltage ranges to check ignition coil primary, ignition pulse generator, exciter coil and battery
- Add adaptors to measure temperature, RPM, pressure and amps
- Measure ohms to determine resistance of a coil or spark plug
- Use the continuity buzzer for finding breaks or shorts in wires
- Large, easy-to-read 4,000-count LCD and bar graph to easily view rapidly changing input signals
- Lock readings on display with data hold
- View + or - spark readings with the push of a button
- Measure peak voltage of ignition coil and secondary spark
- Input connector for kV probe
- Auto power off to conserve battery power when not in use
- Includes test instrument, test lead set with alligator clips, protective rubber boot, kV probe, soft carrying case, 9V battery and instruction manual




MTPV1000

**Applications**

- Peak voltage measurement of secondary ignition systems on all types of vehicles and pleasure craft
- CDI ignition diagnosis on motorcycles, ATVs and snowmobiles
- Digital multimeter functions to measure battery, sensor and circuit voltage
- Check continuity of wiring and resistance of ignition wires

**Optional Accessories**

- 0–400 AC/DC A clamp-on probe (EETA501C)
- 0–1,000 AC/DC A clamp-on probe (EETA502C)
- Boot Hook Hanger (EEDM503B1)
- K-type temperature adaptor (EEDM506B)
- Heavy duty surface probe for EEDM506B (EETH502B)
- Heavy duty gas probe for EEDM506B (EETH503B)

## AVIATION: SAFETY WIRING



**Wire Twisters**
Cushion throat wire twisters feature a polyurethane filler that is bonded into the tool's cutter head to help prevent flying wire bits. A special undercut design helps maintain cutting edges and increases tool durability. Ideal for assembly line applications.



RWTP6



RWTP9



GA311C



PR311



WT11B



WTR1A



WTS6

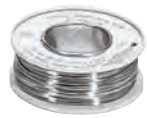
## Wire Twister/Cutters

| Stock No. | Description/Features | Wire Capacity, inches | Overall Length, inches | Wire Retainer |
|---|---|---|---|---|
| RWTP6 | Reversible Wire Twister/Cutters | .020–.041 | 8 1/2 | No |
| RWTP9 | Reversible Wire Twister/Cutters | .020–.051 | 10 1/2 | No |
| GA311C | Wide range of applications | .060 | 10 1/2 | No |
| PR311 | Similar to GA311C, but not spring loaded. Right hand only with manual return. | .060 | 10 1/2 | No |
| WT11B | Small size for use in tight quarters | .041 | 8 1/2 | No |
| WTR1A | Reversible wire twisters let you perform right and left hand twist with the same tool. Spring return and control knob. | .041 | 8 3/4 | No |
| WTRW6A | Reversible wire twisters let you perform right and left hand twist with the same tool. Spring return and control knob. Oval cushioned throat captures and holds wire firmly. | .041 | 8 3/4 | Yes |
| WTS6 | Reversible wire twisters with spring return and control knob. Viton® cushioned throat captures and holds wire firmly. Slim design provides accessibility and utilizes twist rod of 11" tool in 8 3/4" body to provide more twists per pull. | .041 | 8 3/4 | Yes |

**⚠WARNING**

- Read and follow all safety messages and instructions
- Read safety precautions on pages W1 to W4

# AVIATION: SAFETY WIRING



WT105-2004



WT105-2516

## Safety Wire

| Stock No. | Wire Size, inches | Approximate Wire Length, ft | Container |
|---|---|---|---|
| WT105-2004 | .020 | 230 | 1/4 lb Spool |
| WT105-3204 | .032 | 90 | 1/4 lb Spool |
| WT105-4204 | .041 | 55 | 1/4 lb Spool |
| WT105-2016 | .020 | 937 | 1 lb Canister |
| WT105-2516 | .025 | 599 | 1 lb Canister |
| WT105-3216 | .032 | 366 | 1 lb Canister |
| WT105-4116 | .041 | 223 | 1 lb Canister |
| WT105-5116 | .051 | — | 1 lb Canister |

Meets NASM20995 and MS20995C specifications plus conforms to ASTM580 Materials S30400

# AVIATION: MASTIC REMOVAL TOOLS



NYZ701810



NYZ701410



NYZ700510



NYZ700110



NYZ701110



NYZ701210



NYZ7010FSB

## NYROC® Blades

| Blade Size, inches | Description | Pack of 10 | Pack of 200 |
|---|---|---|---|
| 1/8 wide | General Use | NYZ701810 | NYZ701810 |
| 1/8 wide | General Use | NYZ7018200 | NYZ7018200 |
| 1/4 wide | General Use | NYZ701410 | NYZ701410 |
| 1/4 wide | General Use | NYZ7014200 | NYZ7014200 |
| 1/2 wide | General Use | NYZ700510 | NYZ700510 |
| 1/2 wide | General Use | NYZ7005200 | NYZ7005200 |
| 3/4 wide | General Use | NYZ703410 | NYZ703410 |
| 3/4 wide | General Use | NYZ7034200 | NYZ7034200 |
| 1 wide | General Use | NYZ700110 | NYZ700110 |
| 1 wide | General Use | NYZ7001200 | NYZ7001200 |
| 1 wide | Button Head Rivet | NYZ701110 | NYZ701110 |
| 1 wide | Button Head Rivet | NYZ7011200 | NYZ7011200 |
| 1 1/2 wide | Highlock for 3/8 high locks | NYZ701210 | NYZ701210 |
| 1 1/2 wide | Highlock for 3/8 high locks | NYZ7012200 | NYZ7012200 |

Blades available in ten-pack and 200-pack quantities only.

**NYZ7010FSB Flexible Steel Blade**
Use with NYZ7026EH Rubber Handle.



NYZ7000MDKIT



NYZ7007HD

## Complete Kits

**NYZ7000MDKIT Master Mastic Removal Kit**

- Saves most of the time and labor involved to remove PRC and other mastics from every area of an aircraft without damage to the substrate
- Speed controllable vibration gun permits infinitely variable job performance
- Included pneumatic blade sharpener rapidly puts an edge on all *NYROC* blades up to 1" width right at the job site
- Completely portable system is fully grounded and anti-static
- Kit includes medium duty Vibro gun, pneumatic blade sharpener, (one) anti-static vacuum bag, (one) sharpening disc, (one) manual handle, (two) 1" *NYROC* blades, (two) 1/2" *NYROC* blades, (two) 1/4" *NYROC* blades, blade locks and connecting hoses in padded storage case

**NYZ7007HD Manual Mastic Removal Kit**

- Hand kit is ideal for aviation, automotive and industrial use, especially for delicate jobs and limited access scraping applications
- *NYROC* blades are sharpened with sandpaper, small stone or optional pneumatic sharpener
- Kit includes (six) 1" *NYROC* blades, (six) 1/2" *NYROC* blades, (three) 1/4" *NYROC* blades and ergonomic rubber handle

## Blade Sharpener

**NYZ7000S Pneumatic Blade Sharpener**
- Pneumatic powered sharpener quickly sharpens all NYROC® blades up to 1" W
- Consistently sharpens blades to the optimal 51° angle
- Operates with single push button
- Connects directly to shop air
- Removed material is collected in disposable anti-static vacuum bag attached directly to the discharge chute



NYZ7000S



NYZ7026EH

## Accessories

**NYZ7026EH *NYROC* Blade Holder**
- Vulcanized rubber padded blade holder, works exclusively with *NYROC* blades
- Fits comfortably in the users hand, reduces operator fatigue and helps to prevent injury

**NYZ7004VB Anti-Static Vacuum Bags**
- Anti-static vacuum bags for NYZ7000S blade sharpener
- Pack of 10

**NYZ700AD Abrasive Sharpening Discs**
- Abrasive sharpening discs for NYZ7000S blade sharpener
- Pack of ten



NYZ7025H50



NYZ7006MG

## Guns and Hoses

**NYZ7025H50 Air Hose (Anti-Static)**
- NONSTAT® anti-static 1/4" hose is fully grounded to prevent static discharge
- Hose is ideal for environments and projects where static control is essential
- 50' long

**NYZ7024H100 Air Hose (Anti-Static)**
- Same as NYZ7025H50 except 100' long

**NYZ7006MG Vibro Gun Kit**
- Kit includes medium duty Vibro gun, 1", 1/2" and 1/4" *NYROC* blades (one ea.) plus blade locks in black kit bag
- Medium duty Vibro gun adds pneumatic power to all scraping jobs using standard *NYROC* blades





AVPW716



AFPW38

## Aircraft Vacuum/Fuel Pump Wrenches

**AVPW716 Aircraft Vacuum Pump Wrench**
- Removes and replaces vacuum pump flange nuts on aviation and experimental aircraft
- Use with any 1/4" drive extension
- Easily fits into tight areas between the pump and nearby accessories
- Cut down head design adds greater flexibility than a wrench with a bent shank

**Applications Include:** Cessna®: Skyhawk®, Skylane®, Stationair Piper®: Cub®, Warrior®, Archer®, Seminole, Aztec, Navaho, Chieftain Mooney®: M20 series, M200 series, Ovation, Acclaim Beechcraft®: Bonanza®, Duchess, Baron Cirrus®: SR20 and SR22 aircraft

**AFPW38 Aircraft Fuel Pump Wrench**
- Small crowfoot which will remove and install the fuel primer/injector line on Continental® and Lycoming® engines
- Can be used with a 1/4" drive extension and will easily fit into tight areas



AOFW2



AOCO1

## Aircraft Oil Filter Wrench

**AOFW2 Aviation Oil Filter Wrench**
- Oil filter wrench can be used for installing and removing oil filters on all standard general aviation aircraft with 1" hex oil filters
- Compact size allows for reach in restricted areas
- 3/8" drive torque wrench
- Please refer to Snap-on® SS306G Torque Chart for formula to obtain the correct applied torque

**AOCO1 FOD Oil Can Opener**
- Testing by Saybolt® laboratory proves this can opener eliminates a cause of FOD, eliminating costly downtime and repairs
- Using a screwdriver to open an oil can may leave metal debris in the oil, causing FOD to turbines
- Can opener is made of reinforced high-quality plastic designed to open a quart can of oil
- Durable, ergonomic, nonslip design is pocket size and can be attached to a key ring



⚠WARNING
- Read and follow all safety messages and instructions
- Read safety precautions on pages W1 to W4

# AVIATION: SPECIALTY SERVICE TOOLS


LGSW125

## Aircraft Landing Gear Wrench

**LGSW125 Landing Gear Socket Wrench**
- Used to remove and replace the landing gear harness thru bolt on Embraer® 190 aircraft
- 1 1/4" deep well socket with 1/4" slit cut into it allows the speed cable to pass through
- 3/8" square drive allows torque wrench to torque the nut to 80 in-lb
- Flex head and overall length is 11.5"


IMTSX29

## Fan Bolt Impact Socket

**IMTSX29 External MORTORQ® Impact Socket**
- Use on fan bolts found on Rolls Royce® engines used on Airbus® A380 jets


AHCS1

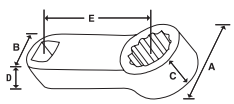
## Hose Clamp Socket

**AHCS1 Aircraft Hose Clamp Socket**
- Use on hose clamps found on Lycoming®, TCM (Continental®) and other engines found on Cessna®, Piper® and Beechcraft® aircraft
- Slotted socket is for removing and installing the three different size thumb knobs found on aircraft hose clamp
- Competitive sockets only work on one size and have a rubber O-ring that can cause an FOD issue
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- 1/4" square drive


FRESL24

## Low Profile, inches (3/8" drive)

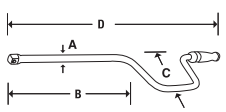
- Saves time by avoiding clearance issues when working on propeller assemblies
- Works on *Lycoming* and *Continental* engines used in *Piper*, *Cessna* and Mooney® aircraft




| | Stock No. | Working Torque, in-lb | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 3/4 | FRESL24 | 465 | 1 5/64 | 3/4 | 7/16 | 3/16 | 2 |
| 7/8 | FRESL28 | 605 | 1 1/4 | 3/4 | 7/16 | 3/16 | 2 |


N8323

## Deep Throw Speeder




| Stock No. | A | B | C | D |
|---|---|---|---|---|
| N8323 | 1/2 | 18 1/16 | 8 1/2 | 32 7/8 |

ASME®/ANSI® B107.10

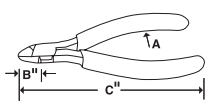
**N8323 Deep Throw Speeder**
- Deep throw speeder wrench
- This "loading tool" is used on F-14A aircraft


87CFCT


388CFCT

## Cushion Throat Cutters

- Quality forged steel ensures tools that will provide years of service
- Differential heat treatment produces the strength and toughness in desired areas to withstand repeated tough cutting jobs
- Handles are designed for comfort and to deliver leverage needed to tackle demanding jobs
- Cushion throat secures wire clippings to avoid contamination of work environment




| Stock No. | Handle Style (A) | Jaw Length, inches (B) | Length, inches (C) |
|---|---|---|---|
| 86CFCT | Bowed | 3/4 | 6 5/16 |
| 87CFCT | Bowed | 13/16 | 7 3/8 |
| 388CFCT | Bowed | 1 1/16 | 8 5/16 |

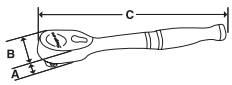

ACP8

## Electrical Connector Pliers

**ACP8 Robo Connector Plier**
- Self-adjusting electrical connector pliers with non-marring jaws make accessibility to confined areas much easier
- Range of 1/4"–1 5/8"
- 8" long

## Hi-Lok® Fastener Ratchets

- Features a hole through the head and square drive so the fastener may be held steady with a hex wrench as the fastener's collar is tightened
- Sealed head keeps dirt and other contaminants out of the head mechanism
- For use with standard or *Hi-Lok* sockets





TFY72


TY72


FCY72

| Stock No. | Square Drive, inches | Gear Teeth | Swing Arc | A | B | C | Repair Kit |
|---|---|---|---|---|---|---|---|
| TFY72 | 1/4 | 72 | 5° | 7/16 | 15/16 | 6 1/4 | RKRTY72 |
| TY72 | 1/4 | 72 | 5° | 7/16 | 15/16 | 4 5/8 | RKRTY72 |
| FCY72 | 3/8 | 72 | 5° | 7/16 | 15/16 | 4 5/8 | RKRFCY72 |



## Generator Engine Sockets

- Socket is used in the oil and gas industries to adjust valves on large generator engines
- Removes cover bolts and adjusts valves on Waukesha® VHP® series engines
- Sockets are used with a XO2830 7/8"–15/16" standard length deep 60° offset wrench
- The offset on the wrench protects the user's hand during valve adjustment
- A retaining ring holds the socket onto the XO2830 wrench
- It holds it on the 7/8" part of the wrench as the sockets have a 7/8" male hex
- Retaining ring part number is ME7A87
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- Flank Drive® wrenching system grips fastener on the flanks/flat to prevent fasteners from rounding


OG2824 OG2828

| | 12 | External Hex, inches |
|---|---|---|
| 3/4 | OG2824 | 7/8 |
| 7/8 | OG2828 | 7/8 |

## Shallow Single Square Impact Sockets

- These "end effector" sockets are used in the manufacturing of subsea and surface wellhead equipment for the oil and gas industry




IM748BC1.5

| | Stock No. | Square Drive, inches | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 1 | IM632BC1.5 | 3/4 | 2 1/8 | 1 3/4 | — | 2 1/4 | 3/4 |
| 1 1/2 | IM748BC1.5 | 1 | 2 7/8 | 2 3/8 | 1 5/8 | 3 1/2 | 7/8 |
| 1.66 | IM753.1BC1.5 | 1 | 1 15/16 | 2 3/8 | — | 3 1/2 | 1 1/16 |
| 1 | IM732BC1.5 | 1 | 2 1/8 | 2 1/8 | — | 2 3/4 | 3/4 |


APW10VLV


ATSK3621


GADW10VLV

## Specialty Service Tools

**APW10VLV Valve Persuader Wrench**

- "Refinery Wrench" used in oil and gas downstream facilities
- Great universal multi-tool for numerous daily applications including 4" and 6" quick turns to open and close valves

**ATSK3621 Hex to Square Adaptor**

- ATSK3621 is used with the B2192 Impact Pentagon Socket to remove and tighten special bolts used by electrical utilities on pad mounted and sub-surface underground facilities
- 7/16" hex–1/2" square adaptor
- 3" long

**GADW10VLV Valve Persuader Wrench**

- Two tools combined into one convenient operator's tool that can be used wherever valves are adjusted for flow and pressure
- 10" overall length supplies leverage while being compact enough to be easily carried
- Big-mouth adjustable wrench has large, 1 3/4" capacity
- 3/4" valve wheel wrench opening
- Precision hardened and anti-corrosion treated
- Easy-to-read size measurement scale: fractional on one side, metric on the other

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# RAILROAD SERVICE TOOLS





5703747UP



IM728NT



IM736NT

## Lag Screw Sockets

| | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 1 1/8 x 7/8 | 5703747UP | 1 7/8 | 2 1/8 | 1 3/4 | 3 1/2 | 7/8 |
| 1 | IM728NT | 1 3/4 | 2 1/8 | 31/32 | 2 1/8 | 13/16 |
| 1 1/8 | IM736NT | 1 13/16 | 2 1/4 | 1 3/32 | 2 1/4 | 3/4 |

**5703747UP Lag Screw Socket**
- For use on special rectangular head lag screws
- Rectangular head timber screw spikes are used to secure the rail anchor or rail clip
- The screw spikes are used by all railroads to varying degrees, but mainly the North American freight railroads (BNSF, NS, CSX, UPRR, KCS, CP Rail and CN Rail)
- The opening is 1 1/8" × 7/8" with a 1" square drive and can be used on an impact wrench

**IM728NT Lag Screw Socket**

**IM736NT Lag Screw Socket**



N8834



N8835



N8842



N8741

## Track Bolt and Frog Bolt Sockets

| | Stock No. | Square Drive, inches |
|---|---|---|
| 1 11/16 | N8834 | 1 |
| 1 13/16 | N8835 | 1 |
| 1 5/8 | N8842 | 1 |
| 1 7/16 | SIM746NT | 1 |
| 2 3/16 | N8741 | 1 |

**N8741 Frog Bolt Socket**
- 1" drive socket is used primarily for Frog bolt applications



N8913

## Side Bearing Cage Socket

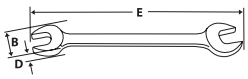
| # | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| E20 | N8913 | 1 5/32 | 1 5/8 | 3/4 | 1 3/4 | 1/2 |

**N8913 Side Bearing Cage Socket**
- Use this 3/4" drive E20 TORX® socket to service the breakoff portion of the side bearing cage bolt
- Installation of shear type E20 bolt during alignment of suspensions on Hendrickson® trailers

## Railroad Torque Socket

| | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 3/4" | SIMDTSA402 | 2 | 1 3/4 | 4 5/8 | 5 7/16 | 13/16 |

**SIMDTSA402 Railroad Torque Socket**




## Railroad Wrench

| | Stock No. | B | D | E |
|---|---|---|---|---|
| $^{13}/_{16}$–$^{7}/_{8}$ | GVO2628TH.20 | 1 $^{11}/_{16}$–1 $^{13}/_{16}$ | $^{7}/_{32}$ | 10 |



GVO2628TH.20



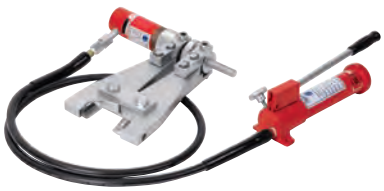
M4431B

**GVO2628TH.20 Open End Wrench**
- Used on railroad auxiliary generator coupler nuts (EMD Locomotives)

**M4431B Car Yard Inspector Wrench**
- Tightens air brake external nuts and cover screws
- Incorporates four 12-point sockets (3/4", 7/8", 15/16" and 1") plus a 9/16" open wrench all-in-one tool
- Box end portion of wrench is 10 3/8" long
- Open end portion of wrench is 6 1/4" long

# NUT SPLITTERS

## Hydraulic Nut Splitter



CG675HY

**CG675HY Hydraulic Nut Splitter**
- 6 ton controlled hydraulic power for removal of frozen or corroded nuts up to 2H hardness and 1 3/4" across the flats or 2" hex on soft nuts
- Includes CG652 ram and pump set
- 1 1/2" stroke

**CG675 Nut Splitter**
- Nut splitter without the hydraulics

## Manual Nut Splitter



NC52

**NC52 Nut Splitter**
- For splitting nuts up to 3/4" across the flats
- Bar acts as a handle to hold tool securely

**NC52-3 Extra Cutter**

**NC52-4A Anvil**

# CABLE CUTTERS

## Hydraulic Cable Cutters



CG410HY

**CG410HY Hydraulic Cable Cutter**
- Cut steel cable up to 1 1/4" in diameter easily with up to 29 tons of force generated by this hydraulic package
- Hardened tool steel cutting blade and die make clean, square cuts and provide long, dependable service
- Both can be resharpened
- Includes CG420-2A pump, CG420-3-1 hose and CG420-4 coupler set

**CG410 Cable Cutter**
- Cable cutter without the hydraulics

**CG420-2A 1 Stage Pump**
One-stage 20, 35 and 50 ton pump

**CG420-3-1 Hose**

**CG420-4 Coupler**

**⚠WARNING**

- Read and follow all instructions
- Keep hands and body clear of cutter and splitter parts
- Read safety precautions on pages W1 to W4

# AS YOU GET BIGGER, WE GET BETTER.

As you grow, Snap-on® tool sets grow with you. From your first day in the shop, to the top of the ladder, Snap-on has set-building solutions to fit your needs. Starting with our Apprentice Set, each tool set builds on the others – allowing your tool set to grow with your skill set. Or, you can simply start big: shop veterans find our larger sets to be the most comprehensive in the industry. That means all-in-one, turnkey solutions for increased productivity.

**HOW IT WORKS.**

Building a set from scratch? These sets will help set your business apart.

**9100GSBO Apprentice Set —** Includes a balanced selection of 1/4", 3/8" and 1/2" square drive tools, wrenches, screwdrivers, pliers, punches and chisels – everything for the "routine maintenance" basics.

**9000GS2 —** As your needs grow, add the second tool group: with more than 100 additional tools for more advanced work. And, as you add on new tool groups, you can expand your storage as well. It's the smart way to build your inventory: the ultimate hand tool inventory growing in lockstep with storage.




9600GSBO Complete Set



KRA2055FPBO



9100GSO

## 9100GSO Apprentice Set

| Stock No. | Description | Page |
|---|---|---|
| 114ATMP | 1/4" Dr. General Service Set, 6-Point (14pc) | 126 |
| 206EAU | 3/8" Dr. Adaptor/Extension Set (6pc) | 144 |
| 211FSY | Shallow, 6-Point (11pc) (1/4 – 7/8") | 146 |
| 211SFSY | 3/8" Dr. Deep Socket Set, 6-Point (11pc) | 148 |
| 317MSPC | 1/2" Dr. General Service Set, 6-Point (17pc) | 209 |
| 91ACP | Adjustable Joint Pliers | 337 |
| AW1015DHK | Hex Wrench Set (15pc) (.028"–3/8") | 270 |
| BP16B | Ball Peen Hammer, 16 oz | 356 |
| CSA8C | Carbon Scraper | 365 |
| ECF201A | 3 W, (2) D Cell, LED Flashlight | — |
| F80 | Standard Handle | 138 |
| GA295 | Mirror | 683 |
| GAC1580A | Dust/Impact Goggles | 731 |
| HBPT16 | Plastic Tip Hammer | 355 |
| HSG319 | Bi-Mold Handle Hacksaw | 358 |
| OEX709B | Combination Wrench Set, 12-Point (9pc) | 244 |
| PL300CF | Pliers/Cutters Set (3pc) | 334 |
| PPC710BK | Punch and Chisel Set (11pc) | 351 |
| PRH57A | Retaining Ring Pliers, Convertible | 340 |
| PT5C | Magnetic Pick-up Tool | 682 |
| PWC6 | Wire Stripper/Cutter Pliers | 344 |
| SHDX800 | Combination Screwdriver Set, Orange (8pc) | 304 |
| TPMA12 | Tape Rule, US (12') | 680 |

**9100GSBO Complete Apprentice Set**
- Includes 9100GSO and KRA2055FPBO top chest

**9100GSO Apprentice Set**
- More than 100pc for a well-balanced selection
- Does not include top chest

**9100GSM Metric Plus Apprentice Set**
- 9100GS Set plus AWM110DK metric hex wrench Set (11pc), 212FMY Metric 12-point socket Set (12pc) and OEXM710B metric 12-point combination wrench set (10pc)
- Does not include top chest

For the latest product components please visit:
**www.snapon.com/setbuilding**



WARNING • Read safety precautions on pages W1 to W4

# US SET 2



9000GS2




KRA4059FPBO

## 9000GS2 Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 110STMY | 1/4" 10pc set | 111 |
| 112TMMY | 1/4" Dr. Metric Shallow Socket Set, 6-Point (12pc) | 110 |
| 1650 | Prybar, 16" | 332 |
| 2004BSKA | Battery Service Kit (4pc) | 614 |
| 212EFTXY | 1/4" and 3/8" Dr. Torx® Driver Set (12pc) | 117 |
| 212FSMY | 3/8" Dr. Metric Shallow Socket Set, 6-Point (12pc) | 146 |
| 212SFSMY | 3/8" Dr. Metric Deep Socket Set, 6-Point (12pc) | 147 |
| AC5C | Hand Scratch Brush | 738 |
| AWM110DHK | Metric Hex Wrench Set, L-Shaped | 270 |
| EECT4H | Circuit Tester | 518 |
| FADH12A | Adjustable Wrench, Cushion Handle, 12" | 272 |
| FB303B | Wire Gap Gauge | 678 |
| FB316B | Spark/Ignition Gauge (18 blades) | 677 |
| FB325A | US/Metric Gauge (25 blades) | 677 |
| FB361A | Gapper Gauge | 678 |
| FLF80 | 3/8" Dr. Long Flex Head Sealed Ratchet | 138 |
| FXK11 | 3/8" Dr. Extension, 11" | 143 |
| GSAF1E | Square Drive Adaptor | 108 |
| LP10WR | Locking Pliers, 10" | 338 |
| OEX30B | Std. Length Combination Wrench, 15/16" | 244 |
| OEX32B | Combination Wrench, 12-Point, 1" | 244 |
| OEXM710B | Metric Combination Wrench Set (10pc) | 243 |
| PK53A | Putty Knife/Scraper | 366 |
| RXFS605B | 3/8" Dr. Double End Flare Nut Wrench Set (5pc) | 257 |
| S9704KR | 3/8" Dr. Spark Plug Retention Socket, 6-Point, 13/16" | 174 |
| S9706KRA | Spark Plug Retention Socket, 6-Point, 5/8" | 372 |
| SGA173BR | Radiator Hose Pick | 432 |
| SGASA204AO | Miniature Pick Set, 4pc | 328 |
| SGDMRC44B | Ratcheting Soft Grip Screwdriver | 314 |
| SGT4BR | 1/4" Dr. Standard Shank Driver | 106 |
| TMXK60 | 1/4" Dr. Extension, 6" | 108 |

**9200GSB Complete US Set 2**
- Includes 9100GSO, 9000GS2 plus KRA4059FPBO top chest

**9200AGSO US Set 2**
- More than 200pc: includes all tools in 9100GSO and 9000GS2
- Does not include tool storage

**9000GS2 Add-on Group 2**
- More than 100pc in the add-on to 9100GSO apprentice set
- Does not include tool storage unit




KRA4008FPBO




KRA4059FPBO




9000GS3O

## 9000GS3O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 112STMMY | 1/4" 12pc Deep socket set | 111 |
| 207EFAMY | 3/8" Dr. Metric Hex Driver Set (7pc) | 157 |
| 208EFAY | 3/8" Dr. Hex Driver Set (8pc) | 158 |
| 309SIMYA | 1/2" Dr. Deep Impact Socket Set, 6-Point (9pc) | 202 |
| 310IMMYA | 1/2" Dr. Metric Shallow Impact Socket Set, 6-Point (10pc) | 200 |
| 310SIMMYA | 1/2" Dr. Metric Deep Impact Socket Set, 6-Point (10pc) | 202 |
| 311IMYA | 1/2" Dr. Shallow Impact Socket Set, 6-Point (11pc) | 201 |
| 313TWMYA | 1/2" Dr. Metric Socket Set, 6-Point (13pc) | 191 |
| AC58E | Wire Brush | 738 |
| GA3000B | Ear Protectors | 729 |
| IP80D | 1/2" Dr. Impact Universal Joint | 199 |
| JCK7D | Fender Cover | 670 |
| JT13B | Blow Gun | 504 |
| MG725 | 1/2" Dr. Impact Wrench | 464 |
| OEXM6B | Metric Short Combination Wrench, 12-Point, 6 mm | 246 |
| OEXM7B | Metric Short Combination Wrench, 12-Point, 7 mm | 246 |
| OEXM8B | Metric Short Combination Wrench, 12-Point, 8 mm | 246 |
| OEXM9B | Metric Short Combination Wrench, 12-Point, 9 mm | 246 |
| QD3R250 | 1/2" Dr. Torque Wrench, 50–250 ft-lb | 279 |
| RXFMS606B | Metric Double End Flare Nut Wrench Set (6pc) | 257 |
| S8 | 1/2" Dr. Universal Joint | 109 |
| SL80A | 1/2" Dr. Long Handle Sealed Ratchet | 185 |
| SPBS240 | Prybar with Handle, 24", Orange | 330 |
| SXK3 | 1/2" Dr. Extension, 3 1/2" | 189 |
| TF72 | 1/4" Dr. Flex Head Sealed Ratchet | 103 |
| TMXK140 | 1/4" Dr. Extension, 14" long | 108 |

**9300GSBO Complete US Set 3**
- Includes 9200AGSO, 9000GS3O plus KRA4059FPBO top chest and KRA4008FPBO roll cab

**9300GSO US Set 3**
- More than 300pc: includes all tools in 9200AGSO and 9000GS3O
- Does not include tool storage

**9000GS3O Add-on Group 3**
- More than 100pc in the add-on to 9200AGSO US Set 2
- Does not include tool storage

For the latest product components please visit:
**www.snapon.com/setbuilding**



WARNING • Read safety precautions on pages W1 to W4

# US SET 4




9000GS40




KRL756CPBO



KRL751PBO

## 9000GS40 Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 1250 | Prybar, 12" long | 332 |
| 206AFSA | 3/8" Dr. Universal Shallow Socket, 12-Point (6pc) | 149 |
| 206FSUMA | 3/8" Dr. Metric Universal Shallow Socket Set, 6-Point (6pc) | 149 |
| 207SFRH | 3/8" Dr. Metric Crowfoot Wrench Set (7pc) | 260 |
| 210FRHMA | 3/8" Dr. Metric Crowfoot Wrench Set (10pc) | 260 |
| 313TSYA | 1/2" Dr. Deep Socket Set, 6-Point (13pc) | 192 |
| 388CF | High Leverage Cutter | 335 |
| 61ACP | Duck Bill Pliers | 336 |
| AWP160 | Adjustable Joint, Tongue & Groove Pliers | 337 |
| BP24B | Ball Peen Hammer, 24 oz | 356 |
| CJ2001P | Bolt Grip Puller Set | 393 |
| CSA12CO | Carbon Scraper, Orange | 365 |
| E1020 | Extractor Set, 20pc | 383 |
| FADH8A | Adjustable Wrench, Cushion Handle, 8" | 272 |
| FL80 | 3/8" Dr. Long Handle Sealed Ratchet | 138 |
| FX24A | 3/8" Dr. Extension, 24" | 143 |
| FXK4 | 3/8" Dr. Extension, 4" | 143 |
| FXK8 | 3/8" Dr. Extension, 8" | 143 |
| HBBD32 | Ball Peen Dead Blow Hammer, 32 oz | 5 |
| HBFE32 | Dead Blow Hammer, 32 oz | 5 |
| JCW60R | Creeper, Red | 671 |
| LP7WR | Locking Pliers, 7" | 338 |
| OEX080B | Short Combination Wrench, 12-Point, 1/4" | 247 |
| OEX10B | Combination Wrench, 12-Point, 5/16" | 244 |
| OEX34B | Combination Wrench, 12-Point, 1 1/16" | 244 |
| OEX36B | Combination Wrench, 12-Point, 1 1/8" | 244 |
| OEX40B | Combination Wrench, 12-Point, 1 1/4" | 244 |

| Stock No. | Description | Page |
|---|---|---|
| OEXM200B | Metric Combination Wrench, 12-Point, 20 mm | 243 |
| OEXM210B | Metric Combination Wrench, 12-Point, 21 mm | 243 |
| OEXM220B | Metric Combination Wrench, 12-Point, 22 mm | 243 |
| OEXS709B | Short Combination Wrench Set, 12-Point (9pc) | 247 |
| OEXSM710B | Metric Short Comb. Wr. Set, 12-Point (10pc) | 246 |
| PPB1012A | Bronze Tapered Punch, 3/8" | 352 |
| PPC104A | Pin Punch, 1/8" | 351 |
| PPC108A | Pin Punch, 1/4" | 351 |
| PPC204A | Starter Punch, 1/8" | 351 |
| PPC208A | Starter Punch, 1/4" | 351 |
| PPC3A | Center Punch, 1/8" | 351 |
| PPC5A | Punch/Chisel Holder | 351 |
| SGCP1BR | Cotter Pin Puller | 588 |
| SGHBF500A | File Set with Handles (4pc) | 363 |
| SHDX40O | Mini Combination Screwdriver Set, Orange (4pc) | 304 |
| SN24C | 1/2" Dr. Breaker Bar, 24" | 187 |
| SPBS18O | Prybar w/Handle, 18" Orange | 330 |
| SRPC105 | Retaining Ring Pliers Set (5pc) | 339 |
| SSM5A | Flat Tip Screw Starter | 317 |
| SX2 | 1/2" Dr. Extension, 2" | 189 |
| TA3 | 1/4"–3/8" Adaptor | 109 |
| TD2425 | Tap and Die Set (41pc) | 377 |
| TDM117A | Metric Tap and Die Set (41pc) | 377 |
| TF528D | Tube Cutting and Double Flaring Set | 14 |
| TM61A | 1/4" Dr. Flexible Extension, 6" | 108 |
| TMX1 | 1/4" Dr. Extension, 1 1/4" | 108 |
| TMXK110 | 1/4" Dr. Extension, Knurled,11" Long | 108 |
| UTK100 | Utility Knife | 361 |

**9400GSBO Complete US Set 4**
- Includes: 9300GSO, 9000GS4O plus KRL751PBO top chest and KRL756CPBO roll cab

**9400GSO US Set 4**
- More than 600pc: includes all tools in 9300GSO and 9000GS40
- Does not include tool storage

**9000GS4O Add-on Group 4**
- More than 250pc in the add-on to 9300GSO US Set 3
- Does not include tool storage



KRL751PBO



KRL756CPBO



9000GS5O

## 9000GS5O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 196CF | Needle Nose Pliers with Side Cutter, 7 1/8" | 336 |
| 212IMFYA | 3/8" Dr. Shallow Impact Socket Set, 6 Point (12pc) | 163 |
| 212SIMFYA | 3/8" Dr. Deep Impact Socket Set, 6 Point (12pc) | 164 |
| 214IMFMYA | 3/8" Dr. Shallow Impact Socket Set, 6 Point (14pc) | 163 |
| 214SIMFMYA | 3/8" Dr. Deep Impact Socket Set, 6 Point (14pc) | 164 |
| 313TSMYA | 1/2" Dr. Metric Deep Socket Set, 6 Point (13pc) | 192 |
| 497CF | 90° Angle Jaw Needle Nose Pliers | 336 |
| 650 | Prybar, 6" | 332 |
| AWP120 | Adjustable Joint, Tongue & Groove Pliers | 337 |
| BP8B | Ball Peen Hammer, 8 oz. | 356 |
| CJ2002 | Bar Type Gear Puller Set | 392 |
| F12LA | 3/8" Dr. Breaker Bar | 142 |
| FADH10A | Adjustable Wrench, Cushion Handle, 10" | 272 |
| FAR7200 | Super Duty Air Ratchet, 3/8" Drive | 464 |
| FBF80 | 3/8" Bent Handle Flex Head | 138 |
| FK80 | 3/8" Dr. Stubby Head Sealed Ratchet | 138 |
| HBBT24 | Bronze Tip Hammer, 24 oz | 355 |
| IMM200 | 1/2" Dr. Metric Shallow Impact Socket, 6 Point, 20 mm | 200 |
| IMM210 | 1/2" Dr. Metric Shallow Impact Socket, 6 Point, 21 mm | 200 |
| IMM220 | 1/2" Dr. Metric Shallow Impact Socket, 6 Point, 22 mm | 200 |
| IMM230 | 1/2" Dr. Metric Shallow Impact Socket, 6 Point, 23 mm | 200 |
| IMM240 | 1/2" Dr. Metric Shallow Impact Socket, 6 Point, 24 mm | 200 |
| IPF800B | 3/8" Dr. Impact Universal Joint | 162 |
| KB2178 | Kit Bag | 351 |
| MG325 | 3/8" Drive Air Impact Wrench | 464 |
| OEX11B | Combination Wrench, 12-Point, 11/32" | 244 |
| OEX260B | Short Combination Wrench, 12-Point, 13/16" | 247 |
| OEX280B | Short Combination Wrench, 12-Point, 7/8" | 247 |
| OEX300B | Short Combination Wrench, 12-Point, 15/16" | 247 |
| OEX320B | Short Combination Wrench, 12-Point, 1" | 247 |
| OEX38B | Combination Wrench, 12-Point, 1 3/16" | 244 |
| OEX42B | Combination Wrench, 12-Point, 1 5/16" | 244 |
| OEX8B | Combination Wrench, 12-Point, 1/4" | 244 |
| OEXM230B | Metric Standard Combination Wrench, 12-Point, 23 mm | 243 |
| OEXM240B | Metric Standard Combination Wrench, 12-Point, 24 mm | 243 |
| OEXM90B | Metric Standard Combination Wrench, 12 Point, 9 mm | 243 |
| OXI10B | Midget Combination Wrench, 12-Point, 5/16" | 248 |
| OXI12B | Midget Combination Wrench 12-Point, 3/8" | 248 |

| Stock No. | Description | Page |
|---|---|---|
| OXI706B | Fractional Midget Comb. Wrench Set, 12-point (6pc) | 248 |
| OXI8B | Midget Combination Wrench, 12-Point, 1/4" | 248 |
| OXIM710B | Metric Midget Comb. Wrench Set, 12-Point (10pc) | 247 |
| OXIM7B | Metrc Midget Combination Wrench, 12-Point, 7 mm | 247 |
| OXIM8B | Metric Midget Combination Wrench, 12-Point, 8 mm | 247 |
| OXIM9B | Metric Midget Combination Wrench, 12-Point, 9 mm | 247 |
| PPC110A | Pin Punch, 5/16" | 351 |
| PPC112 | Pin Punch, 3/8" | 351 |
| PPC210A | Starter Punch, 5/16" | 351 |
| PPC824B | Flat Chisel, 3/4" | 351 |
| PPC828B | Flat Chisel, 7/8" | 351 |
| PT28E | Pick-up Tool | 682 |
| PWC14 | Wire Stripper/Cutter/Crimper/Bolt Cutter, 8 3/4" | 344 |
| QD2R100 | 3/8" Dr. Adj. Click Type Torque Wrench 20–100 ft-lb | 279 |
| RTD48 | Rethreading Kit (48pc) | 19 |
| S9704KFUA | Universal | 173 |
| S9706KRFUA | 3/8" Dr. Spark Plug Universal Socket, 13/16" | 372 |
| SDM400A | Screwdriver Bit Set (37pc) | 316 |
| SF80A | 1/2" Dr. Flex Head Sealed Ratchet | 185 |
| SHDP162O | Phillips® Tip Screwdriver, #2, Orange, 16" | 307 |
| SHDP62IRO | *Phillips* Tip Screwdriver, #2, Orange, 6" | 307 |
| SHDP63IRO | *Phillips* Tip Screwdriver, #3, Orange, 6" | 307 |
| SIMM200 | 1/2" Dr. Deep Impact Socket, 6-Point, 20 mm | 202 |
| SIMM210 | 1/2" Dr. Deep Impact Socket, 6-Point, 21 mm | 202 |
| SIMM220 | 1/2" Dr. Deep Impact Socket, 6-Point, 22 mm | 202 |
| SIMM230 | 1/2" Dr. Deep Impact Socket, 6-Point, 23 mm | 202 |
| SIMM240 | 1/2" Dr. Deep Impact Socket, 6-Point, 24 mm | 202 |
| SPBS12O | Prybar with Handle, 12", Orange | 330 |
| SSDE42C | Flat, Thin Blade Electronic Screwdriver | 308 |
| SSDE43C | Flat, Thin Blade Electronic Screwdriver | 308 |
| SSDE44C | Flat, Thin Blade Electronic Screwdriver | 308 |
| SSDE46C | Flat, Thin Blade Electronic Screwdriver | 308 |
| SSDE48C | Flat, Thin Blade Electronic Screwdriver | 308 |
| SSDMR1AO | Ratcheting Magnetic Screwdriver, Orange | 315 |
| TC123C | Tube Cutter | 13 |
| VS807B | Open End Wrench Set (7pc) | 256 |
| XB605A | Fractional Offset Box Wrench Set, 12-Point (5pc) | 250 |
| XBM605A | Metric Box End Wrench Set, 12-Point (5pc) | 249 |

**9500GSBO Complete US Set 5**
- Includes 9400GSO, 9000GS5O plus KRL751PBO top chest and KRL756CPBO roll cab

**9500GSO US Set 5**
- More than 800pc: includes all tools in 9400GSO and 9000GS50
- Does not include tool storage

**9000GS5O Add-on Group 5**
- More than 150pc in the add-on to 9400GSO US Set 4
- Does not include tool storage

For the latest product components please visit:
**www.snapon.com/setbuilding**

WARNING

• Read safety precautions on pages W1 to W4

# US SET 6



KRL722BPBO



9000GS6O



KRA276D



KRL791APBO

## 9000GS6O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 106ATMXWP | 1/4" Dr. Wobble Extension Set (6pc) | 108 |
| 106TMUSA | 1/4", Dr. Universal Socket Set, 6-Point (6pc) | 114 |
| 10SSD | Offset Flat Tip Screwdriver | 311 |
| 110ETMAY | 1/4" Dr. Hex Driver Set (10pc) | 120 |
| 120SSDP | Offset Phillips® Screwdriver, #1 and #2 | 311 |
| 2050 | Prybar, 20" | 332 |
| 205IPF | 3/8" Dr Shallow Impact Swivel Socket Set, 6-Point (5pc) | 165 |
| 206AFXWP | 3/8" Dr. Wobble Extension Set (6pc) | 144 |
| 20SSD | Offset Flat Tip Screwdriver | 311 |
| 307IPLY | Frac. 1/2" Dr. Impact Swivel Socket Set, 6-Point (5pc) | 204 |
| A265A | Socket Rail, 12 Clips, 1/4" Drive, 7 3/8" | 84 |
| A271BB | Bulk Clips (qty. 6) | — |
| AWP45 | Adjustable Joint, Tongue & Groove Pliers, 4 3/4" | 337 |
| AWP65 | Adjustable Joint, Tongue & Groove Pliers, 7" | 337 |
| BP12B | Ball Peen Hammer, 12 oz | 356 |
| CHN480 | Adjustable Joint Pliers, 20" | — |
| CJ2003A | Rear Axle Puller Set | 392 |
| CJ2004 | Interchangeable Puller Set | 392 |
| CJ2005 | Puller Accessory Set | 392 |
| CM6551 | Miniature Screwdriver Set (5pc) | 311 |
| DBTR129 | Drill Bit Set, 29 Bits | 450 |
| E703BCG | Electronic Needle Nose Pliers | 341 |
| E704BCG | Elec. Needle Nose Pliers, 60° Bent Tip, Non-Serrated | 341 |
| E710BCG | Electronic Taper Head Cutters, True Flush Cut | 342 |
| FADH6A | Adjustable Wrench, Cushion Handle, 6" | 272 |
| FAR25A | 1/4" Dr. Air Ratchet | 464 |
| FS12B | 3/8" Dr. Universal Shallow Socket, 6 Point, 3/8" | 149 |
| FSUM11A | 3/8" Dr. Universal Shallow Socket, 6-Point, 11 mm | 149 |
| FSUM16A | 3/8" Dr. Universal Shallow Socket, 6-Point, 16 mm | 149 |
| FSUM18A | 3/8" Dr. Universal Shallow Socket, 6-Point, 18 mm | 149 |
| FSUM19A | 3/8" Dr. Universal Shallow Socket, 6-Point, 19 mm | 149 |
| FX18 | 3/8" Dr. Extension, 18" | 143 |
| FX36 | 3/8" Dr. Extension, 36" | 143 |
| HBFE48 | Dead Blow Hammer, 48 oz | 5 |
| IMTM10A | 1/4" Dr. Shallow Impact Socket, 6-Point, 5/16" | 122 |
| IMTM12A | 1/4" Dr. Shallow Impact Socket, 6-Point, 3/8" | 122 |
| IMTM14A | 1/4" Dr. Shallow Impact Socket, 6-Point, 7/16" | 122 |
| IMTM16A | 1/4" Dr. Shallow Impact Socket, 6-Point, 1/2" | 122 |
| IMTM18A | 1/4" Dr. Shallow Impact Socket, 6-Point, 9/16" | 122 |
| IMTM8A | 1/4" Dr. Shallow Impact Socket, 6-Point, 1/4" | 122 |
| IMTMM10 | 1/4" Dr. Metric Impact Socket, 6-Point, 10 mm | 122 |
| IMTMM11 | 1/4" Dr. Metric Impact Socket, 6-Point, 11 mm | 122 |
| IMTMM12 | 1/4" Dr. Metric Impact Socket, 6-Point, 12 mm | 122 |
| IMTMM13 | 1/4" Dr. Metric Impact Socket, 6-Point, 13 mm | 122 |
| IMTMM14 | 1/4" Dr. Metric Impact Socket, 6-Point, 14 mm | 122 |

| Stock No. | Description | Page |
|---|---|---|
| IMTMM15 | 1/4" Dr. Metric Impact Socket, 6-Point, 15 mm | 122 |
| IMTMM5 | 1/4" Dr. Metric Impact Socket, 6-Point, 5 mm | 122 |
| IMTMM5.5 | 1/4" Dr. Metric Impact Socket, 6-Point, 5.5 mm | 122 |
| IMTMM6 | 1/4" Dr. Metric Impact Socket, 6-Point, 6 mm | 122 |
| IMTMM7 | 1/4" Dr. Metric Impact Socket, 6-Point, 7 mm | 122 |
| IMTMM8 | 1/4" Dr. Metric Impact Socket, 6-Point, 8 mm | 122 |
| IMTMM9 | 1/4" Dr. Metric Impact Socket, 6-Point, 9 mm | 122 |
| LP6LN | Locking Long Nose Pliers, 6" | 338 |
| NDD900B | Metric Nut Driver Set (9pc) | 318 |
| OEX44B | Combination Wrench, 12-Point, 1 3/8" | 244 |
| OEX46B | Combination Wrench, 12-Point, 1 7/16" | 244 |
| OEX48B | Combination Wrench, 12-Point, 1 1/2" | 244 |
| PDR3000A | Air Drill, 3/8" | 464 |
| PPR708BK | Roll Pin Punch Set (8pc) | 352 |
| R810C | Frac. Ratcheting Box Wrench, 12-Point, 1/4"-5/16" | 239 |
| RB604C | Frac. Ratcheting Box Wrench Set, 12-Point (4pc) | 239 |
| RXS605B | Flare Nut/Open End Wrench Set, 6 Point (5pc) | 257 |
| SGFMN106 | Mixed File Set (6pc) | 363 |
| SHDTX315O | T15 Torx® Screwdriver, Orange | 311 |
| SHDTX320O | T20 *Torx* Screwdriver, Orange | 311 |
| SPBS8O | Prybar with Handle, 8", Orange | 330 |
| SSDMR8AO | Ratcheting Magnetic Screwdriver, Orange | 315 |
| SX15 | 1/2" Dr. Extension, 15" | 189 |
| TD9902B | Tap and Die Set (25pc) | 377 |
| TS381 | 1/2", Dr. Deep Socket, 6-Point, 1 3/16" | 192 |
| TS401 | 1/2" Dr. Deep Socket, 6-Point 1 1/4" | 192 |
| TS421 | 1/2" Dr. Deep Socket, 6-Point 1 5/16" | 192 |
| TW381 | 1/2" Dr. Socket, 6-Point, 1 3/16" | 191 |
| TW401 | 1/2" Dr. Socket, 6-Point, 1 1/4" | 191 |
| TW421 | 1/2", Dr. Socket, 6-Point, 1 5/16" | 191 |
| TW441 | 1/2" Dr. Socket, 6-Point, 1 3/8" | 191 |
| TW461 | 1/2" Dr. Socket, 6-Point, 1 7/16" | 191 |
| TW481 | 1/2" Dr. Socket, 6-Point, 1 1/2" | 191 |
| TWM25 | 1/2", Dr. Metric Socket, 6-Point, 25 mm | 191 |
| TWM26 | 1/2" Dr. Metric Socket, 6-Point, 26 mm | 191 |
| TWM27 | 1/2", Dr. Metric Socket, 6-Point, 27 mm | 191 |
| TWM30 | 1/2" Dr. Metric Socket, 6-Point, 30 mm | 191 |
| TWM32 | 1/2" Dr. Metric Socket, 6-Point, 32 mm | 191 |
| VE200A | Puller Control Board | 392 |
| VS26B | Open End Wrench, 13/16" | 256 |
| VS28B | Open End Wrench, 7/8" | 256 |
| VS30B | Open End Wrench, 15/16" | 256 |
| VS32B | Open End Wrench , 1" | 256 |
| XO605 | Fractional Offset Box Wrench Set, 12-Point (5pc) | 251 |

**9600GSBO Complete US Set 6**
- Includes 9500GSO, 9000GS6O plus KRL791APBO top chest, KRL722BPBO roll cab and KRA276D wall cabinet

**9600GSO US Set 6**
- More than 1000pc: includes all tools in 9500GSO and 9000GS6O
- Does not include tool storage

**9000GS6O Add-on Group 6**
- More than 250pc in the add-on to 9500GSO US Set 5
- Does not include tool storage




KRA4059FPBO



9100AGMO

## 9100AGMO Metric Basic Set A

| Stock No. | Description | Page |
|---|---|---|
| 112STMMY | 1/4" Dr. Metric Deep Skt. Set, 6-Point (12 pcs) | 111 |
| 117TMM | 1/4" Dr. Metric Starter Set (17 pcs) | 125 |
| 1650 | Prybar, 16" long | 332 |
| 2004BSKA | Battery Service Kit (4pc) | 614 |
| 206EAU | 3/8" Dr. Adaptor Set (6 pcs) | 144 |
| 212EFTXY | 1/4" and 3/8" Dr. TORX® Driver Set (12pc) | 117 |
| 212FSMY | 3/8" Dr. Metric Socket Set, 6 Point (12 pcs) | 146 |
| 212SFSMY | 3/8" Dr. Metric Deep Socket Set, 6 Point (12pc) | 147 |
| 317AMMPC | 1/2" Dr. Metric Gen. Service Set, 6 Point (17 pcs) | 209 |
| 91ACP | Adjustable Joint Pliers | 334 |
| 97CF | Needle Nose Pliers | 334 |
| AWM110DHK | Metric Hex Wrench Set (11pc) | 270 |
| BP16B | Ball Peen Hammer, 16 oz. | 356 |
| CSA8C | Carbon Scraper | 365 |
| ECF201A | 3 watt LED Flashlight | — |
| EECT4H | Circuit Tester | 518 |
| F80 | 3/8" Dr. Sealed Ratchet | 138 |
| FADH12A | Adjustable Wrench, Cushion Handle, 12" | 272 |
| FB316B | Ignition/Spark Plug Gauge Set (18 blades) | 677 |
| FB360C | Feeler Gauge Set (6 blades) | 678 |
| FB361A | Gapper Gauge | 678 |
| FBM320 | Metric Feeler Gauge Set (20 blades) | 677 |
| FLF80 | 3/8" Dr. Long Flex Head Sealed Ratchet | 138 |

| Stock No. | Description | Page |
|---|---|---|
| FXK11 | 3/8" 8" Dr. Extension, 11" long | 143 |
| GA295 | Mirror | 683 |
| GAC1580A | Dust/Impact Goggles | 731 |
| GSAF1E | Square Drive Adaptor | 109 |
| HBPT16 | Plastic Tip Hammer, 16 oz | 355 |
| HSG319 | Bi-Mold Handle Hacksaw | 358 |
| LP10WR | Locking Pliers, 10" long | 338 |
| OEXM710B | Metric Combination Wrench Set, 12-Point (10 pcs) | 243 |
| PK53A | Scraper | 366 |
| PL300CF | Needle Nose/Diagonal Cutter/Pliers Set (3 pcs) | 334 |
| PPC710BK | Punch and Chisel Set (11pc) | 351 |
| PRH57A | Retaining Ring Pliers, Convertible | 340 |
| PT5C | Telescopic Pick-up Tool | 682 |
| PWC6 | Wire Stripper/Cutter Pliers | 344 |
| RXFMS606B | Metric Double End Flare Nut Wrench Set (6pc) | 257 |
| S9704KA | 3/8" Dr. Spark Plug Retention Socket, 6 Point, 13/16" | 18 |
| S9706KRA | 3/8" Dr. Spark Plug Retention Socket, 6 Point, 5/8" | 372 |
| SGA173BR | Radiator Hose Pick | 636 |
| SGASA204AO | Miniature Awl/Pick Set, Orange (4 pcs) | 328 |
| SGT4BR | Standard Shank Driver | 106 |
| SHDX80O | Combination Screwdriver Set, Orange (8pc) | 304 |
| SSDMR4BO | Ratcheting Magnetic Screwdriver, Orange | 315 |
| TMXK60 | 1/4" Dr. Extension, 6" long | 108 |
| TPMA25EM | English/Metric Tape Rule 25'/7.5 M | 680 |

**9100GMBO Complete Metric Set A**
- More than 150pc: includes 9100AGMO plus KRA4059FPBO top chest

**9100AGMO Metric Basic Set A**
- Does not include tool storage

For the latest product components please visit:
**www.snapon.com/setbuilding**



WARNING • Read safety precautions on pages W1 to W4

# METRIC SETS B




9000GM2O




KRA4059FPBO




KRA4008FPBO

## 9000GM2O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 1250 | Prybar, 12" long | 332 |
| 206FSUMA | 3/8" Dr. Metric Shallow Universal Socket Set, 6-Point (6pc) | 149 |
| 207EFAMY | 3/8" Dr. Metric Hex Driver Set (7pc) | 157 |
| 210FRHMA | 3/8" Dr. Met. Flare Nut Wrench Set, 6-Point (10 pcs) | 260 |
| 310IMMYA | 1/2" Dr. Shallow Metric Impact Socket Set, 6-Point (10pc) | 200 |
| 310SIMMYA | 1/2" Dr. Deep Metric Impact Socket Set, 6-Point (10pc) | 202 |
| 313TSMYA | 1/2" Dr. Metric Deep Socket Set, 12-Point (13pc) | 192 |
| 388CF | Hi Leverage Cutters, 7 3/4" long | 335 |
| 61ACP | Duck Bill Pliers, 7 3/4" long | 336 |
| AC58E | Wire Brush | 738 |
| AWP160 | Adjustable Joint, Tongue & Groove Pliers | 337 |
| BP24B | Ball Peen Hammer, 24 oz | 356 |
| CJ2001P | Bolt Grip Puller Set | 393 |
| CSA12CO | Carbon Scraper | 365 |
| E1020 | Extractor Set (20pc) | 383 |
| FADH8A | Adjustable Wrench, Cushion Handle, 8" | 272 |
| FL80 | 3/8" Dr. Long Handle Sealed Ratchet | 138 |
| FX24A | 3/8" Dr. Extension, 24" long | 143 |
| FXK4 | 3/8" Dr. Extension, 4" long | 143 |
| FXK8 | 3/8" Dr. Extension, 8" long | 143 |
| GA3000B | Ear Protectors | 729 |
| HBFE32 | Dead Blow Hammer, 32 oz | 5 |
| IP80D | 1/2" Dr. Impact Swivel Socket | 199 |
| JCK7D | Fender Cover | 670 |
| JT13B | Blow Gun | 504 |
| LP7WR | Locking Pliers, 7" long | 338 |
| MG725 | Heavy Duty Air Impact Wrench, 1/2" Dr. | 464 |
| OEXM200B | Metric Combination Wrench, 12-Point, 20 mm | 243 |
| OEXM210B | Metric Combination Wrench, 12-Point, 21 mm | 243 |

| Stock No. | Description | Page |
|---|---|---|
| OEXM220B | Metric Combination Wrench, 12-Point, 22 mm | 243 |
| OEXM6B | Metric Short Combination Wrench, 12-Point, 6 mm | 246 |
| OEXM7B | Metric Short Combination Wrench, 12-Point, 7 mm | 246 |
| OEXM8B | Metric Short Combination Wrench, 12-Point, 8 mm | 246 |
| OEXM9B | Metric Short Combination Wrench, 12-point, 9 mm | 246 |
| OEXSM710B | Metric Short Combination Wrench Set 12-Point (10pc) | 246 |
| PPC104A | Pin Punch, 1/8" | 351 |
| PPC108A | Pin Punch, 1/4" | 351 |
| PPC204A | Starter Punch, 1/8" | 351 |
| PPC208A | Starter Punch, 1/4" | 351 |
| PPC3A | Center Punch, 5/16" | 351 |
| QD3RM30 | 1/2" Dr. Click Type Torque Wrench, 30 kg-m | 280 |
| S8 | 1/2" Dr. Universal Joint | 109 |
| SGCP1BR | Cotter Pin Puller | 588 |
| SGHBF500A | File Set with Handles (4pc) | 363 |
| SL80A | 1/2" Dr. Long Handle Sealed Ratchet | 185 |
| SN24C | 1/2" Dr. Breaker Bar, 24" long | 187 |
| SPBS24O | Prybar with Handle, 24" long, Orange | 330 |
| SRPC105 | Retaining Ring Pliers (5pc) | 339 |
| SXK3 | 1/2" Dr. Extension, 3" long | 189 |
| TA3 | 1/4"–3/8" Dr. Adaptor | 109 |
| TC28C | Tube Cutter | 13 |
| TDM117A | Metric Tap and Die Set (41pc) | 378 |
| TF72 | 1/4" Dr. Flex Head Sealed Ratchet | 103 |
| TFM428 | Flaring Tool | 14 |
| TMX1 | 1/4" Dr. Extension, 1" long | 108 |
| TMXK140 | 1/4" Dr. Extension, 14" long | 108 |
| UTK100 | Utility Knife | 361 |

**9200GMBO Complete Metric Set B**
- Includes: 9100AGMO, 9000GM2O plus KRA4059FPBO top chest and KRA4008FPBO roll cab

**9200GMO Metric Set B**
- More than 400pc
- Does not include tool storage

**9000GM2O Add-on Group B**
- More than 200pc
- Does not include tool storage



KRL751PBO




KRL756CPBO




9000GM3O

## 9000GM3O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 106ATMXWP | 1/4" Dr. Wobble Extension Set (6pc) | 108 |
| 196CF | Needle Nose Pliers with Cutter, 7 1/8" | 336 |
| 206AFXWP | 3/8" Dr. Wobble Plus Extension Set (6pc) | 144 |
| 214IMFMYA | 3/8" Dr. Shallow Impact Socket Set, 6-Point (14pc) | 163 |
| 214SIMFMYA | 3/8" Dr. Metric Deep Impact Socket Set, 6 Point (14pc) | 164 |
| 497CF | 90° Angle Jaw Needle Nose Pliers | 336 |
| 650 | Prybar, 6" | 260 |
| AWP120 | Adjustable Joint Tongue and Groove Pliers, 12 3/4" | 337 |
| BP8B | Ball Peen Hammer, 8 oz. | 356 |
| CJ2002 | Puller Set | 392 |
| F12LA | Long Handle | 142 |
| FADH10A | Adjustable Wrench, Cushion Handle, 10" | 272 |
| FAR7200 | Super Duty Air Ratchet, 3/8" Dr. | 464 |
| FBF80 | Bent Handle Flex Head | 138 |
| FK80 | 3/8" Dr. Short Handle Ratchet | 138 |
| HBBD32 | Dead Blow Ball Peen Hammer, 32 oz | 5 |
| HBBT24 | Bronze Tip Hammer, 24 oz | 355 |
| IMM200 | 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 20 mm | 200 |
| IMM210 | 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 21 mm | 200 |
| IMM220 | 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 22 mm | 200 |
| IMM230 | 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 23 mm | 200 |
| IMM240 | 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 24 mm | 200 |
| IPF800B | 3/8" Dr. Impact Universal Joint | 162 |
| IPFM10C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 10 mm | 165 |
| IPFM12C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 12 mm | 165 |
| IPFM13C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 13 mm | 165 |
| IPFM14C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 14 mm | 165 |
| IPFM15C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 15 mm | 165 |
| IPFM16C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 16 mm | 165 |
| IPFM17C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 17 mm | 165 |
| IPFM18C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 18 mm | 165 |
| IPFM19C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 19 mm | 165 |
| IPFM9C | 3/8" Dr. Metric Shallow Swivel Impact Socket, 9 mm | 165 |
| JCW60R | Creeper | 671 |
| KB2178 | Kit Bag | 351 |
| MG325 | 3/8" Dr. Air Impact Wrench | 464 |
| OEXM230B | Metric Combination Wrench, 12-Point, 23 mm | 243 |
| OEXM240B | Metric Combination Wrench, 12-Point, 24 mm | 243 |
| OEXM270B | Metric Combination Wrench, 12-Point, 27 mm | 243 |
| OEXM300B | Metric Combination Wrench, 12-Point, 30 mm | 243 |
| OEXM90B | Metric Combination Wrench, 12-Point, 9 mm | 243 |
| OXIM710B | Metric Midget Comb. Wrench Set, 12-Point (10pc) | 247 |
| OXIM7B | Metrc Midget Combination Wrench, 12-Point, 7 mm | 247 |
| OXIM8B | Metric Midget Combination Wrench, 12-Point, 8 mm | 247 |
| OXIM9B | Metric Midget Combination Wrench, 12-Point, 9 mm | 247 |
| PPB1012A | Bronzed Tapered Punch, 3/8" | 352 |
| PPC110A | Pin Punch, 5/16" | 351 |
| PPC112 | Pin Punch, 3/8" | 351 |
| PPC210A | Starter Punch, 5/16" | 351 |
| PPC5A | Punch and Chisel Holder | 351 |
| PPC824B | Flat Chisel, 3/4" | 351 |
| PPC828B | Flat Chisel, 7/8" | 351 |
| PT28E | Pick-up Tool | 682 |
| PWC14 | Wire Stripper/Cutter/Bolt Cutter | 344 |
| QD2RM1000 | Metric Adj. Click Type Torque Wrench 3/8" | 280 |
| RTD48 | Rethreading Kit (48pc) | 374 |
| S9704KFUA | Universal | 173 |
| S9706KRFUA | 3/8" Dr. Spark Plug Universal Socket, 6-Point, 5/8" | 372 |
| SDM400A | Screwdriver Bit Set (37pc) | 319 |
| SF80 | 1/2" Dr. Sealed Flex Head Ratchet | 185 |
| SGD304BR | Flat Tip Electronics Sc. Dr., .018" x 1/8" x 3" | 305 |
| SHDP162O | Phillips Tip Screwdriver #2, Orange | 307 |
| SHDP62IRO | *Phillips* Screwdriver, #2, Orange | 307 |
| SHDP63IRO | *Phillips* Tip Screwdriver #3, Orange | 307 |
| SIMM200 | 1/2" Dr. Deep Impact Socket, 6-Point, 20 mm | 202 |
| SIMM210 | 1/2" Dr. Deep Impact Socket, 6 Point, 21 mm 41 | 202 |
| SIMM220 | 1/2" Dr. Deep Impact Socket, 6-Point, 22 mm | 202 |
| SIMM230 | 1/2" Dr. Deep Impact Socket, 6-Point, 23 mm | 202 |
| SIMM240 | 1/2" Dr. Deep Impact Socket, 6-Point, 24 mm | 202 |
| SPBS12O | Prybar with Handle, 12", Orange | 330 |
| SSDE42C | Flat Tip Electronics Sc. Drive, .018 x 1/8 x 2" | 308 |
| SSDE44C | Flat Tip Electronics Sc. Drive, .018 x 1/8 x 4" | 308 |
| SSDE66C | Flat Tip Electronics Sc. Drive, .030" x 3/16" x 6" | 308 |
| SSDE68C | Flat Tip Electronics Sc. Drive, .028" x 3/16" x 8" | 308 |
| SSDMR1AO | Ratcheting Magnetic Screwdriver, Orange 137 | 315 |
| SX2 | 1/2" Dr. Extension, 2" 69 | 189 |
| TC123C | Tubing Cutter | 368 |
| TM61A | 1/4" Dr. Flexible Extension, 6" | 108 |
| TMXK110 | 1/4" Dr. Extension, 11" | 108 |
| TWM25 | 1/2", Dr. Metric Socket, 6-Point, 25 mm 36 | 191 |
| TWM26 | 1/2" Dr. Metric Socket, 6-Point, 26 mm | 191 |
| TWM27 | 1/2", Dr. Metric Socket, 6-Point, 27 mm | 191 |
| TWM30 | 1/2" Dr. Metric Socket, 6-Point, 30 mm | 191 |
| VSM807B | Metric Open End Wrench Set (7pc) | 256 |
| XBM605A | Metric Long Offset Box Wrench Set (5pc) | 249 |
| XOM605 | Metric Deep Offset Box Wrench Set (5pc) | 251 |

**9300GMBO Complete Metric Set C**
Includes: 9200GMO, 9000GM3O plus KRL751PBO tool chest and KRL756CPBO roll cab

**9300GMO Metric Set C**
- More than 600pc: includes all tools in 9200GMO and 9000GM3O
- Does not include tool storage

**9000GM3O Complete Metric Set C**
- Includes 9200GMO, 9000GM3O plus KRL751PBO top chest and KRL756CPBO roll cab

For the latest product components please visit:
**www.snapon.com/setbuilding**

WARNING • Read safety precautions on pages W1 to W4

# METRIC SETS D




9000GM4O




KRL751PBO

KRL756CPBO

## 9000GM4O Add-on Group

| Stock No. | Description | Page |
|---|---|---|
| 106ETMAMY | 1/4" Dr. Metric Hex Driver Set (6pc) | 119 |
| 10SSD | Offset Flat Tip Screwdriver | 311 |
| 111TMUSMA | 1/4" Dr. Metric U-Socket Set (11pc) | 113 |
| 120SSDP | Phillips® Offset Screwdriver, #1-#2 | 311 |
| 2050 | Prybar, 20" | 332 |
| 20SSD | Offset Flat Tip Screwdriver | 311 |
| 307IPLMY | 1/2" Dr. Impact Swivel Sockets, 6-Point (7pc) | 204 |
| AWP65 | Adjustable Joint Tongue & Groove Pliers | 337 |
| BP12B | Ball Peen Hammer, 12 oz | 356 |
| CHN480 | Adjustable Joint Pliers, 20" | — |
| CJ2003A | Rear Axle Puller Set | 392 |
| CJ2004 | Interchangeable Puller Set | 392 |
| CJ2005 | Puller Accessory Set | 392 |
| CM6551 | Miniature Screwdriver Set | 311 |
| DBTR129 | Drill Bit Set 1/16"–1/4" (29pc) | 450 |
| E703BCG | Elec. Needle Nose Pliers, Serrated Jaws | 341 |
| E704BCG | Elec. Needle Nose Pliers, 60º Bent Tip, Nonserrated | 341 |
| E710BCG | Taper Head Electronic Cutters, True Flush Cut | 342 |
| FADH6A | Adjustable Wrench, Cushion Handle, 6" | 272 |
| FAR25A | 1/4" Dr. Air Ratchet | 464 |
| FSM61 | 3/8" Dr. Metric Socket, 6-Point, 6 mm | 146 |
| FSM71 | 3/8" Dr Metric Socket, 6-Point, 7 mm | 146 |
| FSUM11A | 3/8" Dr. Shallow Universal Socket, 6-Point, 11 mm | 149 |
| FSUM16A | 3/8" Dr. Shallow Universal Socket, 6-Point, 16 mm | 149 |
| FSUM18A | 3/8" Dr. Shallow Universal Socket, 6-Point, 18 mm | 149 |
| FSUM19A | 3/8" Dr. Shallow Universal Socket, 6-Point, 19 mm | 149 |
| FX18 | 3/8" Dr. Extension, 18" | 143 |
| FX36 | 3/8" Dr. Extension, 36" | 143 |
| HBFE48 | Dead Blow Hammer, 48 oz | 5 |
| IMTMM10 | 1/4" Dr. Metric Impact Socket, 6-Point, 10 mm | 122 |
| IMTMM11 | 1/4" Dr. Metric Impact Socket, 6-Point, 11 mm | 122 |
| IMTMM12 | 1/4" Dr. Metric Impact Socket, 6-Point, 12 mm | 122 |
| IMTMM13 | 1/4" Dr. Metric Impact Socket, 6-Point, 13 mm | 122 |
| IMTMM14 | 1/4" Dr. Metric Impact Socket, 6-Point, 14 mm | 122 |
| IMTMM15 | 1/4" Dr. Metric Impact Socket, 6-Point, 15 mm | 122 |
| IMTMM5 | 1/4" Dr. Metric Impact Socket, 6-Point, 5 mm | 122 |
| IMTMM5.5 | 1/4" Dr. Metric Impact Socket, 6-Point, 5.5 mm | 122 |
| IMTMM6 | 1/4" Dr. Metric Impact Socket, 6-Point, 6 mm | 122 |
| IMTMM7 | 1/4" Dr. Metric Impact Socket, 6-Point, 7 mm | 122 |
| IMTMM8 | 1/4" Dr. Metric Impact Socket, 6-Point, 8 mm | 122 |
| IMTMM9 | 1/4" Dr. Metric Impact Socket, 6-Point, 9 mm | 122 |
| LP5WR | Curved Jaw Locking Plier, 6" | 338 |
| LP6LN | Long Nose Pliers, 6" | 338 |
| NDDM900A | Metric Nut Driver Set (9pc) | 318 |
| OEXM250B | Metric Combination Wrench, 12-Point, 25 mm | 243 |
| OEXM260B | Metric Combination Wrench, 12-Point, 26 mm | 243 |
| OEXM290B | Metric Combination Wrench, 12-Point, 29 mm | 243 |
| OEXM320B | Metric Combination Wrench, 12-Point, 32 mm | 243 |
| PDR3000A | Heavy Duty Air Drill, 3/8" | 464 |
| PPR708BK | Roll Pin Punch Set (8pc) | 352 |
| RBM1011C | 12-Point Metric Ratcheting Box Wrench | 239 |
| RBM1213C | 12-Point Metric Ratcheting Box Wrench | 239 |
| RBM1415C | 12-Point Metric Ratcheting Box Wrench | 239 |
| RBM1719C | 12-Point Metric Ratcheting Box Wrench | 239 |
| RXSM605B | Metric Flare Nut/Open End Wrench Set, 6-Point (5pc) | 257 |
| SFSM6 | 1/4" Dr. Metric Deep Socket, 6-Point, 6 mm | 147 |
| SFSM7 | 1/4 " Dr. Metric Deep Socket, 6-Point, 7 mm | 147 |
| SGFMN106 | Mixed File Set (6pc) | 363 |
| SHDTX315O | T15 TORX® Screwdriver, Orange | 311 |
| SHDTX320O | T20 *TORX* Screwdriver, Orange | 311 |
| SPBS8O | Prybar with Handle, Orange, 8" | 330 |
| SSDMR8AO | Ratcheting Magnetic Screwdriver, Orange | 315 |
| STMM4.5 | 1/4" Dr. Metric Deep Socket, 6-Point, 4.5 mm | 111 |
| SX15 | 1/2" Dr. Extension, 15" | 189 |
| TDM99117B | Metric Tap and Die Set (25pc) | 378 |
| TMM4.5 | 1/4" Dr. Metric Socket, 6-Point, 4.5 mm | 110 |
| TSM26 | 1/2" Dr. Metric Deep Socket, 6-Point, 26 mm | 192 |
| TSM27 | 1/2" Dr. Metric Deep Socket, 6-Point, 27 mm | 192 |
| TSM30 | 1/2" Dr. Metric Deep Socket, 6-Point, 30 mm | 192 |
| TSM32 | 1/2" Dr. Metric Deep Socket, 6-Point, 32 mm | 192 |
| TWM10A | 1/2" Dr. Metric Socket, 6-Point, 10 mm | 191 |
| TWM11A | 1/2" Dr. Metric Socket, 6-Point, 11 mm | 191 |
| TWM28 | 1/2" Dr. Metric Socket, 6-Point, 28 mm | 191 |
| TWM29 | 1/2" Dr. Metric Socket, 6-Point, 29 mm | 191 |
| TWM31 | 1/2" Dr. Metric Socket, 6-Point, 31 mm | 191 |
| TWM32 | 1/2" Dr. Metric Socket, 6-Point, 32 mm | 191 |
| VE200A | Puller Control Board | 392 |

### 9400GMBO Complete Metric Set D

- Includes: 9300GMO, 9000GM4O plus KRL751PBO top chest, KRL756CPBO roll cab and KRA276D wall cabinet

### 9400GMO Metric Set D

- More than 800pc: includes all tools in 9300GMO and 9000GM4O
- Does not include tool storage

### 9000GM4O Add-on Group D

- More than 175pc in the add-on set to 9300GMO Set C
- Does not include tool storage




Overview.....442

Cordless.....444

Air.....463

Accessories.....487

# POWER TOOLS

# SO MUCH POWER. SO MANY OPTIONS.

Snap-on provides you with almost countless ways to wield power – from lithium cordless impact wrenches, to robust air tools, to ergonomic sanders and much, much more. But it doesn't stop there. Because the power is paired with unrivaled comfort and control. Choose from any one of our vast selection of power tools. And help create a surge in your business.



## POWER

Snap-on puts the power in your hands – in any number of ways. Choose the tool, turn on the power, get the job done. End of story.

**POWERFUL TORQUE —** More power per pound. Snap-on® power tools are built with durable lightweight bodies – but pack a power punch.

**CORDLESS TOOLS —** With abundant power. Provides long-lasting power for the lithium series tools you use most.

**ACCESSIBILITY —** Big power to small spaces. Lets you get power to places where only hand tools used to go.

## COMFORT AND CONTROL

*Snap-on* power tools are ergonomically designed to provide both comfort and control. So while they have power, you'll have staying power.

**BALANCED WEIGHT —** Feel the difference. A lightweight housing design balances the weight, so you get better control.

**ERGONOMIC GRIPS —** It makes perfect sense: when a tool feels better in your hand, it's that much easier to use.

**COMPACT NOSE DESIGN —** By removing unnecessary bulk, you get better access to restricted areas. Less is more.

**"The power to do what you need, when and where you need it. No strings attached."**

James Millikin
Nolensville, TN

James has:
18volt 3/8" drive cordless impact - CT8810A



# UNPLUGGED. UNEQUALED.

Snap-on® cordless tools combine heavy-duty power with max mobility. What's more, you'll always have the proper tool for the proper torque – in low, medium and high torque applications.

**Lightweight and Comfortable —** Designed to feel balanced and natural in your hand.

**Power —** Pull the trigger and feel the power from an industry leader in cordless tools.

**Durability, Capability —** Tough tools that go anywhere – and do a great job when they arrive.

**Higher-Grade Materials —** Internal components combined with glass-filled nylon housings means these tools can tackle the toughest jobs.

**AN ENTIRE BATTERY OF BATTERIES.**

Power up with more battery options than ever before.

**18V Lithium Batteries**
The CTB8184 4.0Ah Battery is lightweight and long lasting, and contains the highest-grade lithium cells available. It features a built-in digital fuel gauge and a micro-controller that senses temperature and amperage – protecting the motor before it can overheat.

**MicroLithium 14.4V**
The new 14.4 MicroLithium™ 2.0Ah Battery has a quick charge time of 55 minutes, allowing you to work throughout the day on multiple jobs.



## Impacts

| Specifications | CT8850† | CT6818† | CT8815A† | CT8810A† | CT4415† | CT4418† | CT761† | CT725† | CT596† | CT595† |
|---|---|---|---|---|---|---|---|---|---|---|
| Battery Type | MonsterLithium™ 4.0 Ah | Ni-Cad 2.5 Ah | *MonsterLithium* 4.0 Ah | *MonsterLithium* 4.0 Ah | Ni-Cad 2.5 Ah | Ni-Cad 2.5 Ah | MicroLithium™ 2.0 Ah | *MicroLithium* 2.0 Ah | Ni-Cad 700 mAh | Ni-Cad 700 mAh |
| Battery Voltage | 18 | 18 | 18 | 18 | 18 | 18 | 14.4 | 14.4 | 9.6 | 9.6 |
| Square Drive, inches | 1/2 | 1/2 | 1/2 | 3/8 | 1/2 | 3/8 | 3/8 | 1/4 | 3/8 | 1/4 |
| Torque Output, ft-lb (N•m) | 600 (813) | 500 (678) | 230 (311.8) | 230 (311.8) | 180 (244) | 180 (244) | 120 (163) | 70 (95) | 60 (81) | 50 (67) |
| Blows Per Minute, BPM | 2,280 | 2,150 | 3,480 | 3,480 | 3,440 | 3,440 | 3,000 | 3,000 | 3,000 | 3,000 |
| Free Speed, RPM | 1,900 | 1,900 | 2,400 | 2,400 | 2,230 | 2,230 | 2,200 | 2,500 | 2,500 | 2,500 |
| Length, inches (mm) | 9.6 (244) | 9.6 (244) | 6.5 (165) | 6.5 (165) | 6.5 (165) | 6.5 (165) | 6.3 (160) | 6.3 (160) | 6.2 (157) | 6.2 (157) |
| Height w/ Battery, inches (mm) | 10.2 (259) | 10.2 (259) | 9.5 (241) | 9.5 (241) | 9.5 (241) | 9.5 (241) | 7.7 (195) | 7.7 (195) | 7.1 (180) | 7.1 (180) |
| Weight w/ Battery, lb (kg) | 7.3 (3) | 8 (3.6) | 4.5 (2.4) | 4.5 (2.4) | 5.5 (2.5) | 5.5 (2.5) | 2.5 (1.1) | 2 (0.9) | 1.7 (.77) | 1.7 (.77) |
| Charge Time (minutes) | 60 | 40 | 60 | 60 | 40 | 40 | 55 | 55 | 55 | 55 |
| Warranty (battery) | 2 Years/ 1,000 Cycles | 1 Year | 2 Years/ 1,000 Cycles | 2 Years/ 1,000 Cycles | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year |
| Warranty (tool, charger) | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year |
| Pinned Anvil Version | CT8850P† | CT6818P† | CT8815AP | CT8810AP | – | CT4418P | – | – | – | CT4418P |
| Quick Change Chuck Version (hex size of chuck) | CT8850QC† (7/16") | CT6818QC† (7/16") | – | CT8810AQC (1/4") | – | CT4418QC (1/4") | CT761QC† (1/4") | CT725QC† (1/4") | CT596QC | – |
| Tool Body Only | CT8850DB† | CT6818DB† | CT8815ADB | CT8810ADB | CT4415DB | CT4418DB | CT761DB† | CT725DB† | CT596DB | CT595DB |

†CE

## Drills/Drivers

| Stock No. | CDR8850H | CDR6850 | CDR761A | CTS761 | CTS725 | CTS596 |
|---|---|---|---|---|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah | Ni-Cad 2.5 Ah | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah | Ni-Cad 700 mAh |
| Battery Voltage | | 18 | 14.4 | 14.4 | 14.4 | 9.6 |
| Chuck Capacity, inches | 1/2 | 1/2 | 3/8 | 1/4 hex | 1/4 hex | 1/4 hex |
| Torque Output, inches lb (N•m) | 450 (51) | 450 (50.8) | 150 (16.9) | 150 (17) | 100 (11.2) | 60 (6.8) |
| Clutch Settings | 22 | 22 | 9 | 9 | 9 | 6 |
| Gear Box Type | 2-speed | 2-speed | 2-speed | 2-speed | Single speed | Single speed |
| RPM (Low) | 0–500 | 0–500 | 0–400 | 0–400 | — | — |
| RPM (High) | 0–1,800 | 0–1,800 | 0–1,400 | 0–1,400 | 0–400 | 0–400 |
| Charge Time (minutes) | 60 | 40 | 55 | 55 | 55 | 55 |
| Length, inches (mm) | 10.25 (260) | 10.25 (260) | 7.5 (190.5) | 5.8 (147.3) | 5.4 (137) | 5.2 (132) |
| Weight w/ Battery, lb (kg) | 5.2 (2.3) | 6.3 (2.8) | 2.4 (1.1) | 2.0 (0.9) | 2 (0.9) | 1.5 (.68) |
| Warranty (battery) | 2 Years/ 1,000 Cycles | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year |
| Warranty (tool, charger) | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year |
| Tool Body Only | CDR8850HDB† | CDR6850DB† | CDR761ADB | CTS761DB | CTS725DB | CTS596DB |

†CE

**⚠WARNING**

• Read and follow safety messages for each type of Cordless Tool on the following pages and the safety precautions on pages W1 to W4

# CORDLESS: QUICK REFERENCE CHART

## Reciprocating Saws/Grease Guns

| Stock No. | CTRS8850† | CTRS761† | CGG4850† |
|---|---|---|---|
| Battery Type | MonsterLithium™ 4.0 Ah | MicroLithium™ 2.0 Ah | Ni-Cad 2.5 Ah |
| Battery Voltage | 18 | 14.4 | 18 |
| Stroke Length, inches (mm) | 1 (25.4) | 1/2 (12.7) | — |
| Strokes Per Minute | 2,400 | 0-3,000 | — |
| Capacity (tubes dispensed w/ one battery) | — | — | 12 |
| Hose Length, inches (mm) | — | — | 30 (762) |
| Pressure Rating (PSI) | — | — | 7500 |
| Charge Time (minutes) | 60 | 55 | 40 |
| Length, inches (mm) | 18 (457) | 12" (304mm) | 15.8 (401) |
| Height w/ Battery, inches (mm) | 8.25 (210) | 12.5 (317.5) | 13 (330) |
| Weight w/ Battery, lb (kg) | 7.7 (3.4) | 1.4 (.64) | 9.5 (4.3) |
| Warranty (battery) | 2 Years/1,000 Cycles | 1 Year | 1 Year |
| Warranty (tool, charger) | 1 Year | 1 Year | 1 Year |
| Tool Body Only | CTRS8850DB† | CTRS761DB† | CGG4850DB† |

†CE

## Adhesive Guns

| Stock No. | CAG8850DBKIT |
|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah |
| Battery Voltage | 18 |
| Weight w/ Battery, lb (kg) | 1.2 (0.5) |
| Actuation | Manual Feed |
| Adhesive Output | 2.5 lb Per Hour |
| Adhesive Stick | 1/2" Round |
| Nozzle Type | Ball Check |
| Stroke: Grams Per Squeeze | 1.2 |
| Service Rating | Industrial |
| Temperature | 350 °F Nominal, 380 °F Maximum |
| Temperature Control | Solid State |

## Ratchets

| Stock No. | CTR725A | CTR761A |
|---|---|---|
| Battery Type | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah |
| Battery Voltage | 14.4 | 14.4 |
| Square Drive, inches (mm) | 1/4 (6) | 3/8 (10) |
| Torque Output, ft-lb (N•m) | 30 (40.6) | 30 (40.6) |
| Free Speed, RPM | 350 | 350 |
| Charge Time (minutes) | 55 | 55 |
| Weight, lb (kg) | 2.5 (1.1) | 2.5 (1.1) |
| Height w/ Battery, inches (mm) | 12.2 (310) | 12.2 (310) |
| Warranty (battery) | 1 Year | 1 Year |
| Warranty (tool, charger) | 1 Year | 1 Year |
| Tool Only | CTR725ADB | CTR761ADB |

## Grinder

| Stock No. | CTGR8850 |
|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah |
| Battery Voltage | 18 |
| Wheel Size, inches (mm) | 4.5 (114) or 5 (127) |
| Arbor Size, inches (mm) | 7/8 (22) |
| Free Speed, RPM | 8,000 |
| Length w/ Battery, inches (mm) | 16.5 (419) |
| Weight w/ Battery, lb (kg) | 5.7 (2.4) |
| Warranty (Battery) | 2 Years/1,000 Cycles |
| Warranty (tool, charger) | 1 Year |
| Tool Only | CTGR8850DB |




CT8850




CT8850G




CT8850O




CT6818

## 18V Impact Wrenches

### CT8850 18V MonsterLithium™ Impact

- 600 ft-lb torque output
- Built-in super bright 1 W LED light
- Built-in anvil brake stop
- Digital microprocessor controlled switch for precise control
- Rare earth magnet motor provides greater torque
- Housing screen keeps debris out of the tool
- Thermal temperature controlled motor prolongs tool life
- Includes two *MonsterLithium* batteries and charger in a tote bag
- Also available: CT8850G (green kit), CT8850DBG (green, tool only), CT8850O (orange kit) and CT8850DBO (orange, tool only)

### CT6818 18V Ni-Cad Impact

- 500 ft-lb torque output
- Glass filled nylon housing provides durability and strength
- Patented air flow system routes cool air over the motor to extend tool life
- Needle bearing support helical cut gears distribute even torque load from the motor
- Ergonomic cushion grip absorbs vibration and reduces fatigue
- Super heavy duty motor is cushion mounted to reduce vibration
- One-handed forward/reverse lever
- Includes two Ni-Cad batteries and charger in a tote bag

| Stock No. | CT8850† | CT6818† |
|---|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah | Ni-Cad 2.5 Ah |
| Battery Voltage | 18 | 18 |
| Square Drive, inches (mm) | 1/2 (13) | 1/2 (13) |
| Anvil Type | Friction Ring | Friction Ring |
| Torque Output, ft-lb (N•m) | 600 (813) | 500 (678) |
| Blows Per Minute, bpm | 2,280 | 2,150 |
| Free Speed, RPM | 1,900 | 1,900 |
| Charge Time (minutes) | 60 | 40 |
| Length, inches (mm) | 9.6 (244) | 9.6 (244) |
| Weight w/ Battery, lb (kg) | 7.3 (3) | 8 (3.6) |
| Warranty (battery) | 2 Years/1,000 Cycles | 1 Year |
| Warranty (tool & charger) | 1 Year | 1 Year |
| Pinned Anvil Version | CT8850P† | CT6818P† |
| Quick Change Chuck Version (hex size of chuck) | CT8850QC† (7/16") | CT6818QC† (7/16") |
| Tool Only | CT8850DB† | CT6818DB† |
| Battery (qty) | CTB8185† (2) | CTB4187† (2) |
| Tote Bag | CTUTOTE | CTUTOTE |
| Charger | CTC720† | CTC620† |
| Optional Protective Boot | CT8850BOOT | CT8850BOOT |
| Color Option: Green | CT8850G | — |
| Color Option: Orange | CT8850O | — |

†CE

**⚠WARNING**



- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# CORDLESS: 18-VOLT IMPACT WRENCHES



CT8815A



CT8810A



CT8810AO



CT8810AG

## 18V Impact Wrenches

**CT8815A/CT8810A 1/2" and 3/8" Square Drive 18V Cordless Impact Wrench**

- Provides an incredibly powerful 230 ft-lb at a light weight of 4.5 lb
- High capacity 72 watt-hour, 18V MonsterLithium™ battery for long run time
- High efficiency rare-earth magnet, four-brush motor for maximum durability
- The CT8815A can remove 525 bolts tightened at 200 ft-lb on one battery charge
- Cold-formed, alloy steel anvil for maximum durability
- The digital fuel gauge and micro-controller in the lithium battery monitors temperature and amperage to prevent motor overheating
- Ergonomic overmolded cushion grip for continuous use with less fatigue
- Includes tool, 2 batteries and a tote bag
- Also available: CT8810G (green kit), CT8810AGDB (green, tool only), CT8810AO (orange kit) and CT8810AODB (orange, tool only)

| Specifications | CT8815A† | CT8810A† |
|---|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah | *MonsterLithium* 4.0 Ah |
| Battery Voltage | 18 | 18 |
| Square Drive, inches (mm) | 1/2 (13) | 3/8 (10) |
| Anvil Type | Friction Ring | Friction Ring |
| Torque Output, ft-lb (N•m) | 230 (311.8) | 230 (311.8) |
| Blows Per Minute, bpm | 3,480 | 3,480 |
| Free Speed, RPM | 2,400 | 2,400 |
| Charge Time (minutes) | 60 | 60 |
| Length, inches (mm) | 6.5 (165) | 6.5 (165) |
| Weight w/ Battery, lb (kg) | 4.5 (2.4) | 4.5 (2.4) |
| Warranty (battery) | 2 Years/1,000 Cycles | 2 Years/1,000 Cycles |
| Warranty (tool & charger) | 1 Year | 1 Year |
| Pinned Anvil Version | CT8815AP† | CT8810AP† |
| Quick Change Chuck Version (hex size) | — | CT8810AQC (1/4") |
| Tool Only | CT8815ADB† | CT8810ADB† |
| Battery (qty) | CTB8185† (2) | CTB8185† (2) |
| Tote Bag | CTUTOTE | CTUTOTE |
| Charger | CTC720† | CTC720† |
| Optional Protective Boot | CT8810BOOT | CT8810BOOT |

†CE – DE, ES, GB, FR, IT, NL, UL, CUL




CT4415




CT4418

## 18V Impact Wrenches

**CT4415/CT4418 1/2" and 3/8" Square Drive 18V Cordless Impact Wrenches**

- 180 ft-lb torque output
- Light illuminates the work area
- High efficiency rare-earth magnet, four-brush, motor for maximum durability
- Micro-controlled digital switch, with variable speed, protects the unit from overheating
- High capacity 2.5 Ah, 18V Ni-Cad battery for long run time
- Alloy steel, heat treated, helical gears for maximum durability
- Alloy steel hammer and gear carrier, accurately machined for maximum durability
- Patented impact mechanism design
- Cold-formed, alloy steel anvil for maximum durability
- Housings are made from high-strength, impact-modified 30% glass-filled Nylon 6 material
- Ergonomic design, with soft grip handles to reduce user fatigue
- Includes tool, two batteries and a tote bag

| Specifications | CT4415† | CT4418† |
|---|---|---|
| Battery Type | Ni-Cad 2.5 Ah | Ni-Cad 2.5 Ah |
| Battery Voltage | 18 | 18 |
| Square Drive, inches (mm) | 1/2 (13) | 3/8 (10) |
| Anvil Type | Friction Ring | Friction Ring |
| Torque Output, ft-lb (N•m) | 180 (244) | 180 (244) |
| Blows Per Minute, bpm | 3,440 | 3,440 |
| Free Speed, RPM | 2,230 | 2,230 |
| Charge Time (minutes) | 40 | 40 |
| Length, inches (mm) | 6.5 (165) | 6.5 (165) |
| Weight w/ Battery, lb (kg) | 5.5 (2.5) | 5.5 (2.5) |
| Warranty (battery) | 1 Year | 1 Year |
| Warranty (tool & charger) | 1 Year | 1 Year |
| Pinned Anvil version | — | CT4418P† |
| Quick Change Chuck version (hex size) | — | CT4418QC (1/4") |
| Tool Only | CT4415DB | CT4418DB† |
| Battery (qty) | CTB4187† (2) | CTB4187† (2) |
| Tote Bag | CTUTOTE | CTUTOTE |
| Charger | CTC620† | CTC620† |
| Optional Protective Boot | CT8810BOOT | CT8810BOOT |

† CE

**⚠WARNING**

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# CORDLESS: 18-VOLT PLATFORMS




CDR8850H




CDR6850

## 18V Drills

**CDR8850H 18V MonsterLithium™ Hammer Drill**

- 1/2" single sleeve steel chuck with carbide jaws
- Heavy duty gearing designed for metal drilling
- Overmolded ergonomic cushion grip absorbs vibration and reduces user fatigue
- Digital microprocessor-controlled variable speed switch maximizes performance, runtime and durability
- 22-position clutch with two-speed gearbox provides torque control for the correct application
- Super bright 1 watt LED illuminates work area
- Stainless-steel motor screen keeps debris out of motor to extend life
- Included two 18V Lithium 4.0 Ah batteries and charger with a tote bag

**CDR6850 18V Ni-Cad Drill**

- Industrial strength, heavy duty gearing designed for drilling in metal
- Heavy duty single sleeve keyless chuck with carbide jaws grips bits securely and prevents slippage
- 22-position clutch with a two-speed gearbox provides torque control for driving applications
- Glass filled nylon housing is rugged and provides durability and strength
- Overmolded ergonomic cushion grip absorbs vibration and reduces user fatigue
- Stainless-steel motor screens keep debris out of the motor, extending tool life
- Contoured variable speed trigger provides ergonomic comfort and superior control
- Includes tool, 1 battery and a tote bag

| Specifications | CDR8850H† | CDR6850† |
|---|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah | Ni-Cad 2.5 Ah |
| Battery Voltage | 18 | 18 |
| Chuck Capacity, inches (mm) | 1/2 (13) | 1/2 (13) |
| Torque Output, in-lb (N•m) | 450 (50.8) | 450 (50.8) |
| Clutch Settings | 22 | 22 |
| Gear Box Type | 3-speed | 2-speed |
| Hammer Mode | Yes | No |
| RPM (Low) | 0–500 | 0–500 |
| RPM (High) | 0–1,800 | 0–1,800 |
| Charge Time (minutes) | 60 | 40 |
| Length, inches (mm) | 10.25 (260) | 10.25 (260) |
| Weight w/ Battery, lb (kg) | 5.2 (20) | 6.3 (2.8) |
| Height w/ Battery, inches (mm) | 9.75 (247.6) | 9.75 (247.6) |
| Warranty (tool & charger) | 1 Year | 1 Year |
| Warranty (battery) | 2 Years/1,000 Cycles | 1 Year |
| Battery (qty) | CTB8185† (2) | CTB4187† (2) |
| Tote Bag | CTUTOTE | CTUTOTE |
| Charger | CTC720† | CTC620† |
| Tool Only | CDR8850HDB† | CDR6850DB† |

†CE



CGG4850

## 18V Grease Guns

- All steel heavy duty gearing provides strength and durability
- High pressure 7,500 PSI hose stays flexible in cold weather
- Planetary spur gear system resists wear and stripping
- Includes tool, 2 batteries and a tote bag

| Specifications | CGG4850† |
|---|---|
| Battery Type | Ni-Cad 2.5 Ah |
| Battery Voltage | 18 |
| Capacity, Tubes Per Charge | 12 |
| Hose Length, inches (mm) | 30 (762) |
| Charge Time (minutes) | 40 |
| Length, inches (mm) | 15.8 (401) |
| Weight w/ Battery, lb (kg) | 9.5 (4.3) |
| Warranty (tool & charger) | 1 Year |
| Warranty (battery) | 1 Year |
| Battery (qty) | CTB4187† (2) |
| Tote Bag | CTTOTEA |
| Charger | CTC620† |
| Tool Only | CGG4850DB |

†CE



CTRS8850

### CTRS8850 18V Cordless Reciprocating Saw

- Two battery choices available: 18V Lithium or 18V Ni-Cad match the needs of any application
- 75A rated, heavy duty variable speed trigger provides long life and is contoured to reduce user fatigue
- Heavy duty 14 gauge internal wiring withstands high current loads during heavy sawing
- Spring loaded blade retention system requires no tools and ejects broken blades easily
- Nonslip cushion grip nose reduces vibration and provides positive tool control
- Heavy duty armature and balanced motor design provide smooth operation
- Turbine style cooling system reduces heat buildup, extending tool life
- Sealed nose mechanism prevents dirt and sawing debris from damaging internal components
- Includes tool, two batteries and a tote bag

## 18V Reciprocating Saws

| Specifications | CTRS8850† |
|---|---|
| Battery Type | MonsterLithium™ 4.0 Ah |
| Battery Voltage | 18 |
| Stroke Length, inches (mm) | 1 (25.4) |
| Strokes per Minute | 2,400 |
| Charge Time (minutes) | 60 |
| Length, inches (mm) | 18 (457) |
| Weight w/ Battery, lb (kg) | 6 (2.7) |
| Warranty (tool & charger) | 1 Year |
| Warranty (battery) | 2 Years/1,000 Cycles |
| Battery (qty) | CTB8185† (1) |
| Tote Bag | CTTOTEA |
| Charger | CTC720† |
| Tool Only | CTRS8850DB |

†CE

**⚠WARNING**

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# CORDLESS: 18-VOLT PLATFORMS



CTGR8850

## 18V Grinders/Cut-off Tool

- 8,000 RPMs handles most grinding jobs with ease
- Ultra slim head – lets you get into areas other grinders cannot
- Battery rotates 270° – the battery will not get in the way
- Takes 4.5" or 5" wheels – more options to get the job done fast
- Anti-vibration handle – allows you to work longer and more comfortably
- Replaceable motor screen – keeps debris out of the motor so the tool lasts longer
- Seven-position safety guard – lets you tackle most jobs with less effort
- Toolless guard removal – simply pull one guard off and slide the other one on
- Includes tool, one battery and tote bag

| Specifications | CTGR8850 |
|---|---|
| Battery Type | MonsterLithium™ 4.0 Ah |
| Battery Voltage | 18 |
| Wheel Size, inches (mm) | 4.5 (114) or 5 (127) |
| Arbor Size, inches (mm) | 7/8 (22) |
| Free Speed, RPM | 8,000 |
| Warranty (tool) | 1 Year |
| Length w/ Battery, inches (mm) | 16.5 (419) |
| Warranty (battery) | 2 Years/1,000 Cycles |
| Tool Only | CTGR8850DB |
| Battery (qty) | CTB8185 (1) |
| Battery Charger | CTC720 (1) |
| Tote Bag | CTUTOTE |
| Replacement Grinding Wheel | PT450-WH (4.5") |
| Replacement Cut-off Wheel | CTGR-CW50 |



CAG8850DKIT
(battery sold separately)

## 18V Cordless Adhesive Guns

- High efficiency melt chamber up to 2.2 lb of material Output Per Hour
- Precision, Solid State Temperature Control – state-of-the-art electronics for consistent performance
- Easy Squeeze Two-Finger Trigger – unique design allows for constant use with no fatigue
- Low Battery/Auto Shut-Off Alarm – audible signal lets you know when battery is low
- Rugged High Impact Nylon Housing
- On/Off Activator – one push start up for rapid ‹4 minute warm-up time
- Ready/On/Low Battery Indicator – visual indicator allows the user to quickly see the state of operation

**Applications:**
Dent pulling, temporary metal tacking, pin repair, wire staking, woods, metals, plastics, fiberglass

**Kit Includes:**
CAG6850DB, three different nozzles and six assorted adhesive sticks (battery and charger not included)

| Specifications | CAG8850DBKIT |
|---|---|
| Battery Type | *MonsterLithium* 4.0 Ah |
| Battery Voltage | 18 |
| Actuation | Manual Feed |
| Adhesive Output | 2.5 lb Per Hour |
| Adhesive Stick | 1/2" Round |
| Nozzle Type | Ball Check |
| Stroke: Grams Per Squeeze | 1.2 |
| Service Rating | Industrial |
| Temperature | 350 °F Nominal, 380 °F Maximum |
| Temperature Control | Solid State |
| Weight with Battery | 1.2 (0.5) |



CADP8850KIT

**CADP8850KIT 18V Cordless Adhesive Gun Dent Pulling Kit**

- CADP8850 Mini Lifters ergonomic design means less hand fatigue
- CADP8850-1 high strength pull tabs do not stretch
- New CAG6850-901 blue glue provides the strongest pull in all temperatures and humidly of any dent glue on the market
- The CAG6850-901 blue glue in combination with the CADP8850-1 pull tabs exceeded all other tab and glue combination pull strength by 20% in lab testing
- CAG6850-901 blue glue peels off easily with solvent


CT761


CT725


CTS761


CTS725

## *MicroLithium* Impact Wrenches and Screwdrivers

| | Impact Wrenches | | Screwdrivers | |
|---|---|---|---|---|
| **Specifications** | **CT761†** | **CT725†** | **CTS761†** | **CTS725†** |
| **Battery Type** | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah |
| **Battery Voltage** | 14.4 | 14.4 | 14.4 | 14.4 |
| **Square Drive, inches (mm)** | 3/8 (13) | 1/4 (6) | 1/4 Hex | 1/4 Hex |
| **Torque Output, ft-lb (N•m)** | 3/8 (10) | 70 (95) | — | — |
| **Torque Output, in-lb (N•m)** | — | — | 150 (17) | 100 (11.2) |
| **Clutch Settings** | — | — | 9 | 9 |
| **Free Speed, RPM** | 2,500 | 2,500 | 400/1,400 | 400 |
| **Blows Per Minute, bpm** | 3,000 | 3,000 | — | — |
| **Charge Time (minutes)** | 55 | 55 | 55 | 55 |
| **Length, inches (mm)** | 6.3 (160) | 6.3 (160) | 5.8 (147.3) | 5.4 (137) |
| **Height, inches (mm)** | 7.8 (197) | 7.6 (193) | 7.8 (198.1) | 7.7 (195) |
| **Weight w/Battery, lb (kg)** | 2 (0.9) | 2 (0.9) | 2 (0.9) | 2 (0.9) |
| **Warranty (tool & charger)** | 1 Year | 1 Year | 1 Year | 1 Year |
| **Warranty (battery)** | 1 Year | 1 Year | 1 Year | 1 Year |
| **Quick Change Chuck version (hex size)** | **CT761QC†** | **CT725QC†** | — | — |
| **Tool Only** | **CT761DB** | **CT725DB** | **CTS761DB†** | **CTS725DB†** |
| **Battery (qty)** | **CTB8172 (2)** | **CTB8172 (2)** | **CTB8172† (2)** | **CTB8172 (2)** |
| **Tote Bag** | **CTUTOTE** | **CTUTOTE** | **CTUTOTE** | **CTUTOTE** |
| **Charger** | **CTC772†** | **CTC772** | **CTC772†** | **CTC772†** |

*UL® and CUL listed

† CE

### CT761 3/8" Square Drive 14.4V *MicroLithium* Cordless Impact Kit

- 2,000 RPM free speed
- 120 ft-lb (162.7 N•m) torque output
- Variable speed trigger
- Built-in brake
- Built-in LED light
- Also available: CT761G (green), CT761DBG (green, tool only), CT761O (orange) and CT761DBO (orange, tool only)

### CT725 1/4" Square Drive 7.2/14.4V *MicroLithium* Cordless Impact Kit

- 60 ft-lb of torque output
- Variable-speed digital toggle-style trigger
- Built-in brake stops the anvil from spinning
- Twin-beam LED lights
- Built-in fuel gauge
- Also available: CT725G (green), CT725DBG (green, tool only), CT725O (orange) and CT725DBO (orange, tool only)

### CTS725 1/4" Hex 7.2/14.4V *MicroLithium* Cordless Screwdriver

- 100 in-lb of torque output
- 400 RPM
- Variable-speed digital toggle-style trigger
- 275 in-lb manual spindle lock
- Nine-position clutch
- Built-in LED lights
- Also available: CTS725G (green), CTS725DBG (green, tool only), CTS725O (orange) and CTS725DBO (orange, tool only)

### CTS761 14.4V Cordless Screwdriver

- Digital variable-speed toggle-style trigger for precise control
- Twin-beam headlights illuminate the work area
- Built-in brake stops the tool from throwing sockets and fasteners
- Nine-position clutch allows you to dial in the proper torque
- 150 in-lb of torque output
- Overcurrent protection protects the electronics
- Under voltage protection will not overdraw the battery
- Built-in gauge displays the battery charge state
- Screened motor keeps debris from entering critical components
- Cushion grip handle provides positive tool control with less fatigue
- Glass-filled nylon housing for durability
- Super bright LED head light
- Two-Speed Gearbox – 400/1,400 RPM
- 300 in-lb manual spindle lock torque
- Also available: CTS761G (green), CTS761DBG (green, tool only), CTS761O (orange) and CTS761DBO (orange, tool only)

**⚠WARNING**

- Do not use grinder without the guard
- Read safety precautions on pages W1 to W4

# CORDLESS: 14.4-VOLT MICROLITHIUM™ PLATFORMS


CTR725A


CTR725AO


CTR725AG


CTR761A


CTR761AO


CTR761AG

## 14.4V *MicroLithium* Ratchets

- 30 ft-lb torque output
- Digital variable-speed trigger for precise control
- Built-in brake stops the tool from throwing sockets and fasteners
- Uses a chromed wear bushing to increase brake life
- Over and under temperature protection keeps tool operating at peak efficiency
- Battery "fuel gauge" LED cleverly integrated into handle
- Cushion-grip handle provides positive tool control with less fatigue
- Large, accessible reversing knob for easy mechanism direction changes
- Integrated LED headlight
- Includes tool, two batteries, charger and tote bag
- Also available: CTR725AG (green), CTR725AO (orange), CTR761AG (green) and CTR761AO (orange) versions

| Specifications | CTR725A | CTR761A |
|---|---|---|
| Battery Type | *MicroLithium* 2.0 Ah | *MicroLithium* 2.0 Ah |
| Battery Voltage | 14.4 | 14.4 |
| Charge Time (minutes) | 55 | 55 |
| Square Drive, inches (mm) | 1/4 (6) | 3/8 (10) |
| Torque Output, ft-lb (N•m) | 30 (40.6) | 30 (40.6) |
| Manual Torque, ft-lb (N•m) | 45 (61) | 158 (214) |
| Free Speed, RPM | 350 | 350 |
| Height w/ Battery, inches (mm) | 12.2 (310) | 12.2 (310) |
| Weight w/ Battery, lb (kg) | 2.5 (1.1) | 2.5 (1.1) |
| Warranty (tool & charger) | 1 Year | 1 Year |
| Warranty (battery) | 1 Year | 1 Year |
| Tool Only | CTR725ADB | CTR761ADB |
| Battery (qty) | CTB8172 (2) | CTB8172 (2) |
| Tote Bag | CTUTOTE | CTUTOTE |
| Battery Charger | CTC772 | CTC772 |

CE – DE, ES, FR, IT, GB, NL, JP


CTRS761

## 14.4V *MicroLithium* Saws

### CTRS761 Cordless Reciprocating Saw

| Specifications | CTRS761 |
|---|---|
| Battery Type | *MicroLithium* 2.0 Ah |
| Battery Voltage | 14.4 |
| Length, inches (mm) | 12 (304) |
| Weight w/ Battery Pack, lb (kg) | 1.4 (.64) |
| Weight w/ Battery, lb (kg) | 3.2 (1.4) |
| Stroke Length, inches (mm) | 5/8 (15.8) |
| Strokes per Minute | 0–3,000 |
| Warranty (tool & charger) | 1 Year |
| Tool Only | CTRS761DB |




**CDR761A**

## 14.4V Drill

| Specifications | CDR761A |
|---|---|
| Battery Type | *MicroLithium* 2.0 Ah |
| Battery Voltage | 14.4 |
| Chuck Cap., inches | 3/8 (10) |
| Clutch Settings | 9 |
| Free Speed, RPM | 0–400 Low (0–1,400 High) |
| Height, inches (mm) | 7.8 (198.1) |
| Length, inches (mm) | 7.5 (190.5) |
| Torque Output, in-lb (N•m) | 150 (16.9) |
| Weight w/ Battery, lb (kg) | 2.4 (1.1) |
| Operating Temperature | -4 °F (-20 °C) to 140 °F (60 °C) |
| Sound Pressure Level, dB(A) | 73.7 |
| Sound Power Level, dBa | 85.3 |
| Warranty (tool & charger) | 1 Year |
| Warranty (battery) | 1 Year |
| Tote Bag | CTUTOTE |
| Tool Only | CDR761ADB |
| Battery (qty) | CTB8172 (2) |
| Battery Charger | CTC772 |

**CDR761A 14.4V *MicroLithium* Cordless Drill Kit**

- Lightweight drill with battery only 2.4 lb
- Small size to get in tight spots – under dash, firewall, etc.
- Cushion grip handle – nonslip, comfort for the operator, positive tool control allows the operator to work longer with less fatigue
- 150 in-lb of torque handles a wide variety of applications
- Two-speed drill (400/1,400 RPM) – low speed for higher torque applications/high speed for steel drilling
- Variable speed switch for featherability and control
- Fuel gauge lets you keep track of battery capacity
- Nine-position clutch delivers a range of torques from 8–50 in-lb
- 3/8" keyless drill chuck-single sleeve durable steel chuck make changing bits easy
- Includes tool, two batteries, charger and tote bag

**⚠WARNING**

- Do not use in an explosive or flammable atmosphere
- Read safety precautions on pages W1 to W4

# CORDLESS: 9.6-VOLT NI-CAD BATTERY PLATFORMS




**CT596**




**CT596QC**




**CTS596**

## 9.6V Impact Wrenches

- Small, lightweight design is easy to control and reduces user fatigue
- Oversized forward/reverse toggle trigger for versatility
- Integrated soft grip handle provides comfort and positive tool control
- Tapered, lightweight, aluminum nose gets into restricted applications easily
- Includes tool, two batteries, charger and tote bag

## 9.6V Screwdriver

- 1/4" quick change hex chuck provides secure bit retention
- Six position clutch for added torque control
- Small, lightweight design maneuvers easily in restricted access applications
- Up to 250 in-lb of manual torque can be applied to break stubborn fasteners loose
- Gearless spindle lock has no teeth or gears to break or chip
- Includes tool, two batteries, charger and tote bag

| | Impact Wrenches | | | Screwdriver |
|---|---|---|---|---|
| **Specifications** | **CT596** | **CT596QC** | **CT595** | **CTS596** |
| **Battery Type** | Ni-Cad 700 mAh | Ni-Cad 700 mAh | Ni-Cad 700 mAh | Ni-Cad 700 mAh |
| **Battery Voltage** | 9.6 | 9.6 | 9.6 | 9.6 |
| **Square Drive, inches** | 3/8 | 1/4 hex | 1/4 | 1/4 hex |
| **Torque Output, ft-lb (N•m)** | 60 (81.3) | 45 (61) | 50 (67) | – |
| **in-lb** | — | — | — | 60 (6.8) |
| **Clutch Settings** | — | — | — | 6 |
| **Free Speed, RPM** | 2,500 | 2,500 | 2,500 | 375 |
| **Blows Per Minute, bpm** | 3,000 | 3,000 | 3,000 | — |
| **Charge Time (minutes)** | 55 | 55 | 55 | 55 |
| **Length, inches (mm)** | 6.2 (157) | 6.5 (165) | 6.2 (157) | 5.2 (132) |
| **Weight w/ Battery, lb (kg)** | 1.7 (.77) | 1.7 (.77) | 1.7 (.77) | 1.5 (.68) |
| **Height w/ Battery, inches (mm)** | 7.1 (180) | 7.1 (180) | 7.1 (180) | 7.1 (180) |
| **Warranty (tool & charger)** | 1 Year | 1 Year | 1 Year | 1 Year |
| **Warranty (battery)** | 1 Year | 1 Year | 1 Year | 1 Year |
| **Battery (qty)** | **CTB5196** (2) | **CTB5196** (2) | **CTB5196** (2) | **CTB5196** (2) |
| **Tool Only** | **CT596DB*†** | **CT596QCDB*†** | **CT595DB*†** | **CTS596DB*†** |
| **Tote Bag** | **CTUTOTE** | **CTUTOTE** | **CTUTOTE** | **CTUTOTE** |
| **Charger** | **CTC596†** | **CTC596†** | **CTC596†** | **CTC596†** |

†CE

Batteries not included



CTLED7850



CTLED6818



CTLZ761



CTL761



CTLU761



CTLUH761



CTLED566A

**CTLED7850 LED Work Light, 18V**
- 300 lumens for a super bright output
- Dual reflector system: flood or spot option
- 12-hour run time
- 120° rotating head
- Low-battery indicator
- Tempered glass lens
- Resists automotive fluids
- Lightweight aluminum head
- Impact modified nylon housing

**CTLED6818 LED Work Light, 18V**
- 300 lumens for a super bright output
- Dual reflector system: flood or spot option (mirror reflector included, changes unit into a flood light)
- Tempered glass lens
- 10-hour run time, low battery indicator
- Lightweight aluminum 120° rotating head
- Impact modified nylon housing resists automotive fluids
- Ni-Cad light 14.4V/18V slide-on batteries

**CTLZ761 Flashlight**
- 200 lumens output
- Low battery indicator (10 minutes)
- 4-hour run time
- Tempered glass lens
- Resists automotive fluids
- Impact modified nylon housing
- Uses CTB8172 14.4V MicroLithium™ Battery and CTC772 Charger

**CTL761 Flashlight**
- 200 lumens
- Low battery indicator
- 4-hour run time
- 120° rotating head
- Aluminum head
- Works with CTB6172, CTB7122 and CTB8172 batteries

**CTLU761 Rechargeable LED Light**
- 540 lumens, ultra bright light output
- 60 LED bulbs
- Includes hook with pad for hanging
- High impact housing and light tube
- 10-minute low battery indicator
- Works with CTB6172, CTB7172 and CTB8172 batteries

**CTLUH761 Rechargeable Underhood LED Light**
- 800 lumens, ultra bright light output
- 90 LED bulbs
- Expandable 81" clamp to position light at work area
- Ideal for underhook, undercarriage and over dash applications
- Includes hook with peg for hanging
- High impact housing and light tube
- 10-minute low battery indicator
- Works with CTB6172, CTB7172 and CTB8172 batteries

**CTLED566A Flashlight**
- Features six bright LED bulbs to illuminate the work area
- Durable glass filled nylon housing holds up in tough environments
- Works with CTB5172 and CTB5196 batteries

CE– DE, ES, FR, IT, GB, NL, JP
Battery and charger sold separately

**⚠WARNING**

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# POWER MANAGEMENT



**CTMS8850**
**(battery sold separately)**



**CTI8850**
**(battery sold separately)**

## Memory Savers/Power Inverters

**CTMS8850 18V Memory Saver**
- 12V DC 4A output
- 5V 1A USB output
- Audible battery level notification
- Four-hour run time, 12V at 1A
- One-hour run time, 12V at 4A
- Flexible swivel head
- Protective external fuse

**CTI8850 18V Power Inverter**
- 175 Watts Continious Output
- 120 Volt AC Adaptor
- 5V 1A  USB Output
- Overload, short Circuit and Battery Voltage Protection
- Flexible Swivel Head
- Protective Internal Fuse and Cooling Fan



**CTUSB8850**



**CTUSB761**
**(battery sold separately)**

## USB Power Units

**CTUSB8850 18V USB Power Unit**
- Four-port USB charging device
- 5V output at 2A, 1A, 0.5A (two each)
- Protective sliding doors
- LED indicator for state of charge
- Ratcheting mountable USB head
- One-hour run time with CTB8185 battery

**CTUSB761 14.4V USB Power Unit**
- 5V 1A output
- 1A output for two hours
- Compatible with CTB9172, CTB7122 and CTB8172
- LED power indicator
- USB protecctive sliding cover
- Easy on/off switch



CTB8172



CTB8185



CTB5196

## 18V Lithium Batteries

- 50% more run time, 36% lighter, 50% more life than Ni-Cad batteries
- 4.0 Ah high capacity cells
- No self discharge
- Four LED fuel gauge indicates battery charge and condition

## 14.4V and 18V Ni-Cad Batteries

- 2.5 Ah high capacity cells for long life
- No memory effect for maximum charging
- Glass filled nylon housing for durability 14.4V Lithium Batteries
- 50% more run time than Ni-Cad batteries
- 2.0 Ah high capacity cells
- Thermostat protects battery from overheating

## 9.6V Ni-Cad Batteries

- .7 Ah high capacity cells
- No memory effect for maximum charging

## Batteries

| Stock No. | Type | Voltage | Style | Charge Time (minutes) | Use with |
|---|---|---|---|---|---|
| CTBS196† | Ni-Cad | 9.6 | Tower | 55 | CTS596, CT595, CT596QC, CT595 |
| CTB3092† | Ni-Cad | 9.6 | Tower | 45 | CT30, CDR20, lights |
| CTB312† | Ni-Cad | 12 | Tower | 45 | CDR30, CT310, CT350, lights |
| CTB3124† | Ni-Cad | 12 | Tower | 45 | CDR30, CT310, CT350, lights |
| CTB314† | Ni-Cad | 14.4 | Tower | 45 | CDR40, CDR45, CT3450, lights |
| CTB4147† | Ni-Cad | 14.4 | Slide-on | 40 | CDR4450 CT4110, CT4450, lights |
| CTB3187† | Ni-Cad | 18 | Tower | 40 | CDR3850, CT3850, lights |
| CTB4187† | Ni-Cad | 18 | Slide-on | 40 | CDR4850, CDR4850A, CDR6850, CGG4850, CT4850, CT4850HO, CT6850, CTRS4850, CTRS6850, lights |
| CTB8185† | Lithium Ion | 18 | Slide-on | 30 | CT8850 series, CT8815 series, CT8810 series |
| CTB6172† | Lithium | 7.2 | Tower | 30 | CT661, CTS661, CT661QC, CT625, CTL761, CT7850 series |
| CTB8172† | Lithium Ion | 14.4 | Tower | 55 | CDR761, CTL761, CLTZ761, CTLU761, CTLUH761 |

†CE



CTC720



CTC728



CTC772

## Chargers

| Stock No. | Type | Application |
|---|---|---|
| CTC572† | 7.2V Ni-Cad Charger | Charges all 7.2V Ni-Cad batteries |
| CTC578† | 7.2V DC Mobile Charger | Charges all 7.2V Ni-Cad batteries |
| CTC596 | 9.6V Ni-Cad Charger | All 9.6V Ni-Cad batteries |
| CTC420† | Multivolt Ni-Cad Charger | Charges all 9.6V, 14.4V and 18V Ni-Cad slide-on or tower style batteries |
| CTC620† | Dual Chemistry Charger | Charges all 14.4V / 18V Ni-Cad or Lithium slide-on style batteries |
| CTC628† | 12V DC Dual Chemistry Mobile Charger | Charges all 14.4V / 18V Ni-Cad or Lithium slide-on style batteries |
| CTC720† | 18V Lithium Charger | Charges CT7850 series products, CDR7850H, CTL7850, CT7850 |
| CTC728† | 12V DC Lithium Mobile Charger | Charges CT7850 series products, CDR7850H, CTL7850 |
| CTC772† | 3.0A 7.2V/14.4V Lithium Charger | All 14.4V and 7.2V MicroLithium™ batteries |

†CE



**⚠WARNING** • Read safety precautions on pages W1 to W4

## CORDLESS: SCREWDRIVER ACCESSORIES



CTEXTSET



CTS561BITSET



CTS561HOLSTER



CTS561CHUCK

### Screwdriver Accessories

**CTEXTSET Quick Change Extension Set**
- Includes: CTEXT6 and CTEXT12 quick change extensions plus a T15 TORX® bit (1/4" shank) and a Phillips® bit (power groove hex shank)
- Ideal companion to the CTS series screwdrivers where extended reach is needed

**CTS561BITSET Quick Change Bit Set**
- For Snap-on® CTS series cordless screwdrivers plus other power drivers
- Quick change hex saves time changing bits
- Includes 22 bits (all 3" long) plus a 1/4" square drive (2" long)
- Storage case included

**CTS561HOLSTR Bit Holster**
- Holster for CTS series cordless screwdrivers
- Includes three flat tip bits (3/16", 7/32", 1/4"), three *Phillips* bits (#0, #1, #2) and two *TORX* bits (T15, T25)

**CTS561CHUCK Quick Change Keyless Drill Chuck (1/4")**
- 1/4" Hex shank for fast change-over
- Compact size improves access and visibility of drilling surface
- 1/4" chuck capacity provides convenience for small jobs
- 1/32"–1/4" drill capacity
- Use for light duty, small holes in metal and wood

## ELECTRIC: POLISHER/ENGRAVER



ETB1580B



ETB1650A

### Polisher

**ETB1580B Polisher (Blue-Point®)**
- Six-position speed setting allows user to dial in desired speed
- Variable-speed trigger lets user vary the speed within the range and have control over polishing speed
- Push button spindle lock for quick and easy pad changes
- Polish and detail autos, trucks and boats

### Impact Wrench

**ETB1650A Electric Impact Wrench (1/2" Square Drive) *(Blue-Point)***
- 8.5A motor delivers a powerful 350 ft-lb of torque
- Heavy duty 16-gauge electrical cord – resists oil
- Forward-reverse toggle switch – for fast, easy rotation selection
- Double-blow molded case protects your investment while transporting it
- ETL certification
- Remove/install auto and light truck fasteners in professional garages, scrap yards or for use at home



GA236C

### Engraver

**GA236C Engraver *(Blue-Point)***
- Marks all materials
- Includes 3 mm tungsten carbide tip
- Nine-position stroke adjustment to control engraving depth

**GA236-32 Diamond Tip**
- Optional heavy duty tip

| Australia | Charger | Stock No. | Stock No. |
|---|---|---|---|
| Chargers: | Dual Chemistry Charger | **CTCFA620†** charges CTB4147, CTB4187 Ni-Cad or CTB6185, CTB6187 Lithium | — |
| | Multi-Volt Ni-Cad Charger | **CTCFA420†** charges CTB3092, CTB312, CTB3124, CTB314, CTB3187, CTB4147, CTB4187 Ni-Cad | — |
| | Lithium Charger | — | **CTCA720†** charges CTB7185/CTB8185 Lithium |
| | 7.2V Charger Lithium also does 14.4V | **CTCA572†** charges CTB5172* Ni-Cad | **CTCA772** charges CTB6172, CTB7172 and CTB8172 Lithium |
| | 9.6V Charger | **CTCA596†** charges CTB5196 Ni-Cad | — |
| **Australia** | **Tool** | **Ni-Cad Version** | **Lithium Version** |
| Tools: | 18V Impact Wrench | **CTA6818†** | **CTA8850†** |
| | 18V Drill | **CDRA6850†** | — |
| | 18V Hammer Drill | — | **CDRA8850H†** Lithium |
| | 18V Reciprocating Saw | **CTRSA6850†** | **CTRSA8850†** |
| | 14.4V Impact Wrench | **CTA4418†** | **CTA761†** 3/8" **CTA725†** 1/4" |
| | 14.4V Drill | **CDRA4450†** | **CDRA761A†** |
| | 14.4V Screwdriver | — | **CTSA725†** **CTSA761†** |
| | 9.6V Impact Wrench | **CTA596†** 3/8" **CTA595†** 1/4" | — |
| | 9.6V Screwdriver | **CTSA596†** | — |

| United Kingdom | Charger | Stock No. | Stock No. |
|---|---|---|---|
| Chargers: | Dual Chemistry Charger | **CTCFU620†** charges CTB4147, CTB4187 Ni-Cad or CTB6185, CTB6187 Lithium | — |
| | Multi-Volt Ni-Cad Charger | **CTCFU4208†** charges CTB3092, CTB312, CTB3124, CTB314, CTB3187, CTB4147, CTB4187 Ni-Cad | — |
| | Lithium Charger | — | **CTCU7208†** charges CTB7185/CTB8185 Lithium |
| | 7.2V Charger Lithium also does 14.4V | **CTCU572†** charges CTB5172 Ni-Cad | **CTCEU772†** charges CTB6172, CTB7172 and CTB8172 Lithium |
| | 9.6V Charger | **CTCU596†** charges CTB5196 Ni-Cad | — |
| **United Kingdom** | **Tool** | **Ni-Cad Version** | **Lithium Version** |
| Tools: | 18V Impact Wrench | **CTU68188†** | **CTU8850†** |
| | 18V Drill | **CDRU6850†** | — |
| | 18V Hammer Drill | — | **CDREU8850H†** Lithium |
| | 18V Reciprocating Saw | **CTRSU6850†** | **CTRSEU8850†** |
| | 14.4V Impact Wrench | **CTEU4418†** | **CTEU761†** 3/8" **CTEU725†** 1/4" |
| | 14.4V Drill | **CDRU4450†** | **CDREU761A*** |
| | 14.4V Screwdriver | — | **CTSEU725†** **CTSEU761†** |
| | 9.6V Impact Wrench | **CTU596†** 3/8" **CTU595†** 1/4" | — |
| | 9.6V Screwdriver | **CTSEU596†** | — |

†CE

**⚠WARNING**

• Use only impact sockets and accessories with impact wrenches
• Read safety precautions on pages W1 to W4

# CORDLESS: INTERNATIONAL PRODUCT

| Europe | Charger | Stock No. | Stock No. |
|---|---|---|---|
| **Chargers:** | Dual Chemistry Charger | **CTCFE620*** charges CTB4147, CTB4187 Ni-Cad or CTB6185, CTB6187 Lithium | |
| | Multivolt Ni-Cad Charger | **CTCFE420*** charges CTB3092, CTB312, CTB3124, CTB314, CTB3187, CTB4147, CTB4187 Ni-Cad | |
| | Lithium Charger | | **CTCE720*** charges CTB7185/CTB8185 Lithium |
| | 7.2V Charger Lithium also does 14.4V | **CTCE572*** charges CTB5172 Ni-Cad | **CTCEU772*** charges CTB6172, CTB7172 and CTB8172 Lithium |
| | 9.6V Charger | **CTCE596*** charges CTB5196 Ni-Cad | |
| **Europe** | **Tool** | **Ni-Cad Version** | **Lithium Version** |
| **Tools:** | 18V Impact Wrench | **CTE6818*** | **CTCEU8850*** |
| | 18V Drill | **CDRE6850*** | — |
| | 18V Hammer Drill | — | **CDRE8850H*** Lithium |
| | 18V Reciprocating Saw | **CTRSE6850*** | **CTRSEU8850*** |
| | 14.4V Impact Wrench | **CTE4418*** | **CTEU761*** 3/8" **CTEU725*** 1/4" |
| | 14.4V Drill | **CDRE4450*** | **CDREU761A*** |
| | 14.4V Screwdriver | — | **CTSEU725*** **CTSEU761*** |
| | 9.6V Impact Wrench | **CTE596*** 3/8" **CTE595*** 1/4" | |
| | 9.6V Screwdriver | **CTSEU596*** | |

| Japan | Charger | Stock No. | Stock No. |
|---|---|---|---|
| **Chargers:** | Dual Chemistry Charger | **CTCJ620*** charges CTB4147, CTB4187 Ni-Cad or CTB6185, CTB6187 Lithium | |
| | Multivolt Ni-Cad Charger | **CTCJ420*** charges CTB3092, CTB312, CTB3124, CTB314, CTB3187, CTB4147, CTB4187 Ni-Cad | |
| | Lithium Charger | | **CTCJ720*** charges CTB7185/CTB8185 Lithium |
| | 7.2V Charger Lithium also does 14.4V | **CTCJ572*** charges CTB5172 Ni-Cad | **CTCJ772*** charges CTB6172, CTB7172 and CTB8172 Lithium |
| | 9.6V Charger | **CTCJ596*** charges CTB5196 Ni-Cad | |
| **Japan** | **Tool** | **Ni-Cad Version** | **Lithium Version** |
| **Tools:** | 18V Impact Wrench | **CTJ6818*** | **CTJ8850*** |
| | 18V Drill | **CDRJ6850*** | — |
| | 18V Hammer Drill | — | **CDRJ8850H*** Lithium |
| | 18V Reciprocating Saw | **CTRSJ6850*** | **CTRSJ8850*** |
| | 14.4V Impact Wrench | **CTJ4418*** | — |
| | 14.4V Drill | **CDRJ4450*** | — |
| | 14.4V Screwdriver | — | **CTSJ725*** **CTSJ761*** |
| | 9.6V Impact Wrench | **CTJ596*** 3/8" **CTJ595*** 1/4" | |
| | 9.6V Screwdriver | **CTSJ596*** | |

| All Countries | Charger | Stock No. | Application |
|---|---|---|---|
| **Chargers:** | 12V DC Mobile Charger | **CTC628*** | Charges CTB4147, CTB4187 Ni-Cad or CTB6185, CTB6187 Lithium |
| | 7.2V DC Mobile Charger | **CTC578*** | Charges CTCA572, CTB5172 Ni-Cad |
| | 12V DC Mobile Charger | **CTC728*** | Charges CTB7185/CTB8185 Lithium slide-on style batteries |

*CE

# LIGHTWEIGHT. ERGONOMIC. POWERFUL. IT'S AIR TOOL SUPERIORITY.

Snap-on has taken air to new heights. By fitting heavy-duty components into smaller places for more power with less weight.

**POWER, MEET SPEED.**
**SPEED, MEET POWER.**

Get the best of both worlds – big torque and high-speed – compliments of Snap-on state-of-the-art innovation.

**Twin Hammer Impact Mechanisms —** Unique hammer design results in more power per blow.

**Impact Mechanism —** More vanes in the rotor means smoother power transfer to the impact mechanism and less power lost in the motor.

**EASY DOES IT. EVERY TIME.**

Air tools that make your job easy, and do the job right.

**Better Balance —** For more user control.

**Compact Nose Designs —** Access tight spaces with ease.

**ENDURING DURABILITY.**

Heavy-duty, wear-and-tear-resistant components are built into every Snap-on® air tool — and into our DNA.

**Oil-Bath Lubrication —** Unique technology keeps internal components continuously lubricated for smooth operation and longer tool life.

**ERGONOMIC DESIGN.**

*Snap-on* air tools feel natural — so you can work more comfortably.

**Reduced Vibration —** Smooth-flowing motors and shock absorption reduce the stress from vibration.

**Tip-Valve Trigger —** For an intuitive flow of power from user to tool.



# AIR: QUICK REFERENCE

## Impact Wrenches

| Stock No. | Drive Size, inches (mm) | Max. Torque, ft-lb (N•m) | Free Speed RPM | Blows Per Minute | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|---|
| IM1800 † | 1 (25) | 1,800 (2,440) | 5,500 | 900 | 6.7 (48) [190] | 8.6 | 104 | 14 (356) | 15.2 (6.8) |
| IM1800L † | 1 (25) | 1,800 (2,440) | 5,500 | 900 | 6.7 (48) [190] | 8.6 | 104 | 20 (508) | 16 (7.3) |
| AT1300A † | 1 (25) | 3,000 (4,067) | 4,000 | 505 | 5.3 (38) [150] | 4.4 | 103 | 21 (533) | 25.6 (11.6) |
| AT1300AL † | 1 (25) | 2,700 (3,661) | 4,000 | 505 | 5.3 (38) [150] | 4.4 | 103 | 27 (686) | 28 (12.7) |
| MG1250 † | 3/4 (19) | 1,200 (1,627) | 6,200 | 1,050 | 6.4 (46) [181] | 10.38 | 99.8 | 8 (203) | 8.1 (3.7) |
| MG1250L † | 3/4 (19) | 1,200 (1,627) | 6,200 | 1,050 | 6.4 (46) [181] | 10.38 | 99.8 | 10 (254) | 9 (4.09) |
| MG1250XL † | 3/4 (19) | 1,200 (1,627) | 6,200 | 1,050 | 6.4 (46) [181] | 10.38 | 99.8 | 13 (330) | 10 (4.5) |
| MG1250P † | 3/4 (19) | 1,200 (1,627) | 6,200 | 1,050 | 6.4 (46) [181] | 10.38 | 99.8 | 8 (203) | 8 (3.6) |
| AT670 † | 3/4 (19) | 1,050 (1,423) | 6,700 (F), 6,900 (R) | 1,050 | 5.6 (40) [159] | 2.44 | 114.4 | 8.5 (215) | 7.5 (3.44) |
| AT670L † | 3/4 (19) | 1,050 (1,423) | 6,700 (F), 6,900 (R) | 1,050 | 5.6 (40) [159] | 2.44 | 114.4 | 13.5 (343) | 8.8 (4) |
| MG725 † | 1/2 (13) | 810 (1,098) | 9,800 | 1,270 | 4.0 (29) [113] | 6.6 | 99.9 | 7.7 (194) | 4.8 (2.2) |
| MG725L † | 1/2 (13) | 810 (1,094) | 9,800 | 1,270 | 4.0 (29) [113] | 6.6 | 99.9 | 9.7 (245) | 5.0 (2.3) |
| MG725P † | 1/2 (13) | 810 (1,094) | 9,800 | 1,270 | 4.0 (29) [113] | 6.6 | 99.9 | 7.7 (194) | 4.8 (2.2) |
| AT570 † | 1/2 (13) | 570 (773) | 6,900 (F), 7,000 (R) | 1,050 | 5.0 (36) [142] (F), 5.3 (38) [150] (R) | 6.08 | 95 | 7.24 (184) | 4.08 (1.87) |
| AT5500 † | 1/2 (13) | 550 (745) | 7,400 | 1,200 | 4.2 (30) [118.9] | 4.0 | 94 | 7.9 (20) | 6.4 (2.9) |
| MG3255 † | 1/2 (13) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 6.1 (155) | 2.8 (1.3) |
| MG3255L † | 1/2 (13) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 7.6 (193) | 2.9 (1.3) |
| MG3255P † | 1/2 (13) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 6.1 (162) | 2.8 (1.3) |
| MG3255LP † | 1/2 (13) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 7.6 (193) | 2.9 (1.3) |
| MG325 † | 3/8 (10) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 6.1 (155) | 2.8 (1.3) |
| MG325P † | 3/8 (10) | 325 (440) | 10,700 | 1,400 | 4 (28) [113] | 4.5 | 99.1 | 6.1 (155) | 2.8 (1.3) |
| AT380A † | 3/8 (10) | 175 (230) | 8,700 | 1,680 | 3.9 (28) [111] | 3.5 | 94 | 6.5 (165) | 3.0 (1.36) |
| AT370 † | 3/8 (10) | 320 (434) | 10,000 (F), 11,000 (R) | 1,050 | 4.4 (326) [125] (F), 4.7 (34) [133] (R) | 3.25 | 92 | 6.3 (160) | 2.62 (1.19) |
| AT351 † | 3/8 (10) | 175 (237) | 9,700 | 1,200 | 2.5 (18) [71] | 3.09 | 109.2 | 7.6 (194) | 2.5 (1.2) |
| AT235MCA † | 1/4 (6) | 25 (34) | 13,000 | 2,900 | 1.67 (12) [47] | <2.5 | 95.1 | 6.2 (158) | 1.4 (.64) |

## Ratchets

| Stock No. | Drive Size, inches (mm) | Torque Range, ft-lb (N•m) | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Pressure Level, dB(A) | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| AT705B † | 1/2 (13) | 5–50 (6–68) | 150 | 3.0 (22) [85] | 8.7 | 89 | 10.7 (273) | 2.5 (1.14) |
| AT700F † | 3/8 (10) | 5–60 (6–81) | 165 | 3.0 (22) [85] | 8.7 | 89 | 10.1 (257) | 2.5 (1.14) |
| FAR72C † | 3/8 (10) | 5–60 (7–61) | 225 | 4.5 (32) [127] | 5.3 | 93.6 | 11.8 (300) | 3.1 (1.4) |
| FAR7200 † | 3/8 (10) | 5–70 (7–95) (open mode), 5–50 (7–67) (quiet mode) | 260 (open mode), 200 (quiet mode) | 4.5 (32) [127] | 5.2 | 94.9 (open mode), 87.9 (quiet mode) | 12.1 (308) | 3.1 (1.4) |
| FAR7000 † | 3/8 (10) | 0–30 (0–41) | 410 | 2.6 (18.6) [73.6] | 9.0 | 91.4 | 11.2 (284.5) | 2.08 (0.94) |
| FAR2505 † | 3/8 (10) | 0–35 (0–47) | 225 | 1.7 (11) [48] | 2.5 | 84 | 7.8 (198) | 1.4 (.6) |
| FAR2500 † | 1/4 (6) | 0–35 (0–47) | 225 | 1.7 (11) [48] | 2.5 | 84 | 7.8 (197) | 1.4 (.6) |
| FAR25A † | 1/4 (6) | 5–25 (7–28) | 200 | 1.4 (10) [40] | 0.5 | 87.4 | 6.7 (171) | 1.3 (5 |
| AT200D † | 1/4 (6) | 5–25 (6–34) | 230 | 1.4 (10)[40] | 3.3 | 85 | 8.7 (222) | 1.1 (.50) |
| AT204A † | 1/4 (6) | — | 350 | 3.5 (25) [99] | 3.6 | 94 | 5.12 (130) | 1.05 (.48) |

## Drills

| Stock No. | Chuck Size, inches (mm) | Rated Power, HP (kW) | Torque Range, in-lb (N•m) | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|---|
| PDR5000A † | 1/2 (13) | 0.45 (.33) | 0–300 (0–34) | 450 | 3.8 (27) [108] | 0.9 | 82.6 | 8.7 (222) | 3 (1.3) |
| AT5000 † | 1/2 (13) | 0.45 (.33) | 0–120 (0–14) | 490 | 3.8 (27) [108] | <2.5 | 82 | 9 (229) | 3.8 (1.7) |
| PDR3000A † | 3/8 (10) | 0.45 (.33) | 0–50 (0–6.0) | 2,500 | 3.5 (25) [99] | 3.0 | 79.7 | 7 (178) | 2.5 (1.1) |
| AT3000 † | 3/8 (10) | 0.45 (.33) | 0–40 (0–4.5) | 1,675 | 3.5 (25) [95] | <2.5 | 82 | 7.6 (194) | 3.2 (1.4) |
| AT811 † | 3/8 (10) | 0.25 (.19) | 0–55 (0–6) | 1,320 | 3.4 (24) [95] | <.8 | 110 | 8.2 (208) | 2.5 (1.1) |
| AT184 † | 5/16 (8) | 0.32 (.65) | — | 0–1,000/ 0–1,800 | 8.4 (60) [238] | <1.0 | 84 | 7.9 (201) | 3.1 (1.4) |
| AT801MCA † | 1/4 (6) | 0.25 (.19) | 0–18 (0–2.0) | 1,800 | 1.9 (13.6) [53.8] | <2.5 | 96.4 | 7.2 (183) | 1.5 (0.68) |

## Hammers

| Stock No. | Bore Diameter, inches (mm) | Blows Per Minute | Piston Stroke, inches (mm) | Shank Opening, inches (mm) | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|---|
| PH3050B † | 3/4 (19) | 2,500 | 3 (76) | 0.401 (10.1) | 1.8 (13) [51] | 1.5 | 91.4 | 9.0 (228) | 5.9 (2.7) |
| AT2050 † | 3/4 (19) | 3,400 | 2.75 (70) | 0.401 (10.1) | 2.5 (18) [71] | 3.0 | 99 | 7.4 (187) | 4.6 (2.1) |

† CE

## Die Grinders

| Stock No. | Collet Size, inches | Rated Power, HP (kW) | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| PT100A † | 1/4 | 0.3 (.2) | 20,000 | 1.7 (11) [48] | 3.2 | 83.3 | 6.1 (155) | 1 (0.4) |
| PT110A † | 1/4 | 0.3 (.2) | 25,000 | 1.7 (11) [48] | 6.3 | 85.9 | 5.75 (146) | 1.2 (0.5) |
| PT200A † | 1/4 | 0.5 (.3) | 22,000 | 3.2 (23) [90] | 2 | 85.1 | 6.9 (175) | 1.2 (0.5) |
| PT210A † | 1/4 | 0.5 (.3) | 20,000 | 3.2 (23) [90] | 5.2 | 86 | 6.4 (162) | 1.4 (.63) |
| PT200AL † | 1/4 | 0.5 (.3) | 22,000 | 3.2 (23) [90] | 3 | 85.9 | 10.9 (276) | 2.1 (.95) |
| PT400 † | 1/4 | 1.0 (.6) | 25,000 | 4.17 (30) [118] | 2.1 | 84.7 | 7.5 (190) | 1.5 (.68) |
| PT410 † | 1/4 | 1.0 (.6) | 12,000 | 4.17 (30) [118] | .78 | 81.8 | 7.5 (190) | 2.0 (.91) |
| PT400L † | 1/4 | 1.0 (.6) | 23,000 | 4.17 (30) [118] | 3.25 | 82.2 | 12.25 (311) | 2.6 (1.1) |
| AT115 † | 1/4 | 0.45 (.33) | 22,000 | 4 (29) [113] | <2.5 | 95 | 6.5 (165) | 1.3 (.61) |
| AT118 † | 1/4 | 0.2 (.15) | 20,000 | 4.0 (29) [113] | 2.5 | 93 | 5.5 (140) | 1.1 (.50) |
| AT105 † | 1/4 | 0.45 (.33) | 22,000 | 4 (29) [113] | <2.5 | 102 | 6.5 (165) | 1.3 (.61) |
| AT109* † | 1/4 | 0.2 (.15) | 20,000 | 2.1 (15) [59] | 2.5 | 93 | 5.5 (140) | 1.1 (.50) |
| AT119 † | 1/4 | 0.2 (.15) | 20,000 | 3 (15) [59] | <6.92 | 100 | 6.81 (173) | 1.1 (50) |
| AT116 † | 1/4 | 0.2 (.15) | 20,000 | 3 (15) [59] | 3 | 100 | 6.5 (165) | 1.1 (50) |
| AT120L † | 1/4 (6.35 mm) | 0.22 (.164) | 23,000 | 3.0 (22) | 1.83 | 77 | 11.02 (280) | 1.45 (.66) |
| AT120LRA † | 1/4 (6.35 mm) | 0.45 (.335) | 18,000 | 3.3 (24) [93.4] | 1.83 | 79 | 11.25 (285) | 1.63 (.74) |
| AT1070A † | 1/8 | — | 75,000 | 1 (7) [28] | 2.0 | 72 | 5.3 (135) | .55 (0.25) |
| AT1070RA † | 1/8 | — | 75,000 | 1 (7) [28] | 2.0 | 72 | 5.9 (150) | .46 (0.21) |

*See p.485 for AT109DGK Die Grinder Kit specifications.

† CE

## Grinders

| Stock No. | Wheel Size, inches (mm) | Rated Power, HP (kW) | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| PT450 † | 4 1/2 (114) | 1.0 | 12,000 | 4.17 (30) [118] | 8.9 | 86.3 | 9 (229) | 3.25 (1.47) |
| AT415B* † | 4 1/2 (114) | 0.86 (.64) | 12,000 | 3.2 (23) [91] | 5.1 | 87 | 10 (254) | 4.2 (1.9) |

*Blue-Point®

## Cutting Tools

| Stock No. | Wheel Size, inches (mm) | Rated Power, hp (kW) | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| PT250A † | 3 (76) | 0.5 (.37) | 22,000 | 3.2 (23) [90] | 6 | 86.1 | 7.2 (183) | 1.6 (.73) |
| PT430 † | 3 (76) | 1.0 (0.75) | 25,000 | 4.17 (30) [118] | 6.92 | 87 | 7.5 (190) | 1.9 (.86) |
| PT490 † | 4 (102) | 1.0 (0.75) | 12,000 | 4.17 (30) [118] | 3.41 | 87.8 | 9.3 (236) | 3.5 (1.6) |
| AT154RA* † | 4 (102) | 0.7 (0.5) | 13,000 | 3.1 (22) [87] | 3.07 | 85 | 14.3 (365) | 3.3 (1.5) |
| AT157R* † | 3 (76) | 0.45 (.33) | 20,000 | 3.5 (25) [99] | <3.8 | 100 | 7.3 (185) | 1.9 (.86) |
| AT153 † | 3 (76) | 0.5 (0.37) | 17,000 | 3.5 (24) [99.1] | <2.86 | 85 | 7.3 (185) | 3.3 (1.5) |

*Blue-Point

## Air Saws

| Stock No. | Free Speed SPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|
| PTS500 † | 9,500 | 1.1 (8.5) [33.9] | 3.68 | 90.7 | 7.8 (198) | 1 (0.45) |
| PTS1000 † | 10,000 | 1.0 (8.5) [33.9] | 2.99 | 87.1 | 9.4 (238) | 1.5 (0.69) |
| AT192A † | 11,000 | 1.0 (7) [28] | 10.1 | 82.0 | 9.3 (235) | 1.75 (0.80) |
| AT194A † | 8,250 | 0.7 (5) [20] | <6.6 | 87 | 6.7 (175) | 1 (0.45) |

† CE

## Finishing Tools

| Stock No. | Pad Size, inches (mm) | Style | Rated Power, HP (kW) | Free Speed RPM | Spindle Thread, inches | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| PS4512 † | 5 (127) | Orbital | 0.25 (.19) | 12,000 | 5/16–24 | 2 (14) [57] | 2.3 | 75.3 | 5 (127) | 1.7 (0.77) |
| PS4612 † | 6 (152) | Orbital | 0.25 (.19) | 12,000 | 5/16–24 | 2 (14) [57] | 2.3 | 75.3 | 6 (152) | 2.5 (1.14) |
| PSF4612 † | 6 (152) | Orbital Finishing | 0.25 (.19) | 12,000 | 5/16–24 | 2 (14) [57] | 2.1 | 74.9 | 6 (152) | 2.4 (1.11) |
| PSF4312 † | 3 (76) | Orbital Finishing | 0.25 (.19) | 12,000 | 1/4–20 | 2 (14) [57] | 2.1 | 74.9 | 3 (76) | 1.44 (0.65) |
| PS4609 † | 6 (152) | Geared (NV) | 0.42 (.33) | 1,000 | 3/8 | 3 (21.7) [85] | 5.9 | 80 | 11 (281) | 3.7 (1.70) |
| PS4609V | 6 (152) | Geared (V) | 0.42 (.33) | 1,000 | 3/8 | 3 (21.7) [85] | 5.9 | 80 | 11 (281) | 3.7 (1.70) |
| PS4809 † | 8 (203) | Geared (NV) | 0.42 (.33) | 1,000 | 3/8 | 3 (21.7) [85] | 5.9 | 80 | 11 (281) | 4 (1.82) |
| PS4809V | 8 (203) | Geared (V) | 0.42 (.33) | 1,000 | 3/8 | 3 (21.7) [85] | 5.9 | 80 | 11 (281) | 4 (1.82) |
| AT408 † | 8 (203) | Geared (NV) | 0.5 (.37) | 850 | 5/16–24 | 5 (36) [142] | 3.7 | 87 | 11 (281) | 4.8 (2.18) |
| AT411A † | 6 (152) | Dual Action | 0.5 (.37) | 10,000 | 5/16–18 UNC | 5 (36) [142] | 3.7 | 79 | 8 (203) | 4.7 (2.14) |
| AT425R † | 5 (127) | Reversible Hi-speed | 0.45 (.33) | 13,000 | 7/16–20 UNC | 4.3 (31) [122] | <0.8 | 93 | 5.3 (135) | 2.8 (1.28) |
| AT406C | 6 (152) | Orbital | 0.25 (.19) | 12,000 | 5/16–24 | 2.5 (18) [71] | 2.8 | 85 | 8.6 (21.9) | 1.5 (0.7) |
| AT475A † | 2 3/4 x 17 1/2 | Inline | — | 1,800 | — | 2.3 (17) [65] | 14.9 | 87 | 16 (406) | 6.8 (3.09) |
| AT401MCA † | 3 (76) | Micro Surface Prep | 0.25 (.19) | 15,000 | 1/4–20 | 2.1 (15) [59] | <2.5 | 84 | 4.7 (119) | 0.97 (0.44) |
| AT402MCA † | 3 (76) | Micro Sander | 0.25 (.19) | 15,000 | 5/16–24 UNF | 2.1 (15) [59] | <2.5 | 84 | 5.2 (133) | 1.1 (.50) |
| AT403MCA † | 3 (76.2) | Micro Polisher | 0.25 (.19) | 6,000 | 5/16–24 UNF | 2.2 (16) [62] | <2.5 | 86 | 5.6 (143) | 1.3 (0.60) |
| AT450CP † | 7 (177) | Vertical Polisher | 0.5 (.37) | 2,500 | 5/8–11 | 3.31 (23.8) [93.72] | <2.5 | 87 | 15 (381) | 5 (2.27) |
| PT280THUGA † | — | Material Removal Tool | 0.45 (.33) | 3,500 | — | 4 (28) [113] | 2.8 | 85 | 12 (304) | 2.4 (1.09) |

† CE

**⚠WARNING**



• Read and follow safety messages for each type of Air Tool on the following pages and the safety precautions on pages W1 to W4

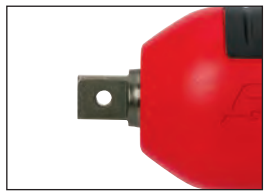
# AIR: 1", 3/4" DRIVE IMPACT WRENCHES



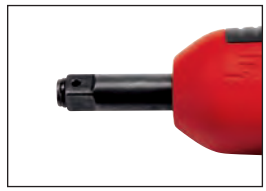

IM1800




MG1250



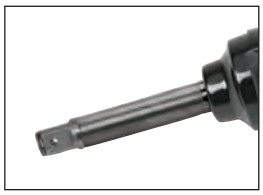
Thru-Hole Anvil (P)



3" Long Anvil (L)



6" Extra Long Anvil (XL)



6" Long Anvil (L)

## Super Duty Air Impact Wrenches

### IM1800 Series 1" Drive

- Convenient D-handle and side handle for less user fatigue
- Lightweight aluminum housing and nose for better balance
- Standard and long anvils are thru-hole design for positive socket retention
- Three-position speed control and full power reverse have more control when tightening or removing fasteners
- Twin hammer mechanism is durable and hard hitting
- Sealed in oil bath lubrication keeps impact mechanism lubricated for less wear and longer tool life

### MG1250 Series 3/4" Square Drive

- One piece magnesium housing assures precision alignment of components and reduces vibration
- Continuous oil-bath lubrication reduces wear and increases life
- Twin-hammer mechanism delivers hard-hitting blows with fewer moving parts for longer tool life
- Six-vane rotor delivers maximum torque and speed to remove stubborn fasteners
- Cushion-grip variable-speed trigger reduces user fatigue
- Balanced design distributes weight evenly to increase control
- Anvil stops with release of the trigger to prevent throwing fasteners
- One-hand reverse button for easy operation

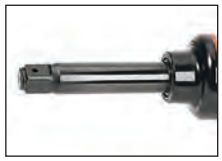
| Specifications | IM1800 † | IM1800L † | MG1250 † | MG1250L † | MG1250XL † | MG1250P † |
|---|---|---|---|---|---|---|
| Drive Size, inches (mm) | 1 (25) | 1 (25) | 3/4 (19) | 3/4 (19) | 3/4 (19) | 3/4 (19) |
| Max. Torque, ft-lb (N•m) | 1,800 (2,440) | 1,800 (2,440) | 1,250 (1,694) | 1,250 (1,694) | 1,250 (1,694) | 1,250 (1,694) |
| Free Speed RPM | 5,500 | 5,500 | 6,200 | 6,200 | 6,200 | 6,200 |
| Blows Per Minute | 900 | 900 | 1,050 | 1,050 | 1,050 | 1,050 |
| Extended Anvil Length, inches (mm) | — | 6 (152) | — | 3 (76) | 6 (152) | — |
| Anvil Type | Friction Ring w/ Thru Hole | Thru Hole | Friction Ring | Friction Ring w/ Thru Hole | Friction Ring w/ Thru Hole | Thru Hole |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 8.6 (62) [244] | 8.6 (62) [244] | 6.4 (46) [181] | 6.4 (46) [181] | 6.4 (46) [181] | 6.4 (46) [181] |
| Air Inlet Thread Size | 1/2"-14 NPT | 1/2"-14 NPT | 3/8"-18 NPT | 3/8"-18 NPT | 3/8"-18 NPT | 3/8"-18 NPT |
| Recommended Hose Size, inches (mm) | 1/2" (13) | 1/2" (13) | 3/8" (10) | 3/8" (10) | 3/8" (10) | 3/8" (10) |
| Vibration Level, m/s² | 8.6 | 8.6 | 10.38 | 10.38 | 10.38 | 10.38 |
| Sound Level dB(A) Pressure | 104 | 104 | 99.8 | 99.8 | 99.8 | 99.8 |
| Length, inches (mm) | 14 (356) | 20 (508) | 8 (203) | 10.5 (266) | 14.5 (368) | 8 (203) |
| Weight, lb (kg) | 15.2 (7) | 16 (7.3) | 8.1 (3.7) | 8.6 (3.99) | 9.5 (4.1) | 8.1 (3.6) |
| Vinyl Boot (included) | — | — | MG1200BOOT | MG1200BOOT | MG1200BOOT | MG1200BOOT |

Impact wrench suffix: P = Pinned anvil, L = Long anvil, XL = Extra long anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high torque applications where socket security is a priority. Long or Extra long anvil for tight applications that require extra reach.

† CE



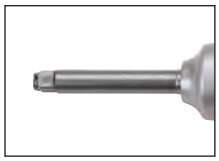
AT1300A



6" Long Anvil (L)



AT670



6" Long Anvil (L)

## Heavy Duty Air Impact Wrenches

### AT1300A Series 1" Drive

- Workhorse performance for use on trucks, buses and heavy equipment
- Steel nose for rugged, demanding applications
- Pin clutch style impact mechanism for fast startup and high torque requirements
- Thru-hole anvil

### AT670 Series 3/4" Drive

- Lightweight composite housing with aluminum nose
- Three-position thumb operated forward/reverse lever
- Bottom handle exhaust
- Twin hammer mechanism

| Specifications | AT1300A † | AT1300AL † | AT670 † | AT670L † |
|---|---|---|---|---|
| Drive Size, inches (mm) | 1 (25) | 1 (25) | 3/4 (19) | 3/4 (19) |
| Max. Torque, ft-lb (N•m) | 3,000 (4,067) | 2,700 (3,661) | 1,050 (1,423) | 1,050 (1,423) |
| Free Speed RPM | 4,000 | 4,000 | 6,700 (F), 6,900 (R) | 6,700 (F), 6,900 (R) |
| Blows Per Minute | 505 | 505 | 1,050 | 1,050 |
| Extended Anvil Length, inches (mm) | — | 6 (152) | — | 6 (152) |
| Anvil Type | Friction Ring w/ Thru Hole | Friction Ring w/ Thru Hole | Friction Ring | Friction Ring |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 5.3 (38) [150] | 5.3 (38) [150] | 5.6 (40) [159] | 5.6 (40) [159] |
| Air Inlet Thread Size | 1/2"-14 NPT | 1/2"-14 NPT | 3/8"-18 NPT | 3/8"-18 NPT |
| Recommended Hose Size, inches (mm) | 1/2" (13) ID min. | 1/2" (13) ID min. | 3/8" (10) ID min. | 3/8" (10) ID min. |
| Vibration Level, m/s² | 4.4 | 4.4 | 2.44 | 2.44 |
| Sound Level dB(A) Pressure | 103 | 103 | 99 | 99 |
| Length, inches (mm) | 21 (533) | 27 (686) | 8.5 (215) | 13.5 (343) |
| Weight, lb (kg) | 25.6 (11.6) | 28 (12.7) | 7.5 (3.44) | 8.8 (4) |
| Vinyl Boot (included) | — | — | — | — |

Impact wrench suffix: L = Long anvil. Standard anvil for applications where frequent socket change is required. Long anvil for tight applications that require extra reach.

† CE

WARNING

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# AIR: 1/2" DRIVE IMPACT WRENCHES



Pinned Anvil (P)



3" Long Anvil (L)



MG725G



MG725O



MG725

## 1/2" Drive Super Duty

| Specifications | MG725 † | MG725L † | MG725P † |
|---|---|---|---|
| Drive Size, inches (mm) | 1/2 (13) | 1/2 (13) | 1/2 (13) |
| Max. Torque, ft-lb (N•m) | 810 (1,098) | 810 (1,098) | 810 (1,098) |
| Free Speed RPM | 9,800 | 9,800 | 9,800 |
| Blows Per Minute | 1,270 | 1,270 | 1,270 |
| Extended Anvil Length, inches (mm) | — | 3 (76) | — |
| Anvil Type | Friction Ring | Friction Ring | Pinned |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 5.2 (37) [147] | 5.2 (37) [147] | 5.2 (37) [147] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 5.1 | 5.1 | 5.1 |
| Sound Level dB(A) Pressure | 102.5 | 102.5 | 102.5 |
| Length, inches (mm) | 7.7 (194) | 9.7 (245) | 7.7 (194) |
| Weight, lb (kg) | 4.8 (2.2) | 5.0 (2.3) | 4.8 (2.2) |
| Vinyl Boot (included) | MG725BOOT | MG725BOOT | MG725BOOT |
| Color Option: Green | MG725G† | — | — |
| Color Option: Orange | MG725O† | — | — |

Impact wrench suffix: P = Pinned anvil, L = Long anvil, XL = Extra long anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high-torque applications where socket security is a priority. Long or extra long anvil for tight applications that require extra reach.

† CE

### MG725 Series 1/2" Drive Impact Wrench

- One-piece machined magnesium housing is extremely durable, lightweight and provides alignment of internal parts to reduce vibration
- Eight-vane rotor provides fast motor startup and greater performance with more torque
- Patented cushion grip helps insulate user's hand from cold and reduces vibration to reduce user fatigue
- Patented tip valve trigger provides increased air flow and greater tool control
- Twin-hammer impact mechanism is durable and hard hitting to quickly remove stubborn fasteners
- Sealed-in oil-bath lubrication keeps impact mechanism lubricated for less wear
- Slim-style nose is ideal for working in restricted access areas
- Anvil stops with release of the trigger to prevent throwing of fasteners
- Cushion-grip trigger button delivers improved comfort and control

# 1/2" DRIVE IMPACT WRENCHES Blue-Point®



AT5500

AT570

## Heavy Duty

| Specifications | AT5500 † | AT570 † |
|---|---|---|
| Drive Size, inches (mm) | 1/2 (13) | 1/2 (13) |
| Max. Torque, ft-lb (N•m) | 550 (745) | 570 (773) |
| Free Speed RPM | 7,400 | 6,900 (F); 7,000 (R) |
| Blows Per Minute | 1,200 | 1,050 |
| Anvil Type | Friction Ring | Friction Ring |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4.2 (30) [118.9] | 5.0 (36) [142] (F); 5.3 (38) [150] (R) |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 4.0 | 6.08 |
| Sound Level dB(A) Pressure | 94 | 95 |
| Length, inches (mm) | 7.9 (20) | 7.24 (184) |
| Weight, lb (kg) | 6.4 (2.9) | 4.08 (1.87) |
| Vinyl Boot (included) | AT5500BOOT | AT570BOOT |

† CE

### AT5500 1/2" Drive Impact Wrench

- 550 ft-lb of torque, 7,400 RPM, 1,200 blows per minute
- Built-in five-position adjustable air regulator plus a variable speed trigger for maximum user control
- Tapered nose increases accessibility to confined areas
- Ball-bearing mounted motor creates a smooth running operation for longer tool life
- One-piece aluminum housing provides a durable tool
- Twin-hammer impact mechanism designed to hit hard yet offer tool longevity
- Inlet filter screens out dirt and grit; easy-to-remove filter for cleaning
- One-year limited warranty
- EU/CE – DE, ES, FR, IT, NL, UK (all models)

### AT570 1/2" Drive Impact Wrench

- Use on automotive and truck fasteners
- Shot peen anvils for improved durability
- Reverse Bias motor provides additional breakaway torque
- Three-position regulator to control power
- One-handed forward/reverse lever for user convenience
- Composite housing with aluminum nose combine to deliver a durable, lightweight and balanced unit
- Twin hammer impact mechanism delivers hard-hitting blows to quickly remove stubborn fasteners




MG325




MG325G



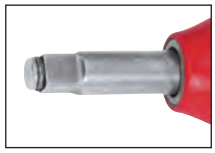

MG325O



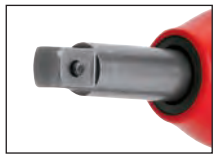

MG3255



Pinned Anvil (P)



2" Long Anvil (L)



2" Long Pinned Anvil (LP)

## 1/2", 3/8" Drive Super Duty

| Specifications | MG325 † | MG325P † | MG3255 † | MG3255L † | MG3255P † | MG3255LP † |
|---|---|---|---|---|---|---|
| Drive Size, inches (mm) | 3/8 (10) | 3/8 (10) | 1/2 (13) | 1/2 (13) | 1/2 (13) | 1/2 (13) |
| Max. Torque, ft-lb (N•m) | 325 (440) | 325 (440) | 325 (440) | 325 (440) | 325 (440) | 325 (440) |
| Free Speed RPM | 10,700 | 10,700 | 10,700 | 10,700 | 10,700 | 10,700 |
| Blows Per Minute | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 | 1,400 |
| Extended Anvil Length, inches (mm) | — | — | — | 2 (76) | — | 2 (76) |
| Anvil Type | Friction Ring | Pinned | Friction Ring | Friction Ring | Pinned | Pinned |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4 (28) [113] | 4 (28) [113] | 4 (28) [113] | 4 (28) [113] | 4 (28) [113] | 4 (28) [113] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Vibration Level, m/s² | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Sound Level dB(A) Pressure | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 |
| Length, inches (mm) | 6.1 (155) | 6.1 (155) | 6.1 (155) | 7.6 (193) | 6.4 (162) | 7.6 (193) |
| Weight, lb (kg) | 2.8 (1.3) | 2.8 (1.3) | 2.8 (1.3) | 2.9 (1.3) | 2.8 (1.3) | 2.9 (1.3) |
| Vinyl Boot (included) | MG325BOOT | MG325BOOT | MG325BOOT | MG325BOOT | MG325BOOT | MG325BOOT |
| Color Option: Green | MG325G† | — | — | — | — | — |
| Color Option: Orange | MG325O† | — | — | — | — | — |

Impact wrench suffix: P = Pinned anvil, L = Long anvil, LP= Long pinned anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high torque applications where socket security is a priority. Long anvil for tight applications that require extra reach.

† CE

### MG325 3/8" Drive Impact Wrench

- One-piece magnesium housing for precise internal component alignment to reduce vibration
- Twin hammer impact mechanism delivers hard-hitting blows with fewer moving parts to quickly remove stubborn fasteners
- Continuous oil bath lubrication prolongs tool life by reducing premature component wear
- Eight-vane motor delivers maximum speed and torque
- Lightweight, balanced design distributes weight evenly to reduce user fatigue
- One-handed forward/reverse lever for user convenience
- Cushion grip handle insulates user's hand from cold and absorbs vibration
- Comfort cushion trigger button allows the user to work comfortably with less finger stress
- Anvil stop feature means anvil will stop when trigger is released to avoid throwing fasteners

### MG3255 1/2" Drive Impact Wrench

- Same features as MG325, except for a 1/2" drive anvil
- Compact, yet powerful, 1/2" model is ideal for working in confined areas

**⚠WARNING**

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# AIR: 3/8", 1/4" DRIVE IMPACT WRENCHES Blue-Point®




AT380A



AT370



AT351




AT235MCA

## 3/8", 1/4" Drive Impact Wrenches

| Specifications | AT380A | AT370 † | AT351 † | AT235MCA † |
|---|---|---|---|---|
| Drive Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 1/4 (6) |
| Max. Torque, ft-lb (N•m) | 175 (230) | 320 (434) | 175 (237) | 25 (34) |
| Free Speed RPM | 8,700 | 10,000 (F), 11,000 (R) | 9,700 | 13,000 |
| Blows Per Minute | 1,680 | 1,050 | 1,200 | 2,900 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.9 (28) [111] | 4.4 (326) [125] (F), 4.7 (34) [133] (R) | 2.5 (18) [71] | 1.67 (12) [47] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8" (10) | 3/8" (10) | 3/8" (10) ID min. | 3/8" (10) ID min. |
| Vibration Level, m/s² | 3.5 | 3.25 | 3.09 | <2.5 |
| Sound Level dBa Pressure | 94 | 92 | 96.6 | 95.1 |
| Length, inches (mm) | 6.5 (165) | 6.3 (160) | 7.6 (194) | 6.2 (158) |
| Weight, lb (kg) | 3.0 (1.36) | 2.62 (1.19) | 2.5 (1.2) | 1.4 (.64) |
| Vinyl Boot (included) | AT380ABOOT | AT370BOOT | — | — |

† CE

**AT380A 3/8" Drive Impact Wrench**
- Built-in five-position adjustable air regulator plus a variable speed trigger for maximum user control
- Aluminum housing provides a lightweight yet durable tool
- Tapered nose increases accessibility to confined areas
- Ball-bearing mounted motor creates a smooth running operation for less user fatigue
- Brass inlet filter screens out dirt and grit; easy-to-remove filter for cleaning
- Twin-hammer impact mechanism designed to hit hard yet offer tool longevity
- One-year limited warranty
- EU/CE – DE, ES, FR,GB, IT, NL

**AT370 3/8" Drive Impact Wrench**
- Use on automotive and truck fasteners
- Shot peened anvils for improved durability
- Reverse Bias motor provides additional breakaway torque
- Three-position regulator to control power
- One-handed forward/reverse lever for convenient use
- Composite housing with aluminum nose combine to deliver a durable, lightweight and balanced unit
- Twin hammer impact mechanism delivers hard-hitting blows to quickly remove stubborn fasteners

**AT351 3/8" Drive Impact Wrench**
- Built-in air inlet swivel
- Eight-position power regulator
- Rotary action air motor is ball bearing-mounted for balance, speed and power
- Ideal tool for small engine repair and bench work

**AT235MCA 1/4" Drive Micro Impact Wrench**
- Fast speed
- Lightweight composite housing with molded comfort grip
- Convenient one-handed forward/reverse lever
- Oversized trigger with variable speed



FAR7200




FAR72C



FAR7000




FAR2505




FAR2500

## Air Ratchets

| Specifications | FAR7200 † | FAR72C † | FAR7000 | FAR2505 † | FAR2500 † |
|---|---|---|---|---|---|
| Drive Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 1/4 (6) |
| Max. Torque, ft-lb (N•m) | 5–70 (7–95) (open mode), 5–50 (7–67) (quiet mode) | 5–60 (7–61) | 0–30 (0–41) | 0–35 (0–47) | 0–35 (0–47) |
| Free Speed RPM | 260 (open mode), 200 (quiet mode) | 225 | 410 | 225 | 225 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4.5 (32) [127] | 4.5 (32) [127] | 2.6 (18.6) [73.6] | 1.7 (11) [48] | 1.7 (11) [48] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8" (10) | 3/8" (10) | 3/8" (10) | 3/8" (10) | 3/8" (10) |
| Vibration Level, m/s² | 5.2 | 5.3 | 9.04 | 2.5 | 2.5 |
| Sound Level dB(A) Pressure | 94.9 (open mode), 87.9 (quiet mode) | 93.6 | 91.4 | 84 | 84 |
| Length, inches (mm) | 12.1 (308) | 11.8 (300) | 11.2 (284.5) | 7.8 (198) | 7.8 (197) |
| Weight, lb (kg) | 3.1 (1.4) | 3.1 (1.4) | 2.08 (0.94) | 1.4 (.6) | 1.4 (.6) |
| Vinyl Boot | YA889 (included) | YA889 (included) | FAR7000BOOT (included) | YA905 (included) | YA905 (included) |

† CE

### FAR7200 3/8" Drive Ratchet
- Muffler bypass allows tool to be used in quiet mode or full power
- Tip valve style trigger is easy to feather for greater control
- Cushion grip handle for added comfort and control
- Heavy duty motor and crank add durability to handle torque loads
- Steel wear bushings to prevent ratchet head wear
- Large selector knob is easy to turn with greasy hands to change direction

### FAR72C 3/8" Drive Ratchet
- Dual pawls for reduced vibration
- Steel wear bushings to prevent ratchet head wear
- Adjustable exhaust directs airflow away from work area
- "Stop lock" pins prevent ratchet pawl lockup
- Easy access zerk fitting allows ratchet head lubrication for longer tool life
- Lightweight aluminum handle provides a sure grip for easy control

### FAR7000 3/8" Drive Ratchet
- FAST – 410 RPM free speed for fast removal/installation
- Slim drive head combined with a long reach – 11.2" overall length – makes getting into tight spots easy
- Adjustable exhaust deflector directs exhaust away from the work area
- Lightweight – just 2.08 lb combined with the ergonomic comfort grip handle reduces fatigue
- Maximum torque of 30 ft-lb will not strip threads
- CE – DE, ES, FR, IT, NL, UK

### FAR2500 1/4" Drive and FAR2505 3/8" Drive Mini Ratchets
- Balanced lightweight housing weighing 1.4 lb for superior control with less user fatigue
- Soft grip handle with increased comfort and reduced vibration. Insulates against cold
- Large lightweight selector knob, easy to turn with greasy hands, easy to reverse direction
- Robust head design for maximum strength and durability, will not separate for longer tool life
- All ball bearing construction and high strength alloy steel gear system that's dependable and durable



**⚠WARNING**

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

# AIR: 1/2", 3/8", 1/4" DRIVE RATCHETS



FAR25A

## 1/4" Drive Air Ratchet

| Specifications | FAR25A † |
|---|---|
| Drive Size, inches (mm) | 1/4 (6) |
| Torque Range, ft-lb (N•m) | 5–25 (7–28) |
| Free Speed RPM | 200 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 1.4 (10) [40] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 5/16" (7.93) |
| Vibration Level, m/s² | 0.5 |
| Sound Level dB(A) Pressure | 87.4 |
| Length, inches (mm) | 6.7 (171) |
| Weight, lb (kg) | 1.3 (5) |
| Vinyl Boot (included) | YA888 |

† CE

**FAR25A 1/4" Drive Ratchet**
- Lightweight clamshell housing easily accesses restricted areas
- Needle bearing supported drive shaft provides a smooth running tool
- Ergonomic handle design provides a sure grip and reduces fatigue
- Paddle style variable speed trigger is spring loaded for easy control
- Directional muffler rotates exhaust away from the user
- Air motor vanes resist wear, chipping, cracking and moisture

# AIR: 1/2", 3/8", 1/4" DRIVE RATCHETS Blue-Point®



AT705B



AT700F



AT200D



AT204A

## Air Ratchets

| Specifications | AT705B † | AT700F † | AT200D † | AT204A † |
|---|---|---|---|---|
| Drive Size, inches (mm) | 1/2 (13) | 3/8 (10) | 1/4 (6) | 1/4 (6) |
| Torque Range, ft lb (N•m) | 5–50 (6–68) | 5–60 (6–81) | 5–25 (6–34) | 30 ft lbs Max |
| 3Free Speed RPM | 150 | 165 | 230 | 350 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.0 (22) [85] | 3.0 (22) [85] | 1.4 (10) [40] | 3.5 (25) [99] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) ID Min. | 3/8 (10) ID Min. | 3/8 (10) | 5/16 (8) |
| Vibration Level, m/s² | 8.7 | 8.7 | 3.3 | 3.6 |
| Sound Level dB(A) Pressure | 89 | 89 | 85 | 94 |
| Length, inches (mm) | 10.7 (273) | 10.1 (257) | 8.7 (222) | 5.12 (130) |
| Weight, lb (kg) | 2.5 (1.14) | 2.5 (1.14) | 1.1 (.50) | 1.05 (.48) |
| Vinyl Boot (included) | AT700E49A | AT700E49A | AT200D22A | AT238-36 |

† CE

**AT705B 1/2" Drive Ratchet**
- 1/2" drive ratchet in a 3/8" drive body
- Ball bearing mounted motor for longer tool life

**AT700F 3/8" Drive Ratchet**
- Lightweight aluminum housing
- Rugged ball bearing-mounted air motor and precision planetary gear system
- Easy-to-use variable speed throttle plus adjustable air regulator

**AT200D 1/4" Drive Ratchet**
- Lightweight aluminum housing
- Rugged ball bearing-mounted air motor and precision planetary gear system

**AT204A 1/4" Drive Mini Air Ratchet**
- Ideal for working in tight quarters
- Head clearance is less than 3/4"
- Includes variable speed trigger, adjustable air regulator and 5' nylon braided whip hose for maneuverability and control
- Composite housing provides strength and durability



PDR5000A



PDR3000A

## 1/2" and 3/8" Capacity Drills

| Specifications | PDR5000A † | PDR3000A † |
|---|---|---|
| Chuck Size, inches (mm) | 1/2 (13) | 3/8 (10) |
| Rated Power, HP (kW) | 0.45 (.33) | 0.45 (.33) |
| Torque Range, in-lb (N•m) | 0–300 (0–34) | 0–50 (0–6.0) |
| Free Speed RPM | 450 | 2,500 |
| Spindle Thread, inches | 1/2-20 UNF | 3/8-24 UNF |
| Air Consumption, Average, CFM (SCFM) [l/min] | 3.8 (27) [108] | 3.5 (25) [99] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 0.9 | 3.0 |
| Sound Level dB(A) Pressure | 82.6 | 79.7 |
| Length, inches (mm) | 8.7 (222) | 7 (178) |
| Weight, lb (kg) | 3 (1.3) | 2.5 (1.1) |
| Auxiliary Handle | PDR5000-40A | — |
| Chuck Key | 30429 | 30002 |
| Keyless Chuck (optional) | PDR5000-2 | PDR3A-2 |

† CE

### PDR5000A 1/2" Reversible Drill

- Five-vane air motor delivers high torque power for added durability
- Three-planet industrial strength gear train provides durability for heavy duty applications
- Precise .0025" chuck run-out for precision drilling
- Includes side handle for added control in high torque drilling applications

### PDR3000A 3/8" Reversible Drill

- Top mounted forward/reverse switch allows one-hand operation
- Internal ball bearing construction for smooth operation
- Insulated cushion grip to reduce cold and vibration
- Variable speed trigger for added control



AT184

## Spotweld Drill

| Specifications | AT184 † |
|---|---|
| Chuck Size, inches (mm) | 5/16 (8) |
| Rated Power, HP (kW) | 0.32 (0.65) |
| Torque Range, in-lb (N•m) | — |
| Free Speed RPM | 0–1,000/0–1,800 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 8.4 (60) [238] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | <1.0 |
| Sound Level dB(A) Pressure | 84 |
| Length, inches (mm) | 7.9 (201) |
| Weight, lb (kg) | 3.1 (1.4) |
| Spotweld Drill Bit (8 mm) (included) | AT183-50 |
| Spotweld Drill Bit (6.5 mm) (optional) | AT183-43 |
| Spotweld Drill Bit (10 mm) (optional) | AT183-51 |
| Support Arm 5.5 (optional) | AT184-26A |

† CE

### AT184 Spotweld Drill (Blue-Point®)

- Twist depth control collar allows precise setting of drilling depth up to 1/4"
- Two-speed trigger for low or high speeds
- Includes (1) 5/16" (8 mm) drill bit and removeable clamp arm

WARNING

• Read safety precautions on pages W1 to W4

# AIR: 1/4", 3/8", 1/2" CAPACITY DRILLS Blue-Point®



AT5000



AT3000



AT811



AT801MCA

## 1/4", 3/8" and 1/2" Capacity Drills

| Specifications | AT5000 † | AT3000 † | AT811 † | AT801MCA |
|---|---|---|---|---|
| Chuck Size, inches (mm) | 1/2 (13) | 3/8 (10) | 3/8 (10) | 1/4 (6) |
| Rated Power, HP (kW) | 0.45 (.33) | 0.45 (.33) | 0.25 (.19) | 0.25 (.19) |
| Torque Range, in-lb (N•m) | 0–120 (0–14) | 0–40 (0–4.5) | 0–55 (0–6) | 0–18 (0–2.0) |
| Free Speed RPM | 490 | 1,675 | 1,320 | 1,800 |
| Spindle Thread, inches | 1/2"-20 UNF | 3/8"-24 UNF | 3/8"-24 UNF | 3/8"-24 UNF |
| Air Consumption, Average, CFM (SCFM) [l/min] | 3.8 (27) [108] | 3.5 (25) [95] | 3.4 (24) [95] | 1.9 (13.6) [53.8] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) ID Min. | 3/8 (10) ID min. |
| Vibration Level, m/s² | <2.5 | <2.5 | <.8 | <2.5 |
| Sound Level dB(A) Pressure | 82 | 82 | 110 | 96.4 |
| Length, inches (mm) | 9 (229) | 7.6 (194) | 8.2 (208) | 7.2 (183) |
| Weight, lb (kg) | 3.8 (1.7) | 3.2 (1.4) | 2.5 (1.1) | 1.5 (0.68) |
| Auxiliary Handle | PDAH1A | — | — | — |
| Vinyl Boot (optional) | AT5000BOOT | AT3000BOOT | — | — |

† CE

**AT5000 1/2" Reversible Drill**
- Chuck key conveniently stores in handle
- Variable speed trigger
- Convenient, one-hand forward/reverse operation
- Bottom handle exhaust directs exhaust away from the work

**AT3000 3/8" Reversible Drill**
- Convenient, one-hand forward/reverse operation
- Bottom handle diffused exhaust
- Comfort grip handle
- Keyless chuck

**AT811 3/8" Angle Drill**
- Convenient, one-hand push button forward/reverse
- Rear exhaust keeps air away from the work area
- Ball bearing construction for longer tool life

**AT801MCA 1/4" Micro Drill**
- Small size ideal for working in confined areas
- Durable composite housing stands up to rugged use
- Reverse lever conveniently positioned for one-hand operation
- Oversize variable speed trigger



PH3050B



AT2050

## Super and Heavy Duty Hammers

| Specifications | PH3050B † | AT2050 † |
|---|---|---|
| Bore Diameter, inches (mm) | 3/4 (19) | 3/4 (19) |
| Blows Per Minute | 2,500 | 3,400 |
| Piston Stroke, inches (mm) | 3 (76) | 2.75 (70) |
| Shank Opening, inches (mm) | 0.401 (10.1) | 0.401 (10.1) |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 2.1 (14) [59] | 2.5 (18) [71] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 5/16" (8) | 5/16" (8) |
| Vibration Level, m/s² | 2.8 | 3.0 |
| Sound Level dB(A) Pressure | 91.4 | 99 |
| Length, inches (mm) | 9.0 (228) | 7.4 (187) |
| Weight, lb (kg) | 5.9 (2.7) | 4.6 (2.1) |
| Vinyl Boot (optional) | PH3050BOOT | AT2050BOOT |

† CE

**PH3050B Super Duty Hammer**
- Dual elastomer cushions absorb shock and vibration to reduce user fatigue
- Phenolic (Kevlar® reinforced) flutter disc provides long life
- Direct multi-port front exhaust keeps air and debris away from user
- High grade steel barrel provides greater strength
- Variable speed soft-touch trigger provides featherability for greater control
- Four-position built-in air regulator varies power for different applications
- Air line screen helps prevent foreign particles from clogging trigger mechanism
- Hardened steel piston delivers harder blows for maximum impact
- Includes PH200D Quick Change Chuck Retainer

**AT2050 Heavy Duty Hammer (Blue-Point®)**
- Variable speed trigger with built-in speed regulator
- Quick change chuck makes bit changing easy
- Comfort grip handle for less user fatigue
- Hard hitting to get the job done quicker

## PH3050BCH4† Super Duty Set

**Includes:**

| Stock No. | Description |
|---|---|
| PH3050B | Super-Duty Air Hammer |
| PH200D | Retainer Chuck |
| PHG55A | Flat Chisel, 3/4" Wide |
| PHG57A | Double-Blade Panel Cutter, 3/4" Wide |
| PHG59A | Taper Punch, 3/16" Tip |
| PHG87A | Muffler Cutter, 17/32" Wide |
| PB1D | Carrying Case |



PH3050BCH4

**PH200D Universal Quick Change Chuck Retainer**
- Use for fast and easy insertion/removal of air hammer bits
- Non-turning insert design reduces wear for longer tool life
- Constructed from high grade steel; insert is constructed from durable polyurethane elastomer
- Universal design fits most air hammers
- Knurled collar provides a solid gripping surface, even with greasy hands



PH200D

**⚠WARNING**

- Use air hammer accessories only for intended purpose, replace when worn or broken
- Read safety precautions on pages W1 to W4

# AIR: DIE GRINDERS


PT100A


PT110A


PT200A


PT210A


PT200AL

## PT100 and 200 Series Die Grinders

- Ergonomic handle is contoured to fit comfortably in the hand as well as absorb vibration
- Adjustable rear exhaust outlet allows adjustment of exhaust away from the work area while keeping material removal away from operator's face
- Thermally balanced air motor acts as internal cooling system to protect moving parts, efficiently routing air to control surface temperature of tool
- Built-in ten-position power/speed regulator precisely matches tool speed to job requirements
- Easy bit changing using standard wrenches
- Safety style variable speed paddle trigger helps prevent accidental starting of tool
- Low dB(A) rating reduces fatigue from noise
- Dual taper collet system for improved bit retention

## Straight, Angle Head and Extended Shaft – 1/4" Collet

| | Mini Series | | Standard Series | | |
|---|---|---|---|---|---|
| **Specifications** | **PT100A †** | **PT110A †** | **PT200A †** | **PT210A †** | **PT200AL †** |
| **Collet Size, inches** | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| **Rated Power, HP (kW)** | 0.3 (.2) | 0.3 (.2) | 0.5 (.3) | 0.5 (.3) | 0.5 (.3) |
| **Free Speed RPM** | 20,000 | 25,000 | 22,000 | 20,000 | 22,000 |
| **Air Consumption, Free Speed, CFM (SCFM) [l/min]** | 1.7 (11) [48] | 1.7 (11) [48] | 3.2 (23) [90] | 3.2 (23) [90] | 3.2 (23) [90] |
| **Air Inlet Thread Size** | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| **Recommended Hose Size, inches (mm)** | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| **Vibration Level, m/s²** | 3.2 | 6.3 | 2 | 5.2 | 3 |
| **Sound Level dB(A) Pressure** | 83.3 | 85.9 | 85.1 | 86 | 85.9 |
| **Length, inches (mm)** | 6.1 (155) | 5.75 (146) | 6.9 (175) | 6.4 (162) | 10.9 (276) |
| **Weight, lb (kg)** | 1 (0.4) | 1.2 (0.5) | 1.2 (0.5) | 1.4 (.63) | 2.1 (.95) |

† CE

## PT400 Heavy Duty Series Die Grinders


PT400


PT410


PT400L

## Straight, Angle Head and Extended Shaft – 1/4" Collet

- 1 HP thermally balanced air motor
- Dual taper collet system
- Paddle style safety trigger
- Easy bit changing using standard wrenches
- Low dB(A) rating reduces fatigue from noise

| **Specifications** | **PT400 †** | **PT410 †** | **PT400L †** |
|---|---|---|---|
| **Collet Size, inches** | 1/4 | 1/4 | 1/4 |
| **Rated Power, HP (kW)** | 1.0 (.6) | 1.0 (.6) | 1.0 (.6) |
| **Free Speed RPM** | 25,000 | 12,000 | 23,000 |
| **Air Consumption, Free Speed, CFM (SCFM) [l/min]** | 4.17 (30) [118] | 4.17 (30) [118] | 4.17 (30) [118] |
| **Air Inlet Thread Size** | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| **Recommended Hose Size, inches (mm)** | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| **Vibration Level, m/s²** | 2.1 | .78 | 3.25 |
| **Sound Level dB(A) Pressure** | 84.7 | 81.8 | 82.2 |
| **Length, inches (mm)** | 7.5 (190) | 7.5 (190) | 12.25 (311) |
| **Weight, lb (kg)** | 1.5 (.68) | 2.0 (.91) | 2.6 (1.1) |

† CE


AT115


AT118


AT105


AT109


AT109DGK


AT119


AT116


AT120L


AT120LRA

## Straight and Angle Head Die Grinders - 1/4" Collet

| Specifications | AT115 † | AT118 † | AT105 † | AT109* † | AT119 † | AT116 † | AT120L | AT120LRA |
|---|---|---|---|---|---|---|---|---|
| Collet Size, inches | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 (6.35 mm) | 1/4 (6.35 mm) |
| Rated Power, HP (kW) | 0.45 (.33) | 0.2 (.15) | 0.45 (.33) | 0.2 (.15) | 0.2 (.15) | 0.2 (.15) | 0.22 (.164) | 0.45 (.335) |
| Free Speed RPM | 22,000 | 20,000 | 22,000 | 20,000 | 20,000 | 20,000 | 23,000 | 18,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4 (29) [113] | 4.0 (29) [113] | 4 (29) [113] | 2.1 (15) [59] | 3 (15) [59] | 3 (15) [59] | 3.0 (22) | 3.3 (24) [93.4] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4" -18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) ID Min. | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | <2.5 | 2.5 | <2.5 | 2.5 | <6.92 | 3 | 1.83 | 1.83 |
| Sound Level dB(A) Pressure | 95 | 93 | 102 | 93 | 100 | 100 | 77 | 79 |
| Length, inches (mm) | 6.5 (165) | 5.5 (140) | 6.5 (165) | 5.5 (140) | 6.81 (173) | 6.5 (165) | 11.02 (280) | 11.25 (285) |
| Weight, lb (kg) | 1.3 (.61) | 1.1 (.50) | 1.3 (.61) | 1.1 (.50) | 1.1 (50) | 1.1 (50) | 1.45 (.66) | 1.63 (.74) |

* See p.485 for AT109DGK die grinder kit specifications.
† CE

**AT115 Standard Die Grinder**
- Intended for most standard deburring operations
- Ergonomic handle grip increases comfort and control
- Safety lever throttle
- Built-in speed regulator
- Brass bearing cap and hose adaptor
- Rear diffused exhaust

**AT118 Right Angle Mini Die Grinder**
- Clean dies, rotors, backing plates and brake pad mounts
- Remove gasket material
- Grind dies and valve seats
- Dress welds and enlarge holes
- Compact mini-design with 90° angled head for easy access
- Ergonomic handle grip increases comfort and control
- Safety lever throttle
- Built-in speed regulator
- Brass bearing cap and hose adaptor

**AT105 Standard Die Grinder**
- Aluminum housing for long lasting durability
- Intended for most standard deburring operations
- High quality bearings improve productivity with less repair
- Rear exhaust directs air away from work area

**AT109 Right Angle Mini Die Grinder**
- Aluminum housing for long lasting durability
- Compact mini design with 90° head for easy access
- High quality bearings improve productivity with less repair

**AT109DGK Die Grinder Kit**
Includes: AT109 mini angle die grinder plus one 2" (50.8 mm) *ROLOC* pad, two 2" (50.8 mm) coarse discs, two 2" (50.8 mm) medium discs, two 2" (50.8 mm) 24 grit discs, two 2" (50.8 mm) 36 grit discs, two 2" (50.8 mm) crud discs, one 3" (76.2 mm) *ROLOC* pad, two 3" (76.2 mm) 50 grit discs, two 3" (76.2 mm) 120 grit discs, two 3" (76.2 mm) crud discs, one 1/4" shank adaptor and two spanner wrenches in storage case.

**AT119 Mini Angle Die Grinder (115°)**
- 115° offset head provides a more ergonomic grinding position
- Thread-on style disc provides a more compact head
- One 2" quick change disc included so tool is ready for your abrasive pad
- Body work spot sanding
- Cleaning gasket material from surfaces
- Dressing welds
- Cleaning brake rotors, backing plates and brake pad

**AT116 Mini Angle Die Grinder (115°)**
- 115° offset head provides a more ergonomic grinding position
- Quick change 1/4" collet for faster job changes
- Compact size is ideal for accessing tough-to-reach areas
- Comfort grip over mold
- Variable speed regulator for precision control
- CE – DE, ES, FR, IT, GB, NL

Optional Accessories:

**AT116-3 ROLOC® Pad (2", 1/4" shaft)**

**AT116-4 *ROLOC* Pad (3", 1/4" shaft)**

**AT120L Extended Length Mini Die Grinder**
- Extended reach of 4.5" to gain access into limited work space
- Comfort grip reduces fatigue
- Built-in speed regulator matches tool speed to the job
- Safety throttle — release the lever and the tool turns off
- CE – DE, ES, FR, IT, GB, NL

**AT120LRA Right Angle Extended Length Mini Die Grinder**
- Built-in speed regulator matches tool speed to the job
- Comfort grip reduces fatigue
- Safety throttle release the lever and the tool turns off
- .45 HP motor with free speed of 18,000 RPM
- Extended reach of 4.5" with a 90° head

**⚠WARNING**
- Use only accessories intended for die grinders
- Do not use grinder accessories above their maximum rated RPM
- Read safety precautions on pages W1 to W4

# AIR: DIE GRINDERS Blue-Point®



AT1070A



AT1070RA

## Pencil Die Grinders

| Specifications | AT1070A † | AT1070RA † |
|---|---|---|
| Collet Size, inches | 1/8 | 1/8 |
| Rated Power, HP (kW) | — | — |
| Free Speed RPM | 75,000 | 75,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 1 (7) [28] | 1 (7) [28] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 2.0 | 2.0 |
| Sound Level dB(A) Pressure | 72 | 72 |
| Length, inches (mm) | 5.3 (135) | 5.9 (150) |
| Weight, lb (kg) | .55 (0.25) | .46 (0.21) |

† CE

**AT1070A Pencil Die Grinder**
- Twist action variable speed control
- 5' (1.5 m) long protected air hose
- Used with 1/8" shank grinding accessories rated a minimum of 75,000 RPM
- Ideal for tight spaces and easy cleaning of dies, rotors and brake pads

**AT1070RA Pencil Die Grinder**
- Same as AT1070A except features right angle head

# CUT OFF TOOLS



PT250A



PT430



PT490

## Cut Off Tools

| Specifications | PT250A † | PT430 | PT490 |
|---|---|---|---|
| Wheel Size, inches (mm) | 3 (76) | 3 (76) | 4 (102) |
| Rated Power, HP (kW) | 0.5 (.37) | 1.0 (0.75) | 1.0 (0.75) |
| Free Speed RPM | 22,000 | 25,000 | 12,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.2 (23) [90] | 4.17 (23) [90] | 4.17 (23) [90] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 6 | 6.92 | 3.41 |
| Sound Level dB(A) Pressure | 86.1 | 87 | 87.8 |
| Length, inches (mm) | 7.2 (183) | 7.5 (190) | 9.3 (236) |
| Weight, lb (kg) | 1.6 (.73) | 1.9 (.86) | 3 (1.3) |
| 3" Cutter Wheels (36-Grit) (optional) | AT150-20A | AT150-20A | — |
| 3" Cutter Wheels (54-Grit) (optional) | AT150C29A | AT150C29A | — |
| 4" Cutter Wheels (optional) | — | — | AT154RWHLMP |

† CE

**PT250A Cut Off Tool (3")**
- Adjustable cutting wheel guard rotates to any safe and convenient position
- Adjustable rear exhaust keeps exhaust away from the work area
- Thermally balanced air motor acts as internal cooling system to protect moving parts and efficiently routes air to control surface temperature of tool
- Ten-position power/speed regulator precisely matches tool speed to job requirements

**PT430 Cut Off Tool (3")**
- Powerful thermally balanced air motor cools internal parts and tool surface
- Double bearings for smooth operation
- Lightweight and ergonomic comfort grip handle for less user fatigue
- Built-in speed regulator for easy adjustment
- Rear-diffused exhaust directs exhaust away from the work area
- Paddle-style trigger/safety lever for easy operation
- Precision-machined steel end plates
- Adjustable wheel guard so tool can be used at any angle
- UL® – JP

**PT490 Angle Cut Off Tool (4")**
- 4" cutting wheel
- Powerful thermally balanced air motor cools internal parts and tool surface
- Steel angle head with heavy duty spiral bevels gears for tool longevity
- Double bearings for smooth operation
- Instinct side handle (included) to increase leverage and ergonomic comfort-grip handle for less user fatigue
- Built-in speed regulator for easy adjustment
- Rear-diffused exhaust directs exhaust away from work area
- Paddle-style trigger/safety lever for easy operation
- Precision-machined steel end plates
- Adjustable wheel guard so tool can be used at any angle
- *UL* – JP

## Reversible Cut Off Tools (Blue-Point®)

| Specifications | AT154RA † | AT157R † |
|---|---|---|
| Wheel Size, inches (mm) | 4 (102) | 3 (76) |
| Rated Power, HP (kW) | 0.7 (0.5) | 0.45 (.33) |
| Free Speed RPM | 13,000 | 20,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.1 (22) [87] | 3.5 (25) [99] |
| Air Inlet Thread Size | 1/4" - 18 NPT | 1/4" - 18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 3.07 | <3.8 |
| Sound Level dB(A) Pressure | 85 | 100 |
| Length, inches (mm) | 14.3 (365) | 7.3 (185) |
| Weight, lb (kg) | 3.3 (1.5) | 1.9 (.86) |
| 3" Cutter Wheels (36-Grit) (optional) | — | AT150-20A |
| 3" Cutter Wheels (54-Grit) (optional) | — | AT150C29A |
| 4" Cutter Wheels | AT154RWHLMP | — |

† CE



AT154RA



AT157R

**AT154RA Reversible Cut Off Tool (4")**
- 14.3" overall length provides extended reach for easier access
- Reverse mode controls direction of sparks for safety
- Exhaust diffused through the rear of tool away from work surface
- Side handle provides additional tool control

**AT157R Reversible Cut Off Tool (3")**
- Reversible to change direction of sparks
- Built-in speed regulator for fine tuning
- Extended reach for hard-to-access areas

## Cut Off Tools *(Blue-Point)*

| Specifications | AT153 |
|---|---|
| Wheel Size, inches (mm) | 3 (76) |
| Rated Power, HP (kW) | 0.5 (0.37) |
| Free Speed, RPM | 17,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.5 (24) [99.1] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Air Pressure, psig (kPa) | 90 (620) |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | <2.86 |
| Sound Level dB(A) Pressure | 85 |
| Length, inches (mm) | 7.3 (185) |
| Weight, lb (kg) | 3.3 (1.5) |
| 3" Cutter Wheels (36-Grit) (optional) | AT150-20A |
| 3" Cutter Wheels (54-Grit) (optional) | AT150C28A |
| 4" Cutter Wheels (optional) | — |

† CE



AT153

**AT153 Cut Off Tool (3")**
- Compact size excellent for accessing areas with limited working space
- Heavy duty bevel gears for tool longevity
- Indexing adjustable guard controls the direction of sparks
- Spindle lock eliminates the need for special wrenches for fast change of cut-off wheels
- Adjustable built-in regulator easily adjusts up to 17,000 RPM free speed
- CE – DE, ES, FR, IT, GB, NL

**⚠WARNING**

- When using die grinder, use only accessories intended for die grinder
- Do not operate without the guard
- Do not use grinder accessories above their maximum rated RPM
- Read safety precautions on pages W1 to W4

# AIR: GRINDERS




PT450

## Grinder

| Specifications | PT450 † |
|---|---|
| Wheel Size, inches (mm) | 4 1/2 (114) |
| Rated Power, HP (kW) | 1.0 |
| Free Speed RPM | 12,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4.17 (30) [91] |
| Air Inlet Thread Size | 1/4"-18NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | 8.9 |
| Sound Level dB(A) Pressure | 86.3 |
| Length, inches (mm) | 9 (229) |
| Weight, lb (kg) | 3.25 (1.47) |
| Grinding Discs | PT450-WH |

† CE

**PT450 4 1/2" Angle Grinder**
- 12,000 RPM Maximum Free Speed
- 1 HP thermally balanced air motor
- Adjustable Wheel Guard
- Lightweight, only 3 1/4 lb
- Features Snap-on® Instinct® Screwdriver Side Handle



AT415B

## Grinder (Blue-Point®)

| Specifications | AT415B † |
|---|---|
| Wheel Size, inches (mm) | 4 1/2 (114) |
| Rated Power, HP (kW) | 0.86 (.64) |
| Free Speed RPM | 12,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.2 (23) [91] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | 5.1 |
| Sound Level dB(A) Pressure | 87 |
| Length, inches (mm) | 10 (254) |
| Weight, lb (kg) | 4.2 (1.9) |
| Grinding Discs | AT415A51 |

† CE

**AT415B 4 1/2" Compact Grinder (*Blue-Point*)**
- Includes one grinding disc

# CUTTING TOOLS




PTS500




PTS1000

## Air Saws

| Specifications | PTS500 † | PTS1000 † |
|---|---|---|
| Free Speed RPM | 9,500 | 10,000 |
| Air Consumption, Free Speed, CFM (SCFM) [l/MIN] | 1.1 (8.5) [33.9] | 1.0 (8.5) [33.9] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 3.68 | 2.99 |
| Sound Level dB(A) Pressure | 90.7 | 87.1 |
| Stroke Length, inches (mm) | 3/8 (10) | 3/8 (10) |
| Length, inches (mm) | 7.8 (198) | 9.4 (238) |
| Weight, lb (kg) | 1 (0.45) | 1.5 (0.69) |

† CE

**PTS500 Mini Air Saw**
- Can cut 1/8" (3 mm) thick mild steel
- Low vibration – 3.68 m/s² – for less user fatigue
- Chuck accepts standard 0.035" thick air saw blades
- Featherable paddle trigger with safety lever for easy operation
- 360° adjustable exhaust deflector
- Smooth cutting action
- Comfort-grip handle
- Includes three 3 5/8" long air saw blades (one each: 18 TPI, 24 TPI and 32 TPI)
- UL® – Listed: JP

**PTS1000 Dual Chuck Air Saw**
- Dual chuck accepts 0.035" standard air saw blades and 6" long reciprocating saw blades
- Can cut 1/8" (3 mm) thick mild steel
- Smooth cutting action
- Comfort grip handle
- Low vibration (2.99 m/s²) for less user fatigue
- Featherable paddle trigger with safety lever for easy operation
- 360° adjustable exhaust deflector
- Includes three 3 5/8" long air saw blades (one each 18 TPI,24 TPI and 32 TPI) and one 6" long reciprocating saw blade (18 TPI)
- *UL* – Listed: JP



AT192A



AT194A

## Reciprocating Saws

| Specifications | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Air Inlet Thread Size | Recommended Hose Size, inches (mm) | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| **AT192A** † | 11,000 | 1.0 (7) [28] | 1/4"-18 NPT | 3/8 (10) | 10.1 | 94 | 9.3 (235) | 1.75 (0.80) |
| **AT194A** † | 8,250 | 0.7 (5) [20] | 1/4-18NPT | 3/8 (10) | <6.6 | 87 | 6.7 (175) | 1 (0.45) |

| Replacement Blades | |
|---|---|
| Bi-Metal Blade Scroll, 18TPI, 3 3/4" long (qty. 5) | AT190-39C |
| Bi-Metal Blade Scroll, 24 TPI, 3 3/4" long (qty. 5) | AT190-40C |
| Bi-Metal Blade Scroll, 32 TPI, 3 3/4" long (qty. 5) | AT190-41C |

† CE

### AT192A High Speed Reciprocating Saw

- Adjustable blade guard to control cutting depth
- Teflon® coated piston for smooth operation and durability
- Comfort grip handle with safety lever throttle
- Includes bi-metal blades: one 18TPI, one 24TPI, one 32TPI

### AT194A Micro Air Saw

- Compact size for easy access in tight quarters
- Guarded hose extension helps prevent damage to finished surfaces
- Performs straight or scroll cuts in metal and plastic
- Includes bi-metal blades: one 18TPI, one 24TPI, one 32TPI



AT195

## Shears

| Specifications | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Air Inlet Thread Size | Recommended Hose Size, inches (mm) | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| **AT195** † | — | 4.0 (29) [113] | 1/4"-18 NPT | 3/8 (10) | <2.5 | 99.6 | 10 (254) | 2.8 (1.3) |

† CE

### AT195 Air Powered Shears

- Trims, outlines and shears
- Replaceable brass filter screen
- Built-in speed regulator



AT180C

## Nibbler

| Specifications | Free Speed RPM | Air Consumption, Free Speed, CFM (SCFM) [l/min] | Air Inlet Thread Size | Recommended Hose Size, inches (mm) | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|
| **AT180C** † | 3,500 | 4 (29) [113] | 1/4"-18 NPT | 3/8 (10) | 4.3 | 97 | 7.6 (193) | 1.9 (.88) |

† CE

### AT180C Nibbler

- Cuts mild steel sheet up to 16 gauge (0.62") (1.55 mm)
- Anvil is adjustable for forward, backward and left or right cutting
- Readily cuts most non-ferrous materials including aluminum, brass, formica, laminates, fiberglass and masonite




- Do not operate without the guard
- Do not use grinder accessories above their maximum rated rpm
- Read safety precautions on pages W1 to W4

# AIR: SANDERS



PS4512



PS4612



PSF4612



PSF4312



PS4609



PS4809

## Orbital and Geared Sanders

| Specifications | PS4512 † | PS4612 † | PSF4612 † | PSF4312 † | PS4609 † | PS4609V † | PS4809 † | PS4809V † |
|---|---|---|---|---|---|---|---|---|
| Pad Size, inches (mm) | 5 (127) | 6 (152) | 6 (152) | 3 (76) | 6 (152) | 6 (152) | 8 (203) | 8 (203) |
| Rated Power, HP (kW) | 0.25 (.19) | 0.25 (.19) | 0.25 (.19) | 0.25 (.19) | 0.42 (.33) | 0.42 (.33) | 0.42 (.33) | 0.42 (.33) |
| Free Speed RPM | 12,000 | 12,000 | 12,000 | 12,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Spindle Thread, inches | 5/16-24 | 5/16-24 | 5/16-24 | 1/4-20 | 3/8 | 3/8 | 3/8 | 3/8 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 2 (14) [57] | 2 (14) [57] | 2 (14) [57] | 2 (14) [57] | 3 (21.7) [85] | 3 (21.7) [85] | 3 (21.7) [85] | 3 (21.7) [85] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | 2.3 | 2.3 | 2.1 | 2.1 | 5.9 | 5.9 | 5.9 | 5.9 |
| Sound Level dB(A) Pressure | 75.3 | 75.3 | 74.9 | 74.9 | 80 | 80 | 80 | 80 |
| Length, inches (mm) | 5 (127) | 6 (152) | 6 (152) | 3 (76) | 11 (281) | 11 (281) | 11 (281) | 11 (281) |
| Weight, lb (kg) | 1.7 (0.77) | 2.5 (1.14) | 2.4 (1.11) | 1.44 (0.65) | 3.7 (1.70) | 3.7 (1.70) | 4 (1.82) | 4 (1.82) |
| Standard Pad | PS4512-1AH | PS4612-1AH | PS4612-1AH | PS4312-1H | PS468-34 | PS468-34V | PS468-35 | PS468-35V |

† CE

**PS4512/PS4612/PSF4612 Orbital Sander (5")**
- Delivers 12,000 RPM with unsurpassed control and comfort
- Soft, ergonomic adjustable grip is indexable and can be rotated to fit the user's hand
- Patented O-ring sealed motor extends tool life by preventing dust and debris from entering mechanical components
- S-shaped paddle lever to better fit the curve of the user's hand to provide comfort and resist fatigue
- Multi-position regulator controls maximum speed for versatility
- Robust front spindle and precision balanced crank extend motor life and provide smoother operation with minimal vibration
- Patented bearing dust shield extends motor life by preventing contamination of lower motor bearings
- Composite over molded housing is lightweight and easy to maneuver
- Optional PSV4612KIT vacuum kit is also available

**PSF4312 Orbital Sander (3")**
- Same features as PS4612 except: 3" lightweight, 30 gram pad is flexible for spot sanding and feather edging, providing more control of the application

**PS4609 (6") and PS4809 (8") Geared Sanders**
- Remove and level large amounts of filler materials such as glue or epoxy
- To level small welds
- Removing coatings prior to painting
- For use on metal, solid surfaces, wood and fiberglass
- Super ergonomic adjustable grip is indexable to multiple positions for optimum comfort
- Soft grip housing material for maximum vibration absorption
- PS4609V vacuum model
- PS4809V vacuum model



AT408



AT411A

## Sanders

| Specifications | AT408 † | AT411A † |
|---|---|---|
| Pad Size, inches (mm) | 8 (203) | 6 (152) |
| Rated Power, HP (kW) | 0.5 (.37) | 0.5 (.37) |
| Free Speed RPM | 850 | 10,000 |
| Spindle Thread, inches | 5/16-24 | 5/16-18 UNC |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 5 (36) [142] | 5 (36) [142] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) ID Min. |
| Vibration Level, m/s² | 3.7 | 3.7 |
| Sound Level dB(A) Pressure | 87 | 79 |
| Length, inches (mm) | 11 (281) | 8 (203) |
| Weight, lb (kg) | 4.8 (2.18) | 4.7 (2.14) |
| Standard Pad | AT408-2 | AT411A-1 |

† CE

**AT408 Geared Sander (8")**
- Rear diffused exhaust
- Built-in adjustable speed regulator
- Removable brass filter screens out debris

**AT411A Dual Action Sander (6")**
- For fine sanding operations and swirl-free finishing
- Comfort handle helps reduce fatigue
- Converts from rotary to random orbit action by sliding drive plate
- Built-in thumb wheel speed regulator



AT425R

## Reversible Disc Sanders

| Specifications | AT425R † |
|---|---|
| Pad Size, inches (mm) | 5 (127) |
| Rated Power, HP (kW) | 0.45 (.33) |
| Free Speed RPM | 13,000 |
| Spindle Thread, inches | 7/16-20 UNC |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4.3 (31) [122] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | <0.8 |
| Sound Level dB(A) Pressure | 93 |
| Length, inches (mm) | 5.3 (135) |
| Weight, lb (kg) | 2.8 (1.28) |
| Standard Pad | AT425R-24 |
| 3" Replacement Pad (opt.) | AT425R-22 |
| 4" Replacement Pad (opt.) | AT425R-23 |

† CE

**AT425R Reversible Hi-speed Sander (5")**
- Comfort grip handle
- One-hand forward/reverse lever
- Built-in speed regulator
- Includes three backing discs: 3", 4" and 5"



AT406C

## Orbital Sander

| Specification | AT406C |
|---|---|
| Pad/Disc Size, Dia., inches (mm) | 6 (152) |
| Rated Power, HP (kW) | .25 (.19) |
| Free Speed, RPM | 12,000 |
| Spindle Thread, inches | 5/16–24 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 2.5 (18) [71] |
| Sound Level dB(A) Pressure | 85 |
| Length, inches (mm) | 8.6 (21.9) |
| Weight, lb (kg) | 1.5 (0.7) |

**AT406C Orbital Palm Sander (6")**
- Lightweight & durable composite housing
- Built-in power regulator for optimized power control
- Well-balanced for smooth handling
- For use with accessories rated above 12,000 RPM



AT475A

## In-Line Sander

| Specifications | AT475A † |
|---|---|
| Free Speed RPM | 1,800 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 2.3 (17) [65] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) ID Min. |
| Vibration Level, m/s² | 14.9 |
| Sound Level dB(A) Pressure | 87 |
| Length, inches (mm) | 16 (406) |
| Weight, lb (kg) | 6.8 (3.09) |
| Standard Pad | AT475A-29 |

† CE

**AT475A Heavy Duty In-Line Sander (16")**
- 5/8" stroke
- Minimal vibration
- For fast material removal
- Pad has positive locking clamps

**⚠WARNING**



- Do not use grinding discs on sanders
- Read safety precautions on pages W1 to W4

# AIR: FINISHING TOOLS Blue-Point®



AT615K

**AT615K Belt Sander Kit**
- Includes belt sander,three 18" x 3/8" sanding belts (60, 80, 120 grit), three 18" x 1/2" sanding belts (60, 80, 120 grit) and three 18" x 3/4" sanding belts (60, 80, 120 grit)

**AT615ARM1 Contact Arm Assembly (1" D x 3/8" W rubber)**
- Use with AT615 Belt Sander

**AT615ARM2 Contact Arm Assembly (3/4" D x 3/8" W rubber)**
- Use with AT615 Belt Sander

**AT615ARM3 Contact Arm Assembly (3/4" D x 5/8" W)**
- Use with AT615 Belt Sander

**AT615-31 Collet Assembly (1/4")**
- Optional 1/4" collet assembly for use with the AT615 Belt Sander

**AT615KPB Storage Case**
- Storage case for the AT615K Belt Sander Kit



## Belts

| Stock No. | Description | Size | Grit | Package Quantity |
|---|---|---|---|---|
| ATBA381860 | Coated Abrasive | 3/8" x 18" | 60 | 5 each |
| ATBA381880 | Coated Abrasive | 3/8" x 18" | 80 | 5 each |
| ATBA3818120 | Coated Abrasive | 3/8" x 18" | 120 | 5 each |
| ATBA121860 | Coated Abrasive | 1/2" x 18" | 60 | 5 each |
| ATBA121880 | Coated Abrasive | 1/2" x 18" | 80 | 5 each |
| ATBA1218120 | Coated Abrasive | 1/2" x 18" | 120 | 5 each |
| ATBA341860 | Coated Abrasive | 3/4" x 18" | 60 | 5 each |
| ATBA341880 | Coated Abrasive | 3/4" x 18" | 80 | 5 each |
| ATBA3418120 | Coated Abrasive | 3/4" x 18" | 120 | 5 each |
| ATBB121850 | Non-Woven Abrasive | 1/2" x 18" | 50 | 5 each |
| ATBB1218100 | Non-Woven Abrasive | 1/2" x 18" | 100 | 5 each |
| ATBB1218240 | Non-Woven Abrasive | 1/2" x 18" | 240 | 5 each |
| ATBB341850 | Non-Woven Abrasive | 3/4" x 18" | 50 | 5 each |
| ATBB3418100 | Non-Woven Abrasive | 3/4" x 18" | 100 | 5 each |
| ATBB3418240 | Non-Woven Abrasive | 3/4" x 18" | 240 | 5 each |
| ATBB381850 | Non-Woven Abrasive | 3/4" x 18" | 50 | 5 each |
| ATBB3818100 | Non-Woven Abrasive | 3/4" x 18" | 100 | 5 each |
| ATBB3818240 | Non-Woven Abrasive | 3/4" x 18" | 240 | 5 each |



AT240



AT265A



AT1212A

## Tire Buffer

**AT240 Tire Buffer**
- Use for tire patch preparation, roughing up rubber for tire recaps plus removing excess rubber
- Speed regulator for improved tool control
- Comfort grip housing for reduced operator fatigue
- Rear exhaust directs air away from work
- Semicircle buffing wheel for maximum surface preparation

## Pinstripe Removal Tool

**AT265A Pinstripe Removal Tool**
- Use to remove pinstripes, adhesive, tape and graffiti
- Includes three 3.5" eraser pads to keep you working longer
- Step pad eraser design for improved visibility during operation
- Comfort grip handle for less fatigue
- Auxiliary side handle for improved tool control

## Needle Scaler

**AT1212 Mini Needle Scaler**
- Mini size for access in confined areas
- Smooth palm controlled trigger mechanism for ease of operation
- 12 high-tension steel needles conform to any irregular surface for cleaning crevices

| Stock No. | Pad Size | Style | Rated Power, HP (kW) | Free Speed RPM | Spindle Size | Air Consumption | Vibration Level, m/s² | Sound Level dB(A) Pressure | Length, inches (mm) | Weight, lb (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| AT240 † | — | Tire Buffer | 0.4 | 2,600 | — | 3.7 (26.6) [104.7] | 1.18 | 89 | 9.1 (233) | 1.8 (.82) |
| AT265A † | 3.5 | Pinstripe Removal Tool | 0.4 | 3,600 | 5/16"-24 | 3.7 (26.6) [104.7] | 0.69 | 88 | 8.1 (206) | 1.8 (.82) |
| AT1212 † | — | Mini Needle Scaler | — | 4,000 BPM | — | 4.0 (11.19) [113] | 11.4 | 90 | 12.5 (318) | 2.64 (1.20) |

† CE



AT401MCA



AT402MCA

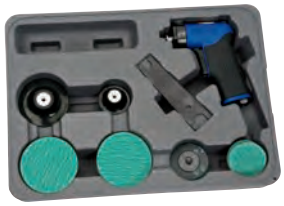


AT403MCA

| Specifications | AT401MCA † | AT402MCA † | AT403MCA † |
|---|---|---|---|
| Pad Size, inches (mm) | 3 (76) | 3 (76) | 3 (76.2) |
| Rated Power, HP (kW) | 0.25 (.19) | 0.25 (.19) | 0.25 (.19) |
| Free Speed RPM | 15,000 | 15,000 | 6,000 |
| Spindle Thread, inches | 1/4-20 | 5/16-24 UNF | 5/16-24 UNF |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 2.1 (15) [59] | 2.1 (15) [59] | 2.2 (16) [62] |
| Air Inlet Thread Size | 1/4"-18 NPT | 1/4"-18 NPT | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) | 3/8 (10) | 3/8 (10) |
| Vibration Level, m/s² | <2.5 | <2.5 | <2.5 |
| Sound Level dB(A) Pressure | 84 | 84 | 86 |
| Length, inches (mm) | 4.7 (119) | 5.2 (133) | 5.6 (143) |
| Weight, lb (kg) | 0.97 (0.44) | 1.1 (.50) | 1.3 (0.60) |

† CE

**AT401MCA, AT402MCA and AT403MCA Micro Series**
- Powerful direct drive gear train for greater durability
- Large two-finger trigger for better control
- High quality bearings for longer tool life
- Composite housing with comfort grip insulates from cold
- Bottom handle diffused exhaust
- Variable speed trigger



AT401MCKA

**AT401MCKA Micro Surface Prep Tool Kit**
- Includes: AT401MCA micro surface prep tool, one 2" ROLOC® pad, one 3" *ROLOC* pad, five 2" 40 grit pads and five 3" 80 grit pads in storage case
- CE



AT402MCKA

**AT402MCKA Micro Dual Action Sander Kit**
- Includes: AT402MC micro sander, one 3" Hook-It® pad , (25) 3" 180 grit pads, (25) 3" 200 grit pads, ten 3" 320 grit pads and ten 3" 800 grit pads in storage case
- CE



AT403MCKA

**AT403MCKA Micro Polisher Kit**
- Includes: AT403MCA micro polisher, one 3" *Hook-It* pad, one 3" wool pad, and one 3" foam pad in storage case
- CE

## Polisher

| Specifications | AT450CP † |
|---|---|
| Pad Size, inches (mm) | 7 (177) |
| Rated Power, HP (kW) | 0.5 (0.37) |
| Free Speed RPM | 2,500 |
| Spindle Thread, inches | 5/8"-11 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 3.31 (23.8) [93.72] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches | — |
| Vibration Level, m/s² | <2.5 m/S² |
| Sound Level dB(A) Pressure | 87 |
| Length, inches (mm) | 15 (381) |
| Weight, lb (kg) | 5 (2.27) |
| Standard Wool Pad | POLISHW8A |
| Spanner Wrench (opt.) | AT450-50H |

† CE



AT450CP

**AT450CP Heavy Duty Vertical Polisher**
- Removeable side handle
- Includes wool pad

**WARNING**
- Use only accessories intended for each air tool
- Do not use accessories above their maximum rated RPM
- Read safety precautions on pages W1 to W4

# AIR: FINISHING TOOLS

**PT280THUGA Crud Thug® Removal Air Tool**

- Quickly remove seam sealers, rust, paint and under-body coatings
- Optional rubber eraser wheel for pinstripe and graphics removal
- Easily removes automotive “crud” without fumes, heat buildup or surface damage
- Includes one fine wire wheel and one coarse wire wheel
- Thermally balanced air motor routes air between housing and liner for cooler tool temperatures and longer life
- Planetary gear system for increased torque
- Ergonomic cushion grip insulates against cold and vibration
- Adjustable exhaust outlet in rear of tool allows choice of exhaust direction
- Ten-position power/speed regulator allows easy RPM adjustment
- Paddle style trigger for precise speed control



**PT280THUGA**

| Specifications | PT280THUGA † |
|---|---|
| Rated Power, HP (kW) | 0.45 (.33) |
| Free Speed RPM | 3,500 |
| Air Consumption, Free Speed, CFM (SCFM) [l/min] | 4 (28) [113] |
| Air Inlet Thread Size | 1/4"-18 NPT |
| Recommended Hose Size, inches (mm) | 3/8 (10) |
| Vibration Level, m/s² | 2.8 |
| Sound Level dB(A) Pressure | 85 |
| Length, inches (mm) | 12 (304) |
| Weight, lb (kg) | 2.4 (1.09) |

† CE



**SPPT280-300**



**PT280-301MP5**



**PT280-302MP5**



**PT280-303MP3**



**PT280-304**



**PT280-305**



**PT280-306**



**PT280-300-11**



**PT280-301-11**



**PT280-302-11**



**PT280-304-11**



**PT280-305-11**



**PT280-306-11**

| Stock No. | Description | Width, mm | Wheel Diameter, inches | Wire Style | Max. Safe Free Speed RPM | Applications |
|---|---|---|---|---|---|---|
| SPPT280-300 | Hub | 23 and 30 | 4.05 | — | 4,000 | Use to mount 23 mm and 30 mm wheels to tool. |
| PT280-301MP5 | Wire Wheel (coarse) | 23 | 4.05 | Bent, sharpened hardened spring steel tips | 4,000 | Removes sealers and coatings. Profiles steel surfaces, rough fiberglass, plastic and rubber. |
| PT280-302MP5 | Wire Wheel (fine) | 23 | 4.05 | Straight, hardened spring steel tips | 4,000 | Removes light rust, paint and gasket material. Cleans contours and tight areas. |
| PT280-303MP3 | Rubber Eraser Wheel | 30 | 4.13 | — | 3,500 | Removes vinyl, decals and pinstripes, along with reflective and DOT tape. Also removes molding and adhesive tape. |
| PT280-304 | Stainless-Steel Wire Wheel (fine) | 23 | 4.05 | Straight tip stainless-steel | 4,000 | Removes paint, oxidation and liquid gaskets. Cleans weld seams and rivets. |
| PT280-305 | Stainless-Steel Wire Wheel (coarse) | 23 | 4.05 | Bent tip stainless-steel | 4,000 | Removes paint, corrosion, cleans weld seams, burn and slag. Effective for non-ferrous metals. |
| PT280-306 | Wire Wheel (medium) | 23 | 4.05 | Bent, sharpened spring steel tips | 4,000 | Removes heavy rust, paint, epoxy and marine growth. Profiles aluminum surfaces. |
| PT280-300-11 | Hub | 11 | 4.05 | — | 4,000 | Use to mount 11 mm wire wheel to tool. |
| PT280-301-11 | Wire Wheel (coarse) | 11 | 4.05 | Bent, sharpened spring steel tips | 4,000 | Removes sealers and coatings. Profiles steel surfaces, roughs fiberglass, plastic and rubber. |
| PT280-302-11 | Wire Wheel (fine) | 11 | 4.05 | Straight, hardened spring steel tips | 4,000 | Removes light rust, paint and gasket material. Cleans contours and tight areas. |
| PT280-304-11 | Stainless-Steel Wire Wheel (fine) | 11 | 4.05 | Straight, hardened stainless-steel tips | 4,000 | Removes paint, oxidation and liquid gaskets. Cleans weld seams and rivets. |
| PT280-305-11 | Stainless-Steel Wire Wheel (coarse) | 11 | 4.05 | Bent, sharpened stainless-steel tips | 4,000 | Removes paint, corrosion, cleans weld seams, burn and slag. Effective for non-ferrous metals. |
| PT280-306-11 | Wire Wheel (medium) | 11 | 4.05 | Bent, sharpened spring steel tips | 4,000 | Remove heavy rust, paint, epoxy and marine growth. Profiles aluminum surfaces. |

# THE PERFECT COMPLEMENTS.

Nothing complements your Snap-on® power tools like our full range of accessories. Add our Blue-point® accessories for more productivity, durability, control and power.

**IT ALL ADDS UP.**

You can add any number of accessories to your *Snap-on* power tools – and that helps optimize the progress in your shop.

**Hardened Drill Bits —** Resist breakage and get the most out of your drill.

**Premium-Grade Oil —** Better lubrication means longer tool life.

**Air Hoses —** Extremely lightweight for maneuverability.

**Protective Boots —** Protect your investment with a wide range of power tool boots.



# AIR/CORDLESS TOOL BOOTS


MG725BOOT


MG325OBOOT


YA888


PH3050BOOT


CT4410AGBOOT


YA969

## Air/Cordless Boots

| Description | | Air Tool Stock No. | Stock No. |
|---|---|---|---|
| Air Impact Wrench Boots | 3/4" Sq. Drive | AT670 | AT670BOOT |
| | | AT760 | AT760BOOT |
| | | AT775/AT775L | YA979 |
| | | MG1200/MG1250 Series | MG1200BOOT |
| | 1/2" Sq. Drive | AT123 Series | AT123-45 |
| | | AT500C/AT500D | YA972 |
| | | AT555/AT555A Series | AT531-25 |
| | | AT5500 | AT5500BOOT |
| | | AT570 | AT570BOOT |
| | | MG725 Series | MG725BOOT<br>MG725GBOOT<br>MG725OBOOT |
| | 3/8" Sq. Drive | AT321 | AT321-44 |
| | | AT351 | — |
| | | AT355A | YA977 |
| | | AT360 | AT360-25 |
| | | AT370 | AT370BOOT |
| | | MG325 Series | MG325BOOT<br>MG325GBOOT<br>MG325OBOOT |
| | 1/4" Sq. Drive | AT225B Series | YA975 |
| Air Drill Boots | 3/8" Capacity | AT5000 | AT5000BOOT |
| | | AT3000 | AT3000BOOT |

| Description | | Air Tool Stock No. | Stock No. |
|---|---|---|---|
| Air Ratchet Boots | 1/2" Sq. Drive | AT705 Series | AT700E49A |
| | 3/8" Sq. Drive | AT205 Series | AT200D22A |
| | | AT700 Series/AT702 | AT700E49A |
| | | ETB14460A | YA889A |
| | | FAR7000 | FAR7000BOOT |
| | | FAR7200, FAR72B, FAR72C | YA889A |
| | | PTR205A | YA905 |
| | | PTR215A | YA905 |
| | | PTR225A | YA905 |
| | 1/4" Sq. Drive | AT200 Series | AT200D22A |
| | | FAR25, FAR25A | YA888 |
| | | PTR200A, FAR2500, FAR2505 | YA905 |
| Air Hammer Boots | — | AT2050 | AT2050BOOT |
| | | PH3050/PH3050A/ PH3050B | PH3050BOOT |
| Cordless Impact Wrench Boots | 1/2" Sq. Drive | CT8850/CT6818 Series | CT8850BOOT |
| | | | CT8850GBOOT |
| | | | CT8850OBOOT |
| | | CT8815/CT4415 Series | CT8810BOOT |
| | | | CT8810GBOOT |
| | | | CT8810OBOOT |
| | | CT7850 Series | CT7850BOOT |
| | | CT4850/CT6850/6855 Series | CT4850BOOT |
| | | | CT6850GBOOT |
| | | | CT6850OBOOT |
| | | CT3450/CT3850 Series | YA982 |
| | 3/8" Sq. Drive | CT8810/CT4418 Series | CT8810BOOT |
| | | | CT8810GBOOT |
| | | | CT8810OBOOT |
| | | CT4410A Series | CT4410BOOT |
| | | | CT4410AGBOOT |
| | | | CT4410AOBOOT |
| | | CT30 Series | YA968 |
| | | CT310 Series | YA982 |
| | | CT3110, CT3110HP Series | YA969 |
| Battery Boots | 18V | CTB4185/CTB4187 Series | CTB4185BOOT |
| | | CTB7185/CTB8185 | CTB7185BOOT |
| | 14.4V | CTB4145/CTB4147 Series | CTB4145BOOT |

## Magnetic Power Nut Drivers

- Magnets keep ferrous metal fasteners positioned in driver
- High grade alloy material for long lasting durability
- Storage case to keep tools organized under hood and bench work

**Applications:** Under dash


PTNDM4KA

**PTND4KA Magnetic Power Nut Setter Set, inch (4pc)**
Includes: 1/4", 5/16", 3/8" and 1/2" nut setters.

**PTNDM4KA Magnetic Power Nut Setter Set, Metric (4pc)**
Includes: 8 mm, 10 mm, 12 mm and 14 mm nut setters.

**CTS561BITSET**
**Quick Change Bit Set**

- For Snap-on® cordless screwdrivers plus other power drivers
- Quick change hex saves time changing bits
- Includes 22 bits (all 3" long) plus a 1/4" square drive (2" long)
- Storage case included


CTS561BITSET

### Set Includes:

| Phillips® Bits | Flat Tip Bits | TORX® Bits | Hex Bits |
|---|---|---|---|
| #0, #1, #2 | 5/32", 3/16", 7/16", 1/4", 9/32" | T10, T15, T20, T25, T27, T30, T40 | 3/32", 7/64", 1/8", 5/32", 3/16", 7/32", 1/4" |

**PTB32K Power Bit Set**

- Ideal for use with cordless drills and screwdrivers, includes (30) 1/4" hex shank bits plus two adaptors
- Storage case clearly indicates bit type and size


PTB32K

### Set Includes:

| Flat Tip Bits | Hex Bits | *Phillips* Bits | POZIDRIV® Bits | *TORX* Tamper Resistant Bits | Square Bits | Adaptors |
|---|---|---|---|---|---|---|
| 5/32", 3/16", 7/32", 1/4", 9/32" | 3/32", 7/64", 1/8", 5/32", 3/16", 7/32", 1/4" | #0, #1, #2, #3 | #0, #1, #2, #3 | T10, T15, T20, T25, T27, T30, T40 | #0, #1, #2 | 1/4" hex male to 1/4" square male, 1/4" hex Quick Change Coupler |



YA52PBSQC

### YA52PBSQC Power Bit Set (Blue-Point®)

- Ideal for use with cordless drills and screwdrivers
- Includes 49 1/4" hex shank bits in short and long lengths, two hex adaptors and quick change chuck
- Storage case holds all components

## Set Includes:

| Flat Tip Bits (Short) | Flat Tip Bits (Long) | Hex Bits (Short) | Hex Bits (Long) | Phillips® Bits (Short) | *Phillips* Bits (Long) | TORX® Tamper Resistant Bits (Short and Long) | Square Bits (Short and Long) | Clutch Bits (Short and Long) | Double End Bits | Adaptors |
|---|---|---|---|---|---|---|---|---|---|---|
| 5–6, 6–8, 8–10 (2 each), 10–12 | 6–8, 8–10, 10–12 | 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 9/32" | 5/32", 3/16", 7/32" | #1, #2 (2 each), #3 | #1, #2, #3 | T10, T15, T20, T25, T27, T30, T40 | #1, #2, #3 | 5/32", 3/16" | 6–8 x #2 *Phillips*, 8–10 x #3 *Phillips* | 1/4" hex female to 1/4" hex female, 1/4" hex male to 1/4" square male, 1/4" hex Quick Change Chuck |

## Double Square Bit

### BTSS620 Double Square Power Bit

- Provide extra clearance and minimize tool contact with work surface
- Minimize potential damage to painted panels on RVs and trailers
- Ideal for use with all types of drills
- 6" long



BTSS620



DC15014



DCA500



AT3000-26



PDAH1A



DCBP500



DC150

| Stock No. | Description | Use On | Size | Thread Size | Capacity | Includes Chuck Key |
|---|---|---|---|---|---|---|
| DC15014 | Drill Chuck | General Use | 1/4" | — | — | — |
| DC15038 | Drill Chuck | General Use | 3/8" | — | — | — |
| DCA375 | Drill Chuck | AT3000 | 3/8" | 3/8"-24 | 1/32"–3/8" | PD3A3 |
| DCA500 | Drill Chuck | AT5000 | 1/2" | 1/2"-20 | 1/16"–1/2" | PD30-3 |
| AT3000-26 | Keyless Drill Chuck | AT3000 | 3/8" | 3/8"-24 | 1/32"–3/8" | — |
| AT5000-6 | Drill Chuck | AT5000 | 1/2" | 1/2"-20 | 1/16"–1/2" | — |
| DCBP500 | Keyless Drill Chuck | AT5000 | 1/2" | 1/2"-20 | 1/16"–1/2" | — |
| DC208881 | Drill Chuck | — | 3/8" | 3/8"-24 | 1/32"–3/8" | DC205989 |
| DC666574 | Drill Chuck | — | 3/8" | 3/8"-24 | 1/32"–3/8" | DC500516 |
| DC666575 | Drill Chuck | — | 1/2" | 1/2"-20 | 1/16"–1/2" | DC500516 |
| DC666582 | Drill Chuck | — | 3/8" | 3/8"-24 | 1/32"–3/8" | DC1125623 |
| PD30-3 | Chuck Key | AT5000 | — | — | — | — |
| PD3A3 | Chuck Key | PDR3A, AT800 | — | — | — | — |
| AT5000-6-1 | Chuck Key | AT5000 | — | — | — | — |
| DC205989 | S2A Chuck Key | DC208881 | — | — | — | — |
| DC500516 | S9 Chuck Key | DC666574, DC666575 | — | — | — | — |
| DC1125623 | S8 Chuck Key | DC666582 | — | — | — | — |

### DC150 Chuck Set

- Includes 1/4" and 3/8" drill chucks, a chuck key and a set of five stubby drill bits in 1/8", 3/16", 1/4", 5/16" and 3/8" sizes
- Packaged in a storage case

### PDAH1A Auxiliary Handle

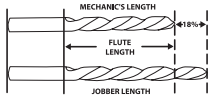
- Provides two-handed power and control when used in conjunction with air drills

⚠WARNING • Read safety precautions on pages W1 to W4

# DRILL BITS




## THUNDERBIT®/Cobalt Jobber Length 135° Split Point




- For drilling at higher speeds in tougher drilling conditions
- Feature 135° split points for easier drill starting without the need for center punching
- Heavy duty web construction for higher strength and less breakage
- Improved chip ejection through a specially engineered flute design

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBTBC1/16 | 1/16 | DBTBC19/64 | 19/64 |
| DBTBC5/64 | 5/64 | DBTBC5/16 | 5/16 |
| DBTBC3/32 | 3/32 | DBTBC21/64 | 21/64 |
| DBTBC7/64 | 7/64 | DBTBC11/32 | 11/32 |
| DBTBC1/8 | 1/8 | DBTBC23/64 | 23/64 |
| DBTBC9/64 | 9/64 | DBTBC3/8 | 3/8 |
| DBTBC5/32 | 5/32 | DBTBC25/64 | 25/64 |
| DBTBC11/64 | 11/64 | DBTBC13/32 | 13/32 |
| DBTBC3/16 | 3/16 | DBTBC27/64 | 27/64 |
| DBTBC13/64 | 13/64 | DBTBC7/16 | 7/16 |
| DBTBC7/32 | 7/32 | DBTBC29/64 | 29/64 |
| DBTBC15/64 | 15/64 | DBTBC15/32 | 15/32 |
| DBTBC1/4 | 1/4 | DBTBC31/64 | 31/64 |
| DBTBC17/64 | 17/64 | DBTBC1/2 | 1/2 |
| DBTBC9/32 | 9/32 | — | — |



DBTBC121



DBTBC129

**DBTBC121 *THUNDERBIT* Cobalt Drill Bit Set**
DBTBC1/16 through DBTBC3/8 (21 bits) in B121B metal drill index.

**DBTBC129 *THUNDERBIT* Cobalt Drill Bit Set**
DBTBC1/16 through DBTBC1/2 (29 bits) in B129B metal drill index.

## *THUNDERBIT*/High Speed Steel Jobber Length 135° Split Point

- Industrial grade steel with bronze oxide surface treatment
- Bits will drill at higher speeds in tougher drilling conditions
- 135° split points for easier drill starting without the need for center punching
- Heavy duty web construction for higher strength and less breakage
- Improved chip ejection through a specially engineered flute design

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBTB1/16 | 1/16 | DBTB19/64 | 19/64 |
| DBTB5/64 | 5/64 | DBTB5/16 | 5/16 |
| DBTB3/32 | 3/32 | DBTB21/64 | 21/64 |
| DBTB7/64 | 7/64 | DBTB11/32 | 11/32 |
| DBTB1/8 | 1/8 | DBTB23/64 | 23/64 |
| DBTB9/64 | 9/64 | DBTB3/8 | 3/8 |
| DBTB5/32 | 5/32 | DBTB25/64 | 25/64 |
| DBTB11/64 | 11/64 | DBTB13/32 | 13/32 |
| DBTB3/16 | 3/16 | DBTB27/64 | 27/64 |
| DBTB13/64 | 13/64 | DBTB7/16 | 7/16 |
| DBTB7/32 | 7/32 | DBTB29/64 | 29/64 |
| DBTB15/64 | 15/64 | DBTB15/32 | 15/32 |
| DBTB1/4 | 1/4 | DBTB31/64 | 31/64 |
| DBTB17/64 | 17/64 | DBTB1/2 | 1/2 |
| DBTB9/32 | 9/32 | — | — |



DBTB121



DBTB129

**DBTB121 *THUNDERBIT* High Speed Drill Bit Set**
DBTB1/16 through DBTB3/8 (21 bits) in B121B metal drill index.

**DBTB129 Drill Bit Set**
DBTB1/16 through DBTB1/2 (29 bits) in B129B metal drill index.

## High Speed Mechanic's Length 135° Point with 3 Flat Shank

| Stock No. | Size, inches | Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|---|---|
| DBTR1/16 | 1/16 | DBTR7/32 | 7/32 | DBTR3/8 | 3/8 |
| DBTR5/64 | 5/64 | DBTR15/64 | 15/64 | DBTR25/64 | 25/64 |
| DBTR3/32 | 3/32 | DBTR1/4 | 1/4 | DBTR13/32 | 13/32 |
| DBTR7/64 | 7/64 | DBTR17/64 | 17/64 | DBTR27/64 | 27/64 |
| DBTR1/8 | 1/8 | DBTR9/32 | 9/32 | DBTR7/16 | 7/16 |
| DBTR9/64 | 9/64 | DBTR19/64 | 19/64 | DBTR29/64 | 29/64 |
| DBTR5/32 | 5/32 | DBTR5/16 | 5/16 | DBTR15/32 | 15/32 |
| DBTR11/64 | 11/64 | DBTR21/64 | 21/64 | DBTR31/64 | 31/64 |
| DBTR3/16 | 3/16 | DBTR11/32 | 11/32 | DBTR1/2 | 1/2 |
| DBTR13/64 | 13/64 | DBTR23/64 | 23/64 | — | — |



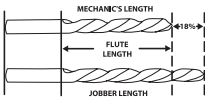
DBTR11



DBTR129

**DBTR11 Drill Bit Set**
DBTR1/16, DBTR3/32, DBTR1/8, DBTR5/32, DBTR3/16, DBTR7/32, DBTR1/4, DBTR9/32, DBTR5/16, DBTR11/32 and DBTR3/8 (11 bits) in a kit bag.

**DBTR129 Drill Bit Set**
DBTR1/16 through DBTR1/2 (29 bits) in B129B metal drill index.




## Jobber Length 118° Point

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBF1/16C | 1/16 | DBF19/64C | 19/64 |
| DBF5/64C | 5/64 | DBF5/16C | 5/16 |
| DBF3/32C | 3/32 | DBF21/64C | 21/64 |
| DBF7/64C | 7/64 | DBF11/32C | 11/32 |
| DBF1/8C | 1/8 | DBF23/64C | 23/64 |
| DBF9/64C | 9/64 | DBF3/8C | 3/8 |
| DBF5/32C | 5/32 | DBF25/64C | 25/64 |
| DBF11/64C | 11/64 | DBF13/32C | 13/32 |
| DBF3/16C | 3/16 | DBF27/64C | 27/64 |
| DBF13/64C | 13/64 | DBF7/16C | 7/16 |
| DBF7/32C | 7/32 | DBF29/64C | 29/64 |
| DBF15/64C | 15/64 | DBF15/32C | 15/32 |
| DBF1/4C | 1/4 | DBF31/64C | 31/64 |
| DBF1764C | 17/64 | DBF1/2C | 1/2 |
| DBF9/32C | 9/32 | – | — |

**DB129C Drill Bit Set**
DBF1/16C through DBF1/2C (29 bits) in B129C metal drill index.

**DB121C Drill Bit Set**
DBF1/16C through DBF3/8C (21 bits) in B121C metal drill index.

**DB113C Drill Bit Set**
DBF1/16C through DBF1/4C (13 bits) in B113B metal drill index.


DB129C


DB121C


DB113C

## Jobber Length Letter Size 118° Point

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBAA1A | .234 (A) | DBAA1N | .302 (N) |
| DBAA1B | .238 (B) | DBAA1O | .316 (O) |
| DBAA1C | .242 (C) | DBAA1P | .323 (P) |
| DBAA1D | .246 (D) | DBAA1Q | .332 (Q) |
| DBAA1E | .250 (E) | DBAA1R | .339 (R) |
| DBAA1F | .257 (F) | DBAA1S | .348 (S) |
| DBAA1G | .261 (G) | DBAA1T | .358 (T) |
| DBAA1H | .266 (H) | DBAA1U | .368 (U) |
| DBAA1I | .272 (I) | DBAA1V | .377 (V) |
| DBAA1J | .277 (J) | DBAA1W | .386 (W) |
| DBAA1K | .281 (K) | DBAA1X | .397 (X) |
| DBAA1L | .290 (L) | DBAA1Y | .404 (Y) |
| DBAA1M | .295 (M) | DBAA1Z | .413 (Z) |

**DBA126B Letter Drill Bit Set**
DBAA1A through DBAA1Z (26pc) (.234"–.413") in B126C metal index.


DBA126B

## Jobber Length Metric Size 118° Point

| Stock No. | Size, mm | Stock No. | Size, mm |
|---|---|---|---|
| DBM1A | 1 | DBM7.5A | 7.5 |
| DBM1.5A | 1.5 | DBM8A | 8 |
| DBM2A | 2 | DBM8.5A | 8.5 |
| DBM2.5A | 2.5 | DBM9A | 9 |
| DBM3A | 3 | DBM9.5A | 9.5 |
| DBM3.5A | 3.5 | DBM10A | 10 |
| DBM4A | 4 | DBM10.5A | 10.5 |
| DBM4.5A | 4.5 | DBM11A | 11 |
| DBM5A | 5 | DBM11.5A | 11.5 |
| DBM5.5A | 5.5 | DBM12A | 12 |
| DBM6A | 6 | DBM12.5A | 12.5 |
| DBM6.5A | 6.5 | DBM13A | 13 |
| DBM7A | 7 | – | — |

**DBM125C Metric Drill Bit Set**
DBM1A through DBM13A (25pc) (1 mm–13 mm) in B125C metal index.


DBM125C



WARNING • Read safety precautions on pages W1 to W4

# WIRE GAUGE DRILL BITS



DBC260A



DB120C

## Wire Gauge 118° Point (Cobalt and High Speed Steel)

| Cobalt | High Speed Steel | Decimal Equiv., inches | Length, inches | Cobalt | High Speed Steel | Decimal Equiv., inches | Length, inches |
|---|---|---|---|---|---|---|---|
| DBCE1A | DBE1B | .2280 | 3 7/8 | DBCE41A | DBE41B | .0960 | 2 3/8 |
| DBCE2A | DBE2B | .2210 | 3 7/8 | DBCE42A | DBE42B | .0935 | 2 1/4 |
| DBCE3A | DBE3B | .2130 | 3 3/4 | DBCE43A | DBE43B | .0890 | 2 1/4 |
| DBCE4A | DBE4B | .2090 | 3 3/4 | DBCE44A | DBE44B | .0860 | 2 1/8 |
| DBCE5A | DBE5B | .2055 | 3 3/4 | DBCE45A | DBE45B | .0820 | 2 1/8 |
| DBCE6A | DBE6B | .2040 | 3 3/4 | DBCE46A | DBE46B | .0810 | 2 1/8 |
| DBCE7A | DBE7B | .2010 | 3 5/8 | DBCE47A | DBE47B | .0785 | 2 |
| DBCE8A | DBE8B | .1990 | 3 5/8 | DBCE48A | DBE48B | .0760 | 2 |
| DBCE9A | DBE9B | .1960 | 3 5/8 | DBCE49A | DBE49B | .0730 | 2 |
| DBCE10A | DBE10B | .1935 | 3 5/8 | DBCE50A | DBE50B | .0700 | 2 |
| DBCE11A | DBE11B | .1910 | 3 1/2 | DBCE51A | DBE51B | .0670 | 2 |
| DBCE12A | DBE12B | .1890 | 3 1/2 | DBCE52A | DBE52B | .0635 | 1 7/8 |
| DBCE13A | DBE13B | .1850 | 3 1/2 | DBCE53A | DBE53B | .0595 | 1 7/8 |
| DBCE14A | DBE14B | .1820 | 3 3/8 | DBCE54A | DBE54B | .0550 | 1 7/8 |
| DBCE15A | DBE15B | .1800 | 3 3/8 | DBCE55A | DBE55B | .0520 | 1 7/8 |
| DBCE16A | DBE16B | .1770 | 3 3/8 | DBCE56A | DBE56B | .0465 | 1 3/4 |
| DBCE17A | DBE17B | .1730 | 3 3/8 | DBCE57A | DBE57B | .0430 | 1 3/4 |
| DBCE18A | DBE18B | .1695 | 3 1/4 | DBCE58A | DBE58B | .0420 | 1 5/8 |
| DBCE19A | DBE19B | .1660 | 3 1/4 | DBCE59A | DBE59B | .0410 | 1 5/8 |
| DBCE20A | DBE20B | .1610 | 3 1/4 | DBCE60A | DBE60B | .0400 | 1 5/8 |
| DBCE21A | DBE21B | .1590 | 3 1/4 | – | DBE61B | .0390 | 1 5/8 |
| DBCE22A | DBE22B | .1570 | 3 1/8 | – | DBE62B | .0380 | 1 1/2 |
| DBCE23A | DBE23B | .1540 | 3 1/8 | – | DBE63B | .0370 | 1 1/2 |
| DBCE24A | DBE24B | .1520 | 3 1/8 | – | DBE64B | .0360 | 1 1/2 |
| DBCE25A | DBE25B | .1495 | 3 | – | DBE65B | .0350 | 1 1/2 |
| DBCE26A | DBE26B | .1470 | 3 | – | DBE66B | .0330 | 1 3/8 |
| DBCE27A | DBE27B | .1440 | 3 | – | DBE67B | .0320 | 1 3/8 |
| DBCE28A | DBE28B | .1405 | 2 7/8 | – | DBE68B | .0310 | 1 3/8 |
| DBCE29A | DBE29B | .1360 | 2 7/8 | – | DBE69B | .0292 | 1 3/8 |
| DBCE30A | DBE30B | .1285 | 2 3/4 | – | DBE70B | .0280 | 1 1/4 |
| DBCE31A | DBE31B | .1200 | 2 3/4 | – | DBE71B | .0260 | 1 1/4 |
| DBCE32A | DBE32B | .1160 | 2 3/4 | – | DBE72B | .0250 | 1 1/8 |
| DBCE33A | DBE33B | .1130 | 2 5/8 | – | DBE73B | .0240 | 1 1/8 |
| DBCE34A | DBE34B | .1110 | 2 5/8 | – | DBE74B | .0225 | 1 |
| DBCE35A | DBE35B | .1100 | 2 5/8 | – | DBE75B | .0210 | 1 |
| DBCE36A | DBE36B | .1065 | 2 1/2 | – | DBE76B | .0200 | 7/8 |
| DBCE37A | DBE37B | .1040 | 2 1/2 | – | DBE77B | .0180 | 7/8 |
| DBCE38A | DBE38B | .1015 | 2 1/2 | – | DBE78B | .0160 | 7/8 |
| DBCE39A | DBE39B | .0995 | 2 3/8 | – | DBE79B | .0145 | 3/4 |
| DBCE40A | DBE40B | .0980 | 2 3/8 | – | DBE80B | .0135 | 3/4 |

**DBC260A Cobalt Drill Bit Set**
DBCE1A through DBCE60A (60pc) (.2280"–.0400") in a B160C metal index.

**DB160C High Speed Drill Bit Set**
DBE1B through DBE60B (60pc) (.2280"–.0400") in a B160C metal index.

**DB120C High Speed Drill Bit Set**
DBE61B through DBE80B (20pc) (.0390"–.0135") in a metal index.



DBBPC21

## Jobber Length 135° Split Point (Cobalt)

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBBPC1/16 | 1/16 | DBBPC15/64 | 15/64 |
| DBBPC5/64 | 5/64 | DBBPC1/4 | 1/4 |
| DBBPC3/32 | 3/32 | DBBPC17/64 | 17/64 |
| DBBPC7/64 | 7/64 | DBBPC9/32 | 9/32 |
| DBBPC1/8 | 1/8 | DBBPC19/64 | 19/64 |
| DBBPC9/64 | 9/64 | DBBPC5/16 | 5/16 |
| DBBPC5/32 | 5/32 | DBBPC21/64 | 21/64 |
| DBBPC11/64 | 11/64 | DBBPC11/32 | 11/32 |
| DBBPC3/16 | 3/16 | DBBPC23/64 | 23/64 |
| DBBPC13/64 | 13/64 | DBBPC3/8 | 3/8 |
| DBBPC7/32 | 7/32 | – | — |

**DBBPC21 Cobalt Drill Bit Set**
DBBPC1/16 through DBBPC3/8 (21pc) (1/16"–3/8") in metal drill bit index.



DBBP21

## Jobber Length 135° Split Point (High Speed Steel)

| Stock No. | Size, inches | Stock No. | Size, inches |
|---|---|---|---|
| DBBP1/16 | 1/16 | DBBP15/64 | 15/64 |
| DBBP5/64 | 5/64 | DBBP1/4 | 1/4 |
| DBBP3/32 | 3/32 | DBBP17/64 | 17/64 |
| DBBP7/64 | 7/64 | DBBP9/32 | 9/32 |
| DBBP1/8 | 1/8 | DBBP19/64 | 19/64 |
| DBBP9/64 | 9/64 | DBBP5/16 | 5/16 |
| DBBP5/32 | 5/32 | DBBP21/64 | 21/64 |
| DBBP11/64 | 11/64 | DBBP11/32 | 11/32 |
| DBBP3/16 | 3/16 | DBBP23/64 | 23/64 |
| DBBP13/64 | 13/64 | DBBP3/8 | 3/8 |
| DBBP7/32 | 7/32 | – | — |

**DBBP21 HSS Drill Bit Set**
DBBP1/16 through DBBP3/8 (21pc) (1/16"–3/8") in metal drill bit index.



DBBPT13

## 135° Split Point (High Speed Steel) (Titanium Coated)

| Stock No. | Size, inches |
|---|---|
| DBBPT1/16 | 1/16 |
| DBBPT5/64 | 5/64 |
| DBBPT3/32 | 3/32 |
| DBBPT7/64 | 7/64 |
| DBBPT1/8 | 1/8 |
| DBBPT9/64 | 9/64 |
| DBBPT5/32 | 5/32 |
| DBBPT11/64 | 11/64 |
| DBBPT3/16 | 3/16 |
| DBBPT13/64 | 13/64 |
| DBBPT7/32 | 7/32 |
| DBBPT15/64 | 15/64 |
| DBBPT1/4 | 1/4 |

**DBBPT13 Titanium Coated Steel Drill Bit Set**
DBBPT1/16 through DBBPT1/4 (13pc) (1/16"–1/4") in metal drill bit index.

# SPECIALIZED DRILL BITS



DBCL105A

## Left Hand Fractional Drill Bits (Cobalt)

| Stock No. | Size, inches |
|---|---|
| DBCL5/64A | 5/64 |
| DBCL7/64A | 7/64 |
| DBCL5/32A | 5/32 |
| DBCL3/16 | 3/16 |
| DBCL1/4A | 1/4 |
| DBCL9/32 | 9/32 |
| DBCL19/64A | 19/64 |
| DBCL5/16 | 5/16 |
| DBCL11/32 | 11/32 |
| DBCL3/8 | 3/8 |
| DBCL13/32 | 13/32 |
| DBCL7/16 | 7/16 |
| DBCL15/32 | 15/32 |
| DBCL1/2 | 1/2 |

**DBCL105A Left Hand Drill Bit Set**
DBCL5/64, DBCL7/64, DBCL5/32, DBCL1/4 and DBCL19/64 drill bits (5pc) in a plastic pouch.



DBLS105A

## Left Hand Fractional Drill Bits (High Speed Steel)

- Use left hand drill bits to make a hole in the broken screw before the extractor is inserted
- Left hand drill bits tend to loosen screws for easier removal

| Stock No. | Size, inches | Flute Length, inches | Overall Length, inches |
|---|---|---|---|
| DBLS1/8A | 1/8 | 1 3/8 | 3 |
| DBLS3/16A | 3/16 | 2 | 3 1/2 |
| DBLS1/4A | 1/4 | 2 1/2 | 4 |
| DBLS5/16A | 5/16 | 2 5/8 | 4 1/2 |
| DBLS11/32A | 11/32 | 2 3/4 | 4 1/2 |

**DBLS105A Left Hand Drill Bit Set**
DBLS1/8 through DBLS11/32 (5pc) in a plastic pouch.



DBH11B

## Hex Shank

- Shank hex size is 1/4"

| Stock No. | Size, inches |
|---|---|
| DBH1/16B | 1/16 |
| DBH3/32B | 3/32 |
| DBH1/8B | 1/8 |
| DBH5/32B | 5/32 |
| DBH3/16B | 3/16 |
| DBH7/32B | 7/32 |
| DBH1/4BB | 1/4 |
| DBH9/32B | 9/32 |
| DBH5/16B | 5/16 |
| DBH11/32B | 11/32 |
| DBH3/8B | 3/8 |

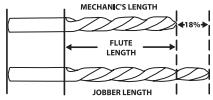
**DBH7B Hex Shank Drill Bit Set**
- Includes DBH1/16B through DBH1/4BB (1/16"–1/4") (7pc) in DBH7B-1 kit bag

**DBH11B Hex Shank Drill Bit Set**
- Includes DBH1/16B through DBH3/8B (1/16"–3/8") (11pc) in DBH11B-1 kit bag



WARNING • Read safety precautions on pages W1 to W4

# SPECIALIZED DRILL BITS






DBD1/4A



DBD110A



DBD1/8AMP10



DBK7A



CSE485B



YA409

**Kit includes:**
YA409 Drive unit; Chucking spud
YA409-316M 3/16" bit, 1 1/4" long
YA409-18L 1/8" bit, 2 1/8" long
YA409-332L 3/32" bit, 2 1/8" long
YA409-18M 1/8" bit, 1 1/4" long
YA409-532M 5/32" bit, 1 1/4" long
YA409-18S 1/8" bit, 3/4" long
YA409-15 Storage Case

## Double Ended 135° Split Point

- DBD7/64A through DBD30A (10pc)
- (7/64" to #30) in a plastic pouch

Set Contains: DBD110A

| Stock No. | Size | |
|---|---|---|
| DBD7/64A | 7/64" | • |
| DBD1/8A | 1/8" | • |
| DBD9/64A | 9/64" | • |
| DBD5/32A | 5/32" | • |
| DBD3/16A | 3/16" | • |
| DBD7/32A | 7/32" | • |
| DBD1/4A | 1/4" | • |
| DBD11A | #11 | • |
| DBD20A | #20 | • |
| DBD30A | #30 | • |

**DBD1/8AMP10 Double Ended Drill Bit (10 pack)**
10 pack of DBD1/8A drill bits

## Aircraft Length 135° Split Point

Extra long bits for drilling thick materials.

Set Contains: DBK7A

| Stock No. | Size, inches | Flute Length, inches | Length, inches | |
|---|---|---|---|---|
| DBT1/8A | 1/8 | 1 5/8 | 12 | • |
| DBT3/16A | 3/16 | 2 1/4 | 12 | • |
| DBT1/4A | 1/4 | 2 3/4 | 12 | • |
| DBT5/16A | 5/16 | 3 1/4 | 12 | • |
| DBT3/8A | 3/8 | 3 3/4 | 12 | • |
| DBT7/16A | 7/16 | 4 | 12 | • |
| DBT1/2A | 1/2 | 4 1/2 | 12 | • |

## 1/2" Reduced Shank Drill Bits 118° Point

- Ideal for cutting in low and medium tensile strength materials
- Flatted shank provides a more secure grip for the drill chuck

| Stock No. | Size, inches |
|---|---|
| CSE345B | 17/32 |
| CSE365B | 9/16 |
| CSE375* | 37/64 |
| CSE385B | 19/32 |
| CSE405B | 5/8 |
| CSE425B | 21/32 |
| CSE445B | 11/16 |
| CSE465B | 23/32 |
| CSE475* | 45/64 |
| CSE485B | 3/4 |
| CSE505B | 25/32 |
| CSE525B | 13/16 |
| CSE565B | 7/8 |
| CSE575* | 59/64 |
| CSE605B | 15/16 |
| CSE645B | 1 |

*Use with TDP6 pipe tap set.

## 90° Angle Drill Bits

| Size | 2 1/8" Long Bit Stock No. | 1 1/4" Medium Bit Stock No. | 3/4" Short Bit Stock No. |
|---|---|---|---|
| #10 | YA409-10L | YA409-10M | YA409-10S |
| #11 | – | – | YA409-11S |
| #13 | – | – | YA409-13S |
| #20 | – | – | YA409-20S |
| #21 | – | – | YA409-21S |
| #27 | – | – | YA409-27S |
| #30 | YA409-30L | YA409-30M | YA409-30S |
| #40 | YA409-40L | YA409-40M | YA409-40S |
| 3/32" | YA409-332L | YA409-332M | YA409-332S |
| 1/8" | YA409-18L | YA409-18M | YA409-18S |
| 5/32" | YA409-532L | YA409-532M | YA409-532S |
| 3/16" | YA409-316L | YA409-316M | YA409-316S |
| 1/4" | YA409-14L | YA409-14M | YA409-14S |

**YA409 90° Angle Drill Kit**
- Allows drilling up to 1/4" holes in confined areas by positioning the bit at a 90° angle to the drill
- Threaded drill bits provide consistent concentricity and eliminate slippage

**YA409-6 Threaded Collet**
Allows the use of 1/4" diameter shank grinding burrs and abrasive wheels.

## Titanium Nitride Step Drills

- Titanium nitride coating creates a surface hardness that makes these tools last four to five times longer than ordinary drill bits
- Surface coating also reduces friction, resulting in a tool that runs cooler while running dry



YA1TA

| Stock No. | Size Range | Increments | Shank Size | Hole Sizes Per Bit | Length, inches |
|---|---|---|---|---|---|
| YA1TA | 1/8"–1/2" | 1/32" | 1/4" | 13 | 3 1/4 |
| YA2TA | 3/16"–1/2" | 1/16" | 1/4" | 6 | 3 1/4 |
| YA3TA | 1/4"–3/4" | 1/16" | 3/8" | 9 | 2 5/8 |
| YA4TA | 3/16"–7/8" | 1/16" | 3/8" | 12 | 3 |
| YA1MTA | 4–12 mm | 1 mm | 1/4"–6.5 mm | 9 | 3 1/4 |
| YA3MTA | 6–18 mm | 2 mm | 3/8"–10 mm | 7 | 2 5/8 |
| YA4MTA | 4–22 mm | 2 mm | 3/8"–10 mm | 10 | 3 |
| YA5MTA | 5–35 mm | 2–3 mm | 1/2"–13 mm | 13 | 3 3/32 |



YA263A

## Step Drills

| Stock No. | Size Range, inches | Increments, inches | Shank Size, inches | Hole Sizes Per Bit | Length, inches | Set Contains: YAS203A |
|---|---|---|---|---|---|---|
| YA261A | 1/8–1/2 | 1/32 | 1/4 | 13 | 3 1/4 | • |
| YA262A | 3/16–1/2 | 1/16 | 1/4 | 6 | 3 3/8 | • |
| YA265A | 3/8 | — | 1/4 | 1 | 1 5/8 | |
| YA263A | 1/4–3/4 | 1/16 | 3/8 | 9 | 2 5/8 | • |
| YA267A | 3/16–7/8 | 1/16 | 3/8 | 12 | 3 | |
| YA266A | 9/16–1 | 1/16 | 1/2 | 8 | 2 1/2 | |



## Hole Saws and Arbors

- High speed cutting edge welded to an alloy steel back to absorb shocks
- Cut clean, accurate holes in steel and cast iron pipe, steel plates, aluminum, copper, brass, stainless-steel, wood or plastic
- Side slits make it easy to knock out the spent disks

| Stock No. | Dia., inches | Recommended Arbors | Stock No. | Dia., inches | Recommended Arbors |
|---|---|---|---|---|---|
| LHS18D | 9/16 | LHS1C, LHS6C | LHS48D | 1 1/2 | LHS3D |
| LHS20D | 5/8 | LHS1C, LHS6C | LHS50D | 1 9/16 | LHS3D |
| LHS22D | 11/16 | LHS1C, LHS6C | LHS52D | 1 5/8 | LHS3D |
| LHS24D | 3/4 | LHS1C, LHS6C | LHS54D | 1 11/16 | LHS3D |
| LHS26D | 13/16 | LHS1C, LHS6C | LHS56D | 1 3/4 | LHS3D |
| LHS28D | 7/8 | LHS1C, LHS6C | LHS58D | 1 13/16 | LHS3D |
| LHS30D | 15/16 | LHS1C, LHS6C | LHS60D | 1 7/8 | LHS3D |
| LHS32D | 1 | LHS1C, LHS6C | LHS64D | 2 | LHS3D |
| LHS34D | 1 1/16 | LHS1C, LHS6C | LHS66D | 2 1/16 | LHS3D |
| LHS36D | 1 1/8 | LHS1C, LHS6C | LHS68D | 2 1/8 | LHS3D |
| LHS38D | 1 3/16 | LHS1C, LHS6C | LHS72D | 2 1/4 | LHS3D |
| LHS40D | 1 1/4 | LHS3D | LHS76D | 2 3/8 | LHS3D |
| LHS42D | 1 5/16 | LHS3D | LHS80D | 2 1/2 | LHS3D |
| LHS44D | 1 3/8 | LHS3D | LHS88D | 2 3/4 | LHS3D |
| LHS46D | 1 7/16 | LHS3D | LHS96D | 3 | LHS3D |



LHS18D



LHS48D



LHS64D



LHS608B



LHS606D

**LHS608B Hole Saw and Arbor Kit**
Includes LHS44D, LHS48D, LHS56D, LHS64D, LHS80D and LHS96D hole saws plus LHS6C and LHS3D arbors and LHS8C arbor adaptor (9pc) in storage case. Recommended speed charts are included.

**LHS606D Hole Saw and Arbor Kit**
Includes LHS24D, LHS28D, LHS32D, LHS36D and LHS40D hole saws plus LHS6C arbor and LHS8C arbor adaptor (7pc) in storage case. Recommended speed charts are included.

## Hole Saw Arbors and Pilot Drills

| Stock No. | Thread Size | Fits Saws, inches | Fits Drill Chucks, inches | Replacement Pilot Drill |
|---|---|---|---|---|
| LHS5C | 1/2"-20 | 9/16–1 3/16 | 1/4 | LHS4D |
| LHS6C | 1/2"-20 | 9/16–1 3/16 | 3/8 | LHS4D |
| LHS1C | 1/2"-20 | 9/16–1 3/16 | 1/2 | LHS4D |
| LHS3D | 5/8"-18 | 1 1/4–6 | 3/8 | LHS4D |
| LHS8C | Arbor adaptor to convert 1/2"-20 thread to 5/8"-18 | | | |



LHS5C



LHS6C



LHS1C



LHS3D



LHS8C

# DRILLING ACCESSORIES



R120



DEBUR300



CL6



YA246A

**R120 Tapered Reamer**
- Tapers from 1/8"–1/2"
- Ideal for removing burrs and enlarging holes
- Includes crossbar

**R121 Tapered Reamer**
- Tapers from 1/2"–1"
- Similar to R120 but has a 3/8" square head for use with socket wrenches when extra torque is required

**DEBUR300 Deburring Tool**
- Easily deburr drilled and machined holes
- Pushbutton locking collet enables quick, easy blade changes
- Includes three round head deburring blades
- Blades store in handle of tool
- Weighs 1 lb
- 6" long

**CL6 Cutting Oil**
- Superior antiweld and lubricating properties reduce heat buildup in drill bits, grinding burrs and other metal cutting tools
- 1 pt bottle

**YA246A Micro Utility Drill Set**
- Knurled surface at chuck end of pin vise provides a sure gripping surface
- Long 1 7/8" drill length
- Includes pin vise and 12 precision HSS twist drills from .0635"–.0225", numbers 52–74

**Applications:** Fuel injectors, fuel lines, welding and soldering torch tips, shower heads, water jets, electronics and hobbies.

# SANDER ACCESSORIES



PS4612-1AH



PS4612V-1AH



PSV4312KIT PSV4612KIT



PS468-34V



PS468-34HL



YA7341

## Replacement Pads

| Stock No. | Size, inches | Type | Style | Use on: |
|---|---|---|---|---|
| PS4312-1H | 3 | PSA | Vacuum/Non-vacuum | PSF4312 |
| PS4312-2H | 3 | Velcro® | Vacuum/Non-vacuum | PSF4312 |
| PS4512-1AH | 5 | PSA | Non-vacuum | PS4512 |
| PS4512V-1AH | 5 | PSA | Vacuum | PS4512 |
| PS4512-2H | 5 | *Velcro* | Non-vacuum | PS4512 |
| PS4512V-2H | 5 | *Velcro* | Vacuum | PS4512 |
| PS4612-1AH | 6 | PSA | Non-vacuum | PS4612 & PSF4612 |
| PS4612V-1AH | 6 | PSA | Vacuum | PS4612 & PSF4612 |
| PS4612-2H | 6 | *Velcro* | Non-vacuum | PS4612 & PSF4612 |
| PS4612V-2H | 6 | *Velcro* | Vacuum | PS4612 & PSF4612 |

| Vacuum Adaptor Kits (contains vacuum adaptor & shroud) | | |
|---|---|---|
| PSV4312KIT | Vacum Kit for 3" Sanders | PSF4312 |
| PSV4612KIT | Vacuum Kit, 5" & 6" Sanders | PS4512, PS4612 & PSF4612 |

| Stock No. | Size, inches | Type | Style | Use on: |
|---|---|---|---|---|
| PS468-34 | 6 | PSA | Non-vacuum | PS4609 |
| PS468-34V | 6 | PSA | Vacuum | PS4609V |
| PS468-34HL | 6 | *Velcro* | Non-vacuum | PS4609 |
| PS468-34VHL | 6 | *Velcro* | Vacuum | PS4609V |
| PS468-35 | 8 | PSA | Non-vacuum | PS4809 |
| PS468-35V | 8 | PSA | Vacuum | PS4809V |
| PS468-35HL | 8 | *Velcro* | Non-vacuum | PS4809 |
| PS468-35VHL | 8 | *Velcro* | Vacuum | PS4809V |
| AT116-3 | 2 | Roloc® | Non-vacuum | AT401MCA |
| AT116-4 | 3 | *Roloc* | Non-vacuum | AT401MCA |
| AT402VEL75MM | 3 | *Velcro* | Non-vacuum | AT402MCA & AT403MCA |
| AT406B33 | 6 | PSA | Non-vacuum | AT406B |
| AT406B30 | 6 | *Velcro* | Non-vacuum | AT406B |

| Tune-up Kits (contains seals, o-rings, washers, valve, rotor & vanes) | | |
|---|---|---|
| PS46-TK | Tune-up Kit for 5" & 6" Sanders | PS4512, PS4612 & PSF4612 |

**YA7341 Bonnet Cleaning Tool**
- Run the spur wheels over your buffing pad or bonnet and it will work to dislodge and remove dry, hardened polish

## Micro Tool Accessory Kits



AT401ACCKIT

**AT401ACCKIT Micro Surface Prep Accessory Kit**
- 1/4 turn abrasive disc in two different grits helps get the job of removing rust or gasket material done quickly, even in confined areas
- Kit contains all the consumables needed to restore a Micro Surface Prep Tool Kit back to new
- Kit includes one 2" *ROLOC* Pad 1/4" x 20T, one 3" *ROLOC* Pad 1/4" x 20T, five 2" 40 grit pads and five 3" 80 grit pads



AT402ACCKIT

**AT402ACCKIT Micro Dual Action Sander Accessory Kit**
- Fresh backing pad with all the sanding disc needed to work the surface down until it is ready for paint
- Kit contains all the consumables needed to restore a Micro Dual Action Sander Tool Kit back to new
- Kit includes one 3" *Velcro* Pad 5/16" x 24T, (25) 3" 180 Grit pads, (25) 3" 220 Grit pads, ten 3" 320 Grit pads and ten 3" 800 Grit pads



AT403ACCKIT

**AT403ACCKIT Micro Polisher Accessory Kit**
- All the pads needed to go from buffing to final polish
- Kit contains all the consumables needed to restore a Micro Polisher Tool Kit back to new
- Kit includes one 3" *Velcro* Pad 5/16" x 24T, one 3" Wool Pad and one Foam Waffle Pad


AC3D


AC16D


AC6B


AC240B


AC241B


AC208A


AC204C


AC339A

| Style/Application | Stock No. | Brush Diameter, inches | Shank Size Arbor Size, inches | Wire Diameter, inches | Maximum Rated RPM |
|---|---|---|---|---|---|
| **Crimped** for removing carbon from cylinder heads and valve parts | **AC2D** | 1 | 1/4 | .020 | 20,000 |
| | **AC3D** | 3/4 | 1/4 | .020 | 20,000 |
| **Solid end** for cleaning aluminum cylinder heads and transmission parts | **AC16D** | 3/4 | 1/4 | .006 | 20,000 |
| **Spiral twist** for removing heavy deposits | **AC6B** | 3/4 | 1/4 | .014 | 20,000 |
| | **AC7E** | 1 | 1/4 | .020 | 20,000 |
| **Cup type** for cleaning wheel rims and scuffing tires | **AC240B** | 1 1/2 | 1/4 | .012 | 6,000 |
| **Hollow end crimped cup** for light duty cleaning | **AC241B** | 2 1/2 | 1/4 | .012 | 6,000 |
| **Cup flared** for deburring, cleaning hard-to-reach areas and wheel rims, and scuffing tires | **AC208A** | 1 1/2 | 1/4 | .008 | 20,000 |
| | **AC212A** | 1 1/2 | 1/4 | .012 | 20,000 |
| | **AC214A** | 2 1/2 | 1/4 | .014 | 18,000 |
| | **AC224A** | 3 | 1/4 | .014 | 15,000 |
| **Encapsulated wire end brushes** for a consistent stiff brushing action | **AC204C** | 1/2 | 1/4 | .014 | 8,000 |
| | **AC205C** | 3/4 | 1/4 | .014 | 8,000 |
| | **AC206C** | 1 | 1/4 | .014 | 8,000 |
| **Knot type, single row wire cup** for heavy duty surface applications | **AC339A** | 3 | 5/8-11 | .020 | 12,500 |
| | **AC341B** | 3 | 5/8-11 | .012 | 7,000 |
| | **AC342B** | 4 | 5/8-11 | .020 | 7,000 |


AC420A


AC616

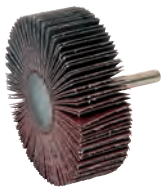

AC17D


AC243


AC10306


A24C


AC4Z60T27MP


AC3180FWMP



AC13002

| | Stock No. | Brush Diameter, inches | Shank Size Arbor Size, inches | Wire Diameter, inches | Maximum Rated RPM |
|---|---|---|---|---|---|
| **Knotted Wire Wheel** for heavy duty cleaning | **AC420A** | 4 | 5/8-11 | .020 | 20,000 |
| | **AC421A** | 4 | M10 x 1.25 | .020 | 20,000 |
| **Crimped Wire Wheel** general purpose cleaner | **AC616** | 3 | 1/4 | .0118 | 20,000 |
| **Wire Brush** medium duty general cleaner | **AC17D** | 1 | 1/4 | .006 | 20,000 |
| | **AC243** | 3 | 5/8-11 | .014 | 14,000 |
| **End Brush** ideal for cleaning right angle | **AC10302** | 1/2 | 1/4 | .014 | 25,000 |
| | **AC10306** | 3/4 | 1/4 | .014 | 22,000 |

### A24C Arbor Adaptor

- Adapts electric drill to light duty grinding and wire brushing: use with wheels and brushes up to 4" in diameter
- Shank is 1/4": arbor is 1/2" in diameter; Length is 1 3/4"
- Maximum rated RPM: 20,000

| | Stock No. | Diameter, inches | Type | Grit | Quantity to Pack |
|---|---|---|---|---|---|
| **Flap Discs** | **AC2Z40T27MP** | 2 | 27 | 40 | 10 |
| | **AC2Z60T27MP** | 2 | 27 | 60 | 10 |
| | **AC2Z80T27MP** | 2 | 27 | 80 | 10 |
| | **AC3Z40T27MP** | 3 | 27 | 40 | 10 |
| | **AC3Z60T27MP** | 3 | 27 | 60 | 10 |
| | **AC3Z80T27MP** | 3 | 27 | 80 | 10 |
| | **AC4Z60T27MP** | 4 | 27 | 60 | 10 |
| **Flap Wheels** | **AC3160FWMP** | 3 | — | 60 | 10 |
| | **AC3180FWMP** | 3 | — | 80 | 10 |
| | **AC31120FWMP** | 3 | — | 120 | 10 |

### AC13002 Drill Accessory Kit

- Includes AC616 crimped wire wheel, AC240B crimped wire cup brush, AC3D crimped wire end brush and AC3180FWMP abrasive flap wheel

### ACMANDREL Mandrel

- 1/4" stem for use on 2" and 3" flap discs

**⚠WARNING**

- Do not use power tool accessories above their maximum rated RPM
- Read safety precautions on pages W1 to W4

# CUTTING AND GRINDING ACCESSORIES Blue-Point®



AT415CWMP

**AT415CWMP Cut Off Wheel**
- Use for metal notching and bolt cutting
- Use on 4 1/2" grinders with 5/8 x 11" thread arbor
- Maximum rated RPM: 13,300
- Front and back illustrated
- Package of five discs



AT415T27MP

**AT415T27MP Grinding Wheel**
- Use for rough grinding applications
- Use on 4 1/2" grinders with 5/8 x 11" thread arbor
- Maximum rated RPM: 13,300
- Package of five discs



ETA125A

**ETA125A Grinding Wheel Set**
- Use with ET1350/ET1360
- Maximum rated RPM: 12,000
- Package of five discs



AT415-20B

**AT415-20B Grinding Disc**
- For AT415B grinder
- 4" diameter x 3/16" thick with 5/8" arbor hole
- Maximum rated RPM: 12,000
- Package of five discs



AT415A51

**AT415A51 Grinding Discs**
- For AT415B grinder
- 4 1/2" diameter x 3/16" thick with 7/8" arbor hole
- Maximum rated RPM: 12,000
- Package of five discs



ETA250A

**ETA250A Grinding Wheel Set**
- 1/4" x 4 1/2" x 7/8"
- Grit coarse (24)
- Maximum rated RPM: 12,000

**AT116-3 ROLOC® Pad**
- 2" *ROLOC* Pad with 1/4" shaft
- Optional accessory for the AT116 Die Grinder

**AT116-4 *ROLOC* Pad**
- 3" *ROLOC* Pad with 1/4" shaft
- Optional accessory for the AT116 Die Grinder



AT150C28A

**AT150C28A Cutter Wheels**
- 3" diameter x 1/32" thick with 3/8" arbor hole
- 54 grit
- Maximum rated RPM: 25,000
- Package of six discs

**AT150C29A Cutter Wheels**
- 3" diameter x 3/32" thick with 3/8" arbor hole
- 54 Grit
- Maximum rated RPM: 25,000




AC13001

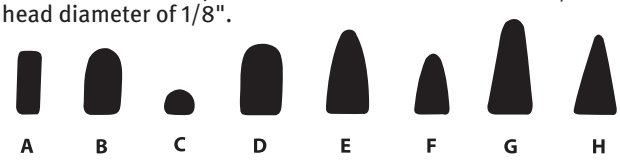
**AC13001 Mini Grinder Kit**
- Includes AC4Z60T27MP flap disc max RPM 13,000, AC339A knot cup brush max RPM 14,000 and AC402A knot wire wheel, max RPM 20,000



AC13003

**AC13003 Cut/Grind/Finish Kit**
- Includes AC4Z60T27MP flap disc max RPM 13,000, AC339A knot cup brush max RPM 14,000, AT415T27MP grinding wheel max RPM 13,300 and two AT415CWMP cut off wheels max RPM 13,500

Grinding burrs are ideal for use with Snap-on® die grinders described on p.476–477. 1/4" and 1/8" shank burrs are available, all with solid carbide heads. The 1/8" shank units all have a maximum head diameter of 1/8".




## 1/4" Shank, Burrs

| Style/Application | Stock No. | Style | Shank Length, in. | Flute Length, in. | Head Dia., in. | Recommended RPM Cast Iron | Recommended RPM Stainless | Set Contains: VWB800D | VWBL400 | VWB200C |
|---|---|---|---|---|---|---|---|---|---|---|
| **1/4" Shank, Burrs** Generally used for ferrous metals | **VWB1C** | A | — | 5/8 | 1/4 | 22,000 | 23,000 | • | | |
| | **VWB9B** | A | — | 1 | 1/2 | 16,000 | 24,000 | | | |
| | **VWB2B** | B | — | 3/4 | 3/8 | 18,000 | 27,000 | • | | |
| | **VWB10B** | B | — | 1 | 1/2 | 16,000 | 24,000 | | | |
| | **VWB3B** | C | — | 1/4 | 5/16 | 20,000 | 30,000 | • | | |
| | **VWB4B** | D | — | 7/8 | 1/2 | 16,000 | 24,000 | • | | |
| | **VWB11B** | E | — | 3/4 | 3/8 | 18,000 | 27,000 | | | |
| | **VWB5B** | E | — | 1 | 1/2 | 16,000 | 24,000 | • | | |
| | **VWB6B** | F | — | 3/4 | 3/8 | 18,000 | 27,000 | • | | |
| | **VWB7B** | G | — | 1 1/8 | 1/2 | 16,000 | 24,000 | • | | |
| | **VWB12B** | G | — | 1 1/16 | 3/8 | 18,000 | 27,000 | | | |
| | **VWB8B** | H | — | 7/8 | 1/2 | 16,000 | 24,000 | • | | |
| **1/4" Shank, Long Reach Burrs** Use for surface conditioning of non-ferrous materials like magnesium, soft steel and hard plastic plus porting of aluminum engine parts | **VWBL401** | — | 4 | — | 3/8 | 14,000 | 17,000 | | • | |
| | **VWBL402** | — | 4 | — | 3/8 | 14,000 | 17,000 | | • | |
| | **VWBL403** | — | 4 | — | 3/8 | 14,000 | 17,000 | | • | |
| | **VWBL404** | — | 4 | — | 3/8 | 14,000 | 17,000 | | • | |
| **1/4" Shank, Wide Fluted Burrs** For non-ferrous metals, plastics, and softer material | **VWB206C** | A | — | 1 | 1/2 | 15,000 | 25,000 | | | • |
| | **VWB204C** | A | — | 3/4 | 1/4 | 15,000 | 25,000 | | | • |
| | **VWB203C** | B | — | 1 | 1/2 | 15,000 | 25,000 | | | • |
| | **VWB202C** | E | — | 1 | 1/2 | 15,000 | 25,000 | | | • |
| | **VWB201C** | G | — | 1 1/8 | 1/2 | 15,000 | 25,000 | | | • |
| | **VWB205C** | G | — | 1 1/16 | 3/8 | 15,000 | 25,000 | | | • |


**VWB800D**


**VWBL400**


**VWB200C**

## 1/8" Shank, Burrs

| Stock No. | Style | Flute Length, in. | Recommended RPM Cast Iron | Recommended RPM Stainless | Set Contains: VWB700B |
|---|---|---|---|---|---|
| **VWB301B** | A | 9/16 | 20,000 | 75,000 | • |
| **VWB302B** | B | 9/16 | 20,000 | 75,000 | • |
| **VWB303B** | C | 1/8 | 20,000 | 75,000 | • |
| **VWB304B** | D | 7/32 | 20,000 | 75,000 | • |
| **VWB305B** | E | 1/2 | 20,000 | 75,000 | • |
| **VWB306B** | F | 3/8 | 20,000 | 75,000 | • |
| **VWB307B** | G | 1/2 | 20,000 | 75,000 | • |
| **VWB308B** | H | 7/16 | 20,000 | 75,000 | • |


**VWB700B**

## 1/4" Shank, Mounted Points

| Stock No. | Size, inches | Maximum RPM | Set Contains: VWB500 |
|---|---|---|---|
| **VWB501** | 11/16 x 1 1/4 | 28,000 | • |
| **VWB502** | 3/4 x 3/4 | 28,000 | • |
| **VWB503** | 3/4 x 1 1/8 | 28,000 | |
| **VWB504** | 1/4 x 1 3/4 | 28,000 | • |
| **VWB505** | 3/4 x 1 1/4 | 28,000 | • |
| **VWB506** | 3/8 x 1 | 28,000 | • |
| **VWB507** | 1/4 x 1 1/4 | 28,000 | |
| **VWB508** | 11/16 x 7/8 | 28,000 | |


**VWB501** **VWB502** **VWB503** **VWB504**
**VWB505** **VWB506** **VWB507** **VWB508**

**⚠WARNING**

- Do not use power tool accessories above their maximum rated RPM
- Read safety precautions on pages W1 to W4

# AIR HAMMER ACCESSORIES


PHG63A


PHG64A


PHG76A


PHG21


PH75A


PHG85A


PHG57A


PHG73A


PHG58B


PHG111


PHG95A


PHG65A


PHG87A


PH201


PHG74A

## Air Hammer Bits

| Stock No. | Description | Application | Length, inches | Tip, inches | Set Contains: PHG1005AK | PHG1055K | PHG1066K |
|---|---|---|---|---|---|---|---|
| PHG94A | Ball Joint/Tie Rod Separator | For separating ball joints and tie rods | 7 13/16 | 5/8 opening | | | |
| PHG63A | Ball Joint/Tie Rod Separator | For separating ball joints and tie rods | 7 3/8 | 13/16 opening | | | |
| PHG69A | Ball Joint/Tie Rod Separator | For separating ball joints and tie rods | 7 3/8 | 1 opening | | | |
| PHG93A | Ball Joint/Tie Rod Separator | For separating ball joints and tie rods | 8 3/4 | 1 1/4 opening | | | |
| PHG64A | Bent End Chisel | Shears ball joint rivets | 10 1/2 | 5/8 | | | |
| PHG76A | Bushing Cutter | For bushing cutting | 6 1/4 | 1/2 | | | |
| PHG21 | Offset Bushing Splitter | For bushing cutting, when extra reach is needed | 8 3/8 | 5/8 | | | |
| PH75A | Bushing Driver | For pneumatic bushing driving | 5 1/2 | 1/2 | | | |
| PHG85A | Curved Flat Chisel | For rivet cutting work | 5 3/4 | 5/8 | | | |
| PHG57A | Double Bladed Panel Cutter | For panels cutting and sheet metal cutting | 6 | 3/4 | • | • | |
| PHG73A | Drift Punch | For punching out pins and other driving applications | 6 1/2 | 1/2 | | • | • |
| PHG77 | Straight Punch | For punching out pins and other driving applications that need extra reach | 18 | 1/2 | | | |
| PHG55A | Flat Chisel | For normal chisel cutting applications | 6 1/2 | 3/4 | • | • | • |
| PHG58B | Flat Chisel | For normal chisel cutting applications, when extra reach is needed | 10 | 3/4 | | | • |
| PHG84A | Flat Chisel | For hammering application, when extra reach is needed | 18 | 3/4 | | | |
| PHG99 | Flat Chisel | For normal chisel cutting applications, when a wide blade is needed | 6 1/2 | 1 1/2 | | | |
| PHG111 | Hinge Pin Driver | Remove and install tube-hinge pins on car and truck doors | 7 3/8 | 0.237 | | | |
| PHG112 | Hinge Pin Driver | Remove and install tube-hinge pins on car and truck doors | 7 3/8 | 0.302 | | | |
| PHG95A | Hole Punch | Punches 3/16" diameter starting hole in sheet metal to prepare it for use with CJ107 and CJ114 Body Dent Pullers | 5 5/8 | — | | | |
| PHG65A | Outside Cutter | For cutting the muffler flange | 8 5/8 | 7/8 | | | |
| PHG66A | Inside Cutter | For cutting the exhaust pipe inside the flange | 8 3/4 | 3/16 | | | |
| PHG87A | Muffler Cutter | For removing the tail pipe | 8 3/4 | 7/8 | | | |
| PH201 | Needle Scaler | Projecting rods chip away rust and scale. Use only at low pressure | 7 13/16 | — | | | |
| PHG74A | Riveter | For 3/16" stem | 5 13/16 | 1/2 | | | |


PHG71A


PHG56A


PHG51A


PHG1005AK


PHG61A


PH1038


PHG70A


PHG1055K


PHG59A


PHG72A


PHG83A


PH200D


PHG151A


PHG161A


PHG155A

| Stock No. | Description | Application | Length, inches | Tip, inches | Set Contains: PHG1005AK | PHG1055K | PHG1066K |
|---|---|---|---|---|---|---|---|
| PHG78A | Riveter | For 1/4" stem | 5 13/16 | 1/2 | | | |
| PHG88A | Riveter | For forming heads on 3/16" compression rivets | 5 13/16 | 1/2 | | | |
| PHG89A | Riveter | For forming heads on 1/4" compression rivets | 3 7/8 | 7/8 | | | |
| PHG71A | Round Hammer | For hammering applications | 4 1/4 | 1 | | | • |
| PHG68 | Round Hammer | For hammering application, when extra reach is needed | 7 | 1 | | • | • |
| PHG56A | Scraper | For scraping applications | 6 3/16 | 1 5/16 | | | |
| PHG51A | Sheet Metal Ripper | For sheet metal ripping and cutting | 5 3/8 | 5/8 | • | | |
| PHG61A | Slitting Chisel | For cutting tail pipes and other surfaces | 6 7/8 | 1 | • | | |
| PH1038 | Air Hammer Socket Adaptor | Attaches to air hammer to provide vibration while turning stubborn fasteners, 3/4" hex, 3/8" square drive | 5 | — | | | |
| PHG70A | Spot Weld Breaker | For weld removal | 6 1/4 | 3/4 | • | | |
| PHG59A | Tapered Punch | For removal of pins | 6 1/2 | 3/16 | | • | • |
| PHG72A | U-Joint Trunion Driver | For needle type trunions | 3 7/8 | 7/8 | | | |
| PHG83A | Valve Guide Remover | For removing and installing valve guides | 190 mm | 7.7 mm pilot | | | |
| PHG86A | Valve Guide Remover | For removing and installing valve guides | 190 mm | 9.3 mm pilot | | | |
| PHG91A | Valve Guide Remover | For removing and installing valve guides | 189 mm | 6.5 mm pilot | | | |
| PHG96A | Valve Guide Remover | For removing and installing valve guides | 189 mm | 6.9 mm pilot | | | |
| PHG97A | Valve Guide Remover | For removing and installing valve guides | 189 mm | 5.2 mm pilot | | | |
| PHG151A | Panel Cutter | Edges and trims sheet metal. Cutting end is offset 25°. Non-turn shank | 6 7/8 | 5/8 | | | |
| PHG161A | Slitting Chisel | Cuts exhaust system pipes, 1/8" tip thickness. Non-turn shank | 8 3/4 | 1 | | | |
| PHG155A | Cold Chisel | Cuts bolts, nuts, tees and angles. Also splits and bevels. Non-turn shank | 7 | 21/32 | | | |
| PH200D | Universal Quick Change Chuck Retainer | Use for fast, easy insertion/removal of air hammer bits | — | — | | | |
| C0508 | Kit Bag | | | | • | • | |

**⚠WARNING**

- Use air hammer accessories only for their intended applications, replace when worn or broken
- Read safety precautions on pages W1 to W4

# AIR HAMMER ACCESSORIES



PHG1004RP

## Rolling Pin Punches

| Stock No. | Description | Application | Length, inches | Tip, inches | Set Contains: PHG1004RP |
|---|---|---|---|---|---|
| PHG79A | Roll Pin Punch | For removing and installing roll pins | 7 1/2 | 3/8 | • |
| PHG80A | Roll Pin Punch | For removing and installing roll pins | 7 1/2 | 1/4 | • |
| PHG81A | Roll Pin Punch | For removing and installing roll pins | 7 1/2 | 5/16 | • |
| PHG821 | Roll Pin Punch | For removing and installing roll pins | 7 1/2 | 1/2 | • |



PHGL37KT

## Extra Long Drift Punches

| Stock No. | Description | Application | Length, inches | Tip, inches | Set Contains: PHGL37KT |
|---|---|---|---|---|---|
| PHGL78 | Extra Long Punch Drift | Loosens hard to reach rusty bolts and fasteners | 5 | 5/16 | • |
| PHGL710 | Extra Long Punch Drift | Loosens hard to reach rusty bolts and fasteners | 5 | 3/8 | • |
| PHGL712 | Extra Long Punch Drift | Loosens hard to reach rusty bolts and fasteners | 5 | 1/2 | • |

**PHGL37KT Extra Long Punch Drift Set**
- Includes PHGL78, PHGL710 and PHGL712 Extra Long Drift Punches (3pc) in PHGL37-KB Storage Pouch

# IMPACT WRENCH AND RATCHET ACCESSORIES



MRB25



YA4190A



YA4190CAPA




YA4190FAR




YA4190DIS

**MRB25 Magnetic Impact Wrench Holder**
- Attach to lift post, tool storage unit or cart to keep impact gun handy
- Ideal for tire and wheel shops
- 160 lb of magnetic force
- Outer diameter of base is 3 7/8"
- Inner diameter of holder is 2 7/8"

**YA4190A Mini Grease Gun**
- Fits all flush type fittings
- Good for FAR72B/FAR70 series air ratchets
- Spring return plunger
- 3 oz capacity

**YA4190CAPA Grease Gun Head**

**YA4190FAR Grease Gun Assembly**

**YA4190DIS Grease Dispenser**
- Grease dispenser attachment for YA4190A
- Contains 3 oz of Mobil® temp SHC-32 grease for Snap-on® FAR series air ratchets

# AIR AND RECIPROCATING SAW BLADES



ASB4-42

## Air Saw Blades

| Stock No. | Application/Material Thickness | Teeth per Inch | Blade Length, inches | Qty Each |
|---|---|---|---|---|
| ASB4-42 | Over 0.20" | 18 | 3 5/8 | 10 each |
| ASB4-43 | 0.08"–0.20" | 24 | 3 5/8 | 10 each |
| ASB4-44 | 0.00"–0.08" | 32 | 3 5/8 | 10 each |

## Metal Cutting Blades

Bi-metal reciprocating saw blades with precision ground teeth for maximum cutting power, greater control and higher speed.

| Stock No. | Application/Material Thickness | Teeth per inch | Blade Thickness, inches | Blade Length, inches | Qty Each |
|---|---|---|---|---|---|
| CTRS614MC | Metal 1/8"–3/8" thick | 14 | .035 | 6 | 5 each |
| CTRS914MC | Metal 1/8"–3/8" thick | 14 | .035 | 9 | 5 each |
| CTRS618MC | Metal 1/8"–1/4" thick | 18 | .035 | 6 | 5 each |
| CTRS918MC | Metal 1/8"–1/4" thick | 18 | .035 | 9 | 5 each |
| CTRS624MC | Metal less than 1/8" thick | 24 | .035 | 6 | 5 each |



CTRS614MC

## General Purpose Blades

Versatile bi-metal blades for general purpose cutting of metal, plastic laminates and wood with nails.

| Stock No. | Application/Material Thickness | Teeth per inch | Blade Thickness, inches | Blade Length, inches | Qty Each |
|---|---|---|---|---|---|
| CTRS658GP | Metal/Plastic/Wood | 5–8 variable | .050 | 6 | 5 each |
| CTRS96GP | Metal/Plastic/Wood | 6 | .050 | 9 | 5 each |
| CTRS126GP | Metal/Plastic/Wood | 6 | .050 | 12 | 5 each |



CTRS126GP

## Demolition Blades

Extra heavy duty bi-metal blades with thicker body and variable 5/8 tooth pitch are ideal for heavy demolition work in wood with nails and also strong enough to handle thick metals.

| Stock No. | Application/Material Thickness | Teeth per inch | Blade Thickness, inches | Blade Length, inches | Qty Each |
|---|---|---|---|---|---|
| CTRS658DB | Nail Embedded Wood | 5–8 variable | .062 | 6 | 5 each |
| CTRS958DB | Nail Embedded Wood | 5–8 variable | .062 | 9 | 5 each |



CTRS658DB

## Wood Cutting Blades

Bi-metal blades with precision ground teeth for fast cutting of wood 3/8" and thicker.

| Stock No. | Application/Material Thickness | Teeth per inch | Blade Thickness, inches | Blade Length, inches | Qty Each |
|---|---|---|---|---|---|
| CTRS67WB | Fast cutting wood 3/8" and thicker | 7 | .040 | 6 | 5 each |
| CTRS97WB | Fast cutting wood 3/8" and thicker | 7 | .040 | 9 | 5 each |



CTRS67WB

## Air Saw Blades (Blue-Point®)

| Bi-Metal Blades | AT192A | AT194A |
|---|---|---|
| Bi-Metal Blade Scroll, 18 TPI, 3 3/4" long (qty 5) | AT190-39C | AT190-39C |
| Bi-Metal Blade Scroll, 24 TPI, 3 3/4" long (qty 5) | AT190-40C | AT190-40C |
| Bi-Metal Blade Scroll, 32 TPI, 3 3/4" long (qty 5) | AT190-41C | AT190-41C |
| Bi-Metal Blade Multipurpose, 18 TPI, 4" (qty 5) | AT190-42B | – |
| Bi-Metal Blade Multipurpose, 24 TPI, 4" (qty 5) | AT190-43B | – |
| Bi-Metal Blade Multipurpose, 32 TPI, 4" (qty 5) | AT190-44B | – |



AT190-42B

**⚠WARNING**

- Use air hammer accessories only for their intended applications, replace when worn or broken
- Read safety precautions on pages W1 to W4

# BLOW GUNS




## Non-vented Blow Guns

Do not use non-vented blow guns above 30 PSI air supply pressure.

**JT13B Blow Gun (Blue-Point®)**
- Tapered, rubber tip for a leak-proof connection between gun and fluid line
- Vinyl coated control lever
- Hanging hook for storage
- 4 1/2" long

**JT17A Blow Gun (*Blue-Point*)**
Same as JT13B except with a 3" tip extension in place of the rubber tip.

**YA1050B Blow Gun (*Blue-Point*)**
Pistol grip style with front full-size trigger. Infinitely variable flow. 10 1/4" long.

**YA4010 Quick Change Tip**
Conical rubber tip for YA1050B.

**JT14 Blow Gun (*Blue-Point*)**
Industrial Interchange style coupler.

**JT15 Blow Gun**
Universal 1/4" pipe threading.

**JT20 Blow Gun**
ARO® style coupler.

**JT21 Blow Gun**
Tru-Flate® style male coupler.

**JT22 Blow Gun**
Lincoln® style male coupler.

**JT23 Blow Gun (*Blue-Point*)**
Solid brass. Industrial Interchange style coupler.

**JT24 Blow Gun (*Blue-Point*)**
Solid brass. *ARO* style coupler.

**YA105020 Blow Gun (*Blue-Point*)**
- 20" bent nozzle
- Trigger provides variable air flow control
- Lightweight body with ergonomically designed grip provides comfort and control
- Venturi tip directs air sideways if tip end is obstructed
- Reinforced 1/4"-18 NPT inlet

**YA105013 Blow Gun**
Same as YA105020 except 13" bent nozzle.

**YA1050T1 Removable Star Tip**
Removable star tip for YA105020 blow gun.

**YA1050T2 Venturi Air Booster**
Venturi nozzle draws in ambient air for extra high flow increasing by 100%. Suitable for deflecting lightweight wood chips. Diverts air when dead ended, reducing the outlet pressure to less than 2 bar (29 PSI).

**YA1050T3 Rubber Tip Kit**
Rubber tip set for YA105020 blow gun.

**YA1050T4 Chip/Fluid Shield**
Chip/fluid shield for YA105020 blow gun.

**AT4101 Blow Gun (4")**
- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (accessories not included)

**AT4113 Blow Gun (19")**
- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (accessories not included)

**AT4135 Blow Gun with Air Adjustment**
- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (accessories not included)
- Sound level 78 dB (8 bar)
- Regulate flow with adjustable volume control
- Complies with OSHA safety standards

**AT4124 Rubber Tip**
Prevents scratching of surface for AT4101, AT4113 and AT4135 blow guns.

## Vented Blow Guns

Do not obstruct vents. Do not use vented blow guns above 135 PSI maximum air supply pressure.

**JT19A Venturi Tip Blow Gun**
- Directs air sideways if tip end becomes obstructed and increases airflow
- Includes stabilizer valve for variable pressure
- 1" hanging hook and paddle type air control lever
- Air inlet: 1/4"-18 NPT(f)

**YA1055B Blow Gun**
- Variable flow trigger offers precise air flow control
- Six-outlet “star tip” delivers an even distribution of air
- 4" full flow tube
- Complies with OSHA safety standards
- Air inlet: 1/4"-18 NPT(f)



JT19A



YA1055B

# AIR HOSES AND SWIVELS

## Rubber Air Hoses

Ideal for industrial applications. Male threads at both ends.

| Stock No. | Hose I.D., inches | Hose Length, feet | Thread Size | Maximum Pressure, PSI |
|---|---|---|---|---|
| IM2001A | 1/4 | 5 | 1/4"-18 NPT | 300 |
| IM2002A | 3/8 | 5 | 3/8"-18 NPT | 300 |
| IM2004A | 3/8 | 2 | 1/4"-18 NPT | 300 |
| IM2005A | 3/8 | 25 | 1/4"-18 NPT | 325 |
| IM2008A | 3/8 | 50 | 1/4"-18 NPT | 325 |
| IM2009A | 1/2 | 50 | 3/8"-18 NPT | 325 |



IM2005A

## Reinforced Polyurethane Air Hoses

- Extremely lightweight for easy maneuverability
- Reinforced construction eliminates layer separation resulting from expansion and contraction during pulsating operations
- More abrasion resistant than PVC and rubber hoses
- Easy to wrap and store, even in subzero weather
- UV stabilized for longer outdoor life
- Strain relief features a tight bending radius to virtually eliminate hose kinking
- Reusable fittings and strain reliefs for longer life

| Stock No. | Color | Hose I.D., inches | Hose Length, feet | Thread Size | Temp. Range | Working Pressure |
|---|---|---|---|---|---|---|
| AIRHOSE35 | Red | 3/8 | 35 | 1/4" NPT | -40 °F–165 °F (-40 °C–73.9 °C) | |
| AIRHOSE50 | Red | 3/8 | 50 | 1/4" NPT | -40 °F–165 °F (-40 °C–73.9 °C) | 200 PSI @ 70 °F (21 °C) |



AIRHOSE35

## Air Swivel Connectors (Blue-Point®)

- Swivels turn 360° at two points for complete tool maneuverability
- Air hoses hang straight to the floor

| Stock No. | Thread Size | Maximum Pressure, PSI | Airflow |
|---|---|---|---|
| YA502M | 1/4" NPT | 150 | Up to 4.6 CFM (33 SCFM) |
| YA503M | 3/8"-18 NPT | 150 | Up to 6.3 CFM (45 SCFM) [178 LPM] |
| ASC14 | 1/4" NPT | 150 | Up to 35 SCFM (991 LPM) |
| ASC14U | 1/4" NPT | 150 | Up to 35SCFM (991 LPM) |



YA502M

**⚠WARNING**

- Do not direct blow gun at yourself or others
- Read safety precautions on pages W1 to W4

# AIR LINE COUPLERS AND ADAPTORS




## Air Line Couplers and Adaptors

| Body Size, inches | Style | Thread Size | Quick Coupler Male | Quick Coupler Female | Adaptor Male | Adaptor Female |
|---|---|---|---|---|---|---|
| 1/4 | Lincoln® | 1/4"-18 NPT | – | AHC26D | AHC26MD | AHC26FD |
| 1/4 | Tru-Flate® | 1/4"-18 NPT | – | AHC24D | AHC24MD | AHC24FD |
| 3/8 | *Tru-Flate* | 3/8"-18 NPT | – | AHC25D | AHC25MD | AHC25FD |
| 1/4 | ARO® | 1/4"-18 NPT | AHC23PMD | AHC23D | AHC23MD | AHC23FD |
| 1/4 | Industrial Interchange | 1/4"-18 NPT | AHC21PMD | AHC21D | AHC21MD | AHC21FD |
| 3/8 | Industrial Interchange | 1/4"-18 NPT | – | AHC22E | AHC22MD | AHC22FD |
| 3/8 | Industrial Interchange | 3/8"-18 NPT | – | AHC28D | AHC28MD | AHC28FD |
| 1/2 | Industrial Interchange | 3/8"-18 NPT | – | – | AHC31 | – |
| 1/2 | Industrial Interchange | 1/2"-14 NPT | – | AHC27D | AHC27MD | AHC27FD |
| 1/4 | Rigid Mounting* | 1/4"-18 NPT | – | AHC21PD | – | – |
| 1/4 | Hi-Flow | 1/4"-18 NPT | – | AHCC98C | AHCCP97C | – |
| 1/4 | Hi-Flow HVLP | 1/4"-18 NPT | AHCC91C | AHCC90C | – | AHCCP90C |

*Conforms to Mil Spec MIL-C-4109F

All adaptors are plated steel to improve durability

## Air Valves and Manifolds

**IM10D Air Valve**
- Volume of airflow can be regulated with 1/4 turn of control knob
- Male/female threads

**AHC300 Multiline Air Manifold**
- Capacity of three air lines running at the same time
- Allows three workstations to use the same air supply
- Evenly distributes air through three different lines

# GENERAL ACCESSORIES




IM1PTMP6



IM10ZMP12




CL6

## Lubrication Accessories

**IM1PTMP6 Air Motor Oil**
- Cleans all piston and rotary air motors and helps prevent rust formation
- Six pack of IM1PT 16 oz bottles

**IM10ZMP12 Air Motor Oil**
- 12 pack of 1 oz bottles

**CL6 Cutting Oil**
- Superior antiweld and lubricating properties reduce heat buildup in drill bits, grinding burrs and other metal cutting tools
- 1 pt bottle



AT187



CTTOTEA



BPTOTE



CTUTOTE

**CTTOTEA Power Tool Tote Bag**
- Wide opening for easy access to tools, extra padding for protection
- Durable 600 Denier® outside for strength
- Interior pockets and compartments for tool organization
- Padded handles for comfortable transport
- Reinforced bottom for strength
- Six external pockets for extra storage
- Approximate inside dimensions, open: 18" L x 8" W x 11 1/2" D

**BPTOTE Tote Bag (Blue-Point®)**
- Heavy duty 600 x 300 D polyester
- Water resistant, rugged and versatile
- Wide top opening for easy access
- Multiple interior and external pockets for organization
- Overall dimensions: 16 1/2" L x 10 1/2" W x 12 1/4" H

**CTUTOTE Power Tool Mini Tote Bag**
- Wide opening for easy access to your tools
- Durable 600 Denier nylon outside for strength
- Pockets and compartments for tool organization
- Padded handles for comfortable transport
- Reinforced bottom for strength
- Heavy duty industrial zipper
- 12" L x 10" D x 10" W

| Stock No. | Recommended Air Pressure, PSI | Air Consumption, average, cfm (scfm) | Free Speed, RPM | Sound Level, dBa | Air Inlet Thread Size | Recommended Hose Size, inches | Hose Length, inches | Overall Length, inches | Weight, lb |
|---|---|---|---|---|---|---|---|---|---|
| AT187* | 90 | 1.0 (7) | 14,000 | 90 | 1/4"-18 NPT | 3/8 | 59 1/2 | 5 1/2 without hose | .48 |

*CE

**AT187 Engraving Pen (*Blue-Point*)**
- Mark tools and other objects to prevent theft
- Use on hardened steel plate (up to HRC55), metals, glass, stone, ceramic, plastics and more
- Used for deburring operations plus reshaping screw or bolt heads for removal
- Rugged metal housing
- Knurled fingertip control
- Tips sold separately

**AT187-11 45° Thick Plate Carbide Tip**
For AT187.

**AT187-13 15° Thin Plate Carbide Tip**
For AT187.

**AT187-14 30° Medium Plate Carbide Tip**
For AT187.

# SHOP & TECH TOOLS




Overview.....508
Testing & Electronics.....510
Welding.....552
Undercar.....568
Battery Service.....606
Air Conditioning.....616
Cooling.....629
Shop Equipment.....637
Shop Cleaning.....721
Safety.....728

# TOP-OF-THE-LINE EQUIPMENT. TO IMPROVE YOUR BOTTOM LINE.

Whether you own a shop or work as a tech, our productivity solutions save you time while helping increase revenues. For tools and technology that's both hardworking and business savvy, turn to Snap-on. It's equipment you can bank on.

**"I specialize in engine swaps. KoolKare™ allows me to recover and recharge quickly for engine removal and replacement."**

Zeb Beard
Warren, AR



## EQUIP YOUR SHOP.

When you tap Snap-on to expand your shop's capabilities and productivity, you're turning to the best in the business. And, we'll help you keep your business.

**RETURN ON INVESTMENT —** From welders made to withstand tough shop environments to battery chargers that perform a variety of functions, our tools build one thing first: your business.

**INNOVATION —** Keep customers loyal to your shop by servicing their vehicles with the most advanced equipment available.

**BREADTH —** Choose from 22 shop equipment categories that help you expand your services, enhance your capabilities and attract more business.

## TECH ESSENTIALS

Some tools are acquired on a "need-to-grow" basis: maximize your potential and enhance your productivity with the essentials.

**WORK SMARTER —** Get complete system coverage: from multimeters, to video inspection scopes, to noise detection devices and more.

**WORK FASTER —** Time is money. And, when you cut prep time and labor time, that provides you with the opportunity to earn more.

**WORK SAFER —** Protect yourself and your profitability – and, just as importantly, stay on the job – with proper safety equipment from Snap-on.

Zeb has:
*KoolKare* PLUS A/C
Service center - EEAC325B



# ZERO IN ON SOLUTIONS.

Enhance your senses with Snap-on® meters and analyzers. *Snap-on* videoscopes, listening devices, multimeters and other testers/electronics deliver with pinpoint accuracy. Get an up-close look at a problem, detect the slightest engine noises, and diagnose complex electrical issues.

**MEASURE AND DETECT.**

Problems come in many forms – and Snap-on helps solve them. Use our testing and electronic equipment to reduce the time and effort it takes to find the source. Whether it's related to amps, volts, HC, CO2, CO, O2, NOx, degrees, ground, shorts, watts, rpm, decibels, compression, cylinder leakage, vacuum or more.



Select the Meter For Your Needs
7-Year Limited Warranty on Snap-on® meters




**EEDM596DK**




**EEDM525E**




**EEDM504D**




**EEDM503D**




**EEDM575D**

## Digital Multimeters

| Stock No. | CHECK YOUR NEEDS ✔ | EEDM596DK† | EEDM525E† | EEDM504D† | EEDM503D† | EEDM575D† |
|---|---|---|---|---|---|---|
| Certificate of Calibration Model | | EEDM504DCRT† | EEDM525ECRT† | EEDM504DCRT† | — | — |
| Display Count | | 40,000 | 4,000 | 4,000 | 2,000 | 11,000 |
| AC Volts | | 750 | 750 | 750 | 750 | 600 |
| DC Volts | | 1,000 | 1,000 | 1,000 | 1,000 | 600 |
| Basic DC Accuracy | | 0.10% | 0.50% | 0.50% | 0.50% | 0.5% |
| AC Amps | | 10 | 10 | 10 | 10 | 400 |
| Micro Amps | | — | Yes | Yes | Yes | 400 DC |
| DC Amps | | 10 | 10 | 10 | 10 | 400 |
| True RMS (Root Mean Square) | | Yes | Yes | — | — | Yes |
| Resistance, ohms | | 40M Ohm | 40M Ohm | 40M Ohm | 20M Ohm | 110 Mega Ohms |
| Capacitance | | Yes | Yes | Yes | — | 110mF |
| Frequency | | Yes | Yes | Yes | — | 10 KHz |
| Insulation Test | | No | No | No | No | — |
| Analog Bar Graph | | Yes | Yes | Yes | — | — |
| Auto Range | | Yes | Yes | Yes | — | Yes |
| Data Hold | | Yes | Yes | Yes | Yes | Yes |
| Min/Max | | Yes | Yes | Yes | — | Yes |
| Backlight | | Yes | Yes | — | — | — |
| Color Screen | | — | Yes | — | — | — |
| Auto Shut-Off | | Yes | Yes | Yes | — | Yes |
| RPM | | Yes | **EEDMRPMG** (opt.) | **EEDMRPMG** (opt.) | **EEDMRPMG** (opt.) | — |
| Adjustable Trigger Level | | Yes | | — | — | — |
| Noise Reduction Circuit | | Yes | — | — | — | — |
| Temperature | | **MT586B1** (incl.) | **MT586B1** (opt.) | **EEDM506C†** (opt.) | **EEDM506C†** (opt.) | **MT586-4** (opt.) |
| Duty/Dwell | | Yes | Duty Only | Duty Only | — | — |
| mS Pulse Width | | Yes | — | — | — | — |
| Comp. Output (USB) | | Yes, Included | — | — | — | — |
| UL® Listed | | cULus 61010-1 | cULus 61010-1 | cULus 61010-1 | cULus 61010-1 | cULus 61010-1 |
| CAT Rating | | CATII 750V AC, CATII 1,000V DC, CATIII 600V AC/DC | CATII 750V AC, CATII 1,000V DC, CATIII 600V AC/DC | CATII 750V AC, CATII 1,000V DC, CATIII 600V AC/DC | CATII 750V AC, CATII 1,000V DC, CATIII 600V AC/DC | CATIII 600V |
| Easy Open Battery and Fuse Door | | Yes | Yes | Yes | Yes | Yes |
| Glitch Capture | | Yes | — | — | — | — |
| Blown Fuse Identifier | | Yes | Yes | Yes | Yes | — |
| Dimensions, inches | | 7 3/4 x 3 3/4 x 1 1/2 | 7 3/4 x 3 3/4 x 1 1/2 | 7 3/4 x 3 3/4 x 1 1/2 | 7 3/4 x 3 3/4 x 1 1/2 | 10 x 1 3/8 x 2 1/2 |
| Case or Zipper Pouch | | **MT586BK1** | **EEDM503B3** | **EEDM504B4** | **EEDM503B3** | Pouch |
| Replacement Fuses | | **EEDM504B1 EEDM504B2** | **EEDM525D6 EEDM525D7** | **EEDM504B1 EEDM504B2** | **EEDM503B2 EEDM504B2** | **EEDM504B1** |

*Certified and *UL* listed
† CE

TECHNICAL SUPPORT 1-888-382-6522

**⚠WARNING**



• Do not use in environment with explosive vapor
• Read safety precautions on pages W1 to W4

# DIGITAL MULTIMETERS

7-Year Limited Warranty on Snap-on® meters
5-Year Limited Warranty on Blue-Point® meters




**EEDM604C**




**EEDM650C**




**MT454C**




**MT501C**




**MT574C**

## Digital Multimeters

| Specifications | CHECK YOUR NEEDS ✓ | EEDM604C† | EEDM650C | MT454C**† | MT501C**† | MT574C**† |
|---|---|---|---|---|---|---|
| **Certificate of Calibration Model** | | EEDM604CCRT | **EEDM650CCRT** | — | — | **MT574CCRT** |
| **Display Count** | | 50,000 | 4,000 | 4,000 | 2,000 | 4,000 |
| **AC Volts** | | 1,000 | 1,000 | 600 | 600 | 600 |
| **DC Volts** | | 1,000 | 1,000 | 600 | 600 | 600 |
| **Basic DC Accuracy** | | 0.05% | ±0.1% + 2 digits | 0.50% | 0.75% | 0.30% |
| **AC Amps** | | 10 | 400mA | — | — | 400mA |
| **Micro Amps** | | Yes | Yes | — | — | — |
| **DC Amps** | | 10 | 400mA | — | — | 400mA |
| **True RMS (Root Mean Square)** | | Yes | Yes | — | — | — |
| **Resistance, ohms** | | (plus conductance) | 40M Ohm | 40M Ohm | 2K Ohm | 40M Ohm |
| **Capacitance** | | Yes | Yes | — | — | — |
| **Frequency** | | Yes | Yes | — | — | — |
| **Insulation Test** | | No | Yes | No | No | No |
| **Analog Bar Graph** | | Yes | — | — | — | — |
| **Auto Range** | | Yes | Yes | Yes | — | Yes |
| **Data Hold** | | Yes | Yes | — | Yes | Yes |
| **Min/Max** | | Yes | Yes | — | — | Yes |
| **Backlight** | | Yes | Yes | — | — | — |
| **Auto Shut-Off** | | Yes | Yes | Yes | — | Yes |
| **RPM** | | **EEDMRPMG** (opt.) | **EEDMRPMG** (opt.) | — | **EEDMRPMG** (opt.) | **EEDMRPMG** (opt.) |
| **Adjustable Trigger Level** | | — | — | — | — | — |
| **Noise Reduction Circuit** | | — | Yes | — | — | — |
| **Temperature** | | **MT586B1** (opt.) | **MT586B1** | — | **EEDM506C†** (opt.) | **EEDM506C†** (opt.) |
| **Duty/Dwell** | | — | — | — | — | — |
| **mS Pulse Width** | | Yes | — | — | — | — |
| **Comp. Output (USB)** | | — | — | — | — | — |
| **UL® Listed** | | cULus 61010-1 | cULus 61010-1 | cULus 3111 | cULus 3111 | cULus 3111 |
| **CAT Rating** | | CATIII 1,000V CAT IV 600V | CATIII 1,000V CAT IV 600V | CATIII 600V | CATIII 600V | CATIII 600V |
| **Easy Open Battery and Fuse Door** | | Yes | Yes | — | — | — |
| **Glitch Capture** | | Yes | Yes (0.25 mS) | — | — | — |
| **Low Pass Filter (LPF)** | | — | Yes | — | — | — |
| **Blown Fuse Identifier** | | Yes | Yes | — | — | — |
| **Dimensions, inches** | | 3 13/16 x 8 x 2 13/32 | 9 x 4 1/4 x 2 | 6 x 3 x 2 | 6 x 3 x 2 | 6 x 3 x 2 |
| **Case or Zipper Pouch** | | **EEDM650CPB (opt.)** | **EEDM650CPB (opt.)** | **EEDM504B4 (opt.)** | **EEDM504B4 (opt.)** | **EEDM504B4 (opt.)** |
| **Replacement Fuses** | | **EEDM604C1 EEDM604C2** | **EEDM604C1** | — | — | **EEDM504B1** |

*Certified and *UL* listed
**Blue-Point*
† CE

TECHNICAL SUPPORT 1-888-382-6522


EETA501C


EETA502C


EETA503C



EEDM5030



EEDMRPMG



EEDMRPMD



EEDM5997



EEDMDVA


EEDM5830


EETA106B

**EETA501C Clamp on Amp Probe**
- Measures AC and DC currents greater than 10A without breaking the circuit
- Ideal for measuring starter (A) and automotive current draw
- Used with DMMs that have 2V and 200 mV AC and DC ranges
- Range: 0–20A on 200mV AC or DC, 0–400A on 2V AC or DC

**EETA502C Clamp on Amp Probe**
- Similar to EETA501C except range is 0–2,000A AC or DC

**EETA503C Low Current Adaptor**
- AC/DC low current adaptor for digital multimeters with DC mV range and 10mA impedance
- Measures parasitic current draw on battery cable when key is in off position to indicate component failures or shorts
- Quickly measures branch circuit draw to isolate problem area
- Safely measures current draw of electrical fuel pumps
- Measures from 10mA–60A

**EEDM5030 Pressure Adaptor**
- Measure pressure from 1–500 PSI and vacuum from 1–29 inHg
- Output is 1mV DC per PSI or inHg
- Ideal for measuring transmission or hydraulic pressure
- 1/4" NPT fitting on pressure transducer
- Sensor compatible for air or liquid
- 6 1/2' cable length

**EEDMRPMG Gasoline Engine RPM Adaptor**
- Ideal for small, single cylinder, 2 and 4 stroke gas engine applications
- Use with any digital multimeter that has DC mV ranges to measure gasoline engine RPM
- Plug adaptor into DMM (set to DC mV function), clip lead above engine spark plug boot and multiply reading by ten
- Range is 300–6,000 RPM
- Output is 1mv DC per 10 RPM
- Powered by 9V battery (included)

TECHNICAL SUPPORT 1-888-382-6522

**EEDMRPMD Diesel Engine RPM Adaptor**
- Ideal for small diesel engine applications
- Measures diesel engine RPM
- Plug adaptor into the DMM (set to IP), attach transducer to fuel line leading to an injector and read RPM on the meter
- Range is 300–4,000 RPM
- Resolution is 1 RPM, powered by 9V battery (included)

**EEDM5997 DMM RPM Adaptor**
- Use with 2 or 4 stroke engines
- Use in conjunction with an automotive feature meter with IP (inductive pick-up) setting
- For motorcycles, outboard motors, snowmobiles and ATVs with limited or no ignition shielding
- Internal circuitry filters out noise
- Non-intrusive pick-up features dual tapped coils to help eliminate errors

**EEDMDVA Direct Voltage Adaptor**
- Converts outboard marine, motorcycle and other small engine ignition pulse signals into DC voltage signals
- Adaptor helps identify secondary ignition problems like failed individual coil packs or poor spark

**EEDM5830 Amp Adaptor**
- Allows DMMs to accurately measure up to 30A AC/DC by converting the signal to millivolts
- Measure current draw of individual circuits from fuse box on automobiles, trucks and buses
- Measure the parasitic load on the battery
- Requires no internal/external power supply
- Range of 0–30A

**EETA106B Inductive Pick-Up (Blue-Point®)**
- Non-intrusive pick-up slides over to secondary ignition spark plug wire and snaps shut for quick hook-ups without directly connecting to ignition circuit
- Used on most engines with 2 and 4 cycle ignition systems including small engines and waste spark systems

**⚠WARNING**
- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# DIGITAL MULTIMETER ACCESSORIES


EEDM506D


EETH501C


EETH502B


EETH503B


MT586-4

## Temperature Probes and Adaptor

**EEDM506D Temperature Adaptor**
- Adds temperature capabilities to multimeters that do not have built-in temperature functions
- Provides dual temperature and differential temperature measurements for multimeters
- Output equals 1mV per degree
- Use with any multimeter with 200mV DC and/or 2V DC ranges
- Provides readings from -50 °F–1,800 °F. Includes two beaded K-type temp probes. Low battery indicator light. Accuracy: ±0.75% of full scale + one digit

**EETH501C Temperature Probe**
Measures temperature in fluids and soft materials.

**EETH502B Temperature Probe**
Measures surface temperatures 8" tip.

**EETH503B Temperature Probe**
Measures air temperatures 8" tip.

**MT586-4 Temperature Probe**

# TEST LEADS


EEDM504B3

**EEDM504B3 Test Lead Set with Alligator Clips**
- Standard vinyl jacketed set of test leads with screw on alligator clips for basic application testing needs
- Screw-on probe protectors limit the metal probe shaft from touching during testing for safety (remove the protectors when using alligator clips or adaptors)


MTTL504

**MTTL504 Fused Test Leads**
- 48" fused test leads help protect unfused digital multimeters from electronic damage
- Provides additional protection when measuring high voltage
- Includes test lead set with alligator clips and five extra fuses
- Overall length is 48"

**MTTL5041 5A Fuses**
- Three-pack of replacement 5A fuses for MTTL504 fused test leads


EETA107B

**EETA107B Shielded Test Lead**
- Shielded test leads block out radio frequency interference (RFI)
- 6" leads are heat and oil resistant

**EETA108B Extra Long Scope Lead Set (2 pack)**
- 10" leads extend the reach of scope/meter leads for testing hard-to-reach components


EETA108B

**TL2A Test Lead Set**
- High grade test lead pair fits all meters using standard banana plug jacks
- Nonslip prodding probes have stainless-steel points
- Coiled cords stretch to more than 60"
- Screw-on alligator clips convert the leads to jumper wires
- Banana plug screws allow use with most multimeters



TL2A

**TL3A Test Leads**
- Heavy duty pair of jumper leads
- Use to connect a power source or a ground to test a fixture in automobile
- Heavy duty alligator clips feature the "bed of nails" concept
- Banana plug screws allow use with most multimeters



TL3A

**MTTL725 Hard Tip DMM Test Lead Set**
- 58" length offers a greater reach advantage
- Silicone double insulation wire jacket for safety–if outer jacket is nicked, a white under layer is revealed
- 90° serrated flexible strain relief for improved long life
- Sleek threaded insulator tips provide easy access to tight spots and allows use of current accessories
- Special tip configuration is designed to accept push-on accessories
- Snap-on® logo and part number molded in the test lead ends
- CAT III 1,000V, CAT IV 1,000V safety rating
- CE


MTTL725


MTTL575

**MTTL575 DMM Test Lead Set, 70"**
- 70" length offers greater flexibility in reach
- Silicone double insulation wire jacket for safety – if outer jacket is nicked, a white under layer is revealed
- 90° serrated flexible strain relief protects the wire from being kinked at the probe or terminal ends for longer life
- Push/pull finger collar for sure grip pressure putting on or pulling off
- CAT III 1,000V, CAT IV 600V safety rating
- Protective plastic collar surrounds the banana jack for safety
- CE

**Applications:**
- The MTTL575 enables long distance testing such as brake lights and underhood while in the cockpit
- Acts as an extension cord for even longer reach when servicing large equipment
- Can be used in high-heat situations around manifolds or exhaust systems
- Jacket material will not burn, even in a flame
- Remains flexible in extreme cold where poly products get hard or stiff



TLS7B

### TLS7B Test Lead and Adaptor Kit

- Quick attach probes and mini alligator clips press onto the straight PVC jacketed lead set
- Threaded hook clips, standard plugs and alligator clips thread onto the probe ends
- Provides an economical set for conducting various tests

| Stock No. | Description | MTTL500 | MTTL600 | MTTL700 | MTTL800 |
|---|---|---|---|---|---|
| MTA20 | Prods – Modular | • | | | |
| MTA24 | Test Leads Silicone Jacket – Modular | • | | | |
| MTA70 | Set, Alligator Clips, Screw-on | | | | |
| MTA75 | Alligator Clips – Medium – Modular | • | | | |
| MTA80 | Spring Hooks – Modular | • | | | |
| MTA85 | Alligator Clips – Heavy Duty – Flanged | • | | | |
| MTTL505 | Set, Grabber Leads | | | | |
| MTTL7001 | Test Leads Silicone Jacket – Threaded | | | • | |
| MTTL7002 | Banana Plugs – Screw-on | | • | • | |
| MTTL7003 | Alligator Clips – Large – Modular | | • | • | |
| MTTL7004 | Insulation Piercing Prods – Modular | | • | • | |
| MTTL7005 | Backprobe Adaptors – Needle – Modular | | • | • | |
| MTTL7005PK | Kit, Test Leads, Modular | | | | • |
| MTTL800-1 | Modular Test Leads | | | | • |
| MTTL800-3 | Crocodile Clips | | | | • |
| MTTL800-4 | Piercing Probes | | | | • |
| MTTL800-5 | Grabbers 90° Test Leads | | | | • |
| MTTL800-6 | Prods | | | | • |
| MTTL800-7 | Spring Hooks 90° | | | | • |
| MTTL800-PB | Storage Pouch | | | | • |

CE



MTTL300

### MTTL300 Test Lead Kit

- Four color-coded test leads help reduce the chance of wrong connections
- Use as test lead,jumper wires or for shorting out components when performing ignition system tests
- Each lead is 4" long



MTTL301

### MTTL301 Test Lead Kit

- Contains 12", 18", 24", and 10" jumper leads
- Use as extension leads or for shorting out components when testing ignition




MTTL800

## High Grade Test Leads (For Digital Multimeters)



MTTL500

### MTTL500 Test Lead Kit

- Interchangeable probes permits wider range of testing possibilities
- Right angle 48" long test leads are made from double insulated silicone super flex wire
- Spring hooks for use on 16 gauge and smaller bare wire
- Alligator clips for attachment to bolts and large wire conductors
- Spade terminals for use on terminal blocks and prods for probing wire ends



MTTL505

### MTTL505 Grabber Lead Set

- Grabber leads slide in to grab wire or terminal ends in tight areas
- Recommended for use with MTTL500 modular test lead set or MTTL700 with the MTTL7002 screw-on banana plug adaptors
- Use with any threaded test lead set using the MTTL7002
- Finger grip and plunger placement provides technician-controlled placement of the jaws even under extreme conditions
- Jaw gripping pressure securely bites on the target terminal or wire
- Plunger and finger grip allow maximum jaw opening with minimum pressure for ideal placement, enabling a good contact
- Safety CAT III 1,000V, 10A rating. cULus61010 and IEC61010 listed



MTA70 MTTL600 MTTL700

### MTA70 Alligator Clip Set

- Screw-on style alligator clips for use with EEDM504B3
- Do not use with MTA24

### MTTL600 Test Lead Kit

- Includes screw-on banana plug adaptors, needle backprobe adaptors, large alligator clips and insulation piercing prods

### MTTL700 Test Lead Kit

- Includes screw-on banana plug adaptors, needle backprobe adaptors, large alligator clips and insulation piercing prods
- Test leads with interchangeable tips are 50" long
- Double insulated silicone wire is heat and flame resistant and flexible in extreme cold conditions

**⚠WARNING**

- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# TEST LEADS

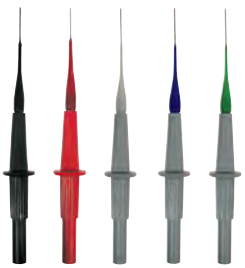


YA1175KIT

## Retractable Test Leads (Blue-Point®)

**YA1175KIT Retractable Test Lead Kit**
- Includes YA1175
- Retractable test leads, YA1175-1 probes (pair), YA1175-2 alligator clips (pair) and YA1175-3 spring hooks (pair)
- Retractable test leads pull out and stay at desired length
- Rewind test leads when not in use for compact storage
- 18 gauge copper wire and interchangeable tips
- CE

TECHNICAL SUPPORT 1-855-799-8880



MTTL7005PK



MTTL7006



MTTL502



MTTL720



MTTLB720

## Backprobes

**MTTL7005PK Backprobes**
- Color-coded for easy identification
- Bendable stainless steel tips (standard diameter)
- Non-intrusive probes slide behind terminals
- Modular ends attach quickly

**MTTLBOOTS Replacement Boot Kit**
Five of each (black, red, yellow, green, blue)

**MTTL7006 Micro Tip Backprobes**
- Features a 0.5 mm tip diameter that has enough muscle to probe new smaller interior vehicle compartment connector terminals
- Smaller diameter enables a wider array of terminal applications
- Modular test lead ends for quick attachment
- Replaceable threaded tips make change out easy
- MTTL7005 series is best used under the hood of vehicles as they provide more body for the pressure needed to penetrate the weather pack material surrounding the terminal connections
- Use with Test Leads and Multimeter
- 4 ½" overall length
- 4 mm standard female banana jack
- Red and black color per set
- Rated to DC 60V

**MTTL502 Insulation Piercing Test Probes**
- Use probes on threaded probe tips
- Banana adaptors included so probes can be used on banana plug lead sets

**MTTL720 Backprobe Pin Kit**
- Just slip the probing pin into the backside of the electrical connector and attach the meter lead to the alligator clip at opposite end of the pin
- Five colors (black, red, yellow, green, blue) make circuit identification easy
- Each color-coded group of pins contains four pins for multiple simultaneous test points
- Sharp pin point easily pierces the wire insulation
- Insulated boots protects the circuit being tested from shorting between circuits and/or a short circuit to ground
- The probing pin can be bent to access an electrical connector at unusual angle for awkward connections
- Compact size makes the pins easy to fit in tight spots

**MTTLB720 Multi-Backprobe Pin Kit**
- Includes five of each: 45° sharp, 45° blunt, 90° sharp, straight sharp



TL616AO TL624AG TL648AR



TLR6B TLBR6B

## High Visibility Jump Leads

**TL Series High Visibility Jump Leads**

- High grade test leads offer the highest heat and oil resistance and exceptional coil memory
- Leads feature a removable "bed of nails" concept
- After removal, probe end with 8-32 brass thread allows use of other product accessories

**TL616AO Test Leads**
Hi-vis orange color, 16' extended length.

**TL624AG Test Leads**
Hi-vis green color, 24' extended length.

**TL648AR Test Leads**
Hi-vis red color, 48' extended length.

## Intrusive Circuit Testing Adaptors

- High quality "bed of nails" wire piercing adaptors
- These alligator style clips allow circuit testing when back probing is not desired or practical

**TLB6B Adaptor**
Straight nose test clip with black boot.

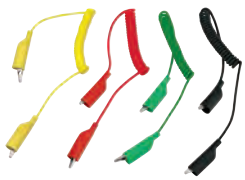
**TLR6B Adaptor**
Straight nose test clip with red boot.

**TLBL6B Adaptor**
Straight nose test clip with blue boot.

**TLBB6B Intrusive Circuit Testing Adaptor**
15° bent nose test clip with black boot.

**TLBR6B Adaptor**
15° bent nose test clip with red boot.

**TLBBL6B Adaptor**
15° bent nose test clip with black boot.



MTTL310

## Coiled Jump Leads

| Stock No. | Coiled Length, inches (cm) | Stretched Length, inches (cm) | Crocodile Clip Opening, inches (cm) | Color |
|---|---|---|---|---|
| MTTL310-1 | 20 (51) | 48 (122) | 1/2 (1.27) | Black |
| MTTL310-2 | 20 (51) | 48 (122) | 1/2 (1.27) | Red |
| MTTL310-3 | 20 (51) | 48 (122) | 1/2 (1.27) | Green |
| MTTL310-4 | 20 (51) | 48 (122) | 1/2 (1.27) | Yellow |

**MTTL310 Coiled Jump Lead Set**

- Four distinct colors facilitate easy identification of test circuits
- Crocodile clips on both ends securely grip terminal connections
- Coiled cord stretches to 48" (122 cm) for extra reach
- Coil cords recoil requiring minimum storage space and less tangling
- Heavy duty but flexible boots provide safety insulation and strain relief
- Soldered and clamped connections provide low signal loss and prolongs life



MTTL311

**MTTL311 Coiled Jump Lead Set**

- Four sizes facilitate various applications that make the job easier to complete
- Alligator clips on both ends securely grip terminal connections
- Coil cords recoil requiring minimum storage space and less tangling
- Heavy duty yet flexible rubber boots provide safety insulation strain relief
- Soldered and clamped wire connections to alligator clips provides low signal loss

| Stock No. | Coiled Length, inches (cm) | Stretched Length, inches (cm) |
|---|---|---|
| MTTL311-1 | 10" (25) | 12" (30.5) |
| MTTL311-2 | 11" (28) | 18" (46) |
| MTTL311-3 | 13" (33) | 24" (61) |
| MTTL311-4 | 24" (61) | 120" (305) |

## Battery Adaptor

**TLS4A Battery Adaptor**

- 12V accessory adaptor supplies power to circuit testers and scanners as well as to most other 12V powered devices like car phones and lights
- Copper coated alligator clips with vinyl grips attach to battery terminals
- 3' cord length



TLS4A

⚠WARNING

- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# CIRCUIT TESTERS



EECT2H



EECT4H



EECT301H




EECT313H



EECT3HL

## 6- and 12-Volt Circuit Testers

- Used to detect DC Voltage, ground and circuit integrity
- Patented Instinct® Handle for style and comfort
- Molded internal contact links with the LED assembly top dimple for low loss signal transfer
- Smart LED design has more brilliant light output and longer life than traditional bulb (note: EECT3HL uses Classic Bulb Style)
- Copper Clip is a superior quality component for maximum electrical signal transfer
- Convenient circuit board and spring assembly

| Specifications | EECT2H† | EECT4H† | EECT301H† | EECT313H† | EECT3HL† |
|---|---|---|---|---|---|
| Voltage | 6 and 12V | 6 and 12V | 12V only | 6 and 12V | 6 and 12V |
| Cord Type/Color | Straight Cord Mini/Black | Straight Cord/Black | Coiled Cord/Black | Straight Cord/Black | Straight Cord Mini/Black |
| Cord Material/ Wire Gauge | Rubber/18 | Rubber/18 | Polyurethane/Dual 18 | Rubber/18 | Rubber/18 |
| Outside Wire Diameter | 4.0 mm | 4.0 mm | 4.5 mm | 4.0 mm | 4.0 mm |
| Cord Length, inches (extended) | 70 | 70 | 125 | 70 plus 72" extension | 70 |
| Replacement Cord Assembly | **EECTCORDBLM** | **EECTCORDBLS** | **EECTCORDBLP** | **EECTCORDBLJ** | **EECTCORDBLM** |
| Replacement LED and Spring Assembly | **EECT2HLED**/White | **EECT4HLED**/White | **EECT301HLED**/ Red (Power), Green (Ground) | **EECT4HLED**/White | **2-5130** Classic Bulb |
| Handle Size/Color | Mini *Instinct*/Clear | Medium *Instinct*/Clear | Medium *Instinct*/Clear | Medium *Instinct*/Clear | Mini *Instinct*/Clear |
| Terminal End | Heavy duty – copper clip | Heavy duty – copper clip | Cigarette lighter adaptor | Banana plug on terminal end | Heavy duty – copper clip |
| Replacement Clip | **EECTCLIP2** | **EECTCLIP** | — | — | **EECTCLIP** |
| Boot | **EECTBOOT2** | **EECTBOOT** | — | — | **EECTBOOT** |
| Stainless Steel Shank Length, inches | 2 | 3 5/8 | 3 5/8 | 1 | 3 5/8 |
| Additional components | — | — | — | non-intrusive accessories and carrying case | — |
| Replacement Carrying Case | — | — | — | **EECT313HBAG** | — |

* Note: In low voltage situations LED light will not dim as significantly as incandescent bulb style.

† CE

TECHNICAL SUPPORT 1-888-382-6522



EECT400



EECT400G



EECT400O



EECT400R

## Digital Display 12V Circuit Tester

**EECT400 Digital Display Circuit Tester**

- Used to detect DC voltage, ground and circuit integrity
- LCD display provides a 'no guess' voltage value of the circuit
- Backlit LED indicates Green for Ground or Red for Power
- Provides one-handed operation of CT and DV Voltage digital display of a multimeter
- One hand free to jiggle wires, replace fuse or operate a switch
- Surge protected circuitry displays 3–19.99V DC (± 0.3V accuracy)
- Computer safe <10mA circuit draw for confident testing (Do not use on airbags)
- 3 1/2" stainless-steel corrosion-free shank
- Patented Instinct® Clear Handle for pure visibility, style and comfort
- Solid Copper Clip – superior quality component for maximum electrical signal transfer
- Terminal Screw Connection – ensures a positive electrical signal and easy field repair
- Superior Flex Wire – glides past components and remains flexible in cold conditions
- Convenient Field Replaceable – digital display board and spring assembly
- Molded contact and finger-turn strain relief are tough
- O-ring sealed moisture-free connection for longer life
- CE: DE, ES, FR, IT, GB, NL

| Stock No. | EECT400† | EECT400G† | EECT400O† | EECT400R† |
|---|---|---|---|---|
| Voltage | 6 and 12V DC | 6 and 12V DC | 6 and 12V DC | 6 and 12V DC |
| Range | 3–19.9V DC | 3–19.9V DC | 3–19.9V DC | 3–19.9V DC |
| Resolution | 0.1V DC | 0.1V DC | 0.1V DC | 0.1V DC |
| Accuracy | ±0.3V | ±0.3V | ±0.3V | ±0.3V |
| Cord Color | Black | Green | Orange | Red |
| Cord Type | Straight Flexible Rubber | Coiled Flexible Rubber | Coiled Flexible Rubber | Coiled Flexible Rubber |
| Outside Wire Diameter | 4.0 mm (0.16") | 4.0 mm (0.16") | 4.0 mm (0.16") | 4.0 mm (0.16") |
| Cord Length, feet | 6 (2 m)/18 gauge | 6 (2 m)/18 gauge | 6 (2 m)/18 gauge | 6 (2 m)/18 gauge |
| Replacement Cord Assembly | EECTCORD400 | EECTCORD400G | EECTCORD400O | EECTCORD400R |
| Replacement LED and Spring Assembly | EECT400LCD | EECT400LCD | EECT400LCD | EECT400LCD |
| Handle Size/Color | Medium *Instinct*/Clear | Medium *Instinct*/Clear | Medium *Instinct*/Clear | Medium *Instinct*/Clear |
| Display | Backlit 2000 count LCD | Backlit 2000 count LCD | Backlit 2000 count LCD | Backlit 2000 count LCD |
| Polarity | Bi-Directional | Bi-Directional | Bi-Directional | Bi-Directional |
| Surge Protected | Overload displays 1.0V, then resets | Overload displays 1.0V, then resets | Overload displays 1.0V, then resets | Overload displays 1.0V, then resets |
| Operating Temperature | 0 °–120 °F (-18 °–50 °C) | 0 °–120 °F (-18 °–50 °C) | 0 °–120 °F (-18 °–50 °C) | 0 °–120 °F (-18 °–50 °C) |
| Terminal End | Heavy duty copper clip | Heavy duty copper clip | Heavy duty copper clip | Heavy duty copper clip |
| Replacement Clip | EECTCLIP | EECTCLIP | EECTCLIP | EECTCLIP |
| Boot | EECTBOOT | EECTBOOT | EECTBOOT | EECTBOOT |
| Stainless-Steel Shank Length, inches | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 |
| Length, inches (cm) | 8 1/4 (20.96) | 8 1/4 (20.96) | 8 1/4 (20.96) | 8 1/4 (20.96) |
| Weight, lb (kg) | 0.4 (0.18) | 0.4 (0.18) | 0.4 (0.18) | 0.4 (0.18) |
| Warranty | 1 Year-Field Repairable | 1 Year-Field Repairable | 1 Year-Field Repairable | 1 Year-Field Repairable |
| Computer Safe | Yes – 10mA or less draw (Do not use on airbags) | Yes – 10mA or less draw (Do not use on airbags) | Yes – 10mA or less draw (Do not use on airbags) | Yes – 10mA or less draw (Do not use on airbags) |

† CE

TECHNICAL SUPPORT 1-888-382-6522

**⚠WARNING**

- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# CIRCUIT TESTERS



EECT424

**EECT424 24V Digital Display Circuit Tester (4–49V DC Range)**

- Used to detect DC voltage, ground and circuit integrity
- LCD display provides a 'no guess' voltage value of the circuit
- Backlit daylight readable LED indicates Green for Ground or Red for Power
- Provides one-handed operation of CT and the DC Voltage digital display of a multimeter
- One hand free to jiggle wires, replace fuse or operate a switch
- Surge protected circuitry displays 4–49.9V DC (± 0.3V accuracy)
- Computer safe <10mA circuit draw for confident testing
- 3 1/2" stainless-steel corrosion-free shank
- Patented Instinct® Clear Handle for pure visibility, style and comfort
- Red cord, boot, shank insulation and printing on the handle identifies this unique circuit tester as the 24V model
- CE: DE, ES, FR, IT, GB, NL

TECHNICAL SUPPORT: 1-888-382-6522

**Applications:**

- Covers most auto, truck, industrial vehicles, buses, 36V rail cars and more from 4–49V DC

**EECT200 Cord-Free DC Circuit Tester**

- For quick detection of DC voltage
- Use on autos and trucks from 3–24V DC
- Probe the wire, touch metal ground on vehicle with free hand
- Black carbon infused contact area completes the circuit
- Buzzer and LED light alerts user to DC voltage presence
- Mini *Instinct* handle and short stainless shank for tight-access jobs
- Pocket clip to keep the first need diagnostic tool ready for work



EECT74

## Specialty Circuit Testers

**EECT74 Amp Hound**

- Use on 6V, 12V and 24V Electrical Systems
- No need to remove a fuse which reduces the amount of time to determine the current in the circuit
- Finding parasitic drains can now be done without resetting the offending circuit
- No more pull a fuse, check the meter, pull a fuse, check the meter...Instead, check the complete fuse box quickly
- Will not short a circuit while the fuse is removed
- Touch the probes to the top of the fuse
- Tests all of the most common automotive fuses types and amp ranges
- Intelligent audible tones and digital displays

## 24V DC Digital Display Circuit Tester

| Specifications | EECT424 |
|---|---|
| Voltage | 24 |
| Range | 4.0V DC – 49.9V DC |
| Resolution | 0.1 V DC |
| Accuracy | ± 0.3 Volt |
| Cord Color | Red |
| Cord Type | Straight/Polyurethane |
| Outside Wire Diameter | 4.0 (0.16") |
| Cord Length, feet | 6 (2 m)/18 gauge |
| Replacement Cord Assembly | EECTCORD424 |
| Replacement LED and Spring Assembly | EECT424LCD |
| Handle Size/Color | *Instinct*/Clear w/ red print |
| Display | LCD w/ back light |
| Polarity | Bi-directional with color LED, red & green indicators |
| Surge Protected | Surge and high DC voltage |
| Operating Temperature | 0 °–120 °F (-18 °–50 °C) |
| Terminal End | Heavy Duty Copper Clip |
| Replacement Clip | EECTCLIP |
| Boot | EECTBOOTR |
| Stainless-Steel Shank Length, inches | 3 1/2 (8.9 cm) |
| Length, inches (cm) | 8 1/4 (20.9) |
| Weight, lb (kg) | 0.4 (0.18) |
| Warranty | 1 Year (field repairable) |
| Computer Safe | Yes <10mA (not for use on airbags) |



EECT200



EECT72

- Active circuit unit beeps three times and displays amp value
- Inactive circuit beeps continuously and displays (000)
- Open or blown fuse will not beep and displays (- - -)

- CE: DE, ES, FR, IT, GB, NL

TECHNICAL SUPPORT: 1-800-537-1077

**EECT72 Amp Hound 2**

Same as EECT74 with additional features:

- Real time readings
- Plug in fuse adaptors
- Funtions with micro fuses



EECT180

## Dynamic Test Leads

**EECT180 LOADpro® Dynamic Test Leads**

*LOADpro* finds these problems fast:
- High corrosive resistance
- Shorts to ground
- Open circuits

**Specifications:**
- Works with any DMM with standard banana plugs
- Test leads are 60" in length
- For use on circuits up to 28.5V
- Do not use on computer ECM input circuits
- *LOADpro* performs a voltage drop test with press of a button
- Steady pin probe tips – small recess allows probe to sit on connector pin
- Pressing the switch applies a load of 40mA per volt across the circuit (example: 40mA x 12V = .48A of load)
- Automotive, Heavy duty, Marine, RV and equipment



EEFF500

## Data Bus Fault Finder

**EEFF500 Data Bus Fault Finder**
- Modern vehicles have 15–20 computers talking to each other on shared circuits that can fail
- Technicians can waste time searching for a serial data circuit failure or use this product
- The “go to” tool to diagnose scan tool communication failures
- User-controlled elimination of modules to isolate defects and find failure location
- Eliminate rogue/defective modules that lock up data bus via 12 switchable data circuits
- LED indicators that light amber for short to ground and red for short to power, plus a self test upon powering on
- 12 standard banana jacks for DMM probing
- Communicates via Data Bus Network Connector
- US Patent #7,664,579
- Two-year warranty

**EEFF500-1 GM Star Cable**
- GM Star Cable for EEFF500 Data Bus Fault Finder

**EEFF500-2 GM Double Stack Cable**
- GM Double Stack Cable for EEFF500 Data Bus Fault Finder

**EEFF500-3 Breakout/Pigtail Cable**
- Breakout/Pigtail Cable for EEFF500 Data Bus Fault Finder

**EEFF500-4 DC Power Cord**
- Power Cord for EEFF500 Data Bus Fault Finder

**EEFF500-PB Storage Case**
- Storage Case for EEFF500 Data Bus Fault Finder

TECHNICAL SUPPORT 1-888-704-9201




EEDMRACKM




EEDMRACKBJR

## Storage Rack

**EEDMRACKM Magnetic Test Lead Storage Rack**
- Convenient rack to hold circuit testers, DMM lead sets, amp clamps, temperature probes and other accessories for multimeters
- Both racks can be mounted to wall with screws or placed on rollcab with magnetic back

**EEDMRACKBJR DMM Banana Jack Storage Rack**
- Convenient rack with banana jacks to hold test leads, back probes, adaptors and more



YA11167

## OBD-II Breakout Box (Blue-Point®)

**YA11167 OBD-II Breakout Box**
- Provides easy access to all 16 OBD-II terminals and connection to scan tool
- Eliminates guessing which terminals are being probed
- Eliminates damage to vehicle terminals from probing
- Tester probes plug in securely so you are free to diagnose
- No more crawling under the dash
- Great for diagnosing inoperative communication links



WARNING
• Do not use in environment with explosive vapor
• Read safety precautions on pages W1 to W4

# CIRCUIT TESTERS



EECT60660

## Relay Kit

**EECT60660 Deluxe Relay Test Kit**
- Kit makes testing relays or live circuits quick and easy
- Includes eight jumpers to fit most popular relays
- Includes test lead kit for easily and securely connecting relay test jumpers to a multimeter
- Relay puller pliers easily remove electrical relays without damage to the relay or electrical box

**EECT60660-1 Gray Test Jumper**
**EECT60660-2 White Test Jumper**
**EECT60660-3 Blue Test Jumper**
**EECT60660-4 Green Test Jumper**
**EECT60660-5 Orange Test Jumper**
**EECT60660-6 Red Test Jumper**
**EECT60660-7 Yellow Test Jumper**
**EECT60660-8 Purple Test Jumper**
**EECT60660-9 Orange Banana Plug Adaptor**
**EECT60660-10 Y-Terminal Lead with Green Plug**
**EECT60660-11 Terminal Lead with Blue Plug**
**EECT60660-12 Terminal Lead with Yellow Plug**
**LIL46950 Relay Puller Pliers**
**EECT60660-PB Storage Case**



YA111KITA

## Short Circuit Locator

**YA111KITA Relay Shorting Plug Kit**
- Plugs close normally open contacts and instantly determine which half of an output circuit is suspect
- Eliminates guessing which terminals to short
- Significantly reduces diagnostic time
- Kit works on all vehicles using standard four- and five-pin relays
- Avoids damage to relay socket as a result of probing

**YA111-10A Relay Shorting Plug**
**YA111-15A Relay Shorting Plug**
**YA111-20A Relay Shorting Plug**



EEFB310



EEFB315

## Fuse Buddy® Kits

**EEFB310 *Fuse Buddy* Pro Test Kit**
- Great tool for reading circuit amperage draws and troubleshooting up to 30A
- Includes: one meter with three interchangeable test functions: 30A MINI circuit current testing, 30A ATC circuit current testing and 30A all purpose current test
- Plugs directly into MINI and ATC fuse sockets
- Original fuse is replaced in line, thereby maintaining circuit protection
- Measuring range: 0–30A/48V DC – 10 seconds
- Accuracy: ±2% of reading
- Resolution: 100mA

**EEFB315 Max *Fuse Buddy* Kit**
- MAXI circuit testing capability up to 80A
- Works with ATC and MINI circuits (adaptors included)
- Unit features peak hold functions and one-touch zero function
- Use on antilock brake circuits, car stereo circuits, power distribution circuits, marine and automotive branch circuits, rear window defogger circuits, solar power DC branch circuits, traction control circuits, solar charge controller circuits and heavy duty equipment circuits
- Amps: 0–80A DC
- Resolution: 0.1A
- Accuracy: ±2.0% of reading + four digits



YA8006



YA8005

## Fuse Savers

**YA8006 Master Fuse Saver Kit**
- Dual type fuse box connector with 10' cord allows you to move around the vehicle shake testing wires while looking for the short
- No wasted fuses
- Includes: 5A, 10A, 15A, 20A and 30A resetting breaker handles, buzz alert module and six fuse adaptors
- Use when installing radios, CD players, radar detectors and other accessory equipment
- CE

**YA8005 Fuse Saver Kit**
- Dual type fuse box connector with 10' cord allows you to move around the vehicle testing wires while looking for the short
- Includes: 10A, 15A and 20A resetting breaker handles
- Use when installing radios, CD players, radar detectors and other accessory equipment

**Accessories**
**YA8005-EXT 10' Extension Cord**
**YA8005-11 Buzz Alert Adaptor**


YA8026


YA8027


YA8028


YA8029


TLT8003


TLT8000


TLT5


TLT6


TLT7


YA3179B

## Trailer Harness Testers and Adaptors

**YA8026 Towing Maintenance Kit**
- Use for four-/five-pin vehicle side circuit testing and cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Extends harness life
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: four-/five-pin tester, terminal cleaning tool and 2 mL tube of DeoxIT® electric contact cleaner
- Packaged in compact clamshell

**YA8027 Towing Maintenance Kit**
- Use for six round pin vehicle side circuit testing
- Test, clean and repair truck and trailer connections plus light assemblies
- Great preventative maintenance tool
- Extends harness life
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: six round pin tester, two terminal cleaning tools and 2 mL tube of *DeoxIT* electric contact cleaner
- Packaged in compact clamshell

**YA8028 Towing Maintenance Kit**
- Use for seven spade pin vehicle side circuit testing and cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Extends harness life
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: seven spade pin tester, two terminal cleaning tools and 2 mL tube of *DeoxIT* electric contact cleaner
- Packaged in compact clamshell

**YA8029 Towing Maintenance Kit**
- Use for seven round pin vehicle side circuit testing and cleaning plus seven round pin connector cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Use as a pin wear gauge on trucks and trailers
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: YA3179B seven round pin tester, IPA8024-AS1 and IPA8024-AS2 two round pin terminal cleaners plus 2 mL tube of *DeoxIT* electric contact cleaner

## Electrical Brushes


AC41C

**AC41C Taillight Socket Brush**
- Stiff carbon steel wire bristles
- 6 5/8" long

**TLT8003 Trailer Plug Adaptor (Blue-Point®)**
- Converts 12V feed at the back of a truck or SUV trailer socket to a dual 12V power outlet
- Powers 12V test equipment, charging equipment and work lights in shop environment
- Recreation purposes such as running air pumps, radios or TVs while tailgating and camping
- Plugs into any seven-way spade pin trailer connection

**TLT8000 3-Way Trailer Adaptor**
- Adapts seven-way connection to six round pin and four-/five-pin connections
- Sealed plugs to keep road debris from corroding connections
- Winged grip for easy installation and removal
- Use on medium/light duty trucks, 1/2, 3/4 and 1 ton pickups, campers and other heavy duty applications

**TLT5 Trailer Harness Tester**
- Easily locates electrical problems in the tow vehicle
- Checks both four- and five-pin flat trailer connectors with LED indicator lights
- Tests left and right signals, brake lights and running lights

**TLT6 Trailer Harness Tester**
- Checks six-pin round trailer connectors with LED indicator lights
- Same applications as TLT5

**TLT7 Trailer Harness Tester**
- Checks seven spade/flat pin trailer connectors with LED indicator lights
- Same applications as TLT5

**YA3179B Circuit Chaser**
- Round pin circuit chaser for semi trailers
- Test the semi trailer plug and cable
- Both male and female ends so technician can isolate a fault to trailer or cable
- Can temporarily repair short circuits in the shop or on the road
- Includes: five jumper tabs and one replacement prong



MTAC110

## AC Voltage Sensor

**MTAC110 AC Voltage Sensor**
- Non-intrusive AC sensor detects voltage from 110–600V AC
- Use to ensure the absence of current before working on a circuit
- Move probe tip along an insulated wire, near an outlet or near a circuit breaker and tip will glow if voltage is present

**⚠WARNING**
- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# LEAK DETECTORS




EELD500




EELD500CVR



EELD500-4



EELD500C02

## Portable Diagnostic Smoke Machine

| Stock No. | EELD500 |
|---|---|
| Power Supply | 12V DC |
| Power Consumption | 12/18V DC, 25 amps |
| Supply Volume | 10 liters per minute |
| Line Length/Smoke Supply, ft. (m) | 8 (2.44) |
| Line Length/Power Supply, ft (m) | 8 (2.44) |
| Line Length/Remote Starter, ft (m) | 50 Range |
| Weight, lb (kg) | 11.5 (5.25) |
| Overall Dimensions, inches (mm) | 12W x 9D x 12H (310W x 230D x 310H) |

**EELD500 Portable Smart Smoke® Machine**

- Portability, take it under and around vehicle with optional 14.4V Ni-Cad or 18V Li-Ion battery and operate using cordless remote control or connect to vehicle 12V battery
- Necessity, eight of the top emission DTC codes can be diagnosed with *Smart Smoke* technology
- Computerized digital readout displays leak sizes down to 0.001" - LPM and Pressure/vacuum in $H_2O$
- Smart, self calibrates for .010", .020", .040" and automatically preforms EVAP pass/fail test
- One touch EVAP testing with automatic pass or fail
- Low flow mode makes it easier to find leaks
- Vacuum port adaptor to diagnose Chrysler® ESIM and NVLD systems
- Find leaks, the evaporative emissions diagnostic smoke machine delivers EVAP testing and general purpose applications
- Conveniently functions with OEM specified nitrogen, portable $CO_2$ (ships empty) bottle or shop air
- Patented UltraTraceUV® dye solution pinpoints leaks
- OEM approved smoke technology
- Smoke solution is safe and does not produce unpleasant odor in the shop
- Unit ships with enough smoke solution to perform 200 tests – EELD500-1
- Three-button control display select, Orifice select and Start
- Combo LED and UV light in one and remote control are included
- Convenient hanger for under car and under hood use
- Lightweight and compact stores in large bottom roll cab drawer or hang with optional cover to protect from shop dirt and dust
- Product support: three-year warranty, instructional video SS3229
- Patents #6,526,808 #6,439,031, #6,392,227
- Other patents pending

**EELD500 Smoke Machines Includes:**
**EELD500-1 8 oz Bottle of *UltraTraceUV* Dye Solution**
**EELD500-2 Large Adaptor Cone**
**EELD500-3 Vacuum Adaptor**
**EELD500-4 Combination LED UV Light and Yellow Glasses**
**EELD500-5 Removable Battery Clamp Lead Set**
**EELD500-REM Remote Control**
**EELD500-Z User Manual**
**EELD301A2 Assorted Cap-Plug Set**
**EELD301A3 Exhaust Cone (1" x 3.5" Diameter/6" Long)**
**EELD301A4 Smoke Diffuser (for finding wind/water leaks)**
**EELD302A2 EVAP Service Port Adaptor Fitting – Standard Size**
**EELD302A4 Dual-Size Schrader Removal/Installation Tool**
**Optional Accessories for EELD500**
**EELD500C02 C02 Bottle and Regulator**
**EELD500CVR Protective Cover**
**CTC620 Battery Charger**
**CTB4187 18V Slide-on Battery**
**EELD500-1 Additional 8 oz Bottle of Solution**
**EELD500-6 Second Smoke Hose**
**YA4000B Vacuum Pump**
**EELDGASCAP Gas Cap Adaptor (3 pack)**
**EELDGASBMW Gas Cap Adaptor BMW® (1 each)**

TECHNICAL SUPPORT 1-800-901-1988

### EELD100A Diagnostic Smoke Machine (EVAP)

- Find Leaks – Contains Diagnostic Smoke® technology for EVAP testing and general purpose applications
- Necessity – eight of the top ten Emission DTC codes can be diagnosed with this unit
- Patented UltraTraceUV® non-contaminating dye solution pinpoints leaks smoke alone cannot
- Smoke solution does not produce an unpleasant odor in the shop
- Combo LED and UV light in one, plus special glasses are included
- Variable Flow Control manually reduce flow to help pinpoint the exact location of a leak
- Conveniently functions with OEM specified optional nitrogen, portable $CO_2$ bottle (ships empty) or shop air
- OEM approved smoke technology
- Unit ships with enough smoke solution to perform 200 tests
- Convenient hanger for under car and under hood use
- Lightweight and compact stores in large bottom roll cab drawer or hang with optional cover to protect from shop dirt
- CE, DE, ES, FR, IT, GB, NL

### PATENTS

- Nitrogen Patent #6,526,808
- Nitrogen with Dye Patent #6,439,031
- Dye Patent #6,392,227

### STANDARD ACCESSORIES

(Included with EELD100A)

- EELD500-1 8 oz Bottle *UltraTraceUV* dye solution
- EELD301A2 Assorted Cap Plug Kit
- EELD301A3 Exhaust Cone (1"–3.5" DIA, 6"L)
- EELD301A4 Smoke Diffuser
- EELD100-4 Combination UV light and Glasses
- EELD302A2 EVAP service port fitting
- EELD302A4 Schrader removal/ install tool
- EELD100A-Z User manual in seven languages

### OPTIONAL ACCESSORIES

- EELD500C02 $CO_2$ Bottle and Regulator
  – EELD500C02 ships empty and needs to be filled at a hardware store
- EELD500CVR Protective Cover
- EELD500-1 Additional 8 oz Bottle of Solution
- EELDGASCAP Gas Cap Adaptor 3pc
- EELDGASBMW One Gas Cap Adaptor BMW®
- EELD100A-3 Smoke Hose Extension with nozzle
- EELD100A-4 Tee Connector with Delrin® nozzle
- EELD301A1 Nitrogen Hose
- EELD302A3 EVAP Port Adaptor (Ford® service)



EELD100A

| Stock No. | EELD100A† |
|---|---|
| Power Supply | 12V DC |
| Power Consumption | 12V DC, 25A |
| Supply Volume | 10 L/min |
| Line Length/ Smoke Supply, ft (m) | 8 (2.44) |
| Line Length/ Power Supply, ft (m) | 8 (2.44) |
| Line Length/ Remote Starter, ft (m) | 10 (3) |
| Weight, lb (kg) | 11.5 (5.25) |
| Overall Dimensions, inches (mm) | 12H x 13D x 12W (305H x 229D x 305 W) |

†CE

### EELD500 and EELD100A APPLICATIONS

- Air cleaner assembly • Air ducts
- Air valves • Cylinder heads
- Diaphragms • EGR valve • EVAP
- Exhaust manifolds • Exhaust pipes and mufflers • Fuel Tank Pressure Sensor • Intercooler • Intake gaskets
- Injector o-rings • Loose clamps
- MAP sensors • Mass air flow meter
- Oil leaks • PCV valve and hoses
- Throttle body shaft • Turbos
- Vacuum hoses • Vacuum switches
- Wind and water

## Evaporative Emissions *Diagnostic Smoke* Vapor Producing Machines – Feature Comparison

| | EELD100 | EELD500 |
|---|---|---|
| Uses *Diagnostic Smoke* vapor technology developed in collaboration with *Ford* Motor Co., GM®, Daimler Chrysler® and approved by most major OEMs. | • | • |
| Patented non-contaminating *UltraTraceUV* dye solution pinpoints the leak. The only dye solution mandated by most major OEM's. Will not harm activated charcoal canister, ORVR valve, purge valves, catalytic converters, $O_2$ sensors, seals or gaskets and determined not to void vehicle factory warranty. | • | • |
| The only Patented technology (STAR) that meets specifications when OEMs require nitrogen for safer EVAP system testing. | • | • |
| Designed with an electronic Safety Valve that automatically shuts off air flow into the vehicle's EVAP system when the machine turns off. This stops gasoline fumes from exiting the EVAP system and filling your work bay. | • | • |
| TECH LINE Supported 1-800-901-1988 for end user to help with any and all EVAP problems. | • | • |
| Vacuum / Pressure Gauge for vacuum / pressure decay. | • | • |
| Convenient Hook with fold down handle for hanging under car or under hood and easy storage in tool box. | • | • |
| Ability to read and display leak size of .010". | • | • |
| 10-Year Warranty On Bosch Glow Plug a reliable heating system that lasts much longer than fiberglass wick-style units. | • | • |
| Variable Flow Control manually reduces flow to help pinpoint the exact location of a leak. | | • |
| Low Flow Pulsating Mode automatically adjusts flow to optimal setting to help find small leaks. | • | |
| One-Touch EVAP Testing with automatic pass or fail. | • | |
| Variable Flow Control manually reduces flow to help pinpoint the exact location of a leak. | • | |
| Low Flow Pulsating Mode automatically adjusts flow to optimal setting to help find small leaks. | • | |
| One-Touch EVAP Testing with automatic pass or fail. | • | |
| Vacuum Port Adapter can apply hand vacuum pump for testing Fuel tank Pressure Sensors, *Chrysler* ESIM & NVLD systems. Also gives you dual smoke hose capability. | • | |
| 100% Portable to work off site, or anywhere outside of work bay area with optional Snap-on® power tool battery and $CO_2$ kit. | • | |
| Computerized Digital Display down to .001" means you're prepared for any industry leak standard changes. | • | |
| Computerized Digital Display Reading Flow in Liters per Minute to make sure factory specs are met. | • | |
| Computerized Digital Display Reading Pressure / Vacuum in $H_2O$ to compare to FTP Sensor for in-depth diagnostic ability. | • | |
| Sleep Mode with Memory retains test results if machine shuts down after five minutes. | • | |
| Option of using vehicle battery or 12 volt, 14.4 volt NiCad,18 volt NiCad or Lithium *Snap-on* Cordless Batteries. | • | |
| Cordless remote so there is no need to walk back and forth when doing a job. | • | |
| Micro-processor touch pad for quick and easy operation. | • | |
| Ability to Choose Inert Gas at start-up for 100% accurate results. | • | |

**⚠WARNING**

- Do not use in environment with explosive vapor
- Use only in well ventilated area
- Read safety precautions on pages W1 to W4

## LEAK DETECTORS



EELDGASCAP



EELD302REG




EELD500-1

**EELDGASCAP1 Fuel Tank Filler Neck Adaptor (Blue-Point®)**
- Quickly pops on virtually any filler neck
- Costly replacement seals are no longer needed
- One size fits all (new model vehicles may be subject to change)

**EELDGASCAP Fuel Tank Filler Neck Adaptor**
- 3 pack of EELDGASCAP1

**EELDGASBMW Fuel Tank Filler Neck Adaptor**
- Single for BMW® vehicles

**EELD302REG Gas Flow Regulator *(Blue-Point)***
- 100 PSI preset regulator guarantees proper operating pressure for any smoke machine
- Easily connects to nitrogen cylinder (optional)

**EELD301A1 UltraTraceUV® Smoke Solution**
- *UltraTraceUV* brand smoke producing solution for use with EELD301A/EELD302B smoke machines
- Single 12 oz bottle

**EELD500-1 *UltraTraceUV* Smoke Solution**
- Single 8 oz bottle



ACT790A

**ACT790A Combustible Gas Detector**
Find leaks in fuel and exhaust systems plus verify integrity of fuel storage containers. Detectable compounds include acetylene, iso-butane (R600a), methane, ethane (R170), propane (R290), hydrogen, acetone, methanol and gasoline. Probe length of 17". Uses four AA alkaline batteries. Conforms with SAEJ1627 and is designed to conform with SAEJ2791. Body length of 10 3/8". Includes storage case.

- Numeric leak size indicator
- Audio mute function
- Automatic calibration
- Comfortable neoprene grip
- Intrinsic safety certified
- Three levels of sensitivity
- Flashing probe LED visual leak indicator
- Long life sensor
- High impact injected molded instrument case
- Two-year warranty on detector, two-year warranty on sensor
- CE

## HANDHELD GAS ANALYZERS



MT706A

### Carbon Monoxide Analyzer

**MT706A Carbon Monoxide Analyzer *(Blue-Point)***
- Monitor and test adjustments affecting carbon monoxide emissions from gas powered vehicles, propane powered forklifts plus other combustion style equipment
- Flow indication warns of restricted emissions flow due to clogged or pinched lines
- Backlit display for ease of reading in dim light
- Range is 0%–10% CO (approx. 100,000 PPM)
- Response time is 90% of reading in less than 60 seconds
- CE

TECHNICAL SUPPORT: 1-888-382-6522



HHGA5B



HHGA5BP

**HHGA5B Handheld Gas Analyzer Kit (5 Gas)**
Independent Handheld 5 Gas Analyzer or use with MODIS™ Link, VERDICT® and VERUS® Bluetooth® link.

- Fully Portable 5 Gas Analyzer, go anywhere, use anywhere
- 110V AC and 12V powered
- Internal rechargeable battery, up to one hour use
- Ideal for road testing and mobile use
- Measures exhaust emissions for CO, $CO_2$, HC, $O_2$, NOx and AFR/Lambda
- Provides an instant assessment of an engine vehicle exhaust and catalytic converter
- *MODIS*, *VERDICT* and *VERUS* Link for enhanced real-time viewing
- Setup required with included software on USB stick
- Gather all the evidence required for effective and accurate vehicle diagnostics on one screen in real time
- View, graph, save and recall data
- Monitor and reduce vehicle emissions, improve driveability and fuel efficiency
- There are 255 memory locations in the analyzer to track and print data for the same or many different vehicles
- Compatible with gasoline, CNG, propane and diesel fuel types
- Service is handled at Crystal Lake Northern Repair-Annual Cal and sensor replacement. Meets required industry standard
- Problems in ignition system (Spark plugs, wires)
- Engine compression problems
- Temperature sensor malfunction
- EGR Valve problems
- Dirty air filter

TECHNICAL SUPPORT: 1-888-717-1333

- Obstructed intake valve ports
- Lambda Sensor failure
- Excessive Fuel Consumption
- Misfire
- Rusted exhaust (internal or external rust)
- Non-homologated exhaust (wrong back pressure)
- Melted catalytic converter
- Worn out catalytic converter
- Obstructed exhaust or catalytic converter

**HHGA5BP Handheld Gas Analyzer Kit (5 Gas)**
Same features as HHGA5B, includes printer and hard storage case.

**Accessories**

**HHGA-8 Motorcycle Exhaust Probe**
- Optional motorcycle exhaust probe for HHGA series gas analyzers

**HHGA-9 Five Gas Exhaust Probe**
- 5 gas exhaust probe for HHGA series gas analyzers

**HHGA-11 Filters**
- Filters for HHGA Series gas analyzers

**HHGA-16 AC Adaptor**
- Designed for use in the service bay

**HHGA-17 12 V Adaptor**
- Designed for use in the service bay or on the road

**HHGA-18 Paper Roll**
- Replacement paper roll for HHGA-5 infrared printer

**HHGA-PRINTER Infrared Printer**
- Infrared printer for HHGA series gas analyzers

**⚠WARNING**

- Do not use in environment with explosive vapor
- Use only in well ventilated area
- Read safety precautions on pages W1 to W4

# VIDEOSCOPES




BK5600




BK6500




BK8000

| Specifications | BK5600 | BK6500 | BK8000 |
|---|---|---|---|
| Power Supply | 6 AA Alkaline Batteries | 3.7V Li-ion, 2600 mAh 9.6 watt hour battery | (2) 3.7V Li-ion, 2600 mAh 9.6 watt hour battery |
| Width, inches (mm) | Viewer: 1.77 (45) | Viewer: 1.77 (45) | Viewer: 1.77 (45) |
| Length, inches (mm) | Viewer: 7.2 (180); Imager: 36 (0.91) | Viewer: 7.2 (180); Imager: 36 (0.91) | Viewer: 7.2 (180); Imager: 36 (0.91) |
| Height, inches (mm) | Viewer: 3.94 (100) | Viewer: 3.94 (100) | Viewer: 3.94 (100) |
| Resolution (Reading Display) | 480 x 272 RGB Backlight LED | 480 x 272 RGB Backlight LED | 480 x 272 RGB Backlight LED |
| Video Out | NTSC/PAL | NTSC/PAL | NTSC/PAL |
| Run Time (hours) | Alkaline Batteries: 6; NiMh Rechargeable Batteries: 6 | 3–4 hours on full charge | 3–4 hours on full charge |
| Operating Temperature Range | 32 °–140 °F (0 °–60 °C) | 32 °–140 °F (0 °–60 °C) | 32 °–140 °F (0 to 60 °C) |
| Storage Temperature | -4 °–140 °F (-20 °–60 °C) | -4 °–140 °F (-20 °–60 °C) | -4 °–140 °F (-20 to 60 °C) |
| Field of View, Forward | Approx. 56° diagonal | Approx. 56° diagonal | Approx. 56° diagonal |
| Field of View, Side | Approx. 56° diagonal | Approx. 56° diagonal | Approx. 56° diagonal |
| Resolution | Imager: 640 x 480 | Imager: 640 x 480 | Imager: 640 x 480 |
| Optimal Focal Range | 0.5"–12" (12 cm–30.5 cm) | 0.5"–12" (12 cm– 30.5 cm) | 0.5"–12" (12 cm–30.5 cm) |
| Water Resistance | Imager only when assembled: to a depth of 10' (3 m) | Imager only when assembled: to a depth of 10' (3 m) | Imager only when assembled: to a depth of 10' (3 m) |

**BK5600 True Digital Video Inspection Scope**

- 4.3" diameter screen vs. 2.4" diameter screen of original BK5500, for even better viewing
- Digital still image capture with included SD card storage
- Includes 36" digital imager with 8.5 mm diameter head
- Uses six AA Alkaline batteries
- Touchscreen interface enables easy feature selection
- 90° glass mirror and magnet retrieval accessories included
- Includes storage tray. Keep in your tool storage drawer for security
- Two-year warranty – serviced through Snap-on® Repair Centers
- CE– DE, ES, FR, IT, GB, NL

**BK6500 Video/Still Recording Digital Borescope**

**BK8000 Wireless Digital Videoscope**

- 4.3" diameter screen
- Digital video and image capture with internal memory as well as SD card storage
- 36" Dual imager is included – see straight ahead or at a 90° angle
- Wireless 802.11n provides clear image transmission
- Rechargeable lithium batteries in both the viewer and imager
- Three mega-pixel rear-view camera allows technician to document pre-service vehicle condition
- Touchscreen interface enables easy feature selection
- USB port for mass storage
- Includes blow molded case
- Two-year warranty – serviced through *Snap-on* Repair Centers
- CE— DE, ES, FR, GB, IT and NL
- BK5500, BK5500W and BK6000 imagers are not compatible with BK8000 units

| Specifications | BK8000-55 | BK8000-56 | BK8000-38-1 | BK8000-38-2 | BK5500-38-1 | BK5500-38-2 |
|---|---|---|---|---|---|---|
| Description | 36" Dual View Imager (5.5 mm head) | 79" Dual View Imager (5.5 mm head) | 36" Forward View Imager (3.8 mm head) | 36" mm Side View Imager (3.8 mm head) | 36" Forward View Imager (3.8 mm head) | 36" mm Side View Imager (3.8 mm head) |
| Power Supply | Forward View Imager: 100 mA; Side View Imager: 100 mA | Forward View Imager: 100 mA; Side View Imager: 100 mA | 100 mA | 100 mA | 100 mA | 100 mA |
| Width, inches (mm) | .2165 (5.5) | .2165 (5.5) | .1496 (3.8) | .1496 (3.8) | .1496 (3.8) | .1496 (3.8) |
| Length, inches (mm) | 36 (914.4) | 79 (2,006) | 36 (914) | 36 (914) | 36 (914) | 36 (914) |
| Operating Temperature Range | 32 °–113 °F (0 °–45 °C) | 32 °–113 °F (0 °–45 °C) | 32 °–113 °F (0 °–45 °C) | 32 °–113 °F (0 °–45 °C) | 32 °–113 °F (0 °–45 °C) | 32 °–113 °F (0 °–45 °C) |
| Storage Temperature | -4 °–158 °F (-20 °–70 °C) | -4 °–158 °F (-20 °–70 °C) | -4 °–158 °F (-20 °–70 °C) | -4 °–158 °F (-20 °–70 °C) | -4 °–158 °F (-20 °–70 °C) | -4 °–158 °F (-20 °–70 °C) |
| Optimal Focal Range | Forward View Imager: 1"–12" (2.5 cm–30 cm); Side View Imager: 1"–12" (2.5–30 cm) | Forward View Imager: 1"–12" (2.5 cm–30 cm); Side View Imager: 1"–12" (2.5–30 cm) | 1"–12" (2.5 cm–30 cm) | 1"–12" (2.5 cm–30 cm) | 1"–12" (2.5 cm–30 cm) | 1"–12" (2.5 cm–30 cm) |
| Water Resistance | Imager to a depth of 10' (3 m) | Imager to a depth of 10' (3 m) | Imager to a depth of 10' (3 m) | Imager to a depth of 10' (3 m) | Imager to a depth of 10' (3 m) | Imager to a depth of 10' (3 m) |
| Lighting Description | Forward View Imager: 4 mini-LEDs with custom ring light pipe; Side View Imager: single LED with custom light pipe | Forward View Imager: 4 mini-LEDs with custom ring light pipe; Side View Imager: single LED with custom light pipe | 3 mini-LEDs with custom ring light pipe | 2 super bright LEDs with custom light pipe | 3 mini-LEDs with custom ring light pipe | 2 super bright LEDs with custom light pipe |
| Weight, lb (kg) | 0.5 (0.227) | 0.75 (0.340) | 0.14 (0.07) | 0.14 (0.07) | 0.14 (0.07) | 0.14 (0.07) |
| Maximum Light Output | Forward View Imager: 300 Lux; Side View Imager: 2,400 Lux at 1" (open air dissipation) | Forward View Imager: 300 Lux; Side View Imager: 2,400 Lux at 1" (open air dissipation) | 300 Lux at 1" (open air dissipation) | 350 Lux at 1" (open air dissipation) | 300 Lux at 1" (open air dissipation) | 350 Lux at 1" (open air dissipation) |
| Maximum Bend Radius | 3/4" (19.05 mm) | 3/4" (19.05 mm) | 3/4" (19.05 mm) | 3/4" (19.05 mm) | 3/4" (19.05 mm) | 3/4" (19.05 mm) |
| Humidity | 5%–100% non-condensing | 5%–100% non-condensing | 5%–100% non-condensing | 5%–100% non-condensing | 5%–100% non-condensing | 5%–100% non-condensing |

Two-year warranty
DE, ES, FR, IT, GB, NL and JP

### BK8000-55 Dual View Imager, 5.5 mm Diameter
- 5.5 mm imagers get into much tighter spaces than standard 8.5 mm
- Dual View Digital Cameras see straight ahead or at a 90° angle
- No need for additional mirror attachment
- Close focus provides incredible detail
- Imagers are resistant to all common automotive chemicals

### BK8000-56 Dual View Imager, 5.5 mm Diameter 78 3/4" in length

### BK5500-38-2 Side View Imager (3.8 mm diameter)
- For use on BK5500, BK5500W and BK6000 Digital Borescopes
- Analog sensor technology provides small package size to access the smallest port sizes
- Side view imager allows the user to see the cylinder wall and valves
- Side view imager features a permanently attached mirror so it can't fall off
- 3.8 mm outside diameter fits most glow plug ports
- Imagers are resistant to all common automotive chemicals

### BK8000-38-6 Cleaning Swabs

### BK5500-38-1 Forward View Imager (3.8 mm diameter)
- For use on BK5500, BK5500W and BK6000 Digital Borescopes
- Analog sensor technology provides small package size to access the smallest port sizes
- Forward view Imager allows the user to see combustion cup of piston
- 3.8 mm outside diameter fits most glow plug ports
- Imagers are resistant to all common automotive chemicals

### BK8000-38-1 Forward View Imager (3.8 mm diameter)
- For use on BK5600, BK6500 and BK8000 Digital Borescopes
- Digital sensor technology provides small package size to access the smallest port sizes
- Forward view Imager allows the user to see combustion cup of piston
- 3.8 mm outside diameter fits most glow plug ports
- Imagers are resistant to all common automotive chemicals

### BK8000-38-2 Side View Imager (3.8 mm diameter)
- For use on BK5600, BK6500 and BK8000 Digital Borescopes
- Digital sensor technology provides small package size to access the smallest port sizes
- Side view imager allows the user to see the cylinder wall and valves
- Side view imager features a permanently attached mirror so it can't fall off
- 3.8 mm outside diameter fits most glow plug ports
- Imagers are resistant to all common automotive chemicals

**⚠WARNING**

- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# VIDEOSCOPES


BK5500-7


BK5500-9


BK5500-10


BK5500-12


BK5500-13


BK5500-15

| Stock No. | Description | Included with BK5500A | Accessory for BK5500A | Included with BK6000 | Accessory for BK6000 |
|---|---|---|---|---|---|
| BK5500-1 | 36" Imager (8.5 mm head) | • | | | |
| BK5500-2 | Mirror and Magnet | • | | • | |
| BK5500-6 | Blow Molded Case | | • | | |
| BK5500-7 | 72" Imager (8.5 mm head) | | • | | • |
| BK5500-8 | Video Out Cable | • | | | |
| BK5500-9 | 120" Imager (8.5 mm head) | | • | | • |
| BK5500-10 | 36" Blue Light / UV Imager (8.5 mm head) | | • | | • |
| BK5500-12 | Dual Imager (mm head) | | • | | • |
| BK5500-13 | 36" View Imager (5.5 mm head) | | • | | • |
| BK5500-15† | 30" Dual Imager (12.5 mm head) | | • | | • |
| BK6000-1 | Battery, Li-ion | | | • | |
| BK6000-2 | S-Hook | | | • | |
| BK6000-6 | Blow Molded Case | | | • | |
| BK6000-10 | Battery Charger | | | • | |
| BK6000-11 | Earbud and Microphone | | | | • |
| BK6000-12 | USB Cable | | | • | |
| BK6000-13 | Kick Stand | | | • | |
| – | (4) AA Batteries | • | | | |
| – | Warranty | 2 years | | 2 years | |
| – | Instruction Manual | • | | • | |

† CE

# STETHOSCOPES


YA6930

## Electronic

Quickly pinpoint the source of noise or vibration in underhood, undercar and vehicle interiors.
Six selectable channels allow placement of sensors in various locations to pick up bearing, gear, engine, suspension, drive accessory and wind noises.

**YA6930 Electronic Engine Stethoscope**

- Electronic Stethoscope amplifies sound during diagnosis or verification of proper vehicle operation
- Use to pinpoint faulty bearings, injectors, squeaks, rattles and more
- Mode selection switch with LED indicator easily switches between the sound and vibration functions
- Noise cancellation feature eliminates background noise
- Studio style headphone set with tangle-free cord
- Detachable flex wand with LED illuminated tip
- Rotary volume control
- Lightweight and balanced with ergonomic comfort grip
- CE




YA6890KT



YA6910



YA6920

## Electronic

**YA6890KT Electronic Squeak and Rattle Finder (Blue-Point®)**

- Quickly pinpoints source and location of noises emanating from under chassis, under hood, transmission, differential/CV joint, faulty fuel injectors and bearings, gears and suspension parts
- Helps detect and isolate squeaks, rattles, groans, cowl "pops", clunks, growls, thumps, rumbling and ticking noises
- Wireless transmitters feature magnetic body with versatile clip
- Wireless channel receiver isolates six different transmitter locations
- LED lights indicate the strength of signal of the active channel
- Illuminated button indicates active channel at a glance

**YAH6890KT European Version**

**YA6910 Mini Electronic Stethoscope (*Blue-Point*)**

- Convenient diagnostic tool can pinpoint location of noise caused by bad bearings, bushings, dirty fuel injectors, wind and air leaks, noisy valves and lifters
- Allows user to monitor gears, bearings and suspension components under load so problems can be more accurately diagnosed
- Sensor clamp helps to detect noises during vehicle test drive that cannot be duplicated in the work bay
- Sensor tip mounted on 6" flexible shaft allows access to hard-to-reach areas
- 5" inductive metal probe allows user to pinpoint source of noise or vibration
- Ultra sensitive microphone provides a full range of sound
- Features a rotary style adjustable volume control

**YA6920 Electronic Marine Stethoscope (*Blue-Point*)**

- Unique diagnostic listening device specifically designed to pinpoint squeaks, rattles and other troublesome noises in most marine vessels and watercraft with inboard or outboard motors
- Test for noise and harmonic vibration on bearings, under dash areas, control cables, fuel injectors, cabinets and compartments, alternators, switches, pumps, final drives, steering gears, gear cases, steering pumps, hulls and compressors
- 14' long, water resistant wire loom harness allows user to diagnose hard-to-reach problem areas
- Six spring-loaded, color-coded stainless-steel sensor clamps with built-in super sensitive microphone in the tips for optimal sound detection
- Heavy duty professional headphones block any unwanted sounds

## Mechanic's

**GA111D Mechanic's Stethoscope**

- Locates any engine sound such as bearing noise, knocks and squeaks in fan or water pump, and valve tappets
- Sound amplifying diaphragm and a 12" probe to locate trouble



GA111D

# INFRARED THERMOMETERS



CTG761

These infrared thermometers safely monitor hot, hazardous or hard to reach materials without contamination or damage to the surface. Simply point at target, pull the trigger and read the temperature on the large, backlit LCD display.

**Applications:**

- Pinpointing radiator core restrictions
- Checking exhaust and emission control problems
- Measuring catalytic converter temperatures
- Diagnosing exhaust manifolds for combustion problems
- Measuring tire temperatures
- Measuring race track temperatures
- Measuring bearing, rotor, drum or brake temperatures for potential problems
- HVAC – Use for temperature room balancing, check supply/return registers duct work, monitor steam traps, furnace performance plus use in energy audits
- Check bearing, rotor, brake and drum temperatures

| Features | CTG761† |
|---|---|
| IR Range | -50 °–1,000 °C (-58 °–1,832 °F) |
| IR Resolution | < 1,000 °C/°F : 0.1 °C/°F<br>> 1,000 °C/°F : 1 °C/°F |
| IR Accuracy | 0 °–560 °C : ±2% or 2 °C<br>-18 °–0 °C : 3 °C<br>-50 °– -18 °C : 5 °C<br>560 °–1,000 °C : ±2% ± 3 °C |
| IR Repeatability (+23 Ems=0.95) | ± 2% or ± 2 °C |
| K Type Range (Thermocouple) (Optional) | -200 °–1,300 °C |
| K Type Resolution (Thermocouple) (Optional) | -99 °C/°F–999 °C/°F : 0.1 °C/°F<br>Other : 1 °C/°F |
| K Type Accuracy (Thermocouple) (Optional) | 0.5% of Reading ± 1 °C |
| Response Time | 500 mSec |
| Spectral Response | 7–14um |
| Display Hold | Last reading and operating mode display for 10 sec nominal upon trigger release |
| Emissivity | 0.30–0.99 Adjustable |
| Alarm | Alarm On/Off and High/Low |
| Record | Rec/Max/Min |
| Ambient Operating Range | 0 °–50 °C (32 °–120 °F) |
| Relative Humidity | 10%–80% RH non-condensing |
| Storage Temperature | -10 °–70 °C (14 °–158 °F) without battery |
| Distance To Spot Size | 12 : 1 (90% energy covered) |
| Battery Type | Snap-on® Battery Pack (Lithium ion) 7.2V/14.4V |
| Battery Life | About 30 hrs continuous use Laser and Back Light |
| Tool Only | CTG761DB† |

†CE

### CTG761 Infrared Thermometer

- Ergonomic design features a comfort grip equally comfortable for both right- and left-handed users
- Widest temperature range of -58 °F–1,832 °F
- Most advanced features of any professional IR gun
- Single-button trigger makes it effortless to control
- Powered by 14.4V micro lithium battery and charger –Interchangeable with our new 7.2V cordless tools and eliminates the need for extra chargers and back-up batteries
- Optional contact k-type thermocouple probe, adds to the flexibility of measuring temperatures in confined spaces, including liquid temperatures
- Seven-year warranty
- Accurate to ±2% or ± 2 °C or ±3 °F, whichever is greater
- Dual laser pointer to indicate the edges of the temp circle
- High contrast large display is even visible in bright sunlight
- Adjustable emissivity from 0.3–1.00
- Record with min, max and continual scan
- CE: DE, ES, FR, IT, GB, NL, JP

### CTG761DB Infrared Thermometer

- Same as CTG761 but does not include battery, charger or storage case




RTEMP8



RTEMPB3A







RTEMPB7

| Features | RTEMP8† | RTEMPB3A*† | RTEMPB7*† |
|---|---|---|---|
| Temperature Range | -60 °–760 °C (-76 °–1,400 °F) | -58 °–932 °F (-20 °–500 °C) | -31 °–689 °F (-35 °–365 °C) |
| Temperature Display | Selectable for °F or °C | Selectable for °F or °C | Selectable for °F or °C ±5 °C (2.7 °F) |
| Response Time | 1 second | 0.5 seconds | 1 second |
| Emissivity | Adjustable, set to 0.95 | 0.98 | 0.95 or 0.70 (0.95 default) |
| Power | (2) AAA Batteries | 9V Alkaline or NiCad Battery | (2) AAA Batteries |
| Accuracy | ±1.8 °F (±1 °C) | ±2% of reading or ±2 °C (±4 °F) | ±1.5 °C (2.7 °F) |
| Distance To Spot Ratio | 12:1 | 12:1 | 12:1 |
| Ambient Operating Range | 0 °–50 °C (32 °–122 °F) | 32 °–105 °F | 0 °–50 °C (32 °–122 °F) |

*(Blue-Point®)
† CE

**RTEMP8 Multi-laser Infrared Thermometer**
- Easy-to-read color screen
- Modes include: E, MAX, MIN, DIF, AVG, HAL and LAL
- Distance: Spot: 12:1
- Temperature range: -60 °–760 °C (-76 °–1,400 °F)
- Operating range: 0 °–50 °C (32 °–122 °F)
- Battery: AAA size (2)
- Battery life: minimum of seven hours' continuous use with laser and 30 hours continuous use without laser
- Thermometer automatically shuts off if left idle for more than 60 seconds
- Accuracy: ± 1 °C (± 1.8 °F)
- CE: DE, ES, FR, IT, GB, NL UL – JP

**RTEMPB3A Infrared Thermometer *(Blue-Point)***
- Temperature range of -58 °–932 °F (-20 °–500 °C)
- Use for most automotive and industrial applications requiring an infrared thermometer
- Compact size of 5.88" x 3.62" x 1.38" (149.2 mm x 92.1 mm x 34.9 mm)
- Laser targeting accuracy
- Enhanced backlit four-digit LCD for easy viewing
- Automatic power-off after ten seconds
- Nylon holster for transport and safe storage
- Conformity

**RTEMPB7 Infrared Thermometer *(Blue-Point)***
- Modes include: E, MAX, MIN, DIF and AVG
- Distance: Spot: 12:1
- Temperature range: -35 °–365 °C (-31 °–689 °F)
- Operating range: 0 °–50 °C (32 °–122 °F)
- Battery: AAA size (2)
- Battery life: typically lasts 18 hours; minimum of 14 hours (continuous use)
- CE: DE, ES, FR, IT, GB, NL UL – JP

# TACHOMETERS



EEDMTACH1



EEDMRPM500



EEDMRPMD500



MT257B

## Tachometers

**EEDMTACH1 Digital Tachometer**
- Combination contact/non-contact tachometer with Minimum (MIN), Maximum (MAX) and LAST or current reading
- Non-contact operation uses photoelectric sensor and reflective tape (included)
- Contact measurements are taken with one of three contact adaptors: cone, concave wheel or large wheel
- Current data will remain until the next reading is taken
- Memory figures will remain until the next recorded reading is taken

Ranges:
Photo Tach: 5–30,000 RPM
Contact Tach: 0.5–19,999 RPM
Surface Speed: 0.2–6,560 ft/min or 0.5–1,999 m/min

**MTTACH1A1 Photo Tape**
Reflective photo tape for the EEDMTACH1 Tachometer.

**EEDMRPM500 Digital Tachometer (Gas Engines)**
- Use to digitally read RPM on single cylinder, 2 or 4 stroke gas engines
- Choose between 2 or 4 stroke engines and 1 or 2 spark ignition systems
- Unit provides MIN/MAX readings with eight storage locations to save readings for future reference
- Range is 300–10,000 RPM
- Powered by 9V battery (included)
- Overall dimensions are 2 3/4" x 5 3/4" x 1"

**EEDMRPMD500 Diesel Engine Adaptor**
- Optional diesel engine adaptor for the EEDMRPM500 digital tachometer
- Use on diesel engines only
- Range is 300–6,000 RPM

## Diesel Timing Meter

**MT257B Diesel Pulse Adaptor (Blue-Point®)**
- Test injector timing or engine RPM on diesel engines equipped with 1/4" or 6 mm external steel fuel injector lines
- Enables use with inductive pick-up timing light to test engine timing
- MT257B is not for use on diesels with common rail fuel systems

# SPECIALTY METERS AND SMALL TESTERS



RELAYTEST1



YA76562

## Automotive Relay Tester

**RELAYTEST1 Automotive Relay Tester**
- Quickly and accurately test four and five terminal electromechanical relays used on many US and imported automobiles
- Will interrogate and identify an unknown relay terminal configuration then self configure its own internal circuitry to perform all required test functions automatically
- Can be used to perform the following tests: coil resistance, surge suppression device (resistor or diode), open/closed contact integrity, contact cyclic testing for intermittent failure detection, loaded contact continuity, relay contacts stuck open or closed and time to contact closure and opening
- Unit automatically indicates test results with a series of red, green and yellow performance lights

## Coil-on-Plug (COP) Probe

**YA76562 Ignition Quick Probe *(Blue-Point)***
- Quickly verify the firing of a coil on plug (COP) ignition coil and spark plug
- Eliminates the need for back probing coil wires and disassembly to test at the coil connector or spark plug
- Variable sensitivity (VS) thumbwheel for greater diagnostic accuracy and expanded application coverage
- Super bright KV and ARC indicator LEDs



EETL500



EETL5568



MT125A

## Timing Lights

**EETL500 Digital Tach/Advance Timing Light**
**EETL500 timing light kit includes:**
**EETL500-2 Inductive Pickup Leads, 72" (6')**
**EETL500-PB Storage Case**
**EETL500-Z Instruction Manual for EETL500**

### Specifications

- Clearly view each flash with patented skip circuitry for tachometers readings up to 9,900 RPM – adjust engine RPM
- View, set and adjust ignition advance and retard: 0°–90° – set base timing, overall advance and view ignition retard
- Measure and adjust ignition dwell: 0°–180°/1–12 cylinders – points ignitions
- Measure battery and charging voltage: 10–16V – with quick references LEDs
- Set ignition timing: works on DIS, conventional and most aftermarket ignition systems without solid core wires
- Measure engine RPM and Ignition advance: also measure dwell on older points type ignition systems
- Check battery voltage: provides a quick visual indication of the current state of the battery
- Measure and Display kV Readings – view individual cylinder firing voltage, perform snap throttle and coil stress tests
- Patented Pivoting Head – with xenon strobe and dual LED flashlight makes it easy to get into tight spots and see
- Large blue backlit graphic LCD screen – clearly view the displayed information
- Timing on both two and four cycle (DIS and conventional) engines, 1–12 cylinders – no adaptors required
- Replaceable heavy duty test leads
- Bright high intensity flash
- Nostalgic look with diamond plate chrome underside
- Comes with a hard case for storage and protection
- Full two-year warranty
- Patents #D377,622, #4,594,886 and #5,767,681 apply

**EETL5568 Digital Timing Light (Blue-Point®)**

- Multi function timing light works on all distributorless and conventional ignition systems
- Patented skip circuitry tests tachometer readings up to 9,900 RPM
- View, set and adjust ignition advance and retard: 0°–90°
- Measure and adjust ignition dwell: 0°–180°/ 2–12 cylinders
- Measure battery and charging voltage: 10–16V
- Dual display backlit screen allows clear viewing of tachometer and ignition advance reading
- Pivoting barrel allows easy access and a clear view to ignition timing marks
- One-hand operation with protective hand guard for comfort and safety
- Clearly view each flash at all RPM's with patented skip circuitry
- Serviceable 72" (6') heavy duty leads and metal inductive pickup
- Shock resistance rubber boots for added durability
- Bright high intensity flash
- Includes EETL5568-PB storage case

**MT125A Self-Powered Timing Light *(Blue-Point)***

- Self powered timing light features a single 6' inductive pickup
- Quick attachment to spark plug wires on motorcycles, marine motors, snowmobiles, jet skis, small engines and other equipment that do not have easy access to a battery power source
- Can be used for automotive applications as well
- On/Off switch is located within thumb reach

TECHNICAL SUPPORT: 1-877-447-6276

# COMPUTER



EECS5MEM



YA960



YA961



TLM12AO

## Computer Memory Savers

**EECS5MEM OBDII Memory Cord, 5'**
- Use in conjunction with a jump starter to preserve vehicle codes and electronic presets while a vehicle's battery is disconnected
- Turns any jump starter with a 12V power port into a memory saver
- Interface connector between a jump starter and a vehicle's OBD-II port
- Prevents electronic memory loss when disconnecting a vehicle's battery
- LED confirms a proper connection has been made to OBD-II port
- Do not plug cables 12V DC into the vehicles 12V DC port

**YA960 Computer Memory Saver**
- Prevents memory loss on digital radios, clocks, door locks, and computers when disconnecting vehicle battery
- Plugs into cigarette lighter socket
- Uses a 9V battery to keep "memories" alive for up to four continuous hours
- Use YA961 on Chrysler® products

**YA961 Computer Memory Saver**
- Similar in function to YA960 except its power source is any 120V AC outlet

**TLM12AO Computer Memory Saver**
- Saves computer memory on clocks, radio settings and fuel injection systems
- Simply plug into 12V accessory, then attach battery clamps to spare battery



YAGM1

## Service Light/Airbag Resetting Tools

**YAGM1 Air Bag Release Tool**
- Tool will quickly and easily release the retention springs for the removal of the SIR module on certain late model GM® vehicles

**Applications:** Cadillac®, Buick® Park Avenue, Pontiac® Grand Am®, minivans and trucks

# ELECTRICAL



FZ4B



FZ7A



YA9811

## Fuse Tools

**FZ4B Fuse Tongs**
- Delrin® tongs pull fuses up to 15/16" in diameter
- 1/8" hook on the handle pulls short fuses
- Tongs have high insulating qualities and are resistant to oil, water and heat up to 300 °F
- Hand stops prevent slipping

**FZ7A Fuse Tongs**
- Nylon tongs remove auto high tension wires and pull cartridge fuses from 15/16"–1" in diameter
- Hooks on handles and jaws
- Tongs have high insulating qualities and are resistant to oil, water and heat up to 300 °F
- Hand stops prevent slipping

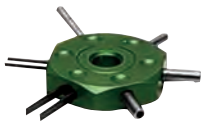
**YA9811 Relay/Fuse Pliers**
- Remove/install relays and fusible links
- Designed to reach into confined access areas
- Slip joint design to enable use for a variety of sizes
- Coated pliers tip securely grips corner of relay or fusible link
- Black industrial finish with red cushioned grip handles
- 8" in length



GMSTB25

## Multifunction Switch Tools

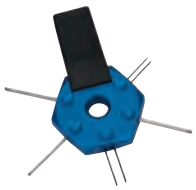
**GMSTB25 Multifunction Switch Tool for *GM* vehicles**
- Reduces the time it takes to replace the multifunction switch (turn signal/dimmer/windshield wiper switch) without removing the air bag, steering wheel and clock spring
- Includes a low-profile 1/4" magnetic bit wrench with a T25 Ball TORX® bit that allows better control and access in restricted areas
- Reversible ratcheting action
- Heat treated for strength and durability
- Chrome plated for great appearance and wear resistance



GA500A



YA500GM



YA500F



TT600



TT12KT

## Terminal Tools

**YA13120 Electrical Connector Separator**
Disconnect electrical connectors without damage. Double ended to fit different access angles. Simply engage the tool tip behind the connector clip and push or pull to disconnect. Works on weather pack and other automotive electrical connectors.

**GA500A Wire Terminal Tool**
- Prongs depress the "barbs" on conventional terminals

**YA500GM Wire Terminal Tool**
- Designed for use for Pack-Con and Weather-Pack terminals on GM® C3 systems

**YA500F Terminal Tool for Ford® Vehicles**
- Use on *Ford* terminals

**TT3KT Terminal Tool Set**
- Comprehensive set covers the majority of today's popular terminals
- Includes: GA500A, YA500GM, YA500F and TT3-1 handle that slips over probes to protect technician's hands and provides extra leverage

**TT600 Terminal Tool Kit**
Includes six tools for removing terminals from harness blocks: pin vise, square probe, wedge probe, tube probe, flat probe and hook probe. Tools come in a vinyl pouch.

**TT12KT C3/Wire Terminal Tool Kit for *GM* vehicles (Blue-Point®)**
Applications include most *GM* and other US computer connectors and terminals. Individual handles for easy access in tight places. Designed for Weather Pack and Pack-Con terminals with flat blade to open connectors and fork for ALDL connectors to access trouble codes. Color coded: Red handle for *GM* and Green for wire terminal tools. Includes molded storage case.

**Kit includes these *GM* C3 System terminal tools**
**TT1201 3.3 mm x 28 mm terminal tool**
**TT1202 1.4 mm x 28 mm square terminal tool**
**TT1203 1.5 mm x 24.75 mm flat terminal tool**
**TT1204 2.0 mm x 22 mm flat terminal tool**
**TT1205 8.0 mm x 24 mm fork terminal tool**
**TT1206 3/16" x 1.0" flat screwdriver**
**TT1207 3.3 mm x 28 mm tube terminal tool**
**TT1208 4.3 mm x 13 mm tube terminal tool**
**TT1209 3.75 mm x 13 mm tube terminal tool**
**TT1210 3 mm x 13 mm tube terminal**
**TT1211 3 mm flat 2-blade terminal tool**
**TT1212 1.6 mm flat 2-blade terminal tool**
**TT1213 blow molded case**

## Soft Grip Terminal Tools

Easily remove terminals from electrical connectors found on mid-1990s and later US and import vehicles. Terminal tools incorporate a stainless-steel design with ergonomic "soft grip" handles.

**SGTT1A Soft Grip Terminal Tool**
Use on PCM and transmission harnesses found on Chrysler®, Hyundai®, Kia® and Mitsubishi® vehicles. 4 13/16" long.

**SGTT2A Soft Grip Terminal Tool**
Provides robust narrow width blade with fulcrum for easier access to release tabs found on newer terminal blocks. General purpose release tool for US and import vehicles. 5 1/8" long.

**SGTT3A Soft Grip Terminal Tool**
Use on underhood sensors such as coolant temperature and throttle position sensors. For use on *Ford*, *GM* (including Cadillac®), *Chrysler*, *Mitsubishi* and *Hyundai* vehicles. 4 13/16" long.

**SGTT4A Soft Grip Terminal Tool**
Use for cutting open wire harnesses for easy access to troubleshooting and replacement applications. Easily slits harness sheathing without piercing the wires inside. 4 3/8" long.

**SGTT5A Soft Grip Terminal Tool**
Use on 55 pin ABS ECUs found on *Ford*, *GM*, Jaguar®, Jeep®, Volvo®, VW®, BMW®, *Hyundai*, *Kia* and Mercedes® vehicles. 4 13/16" long.

**SGTT6A Soft Grip Terminal Tool**
Use on 35 pin ABS ECUs found on Audi®, *BMW*, *Chrysler*, *Ford*, *GM*, Infiniti®, Isuzu®, *Jaguar*, Mazda®, *Mercedes*, *Mitsubishi*, Nissan®, Porsche®, Subaru®, Saab®, *Volvo* and *VW* vehicles. 4 13/16" long.

**SGTT7 Soft Grip Terminal Tool**
Applications: Powertrain Control Modules (PCM) on Acura®, *Audi*, *Chrysler*, *Ford*, *Hyundai*, *Jaguar*, *Kia*, *Mercedes*, *Mazda*, Toyota® and *Volkswagen* vehicles. 4 27/32" long.

**SGTT8 Soft Grip Terminal Tool**
Applications: Powertrain Control Modules (PCM) on *Acura*, *Audi*, Buick®, *Chrysler*, *Ford*, *GM*, *Honda*, *Jaguar*, *Mercedes*, *Mazda*, *Toyota* and *Volkswagen* vehicles. 4 27/32" long.



SGTT110

**SGTT9 Soft Grip Terminal Tool**
Applications: Powertrain Control Modules (PCM) on *Acura*, *Audi*, *Chrysler*, *Jaguar*, *Hyundai*, *Kia*, *Mercedes*, *Toyota* and *Volkswagen* vehicles. 4 27/32" long.

**SGTT10 Soft Grip Terminal Tool**
Applications: Open connector clips and sides of clips on *Acura*, *Audi*, *Chrysler*, *Honda*, *Mercedes* and *Volkswagen*. 4 27/32" long.

**SGTT106A Soft Grip Terminal Tool Set**
Includes SGTT1A–SGTT6A (6pc) in storage tray.

**SGTT110 Soft Grip Terminal Tool Set**
Includes SGTT1A–SGTT10 (10pc) in storage tray.

**⚠WARNING**

- Plastic coated handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: COMPRESSION GAUGE SETS AND ADAPTORS



EEPV500



EEPV503



EEPV600

## Compression Gauge Sets

- Intended for use on spark ignited gasoline engines that do not exceed 300 PSI compression
- Use hose-style EEPV5 series or steel shank EEPV6 series adaptors that thread into the spark plug hole and connect at the gauge hose's quick coupler
- Maintains highest compression test reading and resets to zero with a push button release valve
- Gauge displays individual cylinder pressure
- Test range: 0–300 PSI (0–2,000 kPa) in 10 PSI (50 kPa) increments
- Detect piston ring, intake/exhaust valve, head gasket or other engine issues

CE: DE, ES, FR, IT, GB, NL

**EEPV500 Compression Gauge Set**

- Test cars and trucks with hard-to-access spark plug ports
- Gauge assembly includes 2 3/4" diameter gauge and 27" flexible hose with quick coupler
- Includes EEPV5G12L, EEPV5G14L and EEPV5G14S

**EEPV503 Motorcycle Compression Gauge Set**

- Test motorcycles and recreational vehicles with hard-to-access spark plug ports
- Gauge assembly includes 2 3/4" diameter gauge and 18" flexible hose with quick coupler
- Includes EEPV5G10L, EEPV5G12L and EEPV5G14L

**EEPV600 Compression Gauge Set**

- Simplifies compression testing on engines with deep spark plug wells
- Knurled end allows hand tightening to aid against over-torqueing or cross-threading
- Gauge can be connected to the included hose assembly for extra reach
- Heat-treated and chrome-plated for longer life
- 300 PSI (2100 kPa) superior accuracy gauge with pressure release button
- Detect piston ring, intake/exhaust valve, head gasket or other engine issues
- Includes: EEPV6G12L and EEPV6G14L



MT27D

## Cone-Type Compression Gauge

**MT27D Cone-Type Compression Gauge**

- Range from 0–300 PSI, 0–2,100 kPa
- Cone seal is held firmly over plug hole, unit does not thread in
- Ideal for small gasoline engines, motorcycles, ATVs and snowmobiles

# FUEL & ENGINE SYSTEMS: COMPRESSION GAUGE SETS AND ADAPTORS


EEPV5G10L


EEPV5G14L


EEPV5G18S


EEPV5G10S


EEPV5G14S


EEPV5G16T


EEPV5G12L


EEPV5G12T


EEPV6G3PK

## Compression Gauge Adaptors

- 10 1/4" overall length unless otherwise noted
- Standard reach applies to flat and tapered spark plug hole seats; long reach applies to servicing motorcycle engines

**EEPV5G10L Compression Gauge Adaptor**
- Long reach (M10 x 1.0 pitch)
- Thread length .70"

**EEPV5G14L Compression Gauge Adaptor**
- Long reach (M14 x 1.25 pitch)
- Thread length .73"

**EEPV5G18S Compression Gauge Adaptor**
- Standard reach (M18 x 1.5 pitch)
- Thread length .44"

**EEPV5G10S Compression Gauge Adaptor**
- Standard reach (M10 x 1.0 pitch)
- Thread length .43"

**EEPV5G14S Compression Gauge Adaptor**
- Standard reach (M14 x 1.25 pitch)
- Thread length .36"

**EEPV5G16T Compression Gauge Adaptor**
- Long reach (M16 x 1.5 pitch) for Ford® 5.4 L Triton® engines
- 18" length

**EEPV5G12L Compression Gauge Adaptor**
- Long reach (M12 x 1.25 pitch)
- Thread length .68"

**EEPV5G12T Compression Gauge Adaptor**
- Main application 2nd generation *Ford Triton* engines 2008 and later
- Tests cylinder compression up to 300 PSI
- Additional applications include: Mercedes® (most V6 and some V8 models newer than 2006), Nissan® (2.0 L 2007 and later) plus Toyota® Scion® (1.8 L 2008 and later) vehicles
- 18" length
- Thread length .71 inch

**EEPV6G12L Long Reach Chrome Adaptor**
- M12 x 1.25

**EEPV6G14L Long Reach Chrome Adapter**
- M14 x 1.25

**EEPV6G14S Standard Reach Chrome Adapter**
- M14 x 1.25

**EEPV6G3PK Adaptor Set**
- Set includes EEPV6G12L, EEPV6G14L and EEPV6G14S (3pcs)

# DIESEL COMPRESSION

**EEPD500 Diesel Compression Gauge**
- Dial reads from 9–800 PSI and from 0–5,500 kPa
- Gauge includes 18" hose with release valve

TECHNICAL SUPPORT 855-779-8880


EEPD500



**⚠WARNING**

- Do not expose gasoline or fuel to flames, sparks or other sources of ignition
- Use only in well ventilated area
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: DIESEL COMPRESSION


EEPV313C


M3540C


M3543C


M3542C


M3571C


M3572C


M3574


M3584


M3585

## Compression Adaptors – Injector Style

**EEPV313C Diesel Compression Gauge Adaptor**
- For 1998–2007 Dodge® 24 valve 5.9 L Cummins® plus 5.9 L and *Cummins* ISB and ISBE diesel engines plus the 2007 newer 6.7 L

**M3540C Compression Adaptor**
- For *Cummins* 855 cu in NH and 903 V8 and L10 diesel engines

**M3543C Diesel Compression Gauge Adaptor**
- For Detroit® 53, 71, 92 and 8.2 L diesels

**M3542C Diesel Compression Gauge Adaptor**
- For Volkswagen®, Mercedes-Benz®, Volvo® and Audi® 5000 diesel engines M24 x 2.0

**M3571C Diesel Compression Gauge Adaptor**
- For 21 mm injectors and Bosch® type injectors on the following diesel engines: Allis® Chalmers® 433, 649, and 670, *Allis*/Fiat® 3 cylinder, John Deere® 404, 466, 531 and 619, Navistar® 361 and 407, Perkins® 4.203, 4.236, 4.248, 6.354, and 8.540, Wisconsin Engine® 340, 350, 430, 660, 670, 750, 860 and 1000, White Engine® D2000, D2300, D3000, D3400, and D4800, Mack® 673, 674, 675, 864, 865 and 866, Waukesha® diesel engines, Ford® Tractor diesel engines, Scania® DN11 and DS11

**M3572C Diesel Compression Gauge Adaptor**
- For pencil type injectors on the following: Caterpillar® 3208 and 1100 Series, Case® 70 Series, 188 and 207, *John Deere* early 300, 400 and 500 Series, 276, 404 and 531 diesel engines

**M3574 Diesel Compression Gauge Adaptor**
- For 17 mm injectors on *Navistar* DT466 and 9L, 312, 360, 414, 436 and 446 diesel engines

**M3584 Compression Adaptor**
- For *Case*/*Cummins* series "B" 2.9 L, 3.9 L and 5.9 L diesel engines

**M3585 Compression Adaptor**
- For *Case/Cummins* series "C" 8.3 L engines


EEPV312D


EEPV314C


EEPV317C


M3545B


M3569A


M3570A


M3564C

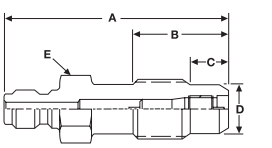

M3565C


M3566C


M3576C

## Compression Adaptors – Glow Plug Style

- All "M" series glow plug style adaptors plus the EEPV312A adaptor require the use of either the M3569 or M3570 quick coupler
- EEPV314A, EEPV315A and EEPV317A couple directly to the EEPD500



Glow Plug Style

**EEPV312D Glow Plug Compression Adaptor**
- For Duramax® and Isuzu® diesel engines up to the 2005 model year only

**EEPV314C Glow Plug Compression Adaptor**
- For *Ford*/*Navistar* 7.3 L Power Stroke® diesel engines

**EEPV317C Glow Plug Compression Adaptor**
- For *Ford Power Stroke* 6.0 L and *Navistar*/International® 6.0 L VT365E engines with 14M x 1.25 glow plug size

**EEPV318 Glow Plug Compression Adaptor**
- For *Power Stroke* engines with M8 x 1.0 glow plug size

**M3545B Glow Plug Compression Adaptor**
- For GM® 4.3 L and 5.7 L plus *Navistar* 6.9 L and 7.3 L diesel engines
- Replacement valve core is M3545A4
- Must be used in conjunctioth MT33C Compression Gauge and M3569 or M3570 Quick Couplers

**M3569A Quick Coupler**
45° offset

**M3570A Quick Coupler**
90° offset

**M3564C Glow Plug Compression Adaptor**
- For *GM* 6.2 L and 6.5 L diesel engines

**M3565C Glow Plug Compression Adaptor**
- For *Isuzu* 1.8 L and 2.2 L diesel engines and Toyota® 1.8 L diesel engine

**M3566C Glow Plug Compression Adaptor**
- For *Toyota* and Nissan® 2.2 L diesel engines, plus Mitsubishi® 2 and 3 cylinder engines

**M3576C Glow Plug Compression Adaptor**
- For BMW® 2.4 L engines used in 1984 and 1985 Lincoln®, Mark VII and Continental models; Peugot® 1978–1984, 2.0 L and 2.3 L engines; VW®, Audi®, and *Volvo* 1.5 L, 1.6 L, 2.0 L and 2.6 L engines

## Adaptors

| Stock No. | Thread | A inch (mm) | B inch (mm) | C inch (mm) | D inch (mm) | E (Hex) |
|---|---|---|---|---|---|---|
| EEPV312D | M10 x 1.25 | 4.12 (104.65) | 3.00 (76.20) | 2.50 (63.50) | .320 (8.13) | 12 mm |
| EEPV314C | M10 x 1.0 | 3.33 (84.58) | 2.78 (70.61) | 2.31 (58.67) | .315 (8.00) | 10 mm |
| EEPV317C | M14 x 1.25 | 1.2" | .625" | 0.25" | .318" | 5/8" |
| EEPV318 | M8 x 1.00 | 1.3" | 0.744" | 310" | .212" | 7/16" |
| 7M3545B | M10 x 1.0 | 1.78 (45.20) | 1.06 (26.92) | .38 (9.65) | .385 (9.77) | 3/8" |
| M3564C | M10 x 1.0 | 2.46 (62.48) | .79 (20.00) | .25 (6.35) | .325 (8.25) | 3/8" |
| M3565C | M10 x 1.0 | 2.50 (63.50) | 1.61 (26.92) | .866 (21.99) | .320 (8.13) | 12 mm |
| M3566C | M10 x 1.25 | 1.96 (49.78) | 1.27 (32.26) | .39 (9.14) | .315 (8.00) | 12 mm |
| M3576C | M12 x 1.25 | 1.77 (44.95) | 1.08 (27.43) | .300 (7.62) | .305 (7.75) | 12 mm |



EEPV509

### EEPV509 Cylinder Leakage Tester

- Use on all US and import engines
- Input pressure gauge displays input air pressure for proper cylinder leakage test setup and accurate results
- Pressure gauge range is 0–100 PSI (0–700 kPa) in 2 PSI (20 kPa) increments
- Cylinder leakage gauge displays leakage as a percentage of input pressure with three distinctive zones of high, moderate and low



EEPV511

### EEPV511 Vacuum Pressure Gauge Set

- Use for almost all basic vacuum pressure testing needs in the shop
- Perform engine vacuum tests on gasoline engines as well as exhaust back pressure tests on applications with an oxygen sensor
- Test vacuum accessories and emission control devices such as EGR valves canister purge systems, air switching and divert valves, vacuum delay and check valves, heater and A/C controls and cruise control systems
- Multicolor gauge face with scales of inch, Hg, PSI, negative kPa and positive kPa



EEPV508



EEPV507

| Stock No. | Description | Set Contains: EEPV508 | EEPV507 |
|---|---|---|---|
| EEPV5F-1 | 2" Pipe Nipple | • | • |
| EEPV5F-2 | 1/4" M x 1/8" F Hex Bushing | • | • |
| EEPV5F-3 | 3/8" M x 1/8" F Hex Bushing | • | • |
| EEPV5F-4 | 1/8" FNPT Coupling | • | • |
| EEPV5F-5 | 1/8" M x 1/8" F Street Elbow | • | • |
| EEPV5F-6 | 1/8-28 BSPT | • | • |
| EEPV5F-7 | M10 x 1.0 Tapered Thread | • | • |
| EEPV5F-8 | M10 x 1.0 Adaptor | • | • |
| EEPV5F-9 | M10 x 1.25 Adaptor | • | • |
| EEPV5F-10 | M12 x 1.5 Adaptor | • | • |
| EEPV5F-11 | M12 x 1.75 Adaptor | • | • |
| EEPV5F-12 | M14 x 1.5 Adaptor | • | • |
| EEPV5F-13 | M16 x 1.5 Adaptor | • | • |
| EEPV5F-14 | M18 x 1.5 Adaptor | • | • |
| EEPV5F-15 | 5/16"-24 Adaptor | • | • |
| EEPV5F-16 | 7/16"-20 Adaptor | • | • |
| EEPV5F-17 | 1/16"-27 Adaptor | • | |
| EEPV5F-18 | M8 x 1.0 Tapered Thread | • | |
| EEPV5F-19 | M8 x 1.0 Adaptor | • | |
| EEPV5F-20 | M8 x 1.25 Adaptor | • | |
| EEPV5F-0 | Male Quick Connect Plug | • | • |
| EEPV5-100G | Pressure Gauge and Boot Assembly (100 PSI) | • | • |
| EEPV5-BOOT1 | Gauge Boot | • | • |
| EEPV5-500G | Gauge and Boot (500 PSI) | • | |
| EEPV5-BOOT2 | Gauge Boot (500 PSI) | | |

### EEPV508 Automatic Transmission Pressure Gauge Set

- Use on all major manufacturer US and import vehicles
- Includes: two gauge assemblies for high and low pressure ranges, nine adaptors to test a wide variety of US and import automatic transmissions, comprehensive instruction manual with applications table and storage case
- Four special fittings are also included for connection to hard-to-reach test ports in areas requiring a 45° or 90° angle
- High pressure gauge assembly includes 3.5" diameter gauge and 10' flexible hose with fluid coupler
- Low pressure gauge assembly includes 2.5" diameter gauge and 6' flexible hose with fluid coupler

### EEPV507 Oil Pressure Gauge Set

- Use on diesel and gasoline engines
- Includes standard and metric adaptors for most US and import cars, trucks, tractors and stationary engines
- Includes: 0–100 PSI (0–700 kPa) gauge assembly

**⚠WARNING**

- Do not expose gasoline or fuel to flames, sparks or other sources of ignition
- Use only in well ventilated area
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: VACUUM PUMPS & TESTERS



YA4000B

**YA4000B Automotive Test Kit**

- Produces vacuum or pressure at the turn of a switch
- Comfortable ergonomic design
- One-finger trigger vacuum/pressure release
- Durable, accurate diaphragm type pressure/vacuum gauge
- Handheld vacuum/pressure pump with 2" compound gauge and rubber boot
- 12 oz fluid reservoir bottle with fluid transfer and storage lids plus fluid pickup tube
- Six tapered adaptors for connecting to tubing from .09"–.50" ID
- Two tapered manifold plugs
- Two universal bleed screw adaptors
- 12 vacuum cap plugs, vacuum line T-adaptor
- Two 1/4" ID x 24" long connection tubes with quick change connector
- 5/32" ID x 1/4" ID tubing adaptor
- 5/32" ID x 3" long vacuum test tube
- Rubber cupped adaptor
- Master cylinder refill kit

**Applications:**
Vacuum and pressure related engine performance diagnostics and tune-ups; brake bleeding; fluid transfer, evacuation and sampling.

# FUEL INJECTION



EEFI500



EEFI500CORE



EEFI50030

## EEFI500 Series Adaptor Sets

| Stock No. | Includes: | EEFI500 | EEFI500CORE | EEFI500ADD |
|---|---|---|---|---|
| EEFI5001 | Gauge and hose assembly with bleed-off valve | • | • | |
| EEFI5002 | Standard schrader hose assembly (Chrysler®, GM®, M-B®, Porsche®, Saab® and Saturn® vehicles) | • | • | |
| EEFI5003 | Small schrader hose assembly (BMW®, Ford®, Jaguar®, Kia®, Lincoln®, Mazda®, Mercury®, Mini®, Volvo® and VW® vehicles) | • | • | |
| EEFI5004 | Standard schrader right angle adaptor (*Chrysler, GM, M-B, Porsche, Saab* and *Saturn*) | • | • | |
| EEFI5005 | Small schrader right angle adaptor (*BMW, Ford, Jaguar, Kia, Lincoln, Mazda, Mercury, Mini, VW* and *Volvo* vehicles) | • | • | |
| EEFI5006 | Tee adaptor with 1/4", 5/16" and 3/8" diameter hoses and clamps (*Chrysler,* Infiniti®, Isuzu®, *Mazda,* Nissan®, Subaru® and Suzuki® vehicles) | • | • | |
| EEFI5006-1 | Replacement hoses and clamps | • | • | |
| EEFI5007 | Spare parts service kit for EEFI5001–EEFI5006 | • | • | |
| EEFI5008 | Tee Hose Assembly – 3/8" Quick Connect | • | | • |
| EEFI5009 | 3/8" Quick Connect Double Male – *GM* vehicles | • | | • |
| EEFI50010 | 5/8" Spring Lock Male – *Ford, Mazda* vehicles | • | | • |
| EEFI50011 | 5/8" Spring Lock Female – *Ford, Mazda* vehicles | • | | • |
| EEFI50012 | 5/16" Quick Connect Male – *Acura, Chrysler, Ford, Mazda,* Toyota® vehicles | • | | • |
| EEFI50013 | 5/16" Quick Connect Female – *Acura, Chrysler, Ford, Mazda, Toyota* vehicles | • | | • |
| EEFI50014 | 5/16" Male Hose Adaptor – *BMW, Chrysler, Infiniti, Nissan, VW* vehicles | • | | • |
| EEFI50015 | 5/16" Hose Adaptor – *BMW, Chrysler, Infiniti, Nissan, VW* vehicles | • | | • |
| EEFI50016 | M14 x 1.5 Inverted Flare Male – *Geo, Infiniti, Toyota* vehicles | • | | • |
| EEFI50017 | M14 x 1.5 Inverted Flare Female – *Geo, Infiniti, Toyota* vehicles | • | | • |
| EEFI50018 | M14 x 1.5 Ball Seat Female – Audi®, Hyundai®, *Jaguar,* Land Rover®, *Porsche, Volvo, VW* vehicles | • | | • |
| EEFI50019 | M14 x 1.5 Ball Seat Male – *Audi, Hyundai, Jaguar, Land Rover, Porsche, Volvo, VW* vehicles | • | | • |
| EEFI50020 | 16 mm O-Ring Adaptor – *Hyundai, Mitsubishi* vehicles | • | | • |
| EEFI50021 | 11 mm O-Ring Adaptor – *Infiniti, Kia, Mitsubishi, Nissan* vehicles | • | | • |
| EEFI50022 | M12 x 1.0 Pulse Dampener Adaptor – *Acura, Honda* vehicles | • | | • |
| EEFI50023 | M12 x 1.5 Banjo Bolt Adaptor – *Audi, Porsche, Saab* vehicles | • | | • |
| EEFI50024 | M12 x 1.25 Banjo Bolt Adaptor – *Honda, Hyundai, Isuzu, Lexus, Toyota* vehicles | • | | • |
| EEFI50025 | M6 x 1.0 Filter Adaptor – *Acura, Honda* vehicles | • | | • |
| EEFI50026 | Spare part service kit for 5009–50025 adaptors | • | | • |

**EEFI500 Master Fuel Injection Pressure Gauge Set**

- Tests fuel injection pressure on major US, European and Asian model multiport fuel systems
- Convenient label shows image of components, part numbers and applications for quick and easy identification and storage
- Fully detailed user manual includes test connection illustrations and application charts
- Set contains tee manifold with shutoff valve, 3 1/2" diameter gauge assembly with a blow down valve and the adaptors needed to test most fuel injection systems
- Blow molded case with special removable lid allows for convenient storage in 4" deep drawer and easy access to components
- Pressure gauge rating of 0–100 PSI

**EEFI500CORE Core Fuel Injection Pressure Gauge Set**

- For basic fuel injection pressure service needs
- Individual components or the EEFI500ADD set can be purchased to build up to master set

**EEFI50030 Universal Fuel Pressure Adaptor**

- Allows owners of MT337, EEFI301 and EEFI307 series fuel pressure gauges to increase applications by using components from the EEFI500 master fuel injection pressure set



EEDF500



EEDF501



EEDF502

## Fuel Pressure Testers

**EEDF500 Fuel Pressure Test Set**
- Designed for testing diesel fuel pressure and vacuum on GM® 6.6 L Duramax® engines
- Gauge assembly includes a compound gauge with a 0–15 PSI (0–100 kPa) pressure plus 0–30 in Hg vacuum scale and a protective rubber boot
- Long 6' flexible hose with quick coupler for fast and easy connection to the engine
- Convenient protective storage and carrying in a slide lid case that fits easily into a 4" drawer

**EEDF501 Fuel Pressure Test Set**
- Designed for diesel fuel pressure and restriction testing on engines with Compucheck test ports
- 3 1/2" compound gauge has a 0–15 PSI (0–100 kPa) pressure and 0–30 inHg vacuum scale
- 2 1/2" pressure gauge has a 0–300 PSI (0–2,000 kPa) scale in 10 PSI (50 kPa) increments
- Includes female Compucheck quick coupler with 6' hose, pressure bleed off, and quick connect for easy interchange of the two gauges
- Includes separate male Compucheck test port for installation in vehicles without Compucheck test ports
- Convenient protective storage and carrying in a slide lid case that fits easily into a 4" drawer

**EEDF502 Fuel Pressure Test Set**
- Developed with input from technicians on adaptor selection for 7.3 L, 6.7 L, 6.4 L and 6.0 L Ford® Power Stroke® engines
- 0–100 PSI gauge and hose assembly
- Low-pressure diesel-fuel delivery testing (lift pump)
- Correct fuel delivery and dynamic fuel pressure are crucial to having a properly running engine
- Helps prevent a lean condition that may cause burning of injectors or scorched cylinders
- Convenient protective slide-lid case that will fit in a 4" drawer for easy tool access

## General Purpose Fuel System Cleaners

**EEFI5CLEANER Fuel Injection System Cleaner**
- Cleans deposits from fuel injectors, fuel rail and intake valves to restore engine performance, lower emissions and smooth idle
- Canister style cleaner accepts preferred or required fuel injection system cleaner (sold separately)
- Check vehicle fuel pressure with right-hand gauge and easily set cleaning pressure with the left-hand gauge
- Stainless-steel braided Teflon® hose resists solvents
- Conveniently hangs under hood with center chain
- Compatible with EEFI500 series adapters (sold separately)
- See user manual for vehicle make details




EEFI5CLEANER

TECHNICAL SUPPORT 1-885-779-8880
This phone number does not apply to the YA4000B shown on page 542.

**⚠WARNING**

- Do not expose gasoline or fuel to flames or other sources of ignition
- Use only in well ventilated area
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: FUEL INJECTION



FIH500



YA76462



IPK1180



A227

## Specialty Service Tools

**FIH500 Fuel Module Disconnect Tool**
- GM® fuel module disconnect tool for 1998 and later *GM* full-size pickups, Suburban® and Tahoe® vehicles
- Two-piece design permits easy access to the connectors
- Fits both 3/8" and 5/16" connector sizes
- Tool segments can be clipped together for convenient storage

**YA76462 Universal EFI Quick Probe (Blue-Point®)**
- Quickly detects electronic fuel injector functions on any gas or diesel engine
- Specifically designed to detect vibrations emitted when electronic injector fires
- No hunting for injector wires to test at connector
- No need to remove injector for testing
- Includes: bright LED strobe, 7" removable probe tip, user guide, battery operation and sensitivity thumb wheel

**IPK1180 Fuel Injector Puller**
- Developed to allow easy removal of injectors on all BMW® vehicles with direct injection
- Compact size allows for easy attachment and removal of the hard-to-reach injectors of the twin turbo V8 (N63) engine, reducing service time
- Easy to install on inline 6 and V8 (N63) engines, simply screw the tool on to the top of the injector, then with one or two taps with the slider, the injector will come out easily

**A227 Fuel Pressure Sensor Socket, 27 mm**
- For removing and installing fuel pressure sensors from fuel injection fuel rails under the intake
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- Snap-on® sockets using the Flank Drive® wrenching system grip fasteners on the flanks/flats increasing torque by 15%–20%; prevents fastener from rounding and increases the life of the socket
- Socket has an enlarged bolt clearance to fit over the sensor connector where a regular 27 mm socket will not work
- Overall length of socket is 2"



YA997



FLR630



FIH940

## Fuel Inlet and Fuel Filter Tool

**YA997 Swivel Handle Fuel Filter Wrench**
- Designed to access hard-to-reach fuel filters
- Fits fuel filters 2 1/4"–2 9/16"

**FLR630 Fuel-Tank Lock-Ring Tool**
- Remove/install plastic fuel tank lock rings without damage
- Channel design on body allows legs to adjust from 4"–7 1/2" while keeping drive centered
- Compact design prevents the tool from hanging over the work area and hitting other parts
- For newer, smaller *GM* vehicles and vehicles with traditional size rings

## Fuel Pump Tools

**FIH940 Gas Tank Fuel Pump Removal Tool**
- Removes plastic fuel pump retaining rings
- Universal adjustable design fits most plastic retaining rings
- Prevents damage to original pump retaining ring
- Use with 1/2" drive extension and ratchet
- Use to reinstall old retaining ring



FID8838A

## Injector Harness Testers

**FID8838A Injector Harness Tester Set**
- Plugs into solenoid harness to identify electrical or fuel system malfunctions
- Includes eight testers and injector harness extension in a storage case

**FID8320 Injector Harness Tester**
- Use on GM® TBI models 100, 200, 220, 300, 400 and 500 used on various cars and trucks

**FID8329 Injector Harness Tester**
- Use on Bosch® PFI injectors used on various *GM*, Ford® and Chrysler® vehicles with PFI

**FID8339 Injector Harness Tester**
- Use on *GM M*ultec® 1 injectors and the "bottom feed" injectors used on 2.2 L 4 cyl. "J" and "L" cars from 1989–1993

**FID8340 Injector Harness Tester**
- Use on *GM* SCPI truck engines 4.3 L V6, 5.0 L V8, and 5.7 L V8 (1996 and later) plus 4.8 L V8, 5.3 L V8, and 6.0 L V8 (1999 and later)

**FID9210 Injector Harness Tester**
- Designed for Geo® TBI systems (1992 and later)

**FID8838A1**
- Use on *GM Multec* 2 injectors found in 1999 and later 2.4 L 4 cylinder engines in Oldsmobile® Intrigue and Cutlass, Chevrolet® Cavalier and Malibu® and Pontiac® Sunfire® vehicles

**FID8838A2 Injector Harness Tester**
- Use on *Bosch* 2 injectors used in 2000 and later Cadillac® 4.6 L V8 engines and *Oldsmobile* 4.0 L V8 engines

**FID8838A3 Injector Harness Extension**
- Injector harness extension line for all FID series injector harness testers
- Use when injector is in a lower position in manifold or cylinder head

**FID8838A4 Plastic Case**
- Storage case for the FID8838A injector harness tester set



YA965A



YA2850A



HCP6A



HCP7A



HCP10A



SHP2KT

**YA965A Hose Pinching Pliers**
- Eliminates need to drain cooling system when repairing thermostat or water pump
- Use to pinch off emission control hoses, flexible brake lines and rubber hose fuel lines
- Jaws swivel for positive clamping

**YA2850A Hose Pinchers**
- For diagnosing problems that require rubber or plastic fuel, vacuum and air lines to be temporarily closed
- Effectively seals lines without disconnecting
- Set of two

**HCP6A Hose Pinching Pliers**
- For sealing hose sizes 1/8"–5/16"
- For use on brake lines, fuel lines and vacuum hoses
- 6" long

**HCP7A Hose Pinching Pliers**
- For sealing hose sizes 1/2"–3/4"
- For use on heater hoses and vacuum lines
- 7" long

**HCP10A Hose Pinching Pliers**
- For sealing hose sizes 3/4"–2 1/4"
- For use on radiator hoses
- 10" long

**HCP3KT Hose Pinching Pliers Set**
- HCP6A, HCP7A and HCP10A (6", 7", 10") in storage pouch

**SHP7 Hose Pinching Pliers**
- Use to pinch off flexible lines to prevent spills when disconnected
- Spring loaded handle and lock for easy one-hand application and release
- Manufactured from strong, lightweight fiber reinforced synthetic polymer with extreme chemical resistance
- Use for small lines – 1/8" (3 mm)–3/4" (19 mm)

**SHP10 Hose Pinching Pliers**
- Use to pinch off flexible lines to prevent spills when disconnected
- Spring loaded handle and lock for easy one-hand application and release
- Manufactured from strong, lightweight fiber reinforced synthetic polymer with extreme chemical resistance
- Use for large lines – 3/4" (19 mm)–2 1/4" (57 mm)

**SHP2KT Hose Pinching Pliers Set**
- Use to pinch off flexible lines to prevent spills when disconnected
- Spring loaded handle and lock for easy one-hand application and release
- Manufactured from strong, lightweight fiber reinforced synthetic polymer with extreme chemical resistance
- Use SHP7 for small lines – 1/8" (3 mm)–3/4" (19 mm)
- Use SHP10 for large lines – 3/4" (19 mm)–2 1/4" (57 mm)



WARNING • Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: FUEL SYSTEMS



FIH9055



FIH9056



LDTF2



LDT8



LDT6



LDT14



ACT1370



LDT3730

## Fuel Line Disconnect Tools

**Fuel Line Coupling Release Tool Sets**
- Designed to service special quick connect couplings found on fuel feed and return lines located at the engine

**FIH9055 Fuel Line Coupling Release Tool Set**
Includes a FIH9055-1 (5/16") and a FIH9055-2 (3/8") tool for GM® fuel lines.

**FIH9056 Fuel Line Coupling Release Tool Set**
Includes FIH9056-1 (1/2") and FIH9056-2 (5/8") for fuel and air conditioning quick connect couplers on most late model Ford® and Mazda® Navajo vehicles.

**LDTF2 Fuel Line Disconnect Tool**
- Disconnect the fuel line from the fuel filter on 5.3 L Suburban®, Tahoe®, Yukon®, Avalanche® plus select Silverado® and Sierra vehicles
- Can be used on other Flex Fuel systems

**LDT8 Master Disconnect Set**
- For spring lock and quick disconnect couplings used on air conditioning and fuel lines on *Ford*, *GM* and Chrysler® vehicles

**LDT6 Disconnect Set**
- Disconnects air conditioning, quick connect fuel lines and spring lock couplings on *Ford* and *Chrysler* AC lines
- Works on fuel lines and other quick disconnect couplings on US and import vehicles
- Angled to access tight spots
- Durable plastic resists fuels and solvents
- Includes six sizes from 1/2"–7/8"

**LDT14 Master Plus Disconnect Set**
- Contains all the tools in the LDT8 master disconnect set
- 3/8"–1/2" Jiffy-Tite® disconnect tools from the LDTSP4 set
- Blue 5/16" fuel line adaptor from the LDTF2 fuel line disconnect set
- Set of four air line push pull disconnect tools that work on heavy duty trucks and industrial applications

**ACT1370 Disconnect Set (Blue-Point®)**
- Useful on air conditioning spring couplings as well as push-lock connectors on radiator and transmission lines
- Includes six tools for disconnecting spring couplings on *Ford*, *GM* and *Chrysler* air conditioning lines
- Works on fuel lines and can be used as push-lock connectors on radiator and transmission lines
- Included sizes are 5/16", 3/8", 1/2", 5/8", 3/4" and 7/8"

**LDT3730 Fuel and A/C Line Disconnect Pliers, 3/8"**
- Unique design provides extra leverage when disconnecting quick-connect couplings on A/C and fuel lines
- Works in conjunction with 5/16", 3/8" or 1/2" adaptors from the ACT1370 or LDT6 disconnect sets
- Pliers' forks have different sized openings so the tool can be turned around to fit single- or two-step collar designed connector lines
- Can also be used to reconnect stubborn lines or connections that are in hard-to-reach areas

## Steel Line Stoppers

**LCSS600 Line Clamp and Stopper Set (6pc)**
- Pliers used to pinch off flexible lines to prevent spills when disconnected
- Spring loaded handle and lock for easy one-hand application and release
- Two sizes to cover all hoses: Small 1/8"–3/4" and Large 3/4"–2 1/4"
- Stoppers used to seal steel lines once disconnected
- Spring loaded for quick install and removal
- Four sizes to suit 5/16", 3/8" and 1/2" pipe and banjo fittings
- Manufactured from strong lightweight fiber, reinforced with synthetic polymer offering extreme chemical resistance
- Manufactured from strong, lightweight fiber reinforced synthetic polymer with extreme chemical resistance
- Use for small lines – 1/8" (3 mm)–3/4" (19 mm)

**SHP7 Pliers, Hose Pinching, 7"**
**SHP10 Pliers, Hose Pinching, 10"**
**SLS516SO Steel Line Stopper, 5/16"**
**SLS38SO Steel Line Stopper, 3/8"**
**SLS12SO Steel Line Stopper, 1/2"**
**SLSBANJOSO Steel Line Stopper, Banjo**
**LCSS600PB Blow Molded Case**


LCSS600


SHP7


SHP10


SLS516SO


SLS38SO


SLS12SO


SLSBANJOSO

## Disconnect Tools for Low-Profile Jiffy-Tite® Fittings

**LDTJT5 Low-Profile *Jiffy-Tite* Disc Set**
- Disengages the line from *Jiffy-Tite* quick connect fittings without removal of the clip
- Teeth of the tool fit perfectly into tight tolerance of the connectors
- When rotated, it allows the line to be pulled without damage to the connector or retaining clip so they can be reused
- Includes new 3/4" size, making this the most comprehensive kit on the market

**LDTJT538 Low-Profile *Jiffy-Tite* Disc, 3/8"**
**LDTJT512 Low-Profile *Jiffy-Tite* Disc, 1/2"**
**LDTJT55830 Low-Profile *Jiffy-Tite* Disc, 3/8"-30°**
**LDTJT55839 Low-Profile *Jiffy-Tite* Disc, 3/8"-39°**
**LDTJT534 Low-Profile *Jiffy-Tite* Disc, 3/4"**
**LDTJT5PB Storage Case**
Storage case for LDTJT5 Low-Profile *Jiffy-Tite* Disc set.


LDTJT5

## OXYGEN AND FUEL SENSOR TOOLS

## Fuel Sensor Wrench

**GANM27 Fuel Sensor Wrench**
- Use to remove the high pressure fuel sensor on the 3.6 FSI engine found on the VW® Touareg® and CC models plus Audi® Q7
- 12-point crowfoot socket engages every 30° for better access in restricted areas
- Special alloy steel provides the highest match of strength and durability
- 3/8" drive, 27 mm


GANM27



**⚠WARNING**
- Plastic coated handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: OXYGEN AND FUEL SENSOR TOOLS


S6176


S6150


S6154


SWR1


SWR2


SWR4


SWR102


YA1239


YA9385


YA9375A


YA6675


YA6775

## Oxygen Sensor

**S6176 Oxygen Sensor Socket**
- For service on most Nissan®, Mazda®, Honda® and Acura® vehicles
- Slotted side clears projections
- 22 mm 1/2" drive, 3 7/8" long

**S6150 Oxygen Sensor Wrench**
- Special crowfoot wrench design provides strength necessary for removal/installation
- 12-point, 7/8" wrench size, 1/2" drive
- Nickel-chrome finish

**S6154 Oxygen Sensor Wrench**
- For use on oxygen sensors on 2007 *Acura* RDX. 22 mm
- 12-point wrench opening, 1/2" drive
- Nickel-chrome finish

**SWR1 Oxygen Sensor Wrench**
- Designed for all oxygen sensors with a 7/8" hex
- Flex head offers essential clearance for removal/installation of oxygen sensors when sensor is positioned upward and inward to the floorboard or when leverage is needed around an exhaust pipe
- Ford® Contours® and 4.6 L and 5.4 L *Ford* Modular engines used in trucks and SUVs have this application
- Other applications include 7/8" and 22 mm knock sensors used on midsize trucks, SUVs and vans
- Flank Drive® wrenching system for greater applied torque
- Chrome finish for easy cleanup and protection against corrosion
- Compact, low-clearance head
- Overall length: 10 3/4". Hex: 7/8" 6-point. Head diameter: 1 9/16". Slot width: 1 5/16"

**SWR2 Oxygen Sensor Socket**
- For oxygen sensors located in the exhaust manifolds of 1981 and later cars and light trucks, including VW®
- 3/8" drive with 7/8" hex size
- 1/2" opening for easy access to oxygen sensor
- Ball detent in square drive for secure retention
- Industrial finish

**SWR4 Oxygen Sensor Wrench**
- Use on oxygen sensors with a 22 mm (7/8") hex
- Bent handle design with flex head offers extra clearance for removal and installation of shielded oxygen sensors and air/fuel sensors
- Chrome finish for easy cleanup and protection against corrosion
- Depth of socket and wall diameter of socket is critical for limited space inside heat shield
- Overall length: 10 3/4". Hex: 7/8" 6 point. Head diameter: 1 3/16". Slot width: 1/2"

**Applications**
- Toyota®: 2003 and later
- *Acura:* 2005 and later
- Lexus®, *Honda*, Hyundai® and Kia®: 2006 and later
- *Nissan*, *Mazda*: 2007 and later

**SWR102 Oxygen Sensor Wrench Set**
- SWR1 and SWR2 (2pc) in storage tray

**YA1239 Dual Drive Oxygen Sensor Wrench (Blue-Point®)**
- 1/2" and 3/8" drive
- Attach 1/2" breaker bar on the end of the tool to initially loosen stuck sensors, use a 3/8" ratchet on the top for fast removal and installation
- Fits oxygen sensor applications with a heat shield
- Slotted body allows clearance for wire harness
- Forged, heat-treated steel with 6-point design will withstand high torque removal applications

**YA9385 Oxygen Sensor Socket *(Blue-Point)***
- Use to install and remove oxygen and vacuum sensors on most US and import vehicles
- Can be used with impact wrench
- 1 1/4" external hex. 19/32" x 2 3/4" slot to clear obstructions, 22 mm, 1/2" drive
- Black industrial finish

**YA9375A Oxygen Sensor Wrench *(Blue-Point)***
- For oxygen sensors on GM® LT1 and LT5 5.7 L V8 engines
- Further applications on 2007 and later Harley-Davidson® motorcycles
- Eliminates need to unhook exhaust system when removing or reinstalling oxygen sensor
- 3/8" drive with 2 1/8" hex size
- Industrial finish

**YA6675 Shielded Oxygen Sensor Socket *(Blue-Point)***
- For use on late model *Toyota* and *Lexus*
- Depth and outer diameter are critical for limited space inside heat shield
- 12-point double hex
- Forged for maximum strength

**YA6775 Oxygen Sensor Wrench *(Blue-Point)***
- Designed for use with most oxygen sensors no matter what size electrical connectors they have
- Double sided design, 6- and 12-point configuration
- Pivoting handle design allows positive leverage in confined areas




## Carburetor Adjustment Tools

**2006IT Carburetor Adjusting Set**
Includes: S6137E, S6138E, S6139, TM64, TM83A, TM85

**S6137E Idle Adjusting Hex Head Driver**
- For 1978 and later Chrysler® vehicles
- 3/32" hex driver is 1 9/16" long
- Nickel-chrome finish socket
- 7/16" OD
- 1/4" drive industrial finish bit

**S6138E Idle Adjusting Driver**
- For Ford® feedback carburetors
- 7/16" OD
- 1/4" drive
- Bit has a 3/16" x 1/32" flat tip, 2" long
- Nickel-chrome finish socket, industrial finish bit

**S6139 Double "D" Carburetor Adjusting Socket**
- For 1978 and later GM® idle adjusting screw
- OD drive end is 7/16"
- Nickel-chrome finish
- 3.5 mm across flats
- 1/4" drive
- 13/16" long

**TM64 Rigid Adjusting Tool**
- Rigid elbow bend rather than flexible feature
- Use with carburetor drivers for making carburetor and point adjustments
- Rigid shaft
- Overall length is 18 1/4", 1/4" drive

**TM65 Flexible Adjusting Tool**
- Flexible shaft end for working in restricted areas
- Overall length is 19 3/4", 1/4" drive
- Ideal for working in tight spaces when servicing window type distributors
- Knob markings allow for counting turns

**TM615 Flexible Driver**
- 1/4" drive
- Designed for carburetor work, this driver can also access buried distributors
- 1/4" drive at the end of a tough but flexible spring steel shank
- 18 5/8" long
- For low torque applications
- Ideal to access buried adjusting screws
- Cable length is 15"; overall length is 18 5/8"

**TM83A Recessed Blade Carburetor Screwdriver**
- 1/4" drive
- Use with TM64 or TM65 and other 1/4" square drive handles
- Blades are recessed in outer socket wall to self center
- Nickel-chrome finish
- 3/8 x 1/32" blade

**TM84 Recessed Blade Carburetor Screwdriver**
- 1/4" drive
- Use with TM64 or TM65 and other 1/4" square drive handles
- Blades are recessed in outer socket wall to self center
- Nickel-chrome finish
- 7/16" x 1/32" blade

**TM85 Recessed Blade Carburetor Screwdriver**
- 1/4" drive
- Use with TM64 or TM65 and other 1/4" square drive handles
- Blades are recessed in outer socket wall to self center
- Nickel-chrome finish
- 9/32" x 1/32" blade for adjusting late model Quadrajet carburetors

**TAM3E Metric Hex Head Driver**
- Use to make carbon monoxide adjustments on 1976 Dasher®, 1974–1976 Audi® and Volvo®, and 1975 and 1976 Fiat® and Saab® vehicles
- 3 mm bit size, 1/4" drive
- 6 7/8" long
- Nickel-chrome finish

**⚠WARNING**
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# FUEL & ENGINE SYSTEMS: DISTRIBUTOR SERVICE TOOLS



S8564B



S9707



S8176



S9609



S9622



S9626

## US Distributor Wrenches

| Stock No. | Wrench Size, inches |
|---|---|
| S8564B | 1/2 |
| S9707 | 1/2 |
| M3515 | 9/16 |
| S8176 | 9/16 |
| S9609 | 9/16 |
| S9622 | 9/16 |
| S9626 | 9/16 |

**S8564B Distributor Wrench**
- Ford®, Lincoln® and Mercury® engines; clears leads and coils

**S9707 Distributor Wrench**
- *Ford*, *Mercury* and Cadillac® engines

**M3515 Distributor Wrench**
- GM® V6 and V8 trucks

**S8176 Distributor Wrench**
- Pontiac® and Oldsmobile® engines

**S9609 Distributor Wrench**
- Chevrolet® V8 engines

**S9622 Distributor Wrench**
- 1977 and later full-size *GM* cars with V8 engines

**S9626 Distributor Wrench**
- *GM* V6 engines



## Metric Distributor Wrench

**S6134 Metric Distributor Wrench**
- 1982 and later *Cadillac* 4.1 L V8 engines, *GM* 2.8 L V6 engines, and 1985 VW® Golf® engines
- 15 mm

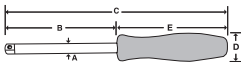


TM63A



ACD12B

## Driver




**TM63A Flexible Driver**
- 1/4" drive
- For low torque applications
- For use on Delco-Remy® window type distributors

| Stock No. | A | B | C |
|---|---|---|---|
| TM63A | 1/4 | 4 21/32 | 9 3/16 |

## Cleaning Brush

**ACD12B Distributor Cleaning Brush (Blue-Point®)**
- Wire brush cleans terminal connections on distributors and coils
- 5 1/4" long with a 4" long handle
- Wire diameter is .012"

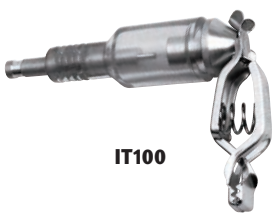
# IGNITION TOOLS

## Ignition Testers



YA2700

**YA2700 Ignition Module Tester**
- For testing Chrysler® 4-pin and 5-pin modules; GM® 4-pin, 5-pin, and 7-pin modules; plus Ford® 3-pin and "grommet" style modules
- LED indicator gives a simple "good" or "bad" reading



IT100

**IT100 Ignition Tester**
- For standard ignition systems
- Check for spark without removing spark plug from engine
- Testers attach to spark plug lead and spring clip attaches to appropriate ground



ITHE100

**ITHE100 Ignition Tester**
- Same as IT100 but for use on HEI systems



YA6465

## Ignition Tools

**YA6465 Ignition Modulator Wrench for *Ford* Vehicles**
- Use to remove 7/32" (5.5 mm) hex retainer bolts on *Ford* ignition modules
- 1/2" hex drive

**⚠WARNING**

- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# WELDING. WELL DONE.

The full contingent of Snap-on® MIG or TIG welders, accessories, plasma cutters, oxygen-acetylene torch kits and protective safety gear.

**Performance —** Weld thicker metal with longer weld times than other machines; higher-duty cycles and wider amperage ranges underscore industry-leading performance.

**Durability —** Metal wire feeder assemblies, copper-on-copper transformer construction and integral cooling fans provide increased longevity.

**Safety —** A variety of welding masks to fit multiple styles and needs; auto-darkening visors, protective sleeves and gloves, and more. Protect yourself with safe – and comfortable – equipment.



# SNAP-ON® MUSCLE MIG/MIG WIRE FEED WELDERS

*Snap-on* MIG Welders have higher duty cycles at maximum amperage providing added weld times and performance that surpasses the competition. Ideal for many applications including automotive repair, collision, heavy duty truck, farm and metal fabrication shops. Added capabilities include a detachable feeder assembly, spot stitch (some models), along with the optional TIG accessory and aluminum spool gun packs.

Wire feed assembly, constructed of precision machined-cast aluminum, features all metal gearing and 800 in/min delivery for consistent wire speeds

Capacitor bank and diode set delivers consistent voltage and industry-leading smooth arc characteristics




All copper wound, tapped transformer features Nomex® insulation and bolted laminations to provide precise voltage control and repeatable welds



**MIG220**




**MM250SL**




**MM350XL**

## 230V MIG Welders

| Stock No. | MIG220 | MM250SL | MM350XL |
|---|---|---|---|
| Output Amperage Max (amps) | 220 | 270 | 350 |
| Duty Cycle Rating | 60% @ 185A | 100% @ 185A | 100% @ 300A |
| Welding Capacity, Single Pass (in) | 5/16 | 3/8 | 1/2 |
| Voltage Settings – MIG/TIG | 12/4 | 8/4 | 8/4 |
| Spot-Stitch | No | Yes | No |
| Detatchable Feeder | No | Yes | Yes |
| Wire Size (inches) | 0.023–0.045 | 0.023–0.045 | 0.023–0.063 |
| Torch Length (ft) | 10 | 10 | 12 |
| Feeder Cable Length (ft) | N/A | 15 | 15 |
| Ground Cable Length (ft) | 10 | 15 | 25 |
| Power Input Cable Length (ft) | 20 | 20 | 20 |
| Input Voltage | 208/230V AC, 50/60 Hz 1-ph | 208/230V AC, 50/60 Hz 1-ph | 208/230V AC, 50/60 Hz 1-ph |
| Input Amperage (recommended) | 26/24 | 26/24 | 46/42 |
| Gas Regulator-Flowmeter | Yes | Yes | Yes |
| Warranty* | 2 Years | 2 Years | 2 Years |

*Does not include cable or torch

TECHNICAL SUPPORT 1-800-ABC-WELD



**⚠WARNING**

- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

# SNAP-ON® MUSCLE MIG/MIG WIRE FEED WELDERS

*Snap-on* MIG welders can be used as straight polarity with shielding gas or reverse polarity without shielding gas for flux cored wire. MIG125 and MIG135 are compact and portable for use on the worksite.




MIG140




MM140SL




MIG125




MIG135

## 115V MIG Welders

| Stock No. | MIG140 | MM140SL |
|---|---|---|
| Output Amperage Max (amps) | 140 | 140 |
| Duty Cycle Rating | 60% @ 140A | 100% @ 140A |
| Welding Capacity, Single Pass (in) | 1/4 | 1/4 |
| Voltage Settings – MIG/TIG | 6/3 | 8/4 |
| Spot-Stitch | No | Yes |
| Detatchable Feeder | No | Yes |
| Wire Size (inches) | 0.023–0.035 | 0.023–0.045 |
| Torch Length (ft) | 10 | 10 |
| Feeder Cable Length (ft) | n/a | 15 |
| Ground Cable Length (ft) | 10 | 15 |
| Power Input Cable Length (ft) | 20 | 20 |
| Input Voltage | 115V AC, 50/60 Hz 1-ph | 120V AC, 50/60 Hz 1-ph |
| Input Amperage (recommended) | 30 | 15 |
| Gas Regulator-Flowmeter | Yes | Yes |
| Warranty | 2 Years | 2 Years |

*Does not include cable and torch

## Portable MIG Welders

| Stock No. | MIG125 | MIG135 |
|---|---|---|
| Output Amperage Max (amps) | 125 | 135 |
| Duty Cycle Rating | 20% @ 80A | 20% @ 90A |
| Welding Capacity, Single Pass (in) | 3/16 | 3/16 |
| Voltage Settings – MIG/TIG | 4/- | 7/- |
| Spot-Stitch | No | No |
| Detatchable Feeder | No | No |
| Wire Size (inches) | 0.023-0.035 | 0.023–0.035 |
| Torch Length (ft) | 7 | 9 |
| Feeder Cable Length (ft) | n/a | n/a |
| Ground Cable Length (ft) | 8 | 8 |
| Power Input Cable Length (ft) | 6 | 6 |
| Input Voltage | 115V AC, 50/60 Hz 1-ph | 115V AC, 50/60 Hz 1-hp |
| Input Amperage (recommended) | 20 | 20 |
| Gas Regulator-Flowmeter | Regulator | Regulator |
| Warranty | 2 Years | 2 Years |

*Does not include cable and torch

TECHNICAL SUPPORT 1-800-ABC-WELD

# MIG WELDER ACCESSORIES

## Accessories – MIG Welders

| Image | Stock No. | Description | MM140SL | MM250SL | MM350XL | MIG220 | MIG140 |
|---|---|---|---|---|---|---|---|
|  | MHG5A | Aluminum Spool Gun<br>Converts welders listed to aluminum welding | n/a | n/a | n/a | opt | opt |
| | MHG5B | Aluminum Spool Gun<br>Converts welders listed to aluminum welding | opt | opt | opt | n/a | n/a |
|  | CKSTP2125A | DC TIG Pack<br>Adds DC TIG welding capability for welding ferrous metals | n/a | n/a | n/a | opt | opt |
| | FLEXTIG25 | DC TIG Pack<br>Adds DC TIG welding capability for welding ferrous metals | opt | opt | opt | n/a | n/a |
|  | CKS2TK | Twin Cylinder Rack<br>Converts models listed to carry 2 cylinders | n/a | opt | std | opt | n/a |
|  | CKS15FN1030 | Flexible Neck Torch<br>Flexible neck torch for welding exhaust systems | opt | opt | opt | opt | opt |

std=standard opt=optional n/a=not applicable

## Parts and Consumables – MIG Welders

| Stock No. | Description | MIG140 | MM140SL | MIG220 | MM250SL | MM350XL |
|---|---|---|---|---|---|---|
| CKS15TG1030 | 10 ft Cable and Torch (.030 wire) | std | std | opt | opt | — |
| CKS15TG1035 | 10 ft Cable and Torch (.035 wire) | opt | opt | std | std | — |
| CKS35XL1235 | 12 ft Cable and Torch (.035 wire) | — | — | — | — | std |
| CKS15TG1025 | 10 ft Cable and Torch (.025 wire) | opt | opt | opt | opt | — |
| CKS15TG1230 | 12 ft Cable and Torch (.030 wire) | opt | opt | opt | opt | — |
| CKS15TG1235 | 12 ft Cable and Torch (.035 wire) | opt | opt | opt | opt | — |
| CKS15TG1535 | 15 ft Cable and Torch (.035 wire) | opt | opt | opt | opt | — |
| CKS25SG1035 | 10 ft Cable and Torch (.035 wire) | opt | opt | opt | opt | — |
| CKS35XL1245 | 12 ft Cable and Torch (.045 wire) | — | — | — | — | opt |
| CKS35XL1535 | 15 ft Cable and Torch (.035 wire) | — | — | — | — | opt |
| CKS35XL1545 | 15 ft Cable and Torch (.045 wire) | — | — | — | — | opt |
| CKSM103LB | Liner for 10 ft Torch (.020–.030) | std | std | opt | opt | — |
| CKSM123LB | Liner for 12 ft Torch (.020–.030) | opt | opt | opt | opt | opt |
| CKSM104LN | Liner for 10 ft Torch (.030–.045) | opt | opt | std | std | — |
| CKSM124LN | Liner for 12 ft Torch (.030–.045) | opt | opt | opt | opt | std |
| CKSM3T2510 | Contact Tip (.025), 10 ea. | opt | opt | opt | opt | opt |
| CKSM3T3010 | Contact Tip (.030), 10 ea. | std | std | std | std | opt |
| CKSM3T3510 | Contact Tip (.035), 10 ea. | opt | opt | opt | opt | std |
| CKSM3T4510 | Contact Tip (.045), 10 ea. | opt | opt | opt | opt | opt |
| CKSM3TN50 | 1/2" Adjustable Nozzle | std | std | std | std | — |
| CKSM5C62 | Nozzle with 5/8 ID | — | — | — | — | std |
| CKSM3TB2 | Insulators (2 ea.) w/ O-rings, 6 ea. | std | std | std | std | — |
| CKSM3TBR3 | Insulator O-rings (3 ea.) | std | std | std | std | — |
| CKSM3TD | Gas Diffuser | std | std | std | std | — |
| CKSM6D | Gas Diffuser | — | — | — | — | std |
| CKSM6B | Insulated Nozzle Bushing | — | — | — | — | std |
| CKSGRFM | Regulator Flowmeter | std | std | std | std | std |

std = Standard opt = Optional

## Snap-on® MIG Welder Consumable Kits

Contains a selection of parts to repair *Snap-on* MM series, MIG220, MIG140, YA212AIND and FM140A welders along with MHG series spoolguns.



**CKSMPK1**



**CKSMPK10**

**CKSMPK1 MIG Welder Parts Kit**
- Standard MIG consumables such as contact tips, O-rings, nozzles, insulator and diffuser

**CKSMPK10 Master MIG Welder Parts Kit**
- Contains CKSMPK1 contents along with additional parts for aluminum spoolguns

## Portable MIG Welder Parts and Consumables

| Stock No. | Description | MIG125 | MIG135 |
|---|---|---|---|
| CKSGR115 | Regulator | std | std |
| MIG023 | Contact Tip (.023), 10 ea. | std | std |
| MIG030 | Contact Tip (.030), 10 ea. | opt | opt |
| MIG035 | Contact Tip (.035), 10 ea. | opt | opt |
| MIG1151 | Tapered Nozzle | std | std |
| MIG1152 | Spot Weld Nozzle | opt | opt |
| MIG1153 | Steel Liner | std | std |
| MIG1154 | Nozzle Spring | std | std |
| MIG1155 | 9 ft Cable and Torch | — | std |
| MIG1156 | Diffuser | std | std |
| MIG1157 | Teflon® Liner (for aluminum wire) | opt | opt |
| CKS8124700 | 6 ft Cable and Torch | std | — |

std = Standard opt = Optional

## TIG Pack Parts and Consumables

| Stock No. | Description | CKSTP2125A | FLEXTIG25 |
|---|---|---|---|
| CKS3T332 | Tungsten 3" – size 1/16" | std | std |
| CKS3C332 | Collet for 3/32" Tungsten | std | std |
| CKS3T116 | Tungsten 3" – size 1/16" | — | std |
| CKS3T418 | Tungsten 3" – size 1/8" | std | opt |
| CKS3C116 | Collet for 1/16" Tungsten | — | std |
| CKS3C418 | Collet for 1/8" Tungsten | std | opt |
| CKS3CB116 | Collet Body for 1/16" Tungsten | — | std |
| CKS3CB332 | Collet Body for 3/32" Tungsten | std | std |
| CKS3CB418 | Collet Body for 1/8" Tungsten | std | opt |
| CKSTIGSHARP | Chemical Tungsten Sharpener | opt | opt |

std = Standard opt = Optional

## Aluminum Spool Parts and Consumables

| Stock No. | Description | MHG5A | MHG5B |
|---|---|---|---|
| CKSM5C62 | Nozzle with 5/8 ID | std | std |
| CKSM5NB | Nozzle Body | std | std |
| CKSM5B | Insulated Nozzle Bushing | std | std |
| CKSM35NA62 | Nozzle Assembly | std | std |
| CKSM35D | Gas Diffuser | std | std |
| CKSMGT2510 | Contact Tip (.025) 10 ea. | opt | opt |
| CKSMGT3010 | Contact Tip (.030) 10 ea. | opt | opt |
| CKSMGT3510 | Contact Tip (.035) 10 ea. | std | std |
| CKSMGT36410 | Contact Tip (3/64) 10 ea. | opt | opt |
| CKS404335 | Aluminum Wire (Size .035) 1 lb | std | std |
| CKS404330 | Aluminum Wire (Size .030) 1 lb | opt | opt |
| CKS4043364 | Aluminum Wire (Size 3/64") 1 lb | opt | opt |

std = Standard opt = Optional

**⚠WARNING**

- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

# TIG WELDERS

Welds a variety of metals including steel, aluminum, stainless-steel and chromoly.




TIG150i Face Plate



TIG255i Face Plate

TIG150i




TIG255i

## TIG Welders

- Welding Process Versatility: select between AC TIG, DC TIG or Stick Electrode welding options
- Amperage Control: fine adjustment range to weld extremely thin materials to maximum thicknesses
- TIG two- or four-stage continuous and pulse modes
- AC Balance Adjustment: penetration, balanced and cleaning
- Pulse and background amperage adjustment
- AC frequency adjustment
- Upslope/Downslope as well as post as flow adjustment
- High frequency/scratch starting modes

| Specifications | TIG150i | TIG255i |
|---|---|---|
| Torch | Gas Cooled | Water Cooled |
| Input Voltage | 208/230V AC | 208/230V AC |
| Input Current | 30 Amps | 30/15.8 Amps |
| Output Current | 5–150 Amps | 220 Amps |
| Duty Cycle | 60% @ 110 A | 100% @ 160A, 40% @ 220A |
| Torch Lead Length | 25' | 25' |
| Ground Cable Length | 25' | 25' |
| Power Cord Length | 12' | 8' |
| Shipping Weight, lb (kg) | 57 (26) | 180 (81.6) |

### TIG150I TIG Welder

- Full featured 150 A TIG welder that's ideal for everyday shop use

### TIG255i TIG Welder

- Full featured 255 A TIG welder with a water-cooled torch for longer weld times, cooler operation and enhanced dexterity
- Ideal for production welding environments



TIGINVRAD



TIGINVFP



TIG250EH

## TIG Welder Accessories

| Stock No. | Description | TIG150i | TIG255i |
|---|---|---|---|
| TIGINVFS | Remote Foot Switch | std | std |
| CKSGRFM | Regulator Flowmeter | std | std |
| TIG150GCA | Ground Cable Assembly | std | std |
| TIG150TA | Torch Assembly | std | — |
| TIG255TA | Torch Assembly | — | std |
| CKSKITTIG250 | Consumable Kit | std | std |
| TIGINVRAD | Clip-On Torch Amperage Control | opt | opt |
| TIGINVFP | Foot Pedal Amperage Control | opt | opt |
| TIG250EH | Stick Electrode Holder | opt | opt |
| TIG250HC25 | Leather Cable Cover | opt | opt |

std = Standard opt = Optional

TECHNICAL SUPPORT 1-800-ABC-WELD

# PLASMA CUTTERS

Snap-on® plasma cutters are ideal for cutting ferrous (steel, stainless-steel) metals as well as non-ferrous metals (aluminum) and new high-strength steels. Uses clean, dry compressed air, includes air regulator for accurate adjustment of air pressure for the best quality cut. Compact torch handle for accessing tight areas.




PLASMA30i




PLASMA60i




PLASMA50




PLASMA25

## Plasma Cutters

| Specifications | PLASMA30i | PLASMA60i | PLASMA50 | PLASMA25 |
|---|---|---|---|---|
| Output Amperage Max (amps) | Adjustable 5–25 | Adjustable 20–55 | 30 and 50 | 25 |
| Cut Thickness (in) | 3/8 | 3/4 | 1/2 | 3/8 |
| Sever Thickness (in) | 1/2 | 1 | 3/4 | 3/8 |
| Primary Input, (V) | 115 or 230V AC, 50/60 Hz | 208/230 V AC, 50/60 Hz | 208/230V AC, 50/60 Hz | 115 V AC 50/60 Hz |
| Primary Input, (A) | 30A 115V or 20A 230V | 40A | 30A | 20A |
| Duty Cycle Rating | 100% @ 19A/60% @ 22A/35% @ 25A | 100% @ 30A/60% @ 40A/35% @ 55A | 40% @ 50A | 20% @ 25A |
| Compressed Air Requirements (min) | 50 PSI @ 7 CFM | 68 PSI @ 7 CFM | 88 PSI @ 7 CFM | 88 PSI @ 5 CFM |
| Torch Cable Length (ft) | 12 | 18 | 18 | 12 |
| Ground Cable Length (ft) | 12 | 18 | 18 | 12 |
| Warranty | 2 Years | 2 Years | 2 Years | 2 Years |
| Net Weight, lb (kg) | 29 (13.15) | 44 (20) | 137 (62) | 55 (25) |

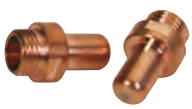
*Does not include cable or torch

TECHNICAL SUPPORT 1-800-ABC-WELD

# PLASMA CUTTER CONSUMABLES



PLASMA2304



PLASMA2305



PLASMA2308



PLASMA5005



PLASMA5001



PLASMA2504



PLASMA3003



PLASMA5003



PLASMA5004

## Plasma Cutter Consumables

| Description | PLASMA115 | PLASMA230 | PLASMA25 | PLASMA50 | PLASMA30i | PLASMA60i |
|---|---|---|---|---|---|---|
| Complete Torch Assembly | PLASMA1153 | PLASMA23010 | PLASMA2503 | PLASMA5007 | PLASMA3007 | PLASMA5007 |
| Metal Diffuser | – | – | PLASMA5005* | PLASMA5005* | – | PLASMA5005* |
| Short Nozzle (1 mm) 30–35 A | PLASMA2301† | PLASMA2301† | – | – | – | – |
| Electrode | PLASMA1151† | PLASMA2305† | PLASMA5004† | PLASMA5004† | PLASMA3004 | PLASMA5004† |
| Long Electrode | PLASMA1152* | PLASMA2307† | – | – | – | – |
| Nozzle (0.7 mm) | – | – | – | – | PLASMA3002† | – |
| Nozzle (1.1 mm) 55A | – | – | PLASMA5002† | PLASMA5002† | – | PLASMA5002† |
| Long Nozzle (0.9 mm) 35 A | PLASMA2308† | PLASMA2308† | – | – | – | – |
| Long Nozzle (1 mm) 35–50 A | PLASMA2302** | PLASMA2302** | – | – | – | – |
| Nozzle Holder | PLASMA2304 | PLASMA2304 | PLASMA5001 | PLASMA5001 | PLASMA3001 | PLASMA5001 |
| Spacer Spring | – | PLASMA2309† | – | – | – | – |
| Swirl Ring | PLASMA23031 | PLASMA23031 | PLASMA5003* | PLASMA5003* | PLASMA3003* | PLASMA5003* |
| Torch Head Body | – | PLASMA23011 | PLASMA5006 | PLASMA5006 | PLASMA3006 | PLASMA5006 |
| Two Point Spacer | – | – | PLASMA2504 | PLASMA2504 | – | PLASMA2504 |

One each per package unless otherwise noted
*Two each per package
**Three each per package
†Five each per package

**⚠WARNING**

- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

# GAS WELDING



WE200A



WE250A

## Gas Welding

- Use for auto repair, construction, fabrication, manufacturing and maintenance
- Forged brass regulator is durable and strong
- Regulator diameter 2 1/4" allows precise control of gas
- Internal filter keeps particles from entering regulator
- PTFE Teflon® seal
- Handle shutoff valve color coding allows ease in identifying the corresponding gas control
- Two-piece cutting tip is easier to clean
- High quality hose offers reduced tear resistance and increased flexibility

**WE200A Standard Duty Welding Kit**
- Cuts up to 1" and welds up to 1/8". Cuts up to 4" and welds up to 1/2" with optional tips

**WE250A Medium Duty Welding Kit**
- Cuts up to 1" and welds up to 1/8". Cuts up to 5" and welds up to 1/2" with optional tips

## Kit Components

| Set Contains: | | WE200A | WE250A |
|---|---|---|---|
| Stock No. | Description | | |
| HRC1401340 | 85 Weld Handle w/ Check Valves | std | std |
| HRC1300380 | 72-3 Cut Attach | std | std |
| HRC9100614 | D-85 Weld Mixer | std | std |
| HRC4300499 | Twin Hose, 3/16 x 20 | std | std |
| HRC4304482 | Cover Goggle | std | std |
| HRC9004486 | Striker | std | std |
| WE200A1 | Oxygen Regulator | std | — |
| WE200A2 | Acetylene Regulator | std | — |
| WE250A1 | Oxygen Regulator | — | std |
| WE250A2 | Acetylene Regulator | — | std |
| HRC1502172 | 6290-1 #1 AC Cut Tip | std | std |
| HRC1600890 | 23-A-90-5 #5 Weld Tip | std | std |
| HRC1600870 | 23-A-90-3 #3 Weld Tip | std | std |
| HRC1600850 | 23-A-90-1 #1 Weld Tip | std | std |

std = Standard opt = Optional

## Optional Accessories

**HRC1800710 J-63-1 Heating Assembly**
**HRC1600840 23-A-90-0 #0 Weld Tip**
**HRC1600860 23-A-90-2 #2 Weld Tip**
**HRC1600880 23-A-90-4 #4 Weld Tip**
**HRC1502171 6290-0AC #0AC Cut Tip**
**HRC1502173 6290-2AC #2AC Cut Tip**
**HRC1502174 6290-3AC #3AC Cut Tip**
**HRC1502175 6290-4AC #4AC Cut Tip**
**HRC4302202 Torch Flash Arrestor (Pair)**
**HRC9000160 E-9 Tip Cleaner (2pc tip)**
**HRC9004484 Replacement Flints**

# WELDING ACCESSORIES

**YA427B Welding Gloves**
- Helps protect hands from sparks when welding
- Leather construction with added insulation for heat protection
- Reinforced palm for durability



YA427B

**YA4282 TIG Welding Gloves**
- Ideal for TIG welding processes
- Pigskin material for precise control
- Helps protect hands from heat and sparks
- Thick leather cuff for wrist protection



YA4282

**YA4280 Welding Sleeves**
- Helps protect arms from sparks when welding or cutting
- Elastic bands at each end of sleeve
- Constructed of flame retardant fabric



YA4280

# SOLDERING



YAKS32A

## Soldering Tips (YAKS32A)

| Stock No. | Description | Size, inches (mm) |
|---|---|---|
| YAKS1-1 | Single Flat Solder Tip | 1/32" (1.0 mm) |
| YAKS1-2 | Single Flat Solder Tip | 3/32" (2.4 mm) |
| YAKS1-3 | Single Flat Solder Tip | 1/8" (3.2 mm) |
| YAKS1-4 | Single Flat Solder Tip | 3/16" (4.8 mm) |
| YAKS1-5 | Double Flat Solder Tip | 1/32" (1.0 mm) |
| YAKS1-6 | Double Flat Solder Tip | 3/32" (2.4 mm) |
| YAKS1-7 | Double Flat Solder Tip | 1/8" (3.2 mm) |
| YAKS1-8 | Double Flat Solder Tip | 3/16" (4.8 mm) |
| YAKS1-9 | Hot Air Blower Tip | — |
| YAKS1-10 | Hot Knife Tip | — |
| YAKS1-11 | Plastic Case | — |
| YAKS112 | Hot Air Blower Deflector | — |
| YAKS113 | Hot Air Blower and Deflector Tip | — |

## Butane Soldering Iron Kit

Durable all around favorite featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane compatible plastics to help prevent gas from leaking.
- Converts to a heat shrink tool and hot knife with the addition of interchangeable tips
- Cordless butane powered, no cords or wires
- 12-month replacement warranty

**YAKS32A Butane Soldering Iron Kit (25 W–125 W)**
- Kit includes five soldering tips plus hot knife, hot air and hot air deflector tips
- Push-button electronic ignitor
- Torch and soldering iron all in one
- Run time 90 minutes plus continuous use
- Adjustable temperature control 25 W–125 W (equivalent)

**YAS32A 2-in-1 Gas Soldering Auto-Ignition Tool (25 W–130 W)**
- Includes YAKS1-6 2.4 mm Double Flat soldering tip
- Push-button electronic ignitor
- Torch and soldering iron all in one
- Run time 90 minutes plus continuous use
- Adjustable temperature control 25 W–125 W (equivalent)



YAKS22A

## Butane Soldering Iron Kit

Versatile and compact professional soldering iron, featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane compatible plastics to help prevent gas from leaking.

- Converts to a torch, heat shrink tool and hot knife with the addition of interchangeable tips
- Cordless butane powered, no cords or wires
- 12-month warranty

**YAKS22A Butane Soldering Iron Kit (15 W–75 W)**

- Kit includes eight tips: Hot air, heat shrink, torch, hot knife with four soldering tips
- Push-button electronic ignitor
- Short distance from tip to grip gets you closer to your work
- Run time up to one hour
- Adjustable temperature control 15 W–75 W (equivalent)
- ESD safe antistatic

**YAS22A Gas Soldering with Auto-Ignition (15 W–75 W)**

- Includes YAKS226 2.4 mm Double Flat Tip
- Push-button electronic ignitor
- Short distance from tip to grip gets you closer to your work
- Run time up to one hour
- Adjustable temperature control 15 W–75 W (equivalent)
- ESD safe antistatic

## YAKS22A Soldering Tips

| Stock No. | Description | Size, inches (mm) |
|---|---|---|
| YAKS221 | Single Flat Solder Tip | 1/32" (1.0 mm) |
| YAKS222 | Single Flat Solder Tip | 3/32" (2.4 mm) |
| YAKS223 | Single Flat Solder Tip | 1/8" (3.2 mm) |
| YAKS224 | Single Flat Solder Tip | 3/16" (4.8 mm) |
| YAKS225 | Double Flat Solder Tip | 1/32" (1.0 mm) |
| YAKS226 | Double Flat Solder Tip | 3/32" (2.4 mm) |
| YAKS227 | Double Flat Solder Tip | 1/8" (3.2 mm) |
| YAKS228 | Double Flat Solder Tip | 3/16" (4.8 mm) |
| YAKS229 | Hot Air Blower Tip | — |
| YAKS2210 | Hot Knife Tip | — |
| YAKS2211 | Hot Air Blower Deflector | — |
| YAKS2212 | Flame Tip | — |
| YAKS2213 | Hot Air Blower and Deflector Tip | — |
| YAKS2214 | Instruction Sheet | — |
| YAKS2215 | Carrying Case | — |




YAKS300

## Butane Soldering Iron Kit

**YAKS300 Butane Soldering Iron Kit (50 W)**

A robust economy model featuring an ultrasonically welded gas tank for better strength. Butane compatible plastics helps prevent gas from leaking.

- 12-month replacement warranty
- Easy to light with added flint ignitor in the cap
- 50 W equivalent with a 30-minute continuous use run time
- Safety cutoff switch when cap is replaced
- Cordless butane powered; no cords or wires
- Kit includes four tips, stand and cleaning sponge

**YAS300 Butane Soldering Iron**

## YAKS300 Soldering Tips

| Stock No. | Description | Size, inches (mm) |
|---|---|---|
| YAKS3001 | Heater Element | — |
| YAKS3002 | Fine Solder Tip | 1/8" (3.2 mm) |
| YAKS3003 | Chisel Solder Tip | 1/8" (3.2 mm) |
| YAKS3004 | Double Flat Solder Tip | 3/16" (4.8 mm) |
| YAKS3005 | Hot Knife Tip | — |
| YAK10-8 | Hot Iron Stand | — |
| YAK10-9 | Metal Sponge Cup | — |
| YAK10-10 | Storage Case | — |

## Kit Comparison YAKS300, YAKS32A & YAKS22A

| Products | YAKS300 | YAKS32A | YAKS22A |
|---|---|---|---|
| Fine Tip | • | | |
| 1.0 DF Tip | | • | • |
| 2.4 DF Tip | • | • | • |
| 3.2 DF Tip | | • | • |
| 4.8 mm Tip | | • | • |
| Hot Knife Tip | • | • | • |
| Hot Blow & Deflector | | • | • |
| Torch | | • | • |
| Cleaning Sponge & Tray | • | • | • |
| Kit Box | • | • | • |
| Flint Ignitor cap | • | | |
| Cap | | • | • |
| Push Button Igniter | | • | • |
| Max. Power (watts equivalent) | 50 | 125 | 75 |
| Adjustable Temperature Control | • | • | • |
| Run time, mins | 30 | 90 | 60 |
| Tips Included | 4 | 8 | 8 |
| ESD Safe | • | • | • |

**⚠WARNING**



- Do not store butane at temperature over 120 °F
- Transport and dispose of butane in accordance with all regulations
- Read safety precautions on pages W1 to W4

# SOLDERING



R450B

**R450B Soldering Gun Kit**
- Three different tip and element configurations give this tool great flexibility from delicate soldering to larger, heavy duty applications, such as automotive maintenance
- Slim, single post design ideal for confined work areas
- Fast heat-up
- Built-in spotlight to illuminate the work area
- Integral tool stand keeps heated part of the tool out of harm's way
- Polarized plug and professional quality
- Packed in a plastic storage case
- UL® listed



R460B

**R460B Heavy Duty Soldering Gun Kit (Blue-Point®)**
- Heavy duty soldering gun for those big jobs, quick and efficient
- Built-in spotlight illuminates the work area
- Balanced tool design is more comfortable and easier to use
- Tip heats up in less than ten seconds
- Quick change type tips can be easily changed within 30 seconds
- Integral tool stand keeps heated part of the tool from damaging surrounding areas
- Packed in a plastic storage case
- *UL* listed



R490

**R490 Industrial Soldering Gun *(Blue-Point)***
- Dual wattage elements: high wattage heats tip in seconds, lower wattage maintains rated tip temperature
- Effective tip temperature of 1,000 °F or more for heavy duty, sustaining soldering
- Trigger activated control is convenient, easy to use and provides instant response
- Built-in worklight illuminates the work area
- Plug-in tip and element (TE) assemblies are plug in units that can be changed within a minute
- Integral tool stand prevents heated part of tool from damaging surrounding areas
- Plastic storage case
- *UL* listed

**R490400 Replacement Soldering Tip**
**R490500 Optional Soldering Tip**

## Irons



R40B

**R40B Industrial Soldering Kit**
- 40 W solder iron is ideal for large solder jobs like battery terminal cables or radiator repair. Threaded tips offer improved heat exchange compared to set screw types
- Features a heat deflection shield, 4 3/4" long handle, 8 1/2" overall length and 8' power cord
- Includes pointed, chisel and fine tips plus 1/2 oz of lead-free rosin core solder and holder
- *UL* listed
- 120V, 60 Hz



R25A

**R25A Industrial Soldering Kit**
- Lightweight 25 W pencil style kit for fine soldering applications
- Threaded tips offer improved heat exchange
- Features a heat deflection shield, 4 3/4" long handle, 8 1/2" overall length and 8' power cord
- Includes pointed, chisel and fine tips plus 1/2 oz of lead-free rosin core solder and holder
- *UL* listed
- 120V, 60 Hz



R60B

## Soldering Stations

**R60B (60 W) Soldering Station *(Blue-Point)***
- Includes low voltage, temperature-controlled soldering pencil that features a heat shield, a non-burnable silicone rubber cord and a plug-in tip design
- Transformer powered
- 700 °F; 1/16" screwdriver tip included
- 120V, 60 Hz
- Optional 700 °F tips for R60B or RH60B

## Optional Tips

| Item | Description |
|---|---|
| R60A7 | Screwdriver 1/16" Tip (700 °F) |
| R60A8A | Screwdriver 1/16" Tip (800 °F) |
| R60B7 | Screwdriver 3/32" Tip (700 °F) |
| R60B8 | Screwdriver 3/32" Tip (800 °F) |
| R60D7 | Screwdriver 3/16" Tip (700 °F) |
| R60O7 | Long Conical 1/32" (700 °F) |
| R60R7 | Narrow Screwdriver 1/16" Tip (700 °F) |
| R60R8 | Narrow Screwdriver 1/16" Tip (800 °F) |
| R60S7 | Long Conical 1/64" Tip (700 °F) |



TORCH6



TORCH2A



TORCH3A



TORCH4

## Miniature Butane Soldering Torches

**TORCH6 Butane Torch**
- Features an ultrasonically welded gas tank for better strength, safety and reliability
- Made with butane compatible plastics, prevents gas leaking
- 18-month replacement warranty
- Robust burner specifically designed to protect the ceramic greatly extends the life of the torch
- Twin spark ignition, lights first time every time
- Massive 2.797 Btu/h flame power
- Adjustable flame length up to 4 1/2"
- Temperature up to 2,462 °F (1,350 °C)
- Almost four times more powerful than any other butane micro torch

**TORCH2A Turbo Torch (Blue-Point®)**
- Child-resistant Piezo Ignition System
- Instant 1,300 °C/2,400 °F Micro Flame
- Pocket size
- Internal fuel tank
- 20 minutes of continuous use per refilling

**TORCH3A Professional Torch *(Blue-Point)***
- Child-resistant Piezo Ignition System
- Instant 1,300 °C/2,400 °F pencil point flame
- Adjustable gas control valve
- Safety continuous-use lock
- 20 minutes of continuous use per refilling

**TORCH4 Butane Blow Torch *(Blue-Point)***
- Ultrasonically welded gas tank for better strength and safety
- Butane compatible plastics prevents gas leaks
- Powerful wind resistant flame with 751 Btu/h
- Temperature up to 2,462 °F (1,350 °C)
- All-in-one easy-to-use on/off ignition switch
- Adjustable flame length up to 3 1/2"
- Run time is a continuous 40 minutes plus
- 220 W equivalent

# SOLDERING ACCESSORIES

## Butane Fuel Cans

**BUTANE15CSA Butane Fuel Cans (Case of 24)**
- Triple filtered butane fuel for use with TORCH2A, TORCH3A, TORCH4 and TORCH6 mini torches, YAKS300/YAKS32A/ YAKS22A soldering irons and GLUEGUN3/GLUEGUN4KT glue guns
- Universal filling tip can be used with most refillable butane products as well
- Case of (24) 1.5 oz cans



BUTANE15CSA

## Solder Suckers

**YA477A Solder Sucker**
- Low static unit designed for desoldering electrostatic discharge sensitive components
- Set plunger and release creates a vacuum that draws up solder

**YA477-1 Replacement Tip**
Replacement tip for YA477A



YA477A



YA476A

**YA476A Small Solder Sucker**
- Smaller version of YA477A above
- Includes self-cleaning feature

**YA476-1A Replacement Tip**
Replacement tip for YA476A

## Tweezers *(Blue-Point)*

**TZK5 Tweezers Kit**
Includes five tweezers in a vinyl zipper pouch.
- All stainless-steel construction
- Pointed tweezers with plain ends, 4 3/8" long
- Self-closing tweezers with plain ends, 4 1/2" long
- Self-closing, weighted solder tweezers with serrated blunt end, 7" long
- Sharp point utility tweezers with bent plain ends, 7" long
- Sharp point utility tweezers with plain ends, 7" long



TZK5

**TZK7 Tweezers Kit**
Includes seven tweezers in a black vinyl zipper pouch.
- All stainless-steel construction
- Pointed tweezers, 4 3/8" long
- Curved head utility tweezers, 6 3/4" long
- Self-closing, heat-resistant tweezers, 6" long
- Sharp pointed utility tweezers, 7" long
- Side locking tweezers, 6" long
- Spade point tweezers, 4 3/8" long
- Weighted solder tweezers, 6" long



TZK7

## Miniature Tool/Pliers *(Blue-Point)*

Stainless-steel, three notch ratcheting locking mechanisms lock onto small objects with varying degrees of pressure. 1/16" tips; 1 3/8" long jaws.

**MPC7A Mini-Pliers**
Curved, serrated jaws. 7" long

**MPC10A Mini-Pliers**
Curved, serrated jaws. 10" long

**MPS7A Mini-Pliers**
Straight, serrated jaws. 7" long

**MPS10A Mini-Pliers**
Straight, serrated jaws. 10" long

**MPK4A Mini-Pliers Set**
MPC7A and MPC10A plus MPS7A and MPS10A (4pc) in black zipper pouch



MPC7A



MPS7A



MPK4A

**⚠WARNING**

- Do not store butane at temperature over 120 °F
- Transport and dispose of butane in accordance with all regulations
- Read safety precautions on pages W1 to W4

# WELDING ACCESSORIES




YA4601



YA4602




YA4603




YA4604



YA4606




YA4607



YA4608



YA4609

## Welding Helmets (Auto Darkening)

Auto darkening welding helmets are triggered automatically by UV light sources. Some models have adjustable sensitivity for various light conditions and an adjustable delay setting to maintain dark state for extended periods of time. Fixed shade helmets offer a fixed #10 shade triggered automatically by UV light. Clear shade provides operator visibility to line up work prior to welding.

| Specifications | YA4601† | YA4602*† | YA4603*† | YA4604† | YA4606† | YA4607 | YA4608 | YA4609 |
|---|---|---|---|---|---|---|---|---|
| Shade | #9–13 | #9–13 | #10 | #9–13 | #9–13 | #6–13 | Adjustable | Adjustable w/ Grind Lockout |
| Sensitivity | Adjustable | Adjustable | Fixed | Adjustable | Adjustable | Adjustable | Adjustable | Adjustable |
| Delay | Adjustable | Fixed | Fixed | Adjustable | Adjustable | Adjustable | Adjustable | Adjustable |
| Clear Shade | #3.5 | #3.5 | #3 | #3.5 | #3.5 | #3.5 | — | — |
| Viewing Area (in) | 3.81 x 2.40 | 3.81 x 1.88 | 3.81 x 1.38 | 3.81 x 2.40 | 3.74 x 3.35 | 3.74 x 3.35 | 3.82 x 2.44 | 3.74 x 3.35 |
| Viewing Area (square in) | 9.14 | 7.16 | 5.26 | 9.14 | 12.53 | 12.53 | 9.32 | 12.53 |
| Number of Sensors | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Delay Time (s) | 0.2–1.0 | 0.1–1.0 | 0.25–0.045 | 0.1–1.0 | 0.1–1.0 | 0.1–1.0 | — | — |
| Switching Speed (ms) | 0.04 | 0.04 | 0.04 | 0.04 | 0.4 | 0.4 | — | — |
| Power Supply | Solar-Lithium | Solar | Solar | Solar-Lithium | Solar-Lithium | Solar-Lithium | Solar-Lithium | Solar-Lithium |
| Applicable Standards | ANSI®, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN, CSA, AS/NZS | *ANSI*, CE, DIN, EN |
| Opt. Magnifying Lens 1.5x/2.0x | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT | YA4600MAGKT |
| Warranty | 2 Years | 1 Year | 1 Year | 2 Years | 2 Years | 2 Years | 3 Years | 2 Years |

*Blue-Point®
†CE



EFPGREENSKL



EFPBLACKICE



EFP2CAMO



EFP2MORBID



EFP2PREDATOR

## Welding Helmets (Auto Darkening) Con't

| Specifications | EFPGREENSKL | EFPBLACKICE | EFP2CAMO | EFP2MORBID | EFP2PREDATOR |
|---|---|---|---|---|---|
| Shade | #9–13 | #9–13 | #9–13 | #9–13 | #9–13 |
| Sensitivity | Yes | Yes | Yes | Yes | Yes |
| Delay | Yes | Yes | Yes | Yes | Yes |
| Clear Shade | 4 | 4 | 4 | 4 | 4 |
| Viewing Area (in) | 3.62 x 1.42 | 3.62 x 1.42 | 3.82 x 1.85 | 3.82 x 1.85 | 3.82 x 1.85 |
| Viewing Area (square in) | 23 | 23 | 40 | 40 | 40 |
| Number of Sensors | 2 | 2 | 4 | 4 | 4 |
| Delay Time (s) | Adjustable | Adjustable | Adjustable | Adjustable | Adjustable |
| Switching Speed (ms) | .3 | .3 | .08 | .08 | .08 |
| Power Supply | CR2450 Replaceable | CR2450 Replaceable | Lithium Ion (Auto On/Off) | Lithium Ion (Auto On/Off) | Lithium Ion (Auto On/Off) |
| Applicable Standards | CE, CSA, ANSI® | CE, CSA, *ANSI* | CE, CSA, *ANSI* | CE, CSA, *ANSI* | CE, CSA, *ANSI* |
| Opt. Magnifying Lens | 1.0, 1.5, 2.0 | 1.0, 1.5, 2.0 | 1.0, 1.5, 2.0 | 1.0, 1.5, 2.0 | 1.0, 1.5, 2.0 |
| Warranty | 2 Years (ADF) 1 Year (all others) | 2 Years (ADF) 1 Year (all others) | 2 Years (ADF) 1 Year (all others) | 2 Years (ADF) 1 Year (all others) | 2 Years (ADF) 1 Year (all others) |



EFPBONEHEDB



EFPSTRIKERB



EFPJURASSIC



EFPOLEGLORY



EFPHANNIBALB



EFPNITESTLKRB

## Welding Helmets (Fixed Shade)

Fixed shade welding helmets offer shade #10 protection.
Hinged mask can be adjusted for hands-free drop down.

| Specifications | EFPBONEHEDB | EFPSTRIKERB | EFPJURASSIC | EFPOLEGLORY | EFPHANNIBALB | EFPNSTLKRB |
|---|---|---|---|---|---|---|
| Lens Style | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral |
| Shade | #10 | #10 | #10 | #10 | #10 | #10 |
| Viewing Area (in) | — | — | — | — | 4.25 x 2.0 | — |
| Viewing Area (square in) | 35.6 | 35.6 | 35.6 | 35.6 | 8.5 | 35.6 |
| Applicable Standards | *ANSI* | *ANSI* | *ANSI* | *ANSI* | *ANSI* | *ANSI* |
| Lens (included) | EFPCLLENSREP | EFPCLLENSREP | EFPCLLENSREP | EFPCLLENSREP | EFP10WLDLENS, EFPCLLENSREP | EFPCLLENSREP |
| Opt. Magnifying Lens 1.5x | — | — | — | — | — | — |
| Opt. Magnifying Lens 2.0x | — | — | — | — | — | — |
| Opt. Auto Darkening Lens | EFPADFLENSA | EFPADFLENSA | EFPADFLENSA | EFPADFLENSA | EFPADFLENSA | EFPADFLENSA |
| Warranty | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year | 1 Year |

†CE

**⚠WARNING**

- Wear welding helmet and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

# WELDING ACCESSORIES



KRBC60T



MIGCARTA

## Welding Carts

**KRBC60T Welding Cart**

- 3/8" plate steel work surface
- Four dual-purpose mounting locations serve as accessory mount and wand holder
- HD textured black matte finish
- Large locking compartment stores two welders
- Slots-n-dots™ rear panel accommodates many accessories
- Three drawers with liners and high quality roller bearing slides
- Three large cord hooks included – extra hook kits available
- 50 3/4" W x 25 3/4" D x 37 1/2" H
- 1,000 lb load capacity

**MIGCARTA Welder and Plasma Cutter Cart (Blue-Point®)**

- 21" L x 14.5" W top tray for storage of MIG welders and plasma cutters
- Includes multiposition cylinder bracket for various bottle sizes
- Includes two hooks for cable storage



YA247



EFPADFLENSA

**YA247 Welder's Marking Set**

**Includes:**

- YA247-2 Soapstone marker for making temporary markings
- YA247 Scribe with a sharp, tough carbide tip for making permanent markings
- Replaceable soapstone
- Each tool has a tough aluminum barrel
- Soapstone marker includes built-in sharpener
- Convenient storage pouch

**YA247-1 Scribe**

**YA247-2 Soapstone Marker**

## EFP Series Welding Lenses

Optional auto darkening lens available for all EFP series helmets

The World's first and ONLY unobstructed ADF integrated, 180° degree peripheral vision ADF welding lens. Has a military grade anti-scratch coating to help prevent scratching. ADF Lens is easily replaced.
Viewing Area: 4.25" L x 2.0" W
Power Supply: Solar Lithium Combo
One-Year Warranty

**EFP3WLDLENS #3 Welding Lens**
**EFP5WLDLENS #5 Welding Lens**
**EFP8WLDLENS #8 Welding Lens**
**EFP10WLDLENS #10 Welding Lens**
**EFP12WLDLENS #12 Welding Lens**
**EFPADFLENSA Auto Darkening Lens**



YA4600MAGKT

## Welding Lenses

**YA4600MAGKT Magnifying Lens Kit**

- Comes complete with 1.5x and 2.0x magnifying lenses and lens holder
- Optional accessory provides additional magnification for YA4601, YA4602, YA4603, YA4604 and YA4606 welding helmets only
- CE



WCH3

## Welding Hammer

**WCH3 Welder's Chipping Hammer**

- Features pick end and 3/4" chisel head end
- Heat treated high alloy steel for long life
- Overall length is 11"
- Head length is 7 1/2"

# WELDING CLAMPS

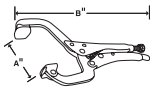


CL402A

## C-Clamps

- Equipped with antis-patter spindles, precision cut from hardened steel
- Forged frames have extra deep throats for additional strength and work capacity
- Grooved anvil, in combination with a serrated pad, provides nonslip grip on various metal surfaces
- Spindles, handles and pads are copper plated to avoid collecting spatter

| Stock No. | Capacity, inches | Throat Depth, inches |
|---|---|---|
| CL402A | 0–2 | 2 |
| CL403A | 0–3 | 2 1/2 |
| CL404A | 0–4 | 2 7/8 |
| CL406A | 0–6 | 3 5/8 |
| CL408A | 0–8 | 4 1/2 |
| CL410A | 2–10 | 5 5/8 |
| CL412A | 2–12 | 5 3/4 |






## Large Jaw

**VGP12212**

- Multipurpose tool with larger jaw capacity for general maintenance and screw-in oil filter removal

| Stock No. | A inch (mm) | B inch (mm) |
|---|---|---|
| VGP12212 | 3 15/16 (100) | 12 (300) |



**VGP12412**

## Locking C-Clamps/Standard Tip

- Quick and easy handling clamps for auto body and metal fabrication applications

| Stock No. | A inch (mm) | B inch (mm) |
|---|---|---|
| VGP12406 | 2 5/16 (60) | 6 (152.4) |
| VGP12412 | 3 15/16 (100) | 12 (304.7) |
| VGP12418 | 10 1/4 (260) | 18 (457.2) |
| VGP12424 | 15 11/16 (400) | 24 (609.6) |



**VGP22418**

## Locking C-Clamps/Swivel Tip

| Stock No. | A inch (mm) | B inch (mm) |
|---|---|---|
| VGP22406 | 1 5/16 (50) | 6 (152.4) |
| VGP22412 | 3 15/16 (100) | 12 (304.7) |
| VGP22418 | 9 7/16 (240) | 18 (457.2) |
| VGP22424 | 15 11/16 (400) | 24 (609.6) |



**VGP12509**

**VGP12509 Locking U-Clamps**

- U-shaped jaws allow access and visibility when welding



**VGP12808**

**VGP12808 Locking Clamps/Sheet Metal**

- Wide jaws allow clamping, bending, forming and crimping of sheet metal without gripping effort

## Auto Body/Welding Sets

**VGP104 Autobody/Welding Locking Pliers Set**

- Includes VGP23312 self-leveling jaws pliers, VGP13709 plugweld pliers plus VGP14412 and VGP12406 c-clamp pliers (4pc) in VGP1041 kit bag



## High Visibility C-Clamps

**CL408VIS**

- Similar to CL series C-clamps
- High visibility models conform to OSHA safety color standard for physical hazards regulation #19110.144
- 3/4" spindle diameter

| Stock No. | Capacity, inches | Throat Depth, inches |
|---|---|---|
| CL404VIS | 0–4 1/2 | 3 1/4 |
| CL406VIS | 0–6 1/16 | 3 5/8 |
| CL408VIS | 0-–8 1/4 | 5 |



**VGP13420**

**VGP13420 Locking C-Clamps/Long Reach**

- Wide profile with perforated jaws allows clamping around large objects with uniform tension distribution



**VGP14412**

**VGP14412 Locking C-Clamps/Aluminum Alloy**

- Lightweight aluminum jaw will not bend or distort body panels
- Welding pellets will not adhere to jaw



**VGP23312**

**VGP23312 Locking Clamps/Self Leveling Jaws**

- Swivel pads and narrow jaw profile firmly grip tapered surfaces in areas where c-clamps cannot fit



**VGP13709**

**VGP13709 Locking Pliers/Plugweld**

- Copper alloy knurled pad prevents burn-thru when plug welding thin sheet metal



**MG2000K**

## Welding Clamps/Miniature

- Micro size for optimal access into confined spaces
- Aluminum alloy body ensures robustness with minimal weight while resisting splatter and corrosion
- Design permits exertion of 1/2 ton of force without deformation
- Perforated jaw allows attachment to fixtures and connection of ground cables
- One-handed “no pinch” clamping and release

**MG2000K Micro Grip Locking Clamp Set**

- Includes four micro grip clamps



WARNING
• Wear welding helmet and protective clothing while welding and cutting
• Do not allow bystanders while welding and cutting
• Read safety precautions on pages W1 to W4

## SPOT WELDERS



YA22300A

**YA22300A Standard Duty Spot Welder**
- Produces spot welds for collision repair
- Squeeze type action produces factory style welds
- Optional accessories can increase welding capability

**YA223001 Welding Tip**
- Long spot welding tip for YA22300A

**YA223002 Welding Tip**
- Short spot welding tip for YA22300A

**YA223003 Welding Tip**
- Replacement drip rail welding tip for the YA223004 welding cable assembly

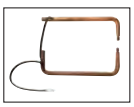
**YA223004A Welding Cable Assembly**
- Accessory welding cable assembly for the YA22300A
- Allows welding from a single side such as door skins and other applications

**YA223005A Dent Puller Kit**
- Fast, effective dent repair without drilling holes or using draw pins

**YA223006 Welding Tip**
- Replacement welding tip for the YA223004 welding cable assembly

**YA223009 Welding Tip**
- Drip rail spot welding tip for YA22300A

**YA22357 Trigger Switch**
- Replacement switch



Long Reach Electrode



Wheelhouse Electrode




YA22355

**YA22355 Heavy Duty Liquid Cooled Spot Welder**
- Designed to produce factory type spot welds in collision repair
- Squeeze type action produces factory style welds
- Pneumatic gun welds through primers, sealers and adhesives
- Features coolant circulation throughout the welding tips for consistent weld penetration
- Included accessories: 14" long reach electrode and wheelhouse electrode

**YA26143 Long Reach Wheelhouse Replacement Tips**

**YA26144 Standard Wheelhouse Replacement Tips**

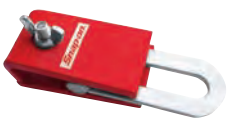
**YA2097335 J-Shaped Wheelhouse Replacement Tips**

| Specifications | Primary Voltage | Line Fuse | Maximum Output | Maximum Thickness | Coated Metal Capability | Kva Rating | Shipping Weight, lb |
|---|---|---|---|---|---|---|---|
| YA22355 | 208/230V AC | 60A | 6000 Amps | 3 pcs. 20 ga. | Yes | 6 | 300 |
| YA22300A | 208/230V AC | 50A | 2800 Amps | 2 pcs. 20 ga. | No | 4 | 120 |

## DENT PULLERS/ACCESSORIES



YA22345KT



YA223453

### Stud Gun Dent Pullers

**YA22345KT Stud Gun Dent Puller Kit**
- Kit includes stud gun, welding tips, slide hammer and T-puller
- Used to pull dents by welding pins to work piece
- Stud gun uses minimal heat to reduce burn through

**YA22345 Stud Gun**

**YA223451 Draw Pins (2 mm)**
- Soft for easy flexing and grinding
- Delivers 500 lb pull
- Pack of 500

**YA223452 Draw Pins (2.5 mm)**
- Soft for easy flexing and grinding
- Delivers 500 lb pull
- Pack of 500

**YA223454 T-Puller**
- Compact for small damage repair on lightweight metal
- Helps reduce overpull

**YA223453 Magna Clamp**
- Features wing nut and is self- tightening
- Locks onto draw pins for pulling dents

**YA223455 Slide Hammer**
- Polished steel bar with rubber handle ensures positive pulling action

**YA223456 Shrinking Electrode**
- Provides fast heat

**YA223457 Pin Electrode**
- Holds all standard size pins

**YA223458 Trim Rivets**
- Used to repair metal trim strips
- Weld onto panel and provide permanent retention to trim strip
- Pack of 500

**YA223459 Rivet Electrode**
- For use with YA223458 trim rivets
- Retains trim rivet for welding



YA22375



YA22350C

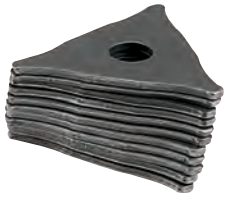
## Portable Dent Pulling System

- Easily pulls dents on roofs, hoods and side panels
- Star tip design eliminates the need to drill holes or cut pin heads
- Built-in slide hammer speeds up the pulling process (YAH22350C only)

| Specifications | Type | Primary Voltage | Line Fuse | Power Input Cable, ft (m) | Power Lead Length, ft | Ground Cable Length, ft | Shipping Weight, lb |
|---|---|---|---|---|---|---|---|
| YA22350C | Star Tip | 120V AC, 50/60 Hz | 30A | 25 (7.6) | 7 | 7 | 64 |
| YA22375 | T-handle | 120V AC, 50/60 Hz | 30A | 25 (7.6) | 10 | 7 | 64 |
| YAH22350C | Star Tip | 208/230V AC, 50/60 Hz | 30A | 25 (7.6) | 7 | 7 | 64 |
| YAH22375 | T-handle | 208/230V AC, 50/60 Hz | 30A | 25 (7.6) | 7 | 7 | 64 |



YA2235CART



YA2355



YA2352



YA2358

## Portable Dent Puller Accessories

**YA2235CART Accessory Cart**
Adds additional height and portability

**YA2355 Star Tips**
Replacement tips (10 ea.) for the YA22350C, YAH22350C and YA223005

**YA2351 Welding Tip**
Optional long stud welding tip

**YA2352 Welding Tip**
Optional molding rivet welding tip

**YA2353 Heating Tip**
Replacement heat shrink heating tip

**YA2358 Magnetic Base**
Replacement magnetic ground clamp

**YA22357 Trigger Switch**
Replacement switch

**YA223008 Pry Bar**
Replacement pry bar for YA22375 and AH22375, optional for YA22350C and YAH22350C

## Quick Claw Dent Puller Set

**YA22351 Quick Claw Dent Pulling Set**

- Used with YA22350C, YAH22350C, YA22375 and YAH22375
- Used to establish multiple pull points along dents
- Independent finger action of claw varies the pulling force at multiple points
- Can pull by hand, slide hammer or chain
- Comes with claw, two tips and 24 wires

**YA22352 Claw Handle**
Four-finger "claw" pulling handle. One included in set

**YA22353 Welder Tips**
Welding tips for YA22354 welding wires. Two included in set

**YA22354 Weld Wires**
1/2 lb welding wires. 24 included in set



YA22351



**⚠WARNING**

- Wear welding helmet and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read saftey precautions on pages W1 to W4

# KEEP YOUR GARAGE RUNNING LIKE A WELL-OILED MACHINE.

Be prepared for any vehicle that comes your way. Snap-on provides the tools and equipment you need to work efficiently and always get the job done like a pro. Whether you're adding services or upgrading equipment, we've got the high-quality tools and equipment you need.

Service your customers wide array of needs with *Snap-on* Tire Changers and Wheel Balancers. Add the Tire Pressure Monitoring tool and related accessories to the mix to better service your customers' critical systems.

With quality-built service tools like torque sticks and lug nut sockets, any tech can handle the job with speed and accuracy. And the Snap-on® Ball Joint Press will allow you to remove and install ball joints with ease, so you're not wasting any time.



Snap-on® Wheel Balancers use a patented Virtual Plane Measurement system to achieve accuracy and repeatability. A variety of weight placement options such as Static, Dynamic, five ALU modes, ALU-S, hidden spoke and match mounting optimization modes provide the versatility for these balancers in a variety of applications on passenger cars, light trucks and commercial vehicles.

## Wheel Balancers



EEWB330A



EEWB331A



EEWB332A

- Features static and dynamic balancing modes
- Five ALU modes to place weights in proper location on multiple wheel configurations
- Input of rim distance and diameter by SAPE arm for accelerated setup time
- ALU-S modes allows exact weight placement on rim when using tape weights
- Weight minimization and balancing optimization modes for reducing the overall weight usage
- Spoke mode to hide weights behind spokes
- Stadium weight tray is curved to access weight pockets easily
- Quick clamp speed nut with release to reduce removal time
- Multiple operator feature allows several users to quickly recall settings
- Sonar sensor automatically calculates rim width (EEWB332A)

| Specifications | EEWB330A | EEWB331A | EEWB332A |
|---|---|---|---|
| Operation | Hand spin | Motorized | Motorized |
| Accuracy, oz (grams) | 0.10 (2) | 0.10 (2) | 0.10 (2) |
| Rim Diameter, inches (mm) | 8–30 (203–762) | 8–30 (203–762) | 8–30 (203–762) |
| Rim Width, inches (mm) | 3–20 (76–508) | 3–20 (76–508) | 3–20 (76–508) |
| Maximum Tire Diameter, inches (mm) | 42 (1067) | 42 (1067) | 42 (1067) |
| Maximum Wheel Width, inches (mm) | 20 (508) | 20 (508) | 20 (508) |
| Maximum Tire/Wheel Weight, lb (kg) | 120 (54) | 120 (54) | 154 (69) |
| Shaft Speed at Calculation, RPM | 100 | 200 | 200 |
| Cycle Time, seconds | 6–10 | 6–8 | 6–8 |
| Electrical Requirements | 115V AC, 1 phase, 60 Hz, 2A | 115V AC, 1 phase, 60 Hz, 6A | 115V AC, 1 phase, 60 Hz, 6A |
| Shipping Weight, lb (kg) | 224 (102) | 280 (127) | 366 (166) |
| Required Floor Space | 52" W x 48" D | 60" W x 48" D | 60" W x 48" D |

**EEWB330A Hand Spin Wheel Balancer**
- Small footprint handspin wheel balancer with features of most high-end machines

**EEWB331A Motorized Wheel Balancer**
- Small footprint motorized wheel balancer with features of most high-end machines

**EEWB332A Motorized Wheel Balancer with Raised Display**
- Medium footprint motorized wheel balancer with a high-end feature set with faster throughput times

## Standard Accessories – 40 mm Shaft

| Stock No. | Description | Stock No. | Description |
|---|---|---|---|
| EAM0003J05A | EAM0003D23A Cone, 40–76mm/1.6"–3.0" | EAC0058D15A | Rubber Protector |
| EAM0003J06A | EAM0005D24A Cone, 71–99mm/2.8"–3.9" | EAM0021D90A | Stub Shaft 40 mm |
| EAM0003J07A | EAM0005D25A Cone, 96–114mm/3.8"–4.5" | WWPR13A | Wheel Weight Pliers |
| EAM0003J08A | EAM0003J69A Cone, 87–137mm/3.4"–5.4" | EAA0247G21A | Rim Width Caliper |
| EAA0263G66A | Quick Nut 40 mm | EAA0346J75A | Optional 1" Extension Flange |
| EAC0058D08A | Pressure Disk | EAA0346J76A | Optional 2" Extension Flange |

TECHNICAL SUPPORT 1-800-225-5786



⚠WARNING
• Read and follow all safety messages and instructions
• Read safety precautions on pages W1 to W4

# WHEEL BALANCING: MOTORCYCLE WHEEL BALANCER AND TIRE CHANGER




EEWB333A




EEWH310B

## Hand Spin Wheel Balancer

| Specifications | EEWB333A |
|---|---|
| Accuracy, oz | 0.25 |
| Cycle Time (seconds) | 6–10 |
| Shaft Measuring Speed | 100 |
| Shaft Capacity, lb | 70 |
| Rim Diameter Range, inches | 8–30 |
| Rim Width Range, inches | 3–20 |
| Tire Diameter, inches | 42 |
| Rim Width Range, inches | 3–20 |
| Electrical Requirements | 115V AC, 1ph, 60Hz, 2A |
| Machine Weight, lb (kg) | 174 |

### EEWB333A Motorcycle Wheel Balancer

- Quickly, easily and accurately balance motorcycle tire and wheel assemblies
- Handspin operation features static and dynamic balancing modes
- Features five ALU modes to place weights in proper location on multiple wheel configurations
- Split weight mode to hide weights behind spokes
- Stadium weight tray is curved to access keypad and weight pockets easily
- Multiple operator feature allows several users to quickly recall settings
- Virtual plane imaging technology for unsurpassed accuracy

## Motorcycle Tire Changer

| Stock No. | EEWH310B |
|---|---|
| Outside Clamping Range, inches | 8–21† |
| Inside Clamping Range, inches | 12–20 |
| Rim Width, max. inches | 13† |
| Tire Diameter, max. inches | 40 |
| Tire Width, max. inches | 10/13* |
| Bead Breaking Width, max. inches | 13 |
| Bead Breaking Force, lb @ 150 PSI | 3,300 |
| Air Requirement, PSI | 140–170 PSI @ 8.5 CFM |
| Voltage Requirements | 120V 60Hz, 20A |
| Net Weight, lb | 306 |
| Overall Dimensions, inches | 67 x 30 x 28 |

†10"–18" car, 8"–15" scooter, 15"–21" motorcycle
*13" car, 10" motorcycle

TECHNICAL SUPPORT 1-800-225-5786

### EEWH310B Motorcycle Tire Changer

- Configured to change tires on most motorcycle wheels
- Raised clamping jaws to allow for hub clearance
- Optional safety restraint arm EAA0270J11A provides additional tire/wheel retention when seating beads

### EAA0255J33A 40 mm Shaft Upgrade Kit

- Optional kit contains cones, 40 mm shaft, quick nut and pressure disk to convert the EEWB333A to balance automotive tire and wheel assemblies

## Balancer Pin Plate Sets

- Pin plate kits are a system of plates and studs to center and load the wheel at the lug-stud holds
- Mirrors mounting wheel to the vehicle's hub and minimizes imbalance errors
- Avoids damage to plastic-clad wheels by avoiding contact with the outer surface of the wheel face
- Applies even pressure to lug-stud surfaces and locates the wheel on center of balancer shaft
- Avoids misalignment by improper and inconsistent mounting on the balancer
- When mounted, the plate and stud system places an even clamping force on the rim and centers the assembly on the balancer

| Stock No. | Description | EEWB3-1A |
|---|---|---|
| EEWB3-11A | Adaptor Plate #1 | • |
| EEWB3-120A | Adaptor Plate #2 | • |
| EEWB3-13A | Adaptor Plate #3 | • |
| EEWB3-140A | Adaptor Plate #4 | • |
| EEWB3-02A | Style B Stud | 8X |
| EEWB3-03A | Style C Stud | 6X |
| EEWB3-050A | Style E Stud | 8X |

TECHNICAL SUPPORT 1-888-621-8767



**EEWB3-1A, EEWB3-4, EAK0309J20A**

**EEWB3-055 Extra Long E-Stud**
- Additional length for E style custom wheels

**EEWB3-5 Balancer Flange Spacer**
- Provides added clearance for larger cones and collets
- Use with EEWB3-4 collet set

**EEWB3-4 Collet Set, 9pc**
- Precision-machined and sized collets fit perfectly into the rear pilot center of plastic-clad wheels
- Collets are shallow in length, not to interfere with the plastic tabs
- Recommended to be used in conjunction with a pin plate on the wheel's outer side

**EAK0309J20A Storage Stand**
Storage stand for the plates and pins in the EEWB3-1A.

**EEWB3-6 Balancer Plate Pin Kit**
- Fits a variety of trucks such as Ford® F350®, F450® and F550® as well as GM®, GMC®, Isuzu®, Mitsubishi® Fuso® and Dodge® Sprinter®
- Some applications may require EEWB3-11A Adaptor Plate #1 (sold separately)

**EAA0255J33A 40 mm Shaft Upgrade Kit**
- Converts older Snap-on® balancers with 28.5 mm shaft to 40 mm (EEWB304A and B, EEWB305A and B)

**EEWB3-75 Truck Step Cone Kit**
- Contains two cones and back-up disk for trucks
- Cone #1 is 6.190"-6.972" (157–77 mm)
- Cone #2 is 5.059"-5.683" (128–143 mm)
- Use only on vehicles that center the wheel on the hub and not studs




**KRD401A**



**WWPR13A**



**WWH13LG**



**WWH13SM**

## Wheel Balancing Accessories

**KRD401A Wheel Weight Cabinet**
- Storage for a wide assortment of wheel weights
- 36 compartments, each measuring 3 7/8" x 3 7/8"

**WWPR13A Right Angle Wheel Weight Pliers**
- Easily removes and replaces wheel weights as well as cutting and crimping
- Made of heat-strengthened steel
- Comfortable vinyl handle grips and replaceable hard plastic hammer tip

**WWPR13-3 Replacement Hammer Tip**
- For WWPR13A

**WWH13LG Wheel Weight Hammer (Blue-Point®)**
- Designed for use on steel and zinc clip-on wheel weights
- Soft hammer face to avoid scratches and dings
- Solid Nuplaglas® handle resists most shop chemicals and has a nonslip grip
- Replaceable cold rolled steel hook assembly to ensure long service life
- Works best on US brands that use traditional dimension dismounting holes

**WWH13SM Wheel Weight Hammer *(Blue-Point)***
- Designed for use on steel and zinc clip-on wheel weights
- Soft hammer face to avoid scratches and dings
- Solid *Nuplaglas* handle resists most shop chemicals and has a nonslip grip
- Replaceable cold rolled steel hook assembly to ensure long service life
- Specially designed small diameter dismounting hook is used on wheel weights with smaller dimension dismount holes



WARNING
• Read and follow all safety messages and instructions
• Read safety precautions on pages W1 to W4

# TIRE CHANGERS

Snap-on® Tire Changers come in a variety of models to fit each individual shop's needs. The Tilt-Back Tire Changer handles a variety of tire sizes and configurations, with a tower that tilts back to allow for wider tire and wheel assemblies and features a Pneumatic Bead Assist arm to assist the operator when mounting low profile tires. The Swing Arm Tire Changer has basic features for a shop that is new in the tire business or as an additional unit in a high-volume shop.




**EEWH312A**




**EEWH311B**




**EEWH326A**

**Common to EEWH326A:**
- Two-Speed turntable offers a forward speed of 14 RPM to provide faster throughput when mounting initial bead and 7 RPM for precise speed control
- Integrated laser guided mount/dismount head precisely locates the edge of the wheel minimizing damage

**Common to EEWH311B and EEWH326A:**
- Tilt-Back design speeds setup and allows for a 15" tire and rim clearance
- Pneumatic Bead Assist provides user with additional capability when servicing low-profile tires with stiff sidewalls
- Pneumatic cylinder raises and lowers each of the specialized tools into place
- Bead Depressor pushes tire sidewall into the drop center and follows the tire as the turntable rotates for easier mounting
- Top Roller also helps keep the bead in drop center
- Top Roller allows user to lubricate top bead prior to dismounting tire
- Wheel Depressor applies downward pressure during initial clamping
- Power Lifting Disc lifts tire off the lower bead of rim to aid user during the dismount process

**Common to all models (EEWH326A, EEWH311B and EEWH312A):**
- Three-position bead breaker covers multiple applications such as SUVs and light trucks that have taller sidewalls
- Bead seating jets are integrated into clamping jaws and force additional air into tire during inflation
- Plastic protection on mount/dismount head and clamping jaws prevents accidental rim damage
- Surge tank delivers additional air during the bead seating process
- Air lubricator and regulator supports corrosion protection for rust-proof air cylinders and valves
- High-torque 1 HP turntable motor minimizes turntable stalling
- Dual clamping cylinders provide even clamping force on jaws to reduce wheel slippage
- Two-year warranty and five years on transmission

| Type | EEWH312A | EEWH311B | EEWH326A |
|---|---|---|---|
| Pneumatic Bead Assist | Optional | Standard | Standard |
| Turntable Speed (RPM) | 7CW/7CCW | 7CW/7CCW | 7+14CW/7CCW |
| Outside Clamping Range (in) | 10–20 | 10–24 | 10–28 |
| Inside Clamping Range (in) | 12–22 | 12–24 | 12–24 |
| Rim Width (max, in) | 12 | 15 | 15 |
| Tire Diameter (max, in) | 40 | 40 | 40 |
| Tire Width (max, in) | 13 | 15 | 15 |
| Bead Breaking Force (lb @ 150 PSI) | 3300 | 3300 | 3300 |
| Air Requirements (PSI) | 140–170 @ 8.5 cfm | 140–170 @ 8.5 cfm | 140–170 psi @ 8.5 cfm |
| Voltage Requirements | 115V 60Hz, 1ph 20A | 115V 60Hz, 1ph 20A | 230V, 60Hz, 1 phase, 12A |
| Net Weight, lb (kg) | 442 | 750 | 766 (347) |
| Overall Height x Width x Depth (in) | 68 x 41 x 49 | 69 x 41 x 55 | 69 x 41 x 55 |



TECHNICAL SUPPORT 1-800-225-5786

## Tire Changer Accessories

| | Stock No. | Description | EEWH312A | EEWH311B | EEWH326A |
|---|---|---|---|---|---|
|  | EAA0351G94A | 8" ATV Adaptors (4 each) | opt | — | — |
| | EAA0351G93A | 6" Clamping Adaptors (4 each) | opt | — | — |
|  | EAA0351G92A | Motorcycle Adaptors (4 each) | opt | — | — |
|  | EAA0329G53A | 8"–24" Motorcycle/ATV Adaptors (4 each) | — | opt | opt |
|  | EAA0328G91A | 4" Clamping Adaptors (4 each, use with EAA0304G80A) | — | opt | std |
|  | EAA0304G80A | 4" Offset Mount/Dismount Head | — | opt | std |
|  | EAA0247G20A | Composite Mount/Demount Head | opt | opt | opt |
|  | EAA0247G15A | Protective Insert for Mount/Dismount Head (10 each) | std | std | std |
|  | EAA0351G90A | Jaw Protectors, covers jaw – Long (4 each) | opt | — | — |
|  | ST4027645 | Jaw Protector, covers jaw (4 each) | — | opt | opt |
| | EAC0087G48A | Jaw Protector, original replacement (1 each) | — | std | std |
|  | 5-14126A | Paste Brush | std | std | std |
|  | 8-03229A | Paste Bucket | std | std | std |
|  | EAA0247G04A | Protective Cover (for tire lever EAA0247G02A) | opt | opt | opt |
|  | EAA0304G14A | Wave Tire Tool | opt | opt | opt |
|  | EAA0247G14A | Motorcycle Bead Breaker Blade | opt | opt | opt |
|  | EAA0304G15A | Protective Cover for Bead Breaker Shovel | opt | opt | opt |
|  | EAA0270J11A | Safety Restraint Arm | opt | — | — |
| | EAA0304G72A | Safety Restraint Arm | — | opt | opt |
|  | EAA0329G33B | Pneumatic Bead Assist | opt | — | — |

**EEWH315A High Performance Tire Changer (Air Deluxe)**
- Air motor driven turntable and swing arm style
- Outside clamping range 10"–24"
- Maximum rim width 13"
- Includes pneumatic bead assist



⚠WARNING
• Read and follow all safety messages and instructions
• Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: TIRE PRESSURE MONITORING SYSTEM

Snap-on® Tire Pressure Monitoring tools work with most foreign and US systems that are both direct and indirect. Whether it is an automotive repair shop, tire store, body shop, fleet repair facility or lube bay, these TPM tools are essential to servicing the customer's needs.



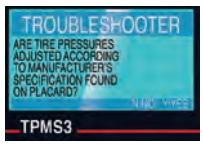
**TPMS3**



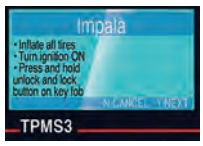
**TPMS3-2**



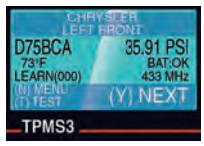
**TPMS3-3**




**Troubleshooter quickly diagnoses TPM Systems**




**Vehicle-specific relearn procedures**




**TPM Sensor Information Display**

## TPMS Testers

**TPMS3 Tire Pressure Sensor System Tool Kit**

- Test TPM Sensors: Diagnose sensors and determine whether or not a replacement is needed. Also captures sensor data and displays PSI, ID, temperature and battery status
- Print Sensor Information: Allows user to print sensor information using WebTPM software (included) and PC
- Relearn TPM Vehicle Systems: Provides vehicle-specific reset procedures when vehicle tires have been rotated
- Sensor Replacements: Features vehicle-specific prompts that guide the TPM system relearn following sensor replacement
- Tire Rotations: Provides quick registration of new sensor locations after tire rotation
- Tests key FOBs for proper signal strength and battery condition
- Includes replacement TPM sensor part number lookup for OEM and aftermarket sensors
- Complete with docking/charging station
- Built-in Lithium Ion rechargeable battery

**Software Updates**

- TPMS3 includes webTPM portal that installs on PC or laptop and administers software updates
- Registration of tool through webTPM provides 12 months of access to new software updates as they become available
- After the first 12 months, TPMS3U update will allow software updates and additional 12-month time period
- Additional functionality of webTPM includes Print Sensor Information and the ability to add optional software such as TPMS3PRG Programmable Sensor add-on pack

**TPMS3-2 OBDII Connector**

**TPMS3-3 Magnet**

**TPMS3-4 USB Cable**




**TPMS3BOX**

**TPMS3U TPMS3 Software Update**

- Up to and including the currrent model year vehicle coverage: sensor testing, relearn procedures and ECU Sensor ID registration
- Troubleshooter menu option assists technician diagnosing the TPM system
- Improved menu navigation with guided symptom-based TPM sensor tests and system relearn procedure
- Added ECU unlock for *Toyota*, *Lexus* and *Scion* vehicles that have a TPMS dash-reset button
- Part number lookup for OEM and aftermarket sensors
- Software purchase allows user to access new updates for a period of 12 months

**TPMS3PRG Programmable Sensor Add-on Package**

- Use the TPMS3 to program aftermarket Tire Pressure Monitoring System (TPMS) programmable sensors
- Replace a sensor with low battery life or one that is non-functioning
- Reduce sensor inventory costs – one sensor covers multiple vehicle applications
- Use to install a duplicate set of sensors in a summer/winter set of tires
- Kit consists of a 2GB Micro SD card along with registration certificate
- Registration certificate contains a code that is entered into webTPM and allows access to sensor programming functionality
- Requires TPMS3 software version CS2-02 or newer to install TPMS3PRG
- TPMS3PRG is a one-time activation to program aftermarket TPM sensors

The TPMS3PRG works with the sensor types listed below: EZ-sensor® , Alligator sens.it®, NAPA® Echlin® Clone-able, Standard® Clone-able, Intermotor® Clone-able, Dorman® DiRECT-FIT™, OEC ID Copy (Orange)

TECHNICAL SUPPORT 1-888-621-8767

## TPMS Tools

**TPMS3BOX TPMS Sensor Bench Tester**

- Tests TPMS sensors without having to mount in a tire/wheel assembly
- Pressurizes sensor to simulate actual conditions
- Used with Tire Pressure Monitoring System Tools
- Saves time in mounting/dismounting tire



TPMS2

## TPMS Testers

**TPMS2 Tire Pressure Monitor Tool**

- Simple to use activation and resetting of TPM sensors and systems
- Vehicle selection interface quickly configures the TPMS2 for fast sensor activation and testing
- Interactive PC Software included to display vehicle specific TPMS service procedures and sensor specific information
- Wireless communication capability via Bluetooth® technology between the TPMS2 and PC for information transfer or with supplied USB cable
- Kit includes TPMS2 Tool, PC software and USB Cable Note: Requires *Bluetooth*-capable PC for wireless communication

**TPMS2U TPMS2 Software Update**

- Provides 6 months access to update TPMS2

TECHNICAL SUPPORT 1-888-498-7671



TPMS2-5

## TPMS Testers

**TPMS2EZ EZ-Sensor® Programming Module Update Kit**

- Provides the ability to program *EZ-Sensor* using TPMS2

**TPMS2-5 TPMS2 Charging Station**

- Charges TPMS2 when not in use



QDTPMS

## TPMS Tools

**QDTPMS Valve Core Torque Tool**

- Specifically designed to be used as a core remover and precise installer for TPMS tire valve to eliminate risk of damaging expensive TPMS sensors
- Preset to 4 in-lb to prevent over- or under-torquing
- Preset torque setting also helps prevent valve core leaks that lead to low tire pressure and TPMS alerts



VSC4KT

**VSC4KT TPMS Valve Stem Cap Set**

- Quickly evacuate air without removing valve cores
- Replace a standard sized valve cap with this tool, will depress the valve stem for rapid deflation
- Return your wheels to the original position without resetting the TPMS
- Caps are clearly marked for easy identification for the reinstall
- Blue anodizing makes caps easily visible on most rims or tires
- Knurling provides sure grip even in greasy situations
- Back side of the tool allows for valve cap storage while the tools are in use
- Vinyl holder included to keep valve stem caps together when not in use
- Kit includes VSC4KT-1, VSC4KT-2, VSC4KT-3 and VSC4KT-4 Valve Stem Caps



WARNING • Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: TIRE PRESSURE GAUGES



TGIFS1



TIF160



TPGDL1000B



TPGIF1600A



TIFHD160

## Inflators

**TGIFS1 Tire Gauge Inflator**
- Snap-on® exclusive design
- Heavy duty billet machined aluminum body
- Dual swivel point hose for ease of use
- 20–160 PSI range
- Modular design for easy replacement of worn parts
- Double sealed scale avoids contamination from air supply
- ±1% accuracy

**TIF160 Tire Pressure Gauge/Inflator**
- 1% accuracy allows for use on vehicles equipped with TPMS sensors
- Shorter hose and body length make this gauge ideal for use on cars and light trucks
- Rugged dial and plunger style mechanism preserve gauge accuracy when dropped
- Stainless-steel braided hose
- 6–160 PSI, 60–1100 kPa
- Lifetime warranty

**TPGDL1000B Digital Tire Pressure Gauge/Inflator (Blue-Point®)**
- Reads in 0.1 PSI increments, 5–150 PSI
- Rugged, braided stainless-steel hose
- Back-lit display, with PSI, kPa, bar and $kg/m^2$
- Dual foot and clip-on chuck included with 1/4" threads for easy use with any open chuck
- 1/4" NPT air inlet fitting
- Rubber body prevents damage when dropped
- Replacement batteries and O-rings included

**TPGIF1600A Tire Gauge and Inflator *(Blue-Point)***
- 10–120 PSI in 2 lb increments
- 1/4" FNPT air inlet fitting
- Swiveling hose for easy gauge positioning
- Zinc body with heavy duty brass valves
- Easy-to-read sight glass featuring PSI and kPa readings
- ±1% accuracy

**TIFHD160 Truck Tire Inflator *(Blue-Point)***
- Inflate heavy duty truck tires quickly and safely
- Gauge measures from 6–160 PSI (40–1100 kPa)
- Includes 14" dual foot budd chuck with locking threads
- High quality 48" extended rubber hose (Tested to 300 PSI)
- 1/4" NPT brass fitting for inlet air connection
- 360° swiveling gauge for easy reading
- Rubber gauge guard for added shock resistance
- Rugged geared gauge construction for added durability
- 48" hose and chuck allow a tire technician to stand outside of the trajectory zone as noted in OSHA1910.177 standards, servicing multipiece and single piece rim wheels. This standard requires a “sufficient length of hose” exist between the chuck and valve



TPGD150



TPGDL150

## Digital Tire Pressure Gauges *(Blue-Point)*

**TPGD150 Digital Tire Pressure Gauge**
- Ranges from 5–150 PSI in 0.5 increments
- Flexible 11" braided hose with dual foot chuck helps access hard-to-reach tire valves
- Black ribbed gauge guard provides a sure gripping surface and helps protect the gauge if dropped
- Auto shutoff extends battery life
- 1% accuracy

**TPGDL150 Digital Tire Pressure Gauge**
- Backlit for easier measurement reading
- Auto shutoff extends battery life
- 5–150 PSI reading
- Shockproof rubber guard to prevent damage when dropped
- Molded finger grips for added comfort
- Heavy die cast faceplate
- Includes steel belt clip and batteries
- ±1% accuracy

## Dial Type Pressure Gauges

**TPRG60 TPMS/Racing Tire Gauge**
- Ideal for applications requiring precise readings like TPMS gauge testing and performance driving
- PowerFlex™ movement is both durable and accurate
- ±1% accuracy

**TPG15 Low Pressure Tire Gauge**
- Low pressure gauge for ATVs, lawnmowers, motorcycle fork tubes and more
- Unique design offers superior shock resistance: movement from socket is isolated, reducing effects of shock
- Silicone dampened gears and enhanced vibration dampening design cushion movement for extended gauge service
- Clear and concise, easy-to-read 1–15 PSI gauge displays in 1/4 PSI increments
- ±1% accuracy

**PG160 Dial Type Pressure Gauge (Blue-Point®)**
- Calibrated in 1 PSI increments from 10–160 PSI
- 2 1/2" diameter dial gauge with shock-resistant gauge movement
- 12" flex hard-to-reach valves (16" with chuck)
- Bleeder valve to relieve excess pressure to achieve proper inflation
- Dual foot chuck 1% accuracy

**PG60 Dial Type Pressure Gauge *(Blue-Point)***
- 12" flex hose and bleeder valve
- 1% accuracy
- Swivel angle chuck
- Dual scale pressure range – 60 PSI, 410 kPa
- Ideal for automobile and light truck service

Best results when tire gauge is used in the middle of pressure scale
* 1% accuracy = 1% of pressure scale



TPRG60



TPG15



PG160



PG60

## Pencil Tire Pressure Gauges

**PGP20 Tire Pressure Pencil Gauge**
- 20 PSI pencil gauge for low pressure applications
- 0.5 PSI accuracy for the full range of scale
- Laser engraved barrel
- Full metal body construction
- Pocket clip holds gauge securely in pocket
- Ideal for ATVs and riding mowers

**PGPS50GB Master's Choice Pencil Gauge with Wooden Box**
- Durable brass construction promotes longevity and resists corrosion
- ± 1% accuracy exceeds ANSI® standards and allows for use on vehicles with TPMS sensors
- Dual scale measures from 5–50 PSI and from 34.4 kPa–344.7 kPa
- The solid maple box protects and showcases this high quality gauge

**PGPS50 Master's Choice Tire Pressure Pencil Gauge**
Tire pressure gauge only

**PGPS50-BOX Master's Choice Box (solid maple)**
Wooden box only

Best results when tire gauge is used in the middle of pressure scale
Note: 1% accuracy = 1% of pressure scale



PGP20



PGPS50GB



PGPS50



**⚠WARNING**

- Do not exceed rated pressure
- Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: TIRE PRESSURE GAUGES


TGS1


PGP120


PGP45LQ


PGP50


PGPL150

## Pencil Tire Pressure Gauges

**TGS1 Sight Glass Test Gauge**
- Gauge is accurate enough to use for TPMS applications
- Rugged sight glass design for better durability and readability
- 1% Master Gauge Accuracy, with certificate of accuracy included
- Durable billet machined 6061-T6 aluminum body
- Dual Foot Budd Chuck
- 10–160 PSI
- Unique comfort grip for easy use
- Can be calibrated in the field (instruction included)

**PGP120 Pressure Gauge (Blue-Point®)**
- Calibrated in 2 PSI increments from 10–120 PSI and in 10 kPa increments from 100–800 kPa
- Chrome body
- 1% gauge accuracy
- 5 3/4" long

**PGP45LQ Air Liquid Pressure Gauge *(Blue-Point)***
- Calibrated in 1 PSI increments from 5–45 PSI
- Can be used on any standard or liquid solution-filled tires
- Spring retracts into gauge, causing pump action to expel tire liquid
- Chrome body
- 1% gauge accuracy
- 5 15/16" long

**PGP50 Pressure Gauge *(Blue-Point)***
- Calibrated in 1 PSI increments from 5–50 PSI and 5 kPa increments from 50–350 kPa
- Chrome body
- 1% gauge accuracy
- 5 3/4" long

**PGPL150 Tire Gauge *(Blue-Point)***
- Calibrated in 2 PSI increments from 10–150 PSI
- Straight dual foot is well suited for Budd truck style tires
- 30° angle reverse foot assists in hard-to-reach areas
- Includes hanging clip
- Chrome body
- 1% gauge accuracy
- 12" long

# AIR CHUCKS


GA359


GA356B


GA460B


GA296B


GA358


YA173B


TPDF14

## Closed Air Chucks

**For use on air lines only. Do not use on inflators.**

**GA359 Dual Foot Air Chuck**
- Easily access hard to reach inner tandem wheels
- Tilt lock feature locks onto the valve
- 30° reverse angle chuck can be used on outside tires
- Screwdriver style handle
- Thread size of 1/4" NPT
- Overall length of 12"

**GA356B Dual Foot Air Chuck *(Blue-Point)***
- 1/4"-18 female NPT with 5/8" hex nut
- Straight foot works well on Budd style wheel rims
- 30° angle reverse foot is helpful in limited access situations
- 6 1/2" long

**GA460B Dual Foot Air Chuck *(Blue-Point)***
- 1/4"-18 female NPT
- 6 1/8" long

**GA296B Angled Air Chuck *(Blue-Point)***
- 1/4"-18 female NPT
- Rubber gasket included

**GA358 Air Chuck**
- Screwdriver style black handle
- Thread size of 1/4" NPT
- Overall length of 7"

**YA173B Clip-on Style Angled Air Chuck *(Blue-Point)***
- 1/4"-18 female NPT
- Spring loaded, trigger operated valve stem clip
- Maximum operating pressure is 200 PSI

**TPDF14 Long Reach Dual Foot Air Chuck *(Blue-Point)***
- 14" Long reach dual chuck
- Straight on chuck with 30° reverse chuck
- All metal components
- Work well for reaching dual wheel truck tires
- Compatible with Snap-on® and *Blue-Point* inflators



GAOC356



GAOC460



TPDFOC14

## Open Air Chucks (Blue-Point®)

**For use on inflators only. Do not use on air lines.**

**GAOC356 Dual Foot Air Chuck**
- 1/4"-18 female NPT with 5/8" hex nut
- Straight foot works well on Budd style wheel rims
- 30° angle reverse foot is helpful in limited access situations
- 6 1/2" long

**GAOC460 Dual Foot Air Chuck**
- 1/4"-18 female NPT
- 6 1/8" long

**TPDFOC14 Long Reach Dual Foot Air Chuck**
- 14" Long reach dual chuck
- Straight on chuck with 30° reverse chuck
- All metal components
- Work well for reaching dual wheel truck tires
- Compatible with Snap-on® and *Blue-Point* inflators

Maximum rating on all *Snap-on* air chucks is 150 PSI





TR107A



TR108



TR109



TR117O



VT1A



QDTPMS



GA143B



VT14

## Valve and Stem

**TR107A Valve Core Tool**
- For installation and removal of standard valve cores
- Screwdriver style handle
- 6 1/4" long

**TR108 Valve Core Tool**
- Similar to TR107A
- 4 3/4" long

**TR109 Valve Core Tool**
- Use to remove or replace valve cores on A/C systems (large bore)
- 6 3/4" long

**TR117O Valve Core Remover/Installer Tool**
- Valve core remover/installer tool
- 6 1/4" long

**VT1A Valve Stem Inserter**
- Simplify installation of valve stem in tubeless tire rim
- Notched shank to accommodate various rim styles
- Comfortable screwdriver type handle

**QDTPMS Valve Core Torque Tool**
- Specifically designed to be used as a core remover and precise installer for TPMS tire valve to eliminate risk of damaging expensive TPMS sensors
- Preset to 4 in-lb to prevent over- or under-torquing
- Preset torque setting also helps prevent valve core leaks that lead to low tire pressure and TPMS alerts

**GA143B Valve Core and Stem Tool *(Blue-Point)***
- Four-function tool inserts and removes cores, taps inner stem threads and chases outer threads
- 1 7/8" x 13/16"

**VT14 Universal Valve Core Tool *(Blue-Point)***
- Double-ended bit removes and installs large and small valve cores
- Reverse the double-ended wrench in the tool body to fit both large and small valve cores
- Use the cup end to remove valve caps



GA599A



TDG1

## Tread Depth Gauge

**GA599A Tread Depth Gauge**
- Measures to a depth of 1" in 1/32" increments
- Plastic body with aluminum probe and sliding gauge
- Includes pocket clip

**TDG1 Tread Depth Gauge**
Same as the GA599A but the gauge is color coded for easy tread wear diagnosis



⚠WARNING
- Do not exceed rated pressure
- Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: WHEEL TORQUE TOOLS



BTQS1000



BTQS600



BTQS500



BTQSHD400



TSS2KT



305TSKTA

## Torque Sticks/Standard Duty

- Strobe marks stop turning at precisely the right torque
- Engineered for rugged professional environments
- Manufactured with heat-treated Swedish spring steel in a solid one-piece design
- Sticks are individually packaged
- Sets come with a color-coded torque chart showing the correct stick for nearly every domestic and import vehicle
- Lifetime guarantee

| Stock No. | Size, mm | Color | Torque Limit, ft-lb | Drive, inches | Set Contains: BTQS1000 | BTQS600 | BTQS500 |
|---|---|---|---|---|---|---|---|
| BTQS12A | 21 | Brown | 100 | 1/2 | • | | |
| BTQS12AA | 22 | Orange | 75 | 1/2 | | • | |
| BTQS12B | 21 | Light Brown | 80 | 1/2 | • | | • |
| BTQS12BB | 21 | Charcoal | 147 | 1/2 | • | | • |
| BTQS12C | 19 | Gray | 100 | 1/2 | • | | • |
| BTQS12D | 21 | Black | 60 | 1/2 | | | |
| BTQS12E | 19 | Blue | 80 | 1/2 | • | | |
| BTQS12EE | 22 | Turquoise | 140 | 1/2 | • | | • |
| BTQS12F | 19 | Yellow | 65 | 1/2 | | • | |
| BTQS12G | 17 | Red | 80 | 1/2 | | • | |
| BTQS12H | 17 | Green | 55 | 1/2 | | • | |
| BTQS12HH | 22 | Medium Brown | 110 | 1/2 | | | |
| BTQS12I | 22 | White | 120 | 1/2 | • | | • |
| BTQS12K | 17 | Light Yellow | 113 | 1/2 | | • | |
| BTQS12KK | 21 | Red-Orange | 110 | 1/2 | | | |
| BTQS12MM | 17 | Off White | 90 | 1/2 | | • | |
| BTQS12NN | 19 | Light Tan | 90 | 1/2 | | | |
| BTQS12OO | 19 | Quartz | 120 | 1/2 | | | |
| BTQS12T | 24 | Light Green | 140 | 1/2 | • | | |
| BTQS12UU | 14 | Mud | 80 | 1/2 | | | |
| BTQS12XX | 21 | Light Purple | 160 | 1/2 | • | | |
| BTQS12Y | 22 | Light Blue | 100 | 1/2 | • | | |

Sets shown include storage case

**BTQSWC13 Wall Chart**
Color wall chart for service bays

## Torque Sticks/Heavy Duty

| Stock No. | Size, inches (mm) | Color | Torque Limit, ft-lb | Drive, inches | Set Contains: BTQSHD400 |
|---|---|---|---|---|---|
| BTQSHD34114 | 1 1/4 | HD Red | 250 | 3/4 | |
| BTQSHD3433M | (33) | HD Brown | 475 | 3/4 | |
| BTQSHD1114 | 1 1/4 | HD Red | 250 | 1 | • |
| BTQSHD133M | (33) | HD Brown | 475 | 1 | • |
| BTQSHD1112 | 1 1/2 | HD Black | 475 | 1 | • |
| BTQSHD11316 | 13/16 | HD Yellow | 475 | 1 | • |

Set shown includes storage case

## Torque Sticks/Special Application

| Stock No. | Size, mm | Color | Torque Limit, ft-lb | Set Contains: TSS2KT |
|---|---|---|---|---|
| TSS2TT | 22 | Pink | 150 | • |
| TSS2QQ | 22 | Salmon | 95 | • |

## Torque Extensions

- Help eliminate overtorqued lug nuts, broken or damaged studs and distortion of rotors, drums and wheels
- Color-coded low-friction sleeve for quick reference
- Cold formed special alloy steel for greater accuracy and strength
- 1/2" male and female square drive for use with appropriate impact socket
- Female square drive designed for improved retention on impact wrenches
- Male square drive has friction ring for secure socket retention

| Stock No. | Color | Torque Limit, ft-lb | Set Contains: 305TSKTA |
|---|---|---|---|
| TSKT65A | Yellow | 65 | • |
| TSKT80A | Blue | 80 | • |
| TSKT100A | Gray | 100 | • |
| TSKT120A | White | 120 | • |
| TSKT140A | Teal | 140 | • |

Set shown includes storage case

## Lug Nut Sockets

**LSR1500 Standard/Twist Wheel Flip Socket Set**
- Five sockets for use on the most popular lug nut sizes (17 mm, 19 mm, 3/4", 21 mm, 13/16" and 7/8")
- Six-point Flank Drive® wrenching system at one end and a six fluted twist socket for removal of damaged wheel lugs at the other end
- Flip the socket when encountering a damaged head
- Knurling identifies twist socket end
- Sockets and 3 1/2" extension are all 1/2" drive for use with hand drivers or impact wrenches
- Black oxide finish
- Storage case


LSR1500

**LSR2000 Thinwall Wheel Flip Socket Set**
- Covers the four most popular lug nut sizes
- (3/4" and 13/16", 19 mm and 21 mm) *Flank Drive* wrenching configuration
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Includes LSR1150 and LSR1250 lug nut sockets and 3 1/2" extension in a custom case
- Black industrial finish


LSR2000

**LSR2000PLUS Lug Nut Flip Socket Set**
- Three flip sockets in 3/4" and 13/16", 7/8" and 15/16" plus 19 mm and 21 mm
- All sockets are 3" long
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Custom case
- Black industrial finish on all components
- Requires use of optional LSR1000EXT extension (not included)


LSR2000PLUS

**LSR1150 Thinwall Wheel Flip Socket**
- Thinwall wheel flip socket covers 3/4" and 13/16" wheel lug sizes
- Use with hand driver or impact wrench
- 3" long


LSR1150

**LSR1250 Thinwall Wheel Flip Socket**
- Thinwall wheel flip socket covers 19 mm and 21 mm wheel lug sizes
- Use with hand driver or impact wrench
- 3" long


LSR1250

**LSR2500 Lug/Lock Flip Twist Socket Set**
- Quickly and easily remove damaged wheel lugs (six flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Includes LSR2501 and LSR2502 lug/lock sockets and 3 1/2" extension in a custom case
- Black industrial finish


LSR2500

**LSR2501 Lug/Lock Flip Twist Socket**
- 3/4" – 19 mm twist socket quickly and easily removes damaged wheel lugs (six flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- Use with hand driver or impact wrench
- Black industrial finish: 2 5/8" long


LSR2501

**LSR2502 Lug/Lock Flip Twist Socket**
- Same as LSR2501 except in 7/8" size

**LSR2503 Lug/Lock Flip Twist Socket**
- Same as LSR2501 except in 17 mm size


LSR2502

**LSR2500PLUS Lug/Lock Flip Twist Socket Set**
- Quickly and easily remove damaged wheel lugs (six flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Includes LSR2501, LSR2502 and LSR2503 lug/lock sockets in a custom case
- Black industrial finish
- LSR1000EXT is optional 3" extension for the set


LSR2500PLUS

**LSR1450 Thinwall Wheel Flip Socket**
- Covers 17 mm and 19 mm wheel lug sizes
- *Flank Drive* wrenching configuration
- 1/2" square drive located at center of socket (requires optional extension LSR1000EXT)
- Ideal companion to LSR2000 and LSR2000PLUS
- Black industrial finish
- Major O.D.: 1.03" (26.3 mm) – Minor O.D.: 0.94" (23.9 mm)
- Length: 3" (76.2 mm)


LSR1450

**LSR1580 Thinwall Lug Nut Flip Socket**
- 21 mm and 22 mm socket size: 3" long
- Use with hand driver or impact wrench
- Requires use of optional LSR1000EXT extension
- 1/2" square drive located at center of socket


LSR1580

**LSRM2000 Metric Flip Socket Set**
- Includes LSR1580 and LSR1450 sockets plus LSR1000-EXT 3" extension
- Designed for 2005 and later vehicles
- Includes 17 mm, 19 mm, 21 mm and 22 mm sizes


LSR2000

**Applications:** Dodge® Pickup 1500, *Dodge* SRT-10, Honda® Odyssey®, Land Rover® L3, Range Rover® and Sport, Lexus® LX470 and Toyota® Land Cruiser® vehicles

**LSR1560 Flip Socket**
- 7/8" and 1" socket size: 3" long
- Use with hand driver or impact wrench
- Expands LSR2000 and LSR2000PLUS sets
- Requires use of LSR1000EXT extension (not included)
- 1/2" square drive located at center of socket


LSR1560

**Applications:** (7/8") Chevy®, GMC® vans, *Dodge* 1500 Ram Pickup, Ford® E250/350, *Ford* Super Duty, Hummer® H1, Lincoln® Blackwood®, *Lexus* LX470, *Toyota Land Cruiser*, Jaguar® XJ Series, (7/8 and 1") *Chevy/GMC* Pickups and SUVs, (1") Plymouth® 1 ton vans

**LSR1570 Flip Socket**
- 15/16" and 1 1/16" socket size: 3" long
- Use with hand driver or impact wrench
- Expands LSR2000 and LSR2000PLUS sets
- Requires use of optional LSR1000EXT extension
- 1/2" square drive located at center of socket


LSR1570

**Applications:** (15/16") *Dodge* Ram 2500, 3500, (1 1/16") Land Rover®, *Range Rover* Discovery II, *Ford* E300/350, *Ford* F300/350



**⚠WARNING**
- Read and follow all safety messages in instructions
- Check final torque on lug nuts with a torque wrench
- Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: LUG/RETAINING NUT SOCKETS


DW402C


2003LN


A98A


IMX32B


TSR700


TSR800


TSR1000


TSR1250


TSR1230


YA1005C

## Lug Nut Sockets

**DW402C Dayton Lug Nut Impact Socket**
- 3/4" square drive with a 1 1/4", six-point wrench opening
- Use with socket retainers

**2003LN Double Ended Lug Nut Socket Set**
- Set includes A98A socket, A98M socket and IMX32B extension bar (3pc)

**A98A 6-Point Lug Nut Socket**
- 1/2" square drive is recessed between (two) six-point wrench openings: 3/4" and 13/16"
- Length 2 3/4"; Diameter 13/16"

**A98M 6-Point Socket**
- 1/2" square drive is recessed between (two) six-point wrench openings: 19 mm and 21 mm
- Length 2 3/4"; Diameter is 13/16"

**IMX32B Impact Extension**
- 1/2" square drive, 5/8" shank diameter; 3" long
- Snap ring locking mechanism

**TSR500 Lug Nut Remover Socket (Blue-Point®)**
- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 3/4", 13/16", 19 mm and 21 mm lug nuts
- Use with 1/2" drive impact wrench
- Fluted socket design helps remove most stubborn lug nuts
- Includes extractor punch

**TSR600 Locking Lug Nut Socket *(Blue-Point)***
- 1/2" square drive is located in the center of the socket
- Use included pin to dislodge lug nut if wedged in socket
- Removes most locking lug nuts and has two-in-one flip socket design
- For use with impact wrench
- Fluted for extra grip

**TSR700 Lug Nut Remover Socket *(Blue-Point)***
- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 7/8", 1", 22 mm and 25 mm lug nuts
- Use with 1/2" drive impact wrench
- Six flute socket design helps remove most stubborn hex lug nuts

**TSR800 Lug Nut Remover Socket *(Blue-Point)***
- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 7/8", 1", 22 mm and 25 mm lug nuts
- Use with 1/2" drive impact wrench
- 12-flute socket design helps remove most stubborn rounded lug nuts

**TSR1000 Lug Nut Socket Set *(Blue-Point)***
- Set includes TSR500 and TSR600 lug nut sockets plus YA1005-7 extractor punch
- Use TSR500 on late model OEM and aftermarket lug nuts
- Dual-sided design allows use on 3/4", 13/16", 19 mm and 21 mm lug nuts
- TSR600 removes most locking lug nuts and has a two-in-one flip socket design
- For use with 1/2" drive tools
- Fluted socket design provides extra grip

**TSR1240 Lug Nut Removal Socket**
- 21 mm/21.5 mm socket, use for *Chrysler* and Dodge® applications

**TSR1250 Lug Nut Removal Socket *(Blue-Point)***
- Dual flip 1/2" drive impact socket design
- Removes lug nuts with missing or distorted caps
- 19.5 mm side fits distorted 19 mm chrome caps found on many GM® and Chrysler® vehicles
- 18.5 mm side fits rusted lug nuts missing chrome covers

**TSR1260 Lug Nut Removal Socket**
- 22 mm/22.5 mm socket, use for *Dodge* 16" – 17" aluminum wheels

**TSR1270 Lug Nut Removal Socket**
- 1 1/16"/27.5 mm socket, use for Range Rover® and Land Rover® applications

**TSR1230 Lug Nut Removal Socket Set**
- Set includes TSR1240, TSR1250, TSR1260 and TSR1270 Dual Flip sockets plus YA1005-7 Extractor Punch in custom vinyl bag
- Works great on lugs that are rusted, have missing caps or are missing caps altogether

**YA1005C Locking Lug Nut Remover Kit *(Blue-Point)***
- Removes locking lug nuts and locking hubcaps on most vehicles including the new *Chrysler* hubcap locks Updated set includes new turbo lug nut socket to easily remove damaged 3/4", 13/16", 19 mm and 21 mm lug nuts
- Tapered swirl in socket bites into damaged lug nut for quick removal
- Intended for hand use only, except for turbo lug nut socket, which should be used with an impact wrench



203FLSM



SIMML210

## Lug Nut Sockets (3/8" drive)

| Stock No. | Square Drive, inches | Wrench size mm | Overall Length, inches |
|---|---|---|---|
| FLSM1719 | 3/8 | 17 & 19 | 3 |
| FLSM2122 | 3/8 | 21 & 22 | 3 |
| FLS2426 | 3/8 | 3/4 & 13/16 | 3 |

**203FLSM Lug Nut Socket Set**
- Includes FLSM1719 and FLSM2122 Metric Flip Lug Nut Sockets plus IMX31 Impact Extension



LMS24

## Lug Nut Socket (Magazine Loading) (Blue-Point®)
- Multiple lug nut removal up to five lug nuts at a time
- Eliminates rolling or lost lug nuts and wasted motion
- Ideal for use in tire and brake shops
- Adjust type 9, 12 and 16 cu in air chambers that are equipped with 1/2"–20" threaded rod and 3/4" nut

| Stock No. | Wrench Size, inches (mm) | Square Drive, inches | Outside Dia., inches | Overall Length, inches |
|---|---|---|---|---|
| LMS24 | 3/4" (19 mm) | 1/2 | 1 | 5 5/16 |



WHM1



WHS1



WHV1



WHB1

## Wheel Hangers
Allow faster, safer and easier balancing of wheels when attempting to insert and tighten wheel bolts.

| Stock No. | Thread Size | Hex Size, mm | Applications |
|---|---|---|---|
| WHM1 | M12 x 1.5 | 10 | Mercedes-Benz®, BMW®, Mini, Cadillac® Catera®, *Chrysler* Crossfire |
| WHS1 | M14 x 1.5 | 15 | Current *Mercedes-Benz*, current Dodge® Sprinter® trucks, Freightliner Sprinter trucks from 2002–2004 |
| WHV1 | M14 x 1.5 | 10 | Volkswagen®, Audi®, *Mercedes* ML Class, *BMW* 7 and X5 Series, Porsche® |
| WHB1 | M14 x 1.25 | 10 | 2009–to current *BMW* and Mini vehicles |

**SIMML210 Lug Nut Socket**
- Long socket designed to fit lug nut applications where an extension would be needed
- Flank Drive® wrenching configuration where the socket grips the fastener on the flanks/flats increasing torque by up to 15%–20%
- Forged from tough alloy steel to increase safety, impact sockets are heat treated to a lower hardness to add impact resistance and ductility
- One-piece design



LSR1000A

## Wheel Lock Sockets *(Blue-Point)*

**LSR1000A Wheel Lock Removal Socket Set**
- Easily removes most lug nuts and wheel locks on most US and import passenger vehicles and light trucks
- Use with hand driver or impact wrench
- Some sockets cover specific GM®, Ford® and Chrysler® applications
- Set includes 11 sockets, extension and extractor punch in storage case



BRUTUS3R250D

## Torque Wrench

**BRUTUS3R250D US Adjustable Click Type Torque Wrench**
- Tougher for longer life cycle
- Hourglass-shaped cam: less friction reduces wear, retains lubricant
- Range 50–250 ft lb
- Thrust bearing resists wear
- "Gorilla-Proof" positive stop prevents accidental disassembly (Caution: Do not wind below lowest scale mark)
- Larger, tougher load screw helps prevent damage due to impact
- High strength, sealed head
- Long handle provides more leverage
- ASME® specifications, traceable to N.I.S.T. at no charge

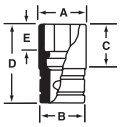


WARNING • Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: AXLE NUT SOCKETS



305SIMMY






ANS1938

## GM® Axle Nut Set (1/2" Drive)

| Stock No. | Size, mm | A | B | C | D | E | Set Contains: 305SIMMY |
|---|---|---|---|---|---|---|---|
| SIMM290 | 29 | 41.3 | 41.3 | 71.6 | 88.9 | 21.3 | • |
| SIMM300 | 30 | 42.9 | 42.9 | 71.6 | 88.9 | 21.6 | • |
| SIMM340 | 34 | 49.3 | 49.3 | 72.8 | 88.9 | 22.6 | • |
| SIMM350 | 35 | 50.8 | 50.8 | 72.8 | 88.9 | 22.9 | • |
| SIMM360 | 36 | 50.8 | 50.8 | 72.8 | 88.9 | 22.9 | • |

## Axle Nut Sockets (1/2" Square Drive) (Blue-Point®)

Use with a torque wrench to service truck wheel bearing lock nuts.

| Stock No. | Nominal Size | Style |
|---|---|---|
| ANS1937* | 2 1/2" | 6-Point |
| ANS1938 | 2 3/4" | 6-Point |
| ANS1939* | 2 3/8" | 6-Point |

*Fits special "rounded" hex nuts on Dana® axles of some Ford® trucks.

## Axle Nut Sockets (3/4" Square Drive) *(Blue-Point)*

Use with a torque wrench to service truck wheel bearing lock nuts.



ANS1900B



ANS1933A

| Stock No. | Nominal Size | Style | Stock No. | Nominal Size | Style |
|---|---|---|---|---|---|
| ANS1900B | 2 1/8"—54 mm | 6-Point | ANS1907A | 3" | 8-Point |
| ANS1933A** | 59 mm | 6-Point | ANS1908A | 3 1/4" | 6-Point |
| ANS1901A | 2 3/32" | 6-Point | ANS1909A | 3 1/4" | 8-Point |
| ANS1920A | 2 1/4" | 6-Point | ANS1910A | 3 1/2" | 6-Point |
| ANS1902A | 2 3/8" | 6-Point | ANS1911A | 3 1/2" | 8-Point |
| ANS1903A | 2 3/8" | 8-Point | ANS1925A | 3 3/4" | 8-Point |
| ANS1921A | 2 1/2" | 6-Point | ANS1927A | 3 13/16" | 8-Point |
| ANS1928A* | 2 9/16" | 6-Point | ANS1912A | 3 7/8" | 6-Point |
| ANS1905A | 2 9/16" | 8-Point | ANS1913A | 3 7/8" | 8-Point |
| ANS1904A | 2 9/16" | 6-Point | ANS1914A | 4" | 6-Point |
| ANS1922A | 2 5/8" | 6-Point | ANS1915A | 4 1/8" | 6-Point |
| ANS1923A | 2 3/4" | 6-Point | ANS1916A | 4 3/8" | 6-Point |
| ANS1924A | 2 3/4" | 8-Point | ANS1917A | 4 3/8" | 8-Point |
| ANS1926A | 2 13/16" | 8-Point | ANS1918A | 4 7/8" | 6-Point |
| ANS1932A | 2 7/8" | 6-Point | ANS1919A | 4 7/8" | 8-Point |
| ANS1906A | 3" | 6-Point | | | |

*Fits special "rounded" hex nuts on *Dana* axles of some *Ford* trucks.
**For 1/2 ton vehicles with automatic locking nuts. Designed for late model *Ford* vehicles. 3/4" square drive, 59 mm nominal size. Industrial finish.



S8695C



S6146



S6109A

## Four Wheel Drive Axle Nut Sockets

**S8695C Axle Nut Socket 4 Lug**
- 1/2" square drive: 3 3/4" long
- For 1/2 ton vehicles with manual locking nuts
- Use on front wheel bearing retaining nut on Dana 44 Series Axle used on 1959 and later *GM*®, *Ford*, Dodge®, and AMC®
- Industrial finish
- Railroad applications: use to install or remove point detector bushing found on WABCO-M23B switch machines

**S6146 Axle Nut Socket 4 Lug**
- For front wheel bearing retaining nut on 3/4 ton vehicles with *Dana* 60 Series axle used on *GM*, *Ford* and *Dodge* trucks
- 1/2" square drive: 3 3/4" long
- Industrial finish

**S6109A Axle Nut Socket 6 Lug**
- For front wheel bearing retaining nut on 3/4 ton vehicles with heavy duty suspension
- Designed for use on *GM*, *Ford* and *Dodge* trucks with *Dana* 70 Series axle
- 1/2" square drive: 3 3/4" long
- Industrial finish

# SPANNER SOCKETS



ANS1929A

## Spanner Sockets

For use with a torque wrench when servicing Chevrolet®, *GM* and *Ford* axles.

| Stock No. | Square Drive, inches | No. of Lugs | Outside Dia., inches | Applications |
|---|---|---|---|---|
| ANS1929A* | 3/4 | 6 | 2 5/8 | Chevy®/GMC® with 5,200 and 7,200 lb axles |
| ANS1930 | 3/4 | 6 | 2 7/8 | *Chevy/GMC* with 11,000 and 13,500 lb axles |
| ANS7269A | 1/2 | 4 | 2 3/4 | 1985 and later *Ford* F250®/F350® with floating rear axle |

**Blue-Point*


SNS2467


SNS2770


SNS3195


SNS3246

## Spindle Nut Sockets

**SNS2467 Spindle Nut Socket**
- Remove and install four-slot axle lock nuts
- 1/2–3/4 ton Dana® 44 axle
- Socket I.D.: 2"
- 1/2" drive

**SNS2770 Spindle Nut Socket**
- Remove and install four-slot front axle lock nuts
- 3/4–1 ton *Dana* 44 axle
- Socket I.D.: 2 1/4"
- 1/2" drive

**SNS3195 Spindle Nut Socket**
- For high-shear rotating nuts
- 1/2 ton *Dana* 80 axle
- Socket I.D.: 2 3/8"
- 1/2" drive

**SNS3246 Spindle Nut Socket**
- Remove and install four-slot axle lock nuts
- 3/4–1 ton
- Socket I.D.: 2 1/4"
- 1/2" drive


YA6540

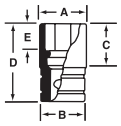
## Axle Lock Nut Removers

**YA6540 Nut Remover Kit for Toyota®/Lexus® vehicles**

**Axle Locks**
- This tool kit prevents damage to the axle shaft threads when removing the lock nut
- Unlocks and removes the 30 mm axle nuts from *Toyota*/*Lexus* vehicles
- Kit combines a 1/2" drive 12-point special depth 30 mm impact socket and unique angle axle-nut release tool (patent pending)

**YA6541 1/2" Drive 30 mm Impact Socket**

**YA6542 Lock Nut Release Tool**





SIMDM300


IMDM320


IMDM390


SIMM360TW

## Special Application Axle Nut Socket, mm (1/2" Drive)

| Stock No. | Size | Style | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| SIMDM300 | 30 mm | 12-point | 42.9 | 42.9 | 71.1 | 88.9 | 21.6 |
| IMDM320 | 32 mm | 12-point | 45.7 | 45.7 | 36.8 | 50.8 | 20.6 |
| IMDM390 | 39 mm | 12-point | 53.8 | 39.6 | 36.8 | 50.8 | 22.3 |
| SIMM360TW | 36 mm | 6-point | 47.2 | 45.8 | 72.8 | 88.9 | 22.9 |

**SIMDM300 12-Point Axle Nut Socket**
- 1/2" square drive

**Applications:** Axle nut removal for *Toyota*: Avalon®, Camry®, Highlander® and Matrix®; *Lexus*: ES300; Pontiac®: Vibe®; VW®: Beetle, Jetta® and Golf® (1999 and later); Dodge®: *Dodge*/Freightliner® Sprinter® vans with 215 mm rear axle (2004 and newer)

**Applications:** Automatic transmission tail output shafts for Chrysler®: 300C and Crossfire® (2004); *Dodge*: Magnum® (2004); Jeep®: Grand Cherokee® V6 models (2005); Mercedes®: Many years of coverage

**IMDM320 12-Point Metric Shallow Impact Socket**

**Applications:** Service axle nuts on Mercedes-Benz® W140 chassis 1992–1999 SC and SL Class, Porsche® Boxster®, Cayenne® and 944 plus BMW® X3, X5 and X6 Series 2007 vehicles and later. Other uses include drive shaft nuts on *VW* Touareg® vehicles 2003 and later

**IMDM390 12-Point Metric Shallow Impact Socket**

**Applications:** Use on front axle hub of 2007 *Toyota* Tundra®

**SIMM360TW Axle Nut Socket**
- Thin wall design provides the extra room needed to remove and install the axle nut on Chevrolet® Sonic vehicles


WLT1


SIM540A

## Wheel Hub Lock Tool

**WLT1 Wheel Hub Lock Tool (Blue-Point®)**
- Eliminates need for assistant to hold brake pedal while axle nuts are removed or installed
- Works on any vehicle with wheel stud bolt patterns ranging from 4 mm x 100 mm–8 mm x 170 mm
- One-piece design with incorporated cushioned grip handle for comfort and ease-of-use
- Can also be used to hold rear differential yoke on solid axle vehicles during pinion seal or bearing service, as well as many other types of machines with drive shafts, yokes and universal joints

## Special Application Axle Nut Sockets, inches

**SIM540A 6-Point Axle Nut Socket**
- Remove or install 1996 and later *Dodge* truck axle nuts
- Use on truck and bus wheel applications
- Flank Drive® wrenching design
- 1/2" square drive



WARNING • Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: SHACKLE PIN



SPS10

## Shackle Pin Impact Sockets

- Oval shaped wrench opening services shackle pins on International® and Kenworth® semi tractors

**SPS10 Shackle Pin Socket**
41/64" x 1 3/32" x 1 3/4" long.

**SPS11 Shackle Pin Socket**
21/32" x 1 17/32" x 1 3/4" long.

# LUG/RETAINING NUT



HDLUGSET2





S6840

## Heavy Duty Truck Wheel Lug Sockets

**HDLUGSET1 Heavy Duty Lug Socket Set**

- Includes: SIM383, SIM403, SIM483B, SIMM333, SIMM383 plus BW726A and BWD483
- Flank Drive® wrenching system
- Alloy steel combines strength and durability
- All sockets 1" square drive

**HDLUGSET2 Heavy Duty Lug Socket Set**

- Includes: SIM342, SIM482, SIMM332, SIMM382, SIMM412, DW402C, plus BW626A, BWD482 and BWDM412 in a PAKPB063 storage case
- *Flank Drive* wrenching system
- Alloy steel combines strength and durability
- All sockets 3/4" square drive

## Lug Nut Removal Sockets (Magazine Loading)

| Stock No. | Drive Size, inches | A | B | C | D | E |
|---|---|---|---|---|---|---|
| S6840 | 3/4 | 1 7/8 | 1 3/4 | 4 13/16 | 5 5/8 | 3/4 |

**S6840 Magazine Loading Lug Nut Removal Socket**

- Manufactured from special alloy steel, precision machined and heat-treated for optimum strength and durability
- *Flank Drive* wrenching system grips fastener on the flanks/flats increasing torque and preventing fastener from rounding and increases the life of the socket

**Applications:**

- Saves technician time by housing the five lug nuts as they are removed, one at a time, from the wheels on Flexi-Van Chassis trailers

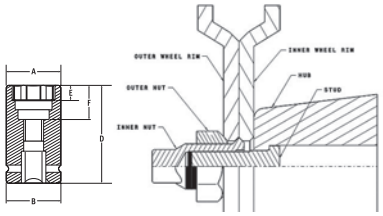
## General Lug Nut Usage

| Lug Nut Size | 3/4" Drive | 1" Drive | Applications |
|---|---|---|---|
| 7/8" Hex Deep | SIM282 | – | Medium to light truck general usage |
| 15/16" Hex Deep | SIM302 | – | Medium to light truck general usage |
| 1" Hex Deep | SIM322 | – | Medium to light truck general usage |
| 1 1/16" Hex Deep | SIM342 | SIM343 | General usage, Ford® F700 8-hole wheels |
| 1 1/8" Hex Deep | SIM362 | – | Various |
| 1 3/16" Hex Deep | SIM382 | SIM383 | Various |
| 1 1/4" Hex Deep | DW402C* | SIM403 | Heavy duty Dayton® style trailers, spoke wheel type |
| 1 5/16" Hex Deep | SIM422 | SIM423 | Various |
| 1 1/2" Hex Deep | SIM482 | SIM483B | Stud piloted Budd style wheel applications |
| 1 3/4" Hex Deep | SIM562 | SIM563 | Construction and off-road equipment applications |
| 13/16" Square | BW626A | BW726A | Inner nuts on Budd-style wheel applications |
| 30 mm Hex Deep | SIMM302 | SIMM303 | Medium duty trucks, small 8-lug wheel sizes |
| 32 mm Hex Deep | SIMM322 | SIMM323 | European truck applications |
| 33 mm Hex Deep | SIMM332 | SIMM333 | General hub piloted wheel applications |
| 35 mm Hex Deep | SIMM352 | – | Import truck applications |
| 36 mm Hex Deep | SIMM362 | – | Import truck applications |
| 38 mm Hex Deep | SIMM382 | SIM383 | Import truck applications |
| 41 mm Hex Deep | SIMM412 | – | Stud piloted Budd-style wheel applications |
| 1 1/2" Hex – 13/16" Square | BWD482 | BWD483 | Stud piloted Budd-style wheel applications |
| 41 mm Hex – 21 mm Square | BWDM412 | – | Stud piloted Budd-style wheel applications |

*Thin walled extra deep.

## Budd Wheel Impact Sockets

- Six-point and square openings combined
- Use with socket retainers below
- Industrial finish





BWD482


BWDM412


BWDS483

| Stock No. | Dimension A, Socket End Diameter | Dimension B, Drive End Diameter | Dimension D, Length | Dimension E, Hex Depth | Dimension F, Square Depth | Hex Size | Square Size | Square Drive, inches |
|---|---|---|---|---|---|---|---|---|
| BWD482 | 2 7/32" | 1 3/4" | 4" | 5/8" | 1 11/16" | 1 1/2" | 13/16" | 3/4 |
| BWD483 | 2 15/64" | 2 15/64" | 4" | 5/8" | 1 11/16" | 1 1/2" | 13/16" | 1 |
| BWDM412 | 2 11/32" | 1 3/4" | 4 1/4" | 17/32" | 1 43/64" | 41 mm | 21 mm | 3/4 |
| BWDS483 | 2 15/64" | 2 15/64" | 4" | 5/8" | 1 9/64" | 1 1/2" | 13/16" | 1" |

**BWDM412 Budd Wheel Socket**

- For 1986 and later Nissan® and Isuzu® classes 4, 5, 6 and 7

**BWDS483 Budd Wheel Impact Socket**

- Dual-opening socket allows just one socket to remove the outer Hex nut and the inner square nut used on Budd wheel assemblies for semi trucks and buses
- Flank Drive® wrenching system configuration
- Special alloy steel for strength and durability
- Some Budd wheel assemblies have long inner nuts while some have short inner nuts. The BWDS483 is designed to engage only short inner nuts; for long inner nuts, use the BWD483

## Stud Remover and Installer


BWS1316A

**BWS1316A Stud Remover (Blue-Point®)**

- Use on 13/16" studs on Budd wheels

**WSK755 Light Truck Wheel Stud Kit (*Blue-Point*)**

- Use on most US and import light trucks and SUVs
- Self-centering units permit quick installation the first time
- Will not damage threads: use with impact wrenches
- Clamshell container for storage
- Includes 9/16"-18, 1/2"-20, 12 mm-1.75 and 14 mm-1.5 installers plus spacer and washer

| Stock No. | Square Drive, inches | Wrench Size | Length |
|---|---|---|---|
| BW626A | 3/4 | 13/16" square | 4" |
| IM562 | 3/4 | 1 3/4" hex | 2 3/4" |
| SIMM332 | 3/4 | 33 mm hex | 82.6 mm |
| BW726A | 1 | 13/16" square | 2 1/4" |
| SIMML332 | 3/4 | 33 mm hex | 152.4 mm |
| SIMML333 | 1 | 33 mm hex | 152.4 mm |


WSK755

**WSK938 Automotive Wheel Stud Kit**

- Use on most US and import cars
- Self centering units permit quick installation the first time
- Will not damage threads: use with impact wrenches
- Clamshell container for storage
- Includes 7/16"-20, 1/2"-20, 12 mm-1.25 and 12 mm-1.5 installers plus spacer and washer


BW626A

## Impact Sockets

- Use with socket retainers listed below
- Industrial finish

# IMPACT SOCKET RETAINERS

## 3/4" Drive

**IM182R Rubber Locking Ring**

- For all 3/4" drive units

**IM182P Steel Locking Pin**

**IMR2 Socket Retainer**

- 1" Drive

**IM243P Steel Locking Pin**

- For use with IM243R
- Fits IM35

**IM243R Synthetic Rubber Locking Ring**

- For IM35, IM243–IM443 and SIM223–SIMM353

**IMR3 Socket Retainer**

- For all 1" drive sockets
- One-piece retention system holds socket to impact wrench anvil

# BEAD BREAKERS

## Bead Breakers


TR200

**TR200 Bead Breaker**

- For bus, truck or tractor tires
- Sliding hammer weighs 13 lb
- Stroke length is 16"; overall length is 46" closed and 62" expanded


BH102

**BH102 Hammer**

- 9 1/4 lb 32" long handle gives force and leverage for bead breaking on auto and large truck tires
- Rubber hand grip

**BH102-1 Replacement Hammer Handle**



⚠WARNING • Read safety precautions on pages W1 to W4

# TIRE AND WHEEL: GENERAL SERVICE TOOLS



B2193

## Carrier Assembly Socket for Toyota®/ Lexus® vehicles

**B2193 Spare Tire Carrier Assembly Socket, 5-point for *Toyota/Lexus***

- Tough nickel chrome plating provides corrosion resistance
- Special alloy steel provides the highest match of strength and durability
- Overall length: 4" long

**Applications:**
Great time saver for PDI (Pre-Delivery Inspection) when selling a new vehicle and you want to check the air pressure of the spare tire. Saves time when doing an oil change and the air pressure of the spare tire is checked as part of the service.



TR100 TR102 TSP813

## Rim

**TR100 Rim Tool**

- Use on split rims and rim lock rings
- One end is angled; the other is straight
- 19 1/8" long with 9/16" and 5/8" wide ends

**TR102 Rim Tool**

- For drop center rims
- 18" long with a 1 3/8" wide end

**TSP813 Motorcycle Tire Spreader**

- Permits one-person installation of tubed tires on motorcycles, ATVs, small farm equipment and industrial equipment
- Easily access valve stem hole when installing difficult 90° valve stems on tubed tires
- Overall length is 23"



S6129 YA105 SRT1

## Seal

**S6129 Seal Puller**

- Designed to pull wheel bearing or other small seals
- 7" long: industrial finish

**YA105 Seal Puller**

- For removing rubber seals
- Two tips designed to reach in and fit nearly all seal applications
- 12 5/8" long

**SRT1 Seal Removal Tool**

- Saves time and labor by eliminating prying against bearings or driving out seals
- Grabs seal only, leaving bearings undamaged
- Seals remain intact allowing for complete failure analysis
- Wedges and long handle provide exceptional leverage
- Heavy duty construction for long life and dependability
- Works with steering, drive and trailer wheel seals on the largest heavy duty wheels



388CF SGCP1BR

## Cotter Pin Pullers

**388CF High Leverage Diagonal Cutters**

- High leverage cutter pulls cotter pins with ease
- 1 1/16" jaw length
- 8 5/16" long
- Vinyl grips

**SGCP1BR Cotter Pin Puller**

- Make short work of pulling even large pins
- Heat treated shank provides maximum strength
- Soft grip handle: 8 1/2" long



S9094B CP9

**S9094B Cotter Pin Puller**

- Pins removed by hitting anvil sharply
- Side handle ensures a firm grip
- 10" long
- Replaceable steel hook

**S9094A2X Replacement Hook and Rivet Set**

- For S9094B

**CP9 Cotter Pin Puller**

- 38° angle end pries cotter pin loose
- 105° angle end pulls it out
- 10" long



BF620C BF623

## Mallets (Blue-Point®)

**BF620C Rubber Head Mallet**

- Solid rubber head is 3 3/4" long, 2 1/4" diameter
- 11" hardwood handle

**BF623 Soft Blow Mallet**

- Designed to reduce marring and denting
- Use in assembly applications and on all types of surfaces including metal, glass, plastic and wood
- Special polymer head resists dynamic fatigue, creep and compression set, even at extreme temperatures



TWP8

## Truck Wheel Pan *(Blue-Point)*

**TWP8 Truck Wheel Pan**

- Helps prevent messes and spills
- Fits rims with 13 3/4" inside diameter or larger for use on most large trucks and trailers
- Holds 88 oz of oil
- Pan will not warp if oil is warm
- Compartment above handles holds hub nuts



GCP10

## Dustcap

**GCP10 Grease and Dust Cap Tool**

- Tapered jaws fit behind the crimped edge of grease cap
- One handle designed for prying hub caps loose



YA9020A

## Wheel Chocks *(Blue-Point)*

**YA9020A Truck Wheel Chocks**

- Heavy duty truck chocks are connected by a 10' nylon rope and measure 8" wide and 8" high overall
- Non-slide design

## Ball Joint Presses

| Stock No. | BJP1 Set Components | ID.-OD, inches | Length, inches |
|---|---|---|---|
| BJP1-1 | Sleeve Adaptor | 1 9/32–1 21/32 | 2 1/8 |
| BJP1-2 | Pressure Screw, 1 1/8-7 UNRC thread, 7/8 hex | — | 9 3/4 |
| BJP1-3A | Pressure Pad (Ball Joint) | NA–1 19/32 | 3 3/16 |
| BJP1-4 | Pressure Pad (Universal Joint) | NA–7/8 | 3 3/16 |
| BJP1-5 | Adaptor | 29/32–1 11/32 | 1 13/16 |
| BJP1-6 | Adaptor/Extension | 1 1/4–1 21/32 | 2 1/16 |
| BJP1-7 | Adaptor | 1 11/16–1 29/32 | 1 1/8 |
| BJP1-8 | Adaptor | 1 25/32–2 | 1.00 |
| BJP1-9 | Adaptor, Front face angled 4.5º | 1 27/32–2 | 1 1/4 |
| BJP1-10A | Adaptor, Front face angled 4.5º | 2 11/32–2 21/32 | 2 1/8 |
| BJP1-11A | Adaptor | 2–2 1/4 | 2 1/8 |
| BJP1-12A | Adaptor | 2 1/4–2 1/2 | 2 3/4 |
| BJP1-13B | Adaptor | 2 7/16–2 3/4 | 1 11/16 |
| BJP1-14A | Adaptor | 2 11/16–2 15/16 | 2 3/4 |
| BJP1-16A | Adaptor | 2 1/4–2 1/2 | 1 1/8 |
| BJP1-17 | Grease Fitting (for BJP1F Press Frame) | 2 1/4–2 1/2 | 1 1/8 |



BJP1



BJP1HONDA



BJP1OPT



BJP1-26A



BJP1-27A



BJP1-18A

**BJP1 Master Ball Joint/Universal Joint Press Set**
- Master ball joint press set covers 95% of current US SUVs, light trucks and passenger cars

**Applications:** Ford® (43 models), GM® (53 models), Dodge®/Daimler-Chrysler® (54 models) and Jeep® (16 models) vehicles
- Installs and removes ball joints with pre-fitted straight grease fittings
- Press frame features large throat for increased ball joint applications and vise mount capability for U-joint applications
- Locking cup design holds cup in place
- Large, coarse thread pressure screw for extra strength and maximum force
- Grease zerk fitting for smooth screw action. Includes full ball joint/universal joint application chart and storage/carrying case

**BJP1F Press Frame**
- 7 13/16" throat opening; 3 1/2" depth; 6" height; 10 13/16" length

**BJP1HONDA Adaptor Set for Honda® Vehicles**
- For removal and installation of upper/lower ball joints on many Honda® and Acura® vehicles: must be used with BJP1 master ball joint/universal joint press set. Includes BJP1-22 and BJP1-24 ball joint adaptors plus (two each) ME7A208 O-rings

**BJP1OPT Adaptor Set**
- Special application set for removal and installation of upper and lower ball joints
- Set must be used with the BJP1 Master Ball Joint Press Set
- Includes BJP1-22A, BJP1-24A, BJP1-25A, BJP1-26A and BJP1-27A Ball Joint Adaptors in storage tray

**BJP1-22A Adaptor**
- For removal and installation of upper/lower ball joints on many *Honda* and *Acura* vehicles: must be used with BJP1 master ball joint/universal joint press set

**BJP1-24A Adaptor**
- For removal and installation of upper/lower ball joints on many *Honda* and *Acura* vehicles: must be used with BJP1 master ball joint/universal joint press set

**BJP1-25A Receiver Adaptor**
- Use with the BJP1 master ball joint/universal joint press set for quick removal and installation of ball joints on *Ford* F450 and F550 trucks from 2005–2007

**BJP1-26A Adaptor**
- This new, optional adaptor is to be used with the BJP1 Master Ball Joint/Universal Joint Press Set
- Use BJP1-26 in combination with BJP1-4 to remove or install front axle U joints for 2002 – present *Dodge* Ram® 2500 and 3500 Series with the American 9.25 axle

**BJP1-27A Adaptor**
- Adaptors required to work on the 1995–2008 *Ford* Explorer
- Lower Ball Joint:
  Install ram – BJP1-6 and BJP1-12, Install receiver – BJP1-16, Remove ram – BJP1-3, Remove receiver – BJP1-27

**ME7A207 Retaining Ring**
- Retaining ring included in BJP1 and UJP1 sets

**ME7A208A Large Snap Ring**
- Large snap ring included in BJP1 and UJP1 sets

**ME7A209 Small Snap Ring**
- Small snap ring included in BJP1 and UJP1 sets

**ME9A34 Steel Ball**
- Steel ball included in BJP1 and UJP1 sets

**BJP1-18A Receiver Adaptor**
- Use with BJP1 for quick removal and installation of lower ball joints on *Dodge*/Mercedes® Sprinter® van models from 2003–2007
- Tools required for lower ball joint removal/installation include: install ram (BJP1-11), install receiver (BJP1-13), removal ram (BJP1-6) and removal receiver (BJP1-18)
- No upper ball joint applications apply to this tool

**RKBJP Repair Kit**

**PAKPB061 Storage Case**

**ZBJP1B BJP1 Owners Manual**



WARNING • Read safety precautions on pages W1 to W4

# WHEEL ALIGNMENT: BALL JOINT



A204

## Ball Joint/Tie Rod Separators

| Stock No. | Jaw Opening, inches | Overall Length, inches |
|---|---|---|
| A204 | 5/8 | 12 |
| A200 | 13/16 | 18 |
| A201 | 1 | 12 |
| A203 | 1 1/4 | 12 |



S9365B

## Ball Joint Sockets

**S9365B Ball Joint Socket**
- For medium size Chrysler® cars
- 3/4" square drive
- Wrench size is 1 59/64", length is 2"

**S9479A Ball Joint Socket**
- For Dodge®/*Chrysler* pickups and vans
- 3/4" square drive
- Wrench size is 2 9/64", length is 2"



S9613

**S9613 Ball Joint Socket**
- Use on 4-5B axles such as found on *Dodge*, Ford®, Chevrolet®, GMC® and International® four wheel drive trucks
- Adjusts the sleeve in the top of the yoke on the front suspension
- 1/2" square drive, 1" OD, 2 1/8" long



BJR1

**BJR1 Ball Joint Socket**
(Subaru® vehicles)
- Easily removes stubborn ball joints on select *Subaru* vehicles
- Stay safe dealing with low clearance and heavy corrosion
- Baja, 2003–2006
- Forester®, 1998–2010
- Impreza®, 1993–2010
- Legacy®, 1990–2010
- Outback®, 2000–2010



BJR2

**BJR2 Ball Joint Socket**
(*Subaru* vehicles)
- Faster, safer ball joint removal for *Subaru* vehicles
- Easily remove stubborn ball joints for increased productivity
- 3/4" hex on pressure screw can be driven by hand or with impact gun
- Beat the flat rate by doing the job faster and with less effort
- Industrial finish helps protect against corrosion
- Use on *Subaru* Tribeca® vehicles 2006–2012



IMDM410

**IMDM410 12-Point Metric Shallow Impact Socket**
**Applications:** For removing and installing the lower ball joint on 2013–current BMW® 5 and 7 series vehicles
- 41 mm, 12-point, 1/2" drive

# SERVICE TOOLS



1658C

## General Service Tools (Blue-Point®)

**1658C Pinch Bar**
16" long.



**2420A Pinch Bar**
20" long.

**2430C Pinch Bar**
Tapered point on one end and a chisel type edge on the other. 7/8" edge, 7/8" stock, 38" overall length.



YA7970

**YA7970 Hub Clamp Expander**
- Designed for hubs and clamping style struts and ball joint mounts
- Allows easy removal and installation of struts and ball joints
- Interchangeable spreaders prevent damage to aluminum or cast iron hubs
- Adjustable for use on hubs with centralized or non-centralized slot
- Allows for on the vehicle repair

## General Service Tools



SIML160

**SIML160 6-Point Extra Deep Impact Socket**
- Use to remove or replace fuel tank retaining strap nuts
- Also has applications on emergency brake adjustment nuts and stabilizer retainers
- 1/2" square drive; 1/2", 6-point wrench opening
- 5" long

## General Service Tools

**GCP10 Grease and Dust Cap Tool**
- Tapered jaws fit behind the crimped edge of grease cap
- One handle designed for prying hub caps loose



GCP10

**GAW1290 Wheel Alignment Wrench**
- 18 1/2" long for extra leverage
- 21 mm 12-point with special angle and bi-directional offset to access difficult to reach bolts
- 24 mm 12-point deep offset for access to guarded bolt heads without the sloppiness of breaker bar and socket
- 24 mm 12-point deep offset for access to 12-point bolt heads with access to lock nuts through the socket
- Use on alignment bolts for Audi®, VW®, Porsche®, BMW® and Mini® vehicles



GAW1290

**TC90A Tail Pipe Cutter**
- Handles on the car cutting from 3/4"–3 1/2" diameter
- 16-link cutter chain is 12" long
- Threaded shaft with cross piece provides elasticity to help prevent chain wheels from breaking
- Ideal for cutting the strut assembly to enable servicing of the strut cartridge



TC90A

**TC90A1 Chain Assembly**
- Includes one wheel and one roll pin

**BF620C Rubber Head Mallet (Blue-Point®)**
- Solid rubber head is 3 3/4" long, 2 1/4" diameter
- 11" hardwood handle



BF620C

**B240B Brake and Accelerator Pedal Jack *(Blue-Point)***
- Holds throttle at a constant rpm
- Easily adjusts to desired length
- Adjustment screw fine-tunes desired RPM
- Rubber tip keeps the tool firmly positioned
- Overall length of 40" (102 cm)
- Can also be used as a pedal depressor



B240B

**YA6510 Bushing Extractor *(Blue-Point)***
- Used on Acura® Integra® (1994–2001) plus various Honda® vehicles (1988–2001)

**YA6510-2 Bushing Extractor Adaptor *(Blue-Point)***
- Enables the YA6510 bushing extractor to be used on 1990–1993 *Integra* vehicles



YA6510

## SHOCK ABSORBER

### Shock Absorber Sockets

| Stock No. | Square Drive, inches | Wrench Oval Width | Wrench Oval Diameter | Length |
|---|---|---|---|---|
| A137 | 3/8 | 1/4" | 5/16" | 29/32" |
| A138 | 3/8 | 15/64" | 21/64" | 29/32" |
| A139 | 3/8 | 6 mm | 8 mm | 23 mm |

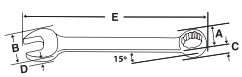


A137

## CASTER CHAMBER

### Wrenches

Metric combination wrenches. Long handle design for access.




| mm | Stock No. | A | B | C | D | E |
|---|---|---|---|---|---|---|
| 17 | OEXLM17B | 25 | 35 | 11 | 8 | 298 |
| 18 | OEXLM18B | 27 | 37 | 12 | 8 | 314 |
| 19 | OEXLM19B | 28 | 39 | 12 | 9 | 330 |



OEXLM18B

**C6630 Camber/Caster Alignment Tool**
- Works on 2003 and later GM® "G" Series Chevy® Express and GMC® Savanna vans
- Eliminates need to use the front 21 mm eccentric bolt, which is difficult to access behind a steel shield
- Hook tool on the top "A" arm and, with locking nut loosened, push or pull for easy caster and camber adjustment
- Saves about 15 minutes per side



CC6630

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# WHEEL ALIGNMENT: TIE ROD


WA13A


WA17


YA2218


YA2222


YA3500


WW500


YA6870


WW600


TRW1

## Tie Rod Adjusting Tools

**WA12A Tie Rod Adjusting Tool**
- For large cars and light trucks
- 1/2" square drive: 3 3/4" long

**WA13A Tie Rod Adjusting Tool**
- For compact and medium cars
- 1/2" square drive: 3 3/4" long

**WA16 Tie Rod Adjusting Tool**
- For large trucks
- 1/2" square drive: 4 7/64" long

**WA17 Tie Rod Adjusting Tool**
- Designed to permit 360° rotation of the adjusting sleeve, even in tight quarters
- Use on 1 7/8" sleeves on full size 3/4 and 1 ton pickups, including Ford® Super Duty
- Use with 1/2" square drive ratchet or breaker bar
- Chrome finish: 4 3/4" long

**YA2218 Tie Rod Adjusting Wrench**
- For US and import vehicles with rack and pinion steering using tie rods with knurled or 17.0 mm–18.5 mm hex gripping sections
- Spring loaded jaws and comfort grip handle

**YA2222 Tie Rod Adjusting Wrench**
- For US and import vehicles with rack and pinion steering using tie rods with knurled or 12 mm hex gripping sections
- Spring loaded jaws and comfort grip handle
- 10 1/2" long

**YA2223 Tie Rod Adjusting Wrench**
- For rack and pinion steering using 14 mm–15.5 mm tie rods
- Spring loaded jaws and comfort grip handle
- Applications: 1995 and later Dodge® Dakota® and Caravan®, 1998 and later *Dodge* Durango®, *Dodge* Viper® and most 1999 and later GM® 1/2, 3/4 and 1 ton trucks

**YA2224 Tie Rod Adjusting Wrench**
- Similar in design to YA2222 but for 10.5 mm–12 mm diameter tie rods like those found on *Ford* Escort®, *GM* Geo, and smaller Nissan® vehicles with rack and pinion steering
- Spring loaded jaws and comfort grip handles
- 9 1/2" long

**YA3500 Universal Inner Tie Rod Wrench (Blue-Point®)**
- Removes inner tie rods equipped with completely round end sockets or flats
- Designed to remove and install all inner tie rod sockets up to 1 15/32"
- Wrench head has three set screws that tighten against the socket
- Includes 1/4" short head hex wrench
- Lifetime warranty

**WW500 Rack Wrench *(Blue-Point)***
- Use on steering racks to service inner tie rod ends
- Fits rack end with hex drive, round with two drive flats or round with no drive flats
- Universal fit from 33 mm–41 mm (1 15/16"–1 9/16") and hex sizes from 31 mm–35 mm (1 1/4"–1 3/8"), 19 mm (3/4") hex drive
- Clamp force increases as load is applied

**YA6870 Rear Toe Adjustment Kit for Subaru® Vehicles**
- Includes two wrenches: each 16" long for extra reach
- YA6870-1: 6-point, 22 mm wrench with the correct 0° offset to securely hold the cam bolt
- YA6870-2: 6-point, 17/19 mm dual-ended wrench designed to meet the high torque levels required when loosening/tightening the cam bolt retaining nut
- Used on all *Subaru* vehicles 1990 and later
- YA6870-1 fits *Subaru* vehicles 1990 and later: YA6870-2 fits 1990–2008 *Subaru* vehicles (17 mm) and 2009 and later (19 mm)
- High quality steel is specially heat treated for torque requirements

**YA6870-1 Toe Adjustment Wrench for *Subaru***
- Cam bolt wrench for *Subaru*
- YA6870-1 fits *Subaru* vehicles 1990 and later

**YA6870-2 Toe Adjustment Wrench for *Subaru***
- Cam bolt retaining nut wrench for *Subaru*
- YA6870-2 fits 1990–2008 *Subaru* vehicles (17 mm) and 2009 and later (19 mm)

**WW600 Heavy Duty Rack Wrench *(Blue-Point)***
- New larger size provides added coverage for US and import trucks and SUVs
- Suits multiple rack ends and sizes (hex drive, round with two flats, round with no flats)
- Fixed position rings provide added strength
- Patented cam design increases force as load is applied
- Universal design suits rack end diameters from 38 mm–46 mm (1 1/2"–1 7/8" )
- Use on vehicles with limited access to avoid the need to remove the rack assembly
- WW600 expands upon the already available WW500 which does 33 mm–41 mm (1 5/16"–1 9/16") tie rods

**TRW1 Wrench, Tie Rod**
- Use to adjust tie rods on vehicles with rack and pinion steering
- Works on spline, hex and two flat design tie rods
- Spring loaded upper jaw pivots to accommodate tie rods ranging in sizes from 10mm–18 mm
- Wrench is self-adjusting
- Cam action increases the gripping pressure as the load applied to the handle increases
- Heat-treated for durability


YA3000D


WA14A


WA800


ITRS22


YA3300

## Tie Rod Removal/Installation Tools

**YA3000D Inner Tie Rod Tool (Blue-Point®)**
- Removable crowfoot adaptors are placed on hex of tie rod
- Engages crowfoot for removal or installation of tie rod
- Includes crowfoot adaptors in 13/16", 11/4", 15/16", 17/16", 11/2" and 33.6 mm sizes

**WA14A Tie Rod End Socket**
- For removing tie rod ends
- Fits most cars and some trucks
- U-shaped opening measures 13/8" x 3/4"
- Use with 1/2" square drive handles. 1 15/16" ID, 2 1/4" long

**WA15 Tie Rod End Socket**
- Similar to WA14A
- For tie rod servicing on most any truck in the Class 2–6 range
- U-shaped opening measures 17/8" x 15/16"
- Use with 1/2" square drive handles. 2 1/2" ID, 2 7/8" long

**WA800 Heavy Duty Truck Tie Rod Socket**
- Use on most Class 7 and 8 heavy duty trucks with 9,000–20,000 lb axles
- U-shaped slot measures 17/8" x 11/2"
- Inside diameter 3"
- Overall length 3 1/2"

**ITRS22 Tie Rod Bushing Socket *(Blue-Point)***
- Use to access the inner tie rod bushings on Chrysler® LHS/Concorde® and Dodge® 300M/Intrepid® featuring the LH body style
- Low-profile design provides easy access to install or remove the 7/8" or 22 mm hex head bolts
- A conventional socket cannot be used in this application

**YA3300 Universal Inner Tie Rod Set *(Blue-Point)***
- A faster, easier and more secure way to replace tie rods
- Quick on/off interchange between the two knuckles
- Easy self-adjusting and cinching in various shapes and sizes
- No more guesswork or fuss with crowfeet style tools
- Kit includes YA3300-1 large head (40 mm–45 mm), YA3300-2 medium head (35 mm–40 mm) and YA3300-3 tube in YA3300-Case storage case



## MacPherson/Coil Spring Compressors

**WA92 Coil Spring Compressor**
- Holds coil spring at desired tension for removal of other parts
- 11" screw
- Liberally lubricate threads with anti-seize compound


WA92

**MSC1 Master MacPherson Strut Tool *(Blue-Point)***
- Designed to quickly and easily compress most MacPherson strut springs
- Compresses up to 5/8" coil diameter
- Broad spring contact for stable compression
- ACME® threaded rod and built in detent latches to help lock coil in place
- Forged construction for strength and durability

**MSC2 Coil Spring Compressor *(Blue-Point)***
- Removes and installs coil springs quickly and safely
- Compresses coil springs on all passenger cars and pickup trucks
- Features *ACME* threaded rod
- Includes instructional card


MSC2

**MSCS1000 Master Spring Compressor Set**
- Includes MSC1 and MSC2 in storage case


YA8730

## Strut Nut Socket for VW®/Audi® Vehicles

**YA8730 Strut Nut Socket for *VW/Audi* Vehicles**
- For late model front wheel drive vehicles to remove the top strut retaining nut


YA9260


WA7500

## Strut Tools for Ford® and GM® Vehicles

**YA9260 Front Strut Cartridge Tool Set for *GM* Vehicles**
- Removes and installs front oil- or gas- filled strut cartridge on 1988 and later *GM* W-platform vehicles
- Works on both manufacturer's stock oil-filled shocks and gas-filled aftermarket shocks

**YA9260-1 Strut Cartridge Nut Wrench**
- Strut cartridge nut wrench from YA9260 set

**YA9260-2 Strut Jounce Bumper Wrench**
- Strut jounce bumper wrench from YA9260 set

**WA7500 Strut Cartridge Tool for GM Vehicles**
- Replaces strut cartridge through the body shock tower on *GM* 10 Series ("W" Car) vehicles
- Includes 1988 and later Pontiac® Grand Prix®, Oldsmobile® Cutlass and Buick® Regal®; 1989 and later Chevrolet® Lumina

## Bushing Tool *(Blue-Point)* for Honda®/ Acura® Vehicles

**YA6810 Bushing Tool Kit for *Honda/Acura* Vehicles**
- Used in removing and installing *Honda* and *Acura* lower control arm bushings without the need of a press

**Applications:**

*Honda*:
- Civic® 2001–2005
- CRV 2002–2006
- Element® 2003–2006
- Pilot® 2003 and later
- Odyssey® 2005 and later
- Ridgeline® 2006 and later
- Accord® 2003–2007

*Acura*:
- MDX® 2000–2006
- TL® 2000–2007


YA6810



**⚠WARNING**
- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# WHEEL/AXLE PULLERS: KING PIN PULLERS



CG430HYC

## 20 Ton Capacity Hydraulic

| Stock No. | Pressure Screw | Yoke Adaptor | Work Head | Yoke Post (2) | Post Nut (2) | Pilot Guide | 1 3/8" x 7/8" Bushing | 1 3/8" x 3 1/4" Bushing | Expansion Plug | Hydraulic Power Pack | 7/8" Diameter Pilots |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CG430HYC | CG430-1 | CG430-2 | CG430-3 | CG430-4 | CG45-2 | CG430-6 | CG430-7 | CG430-8 | CJ91-2A | CG420A | **CG230-9** (6") |
| – | – | – | – | – | – | – | – | – | – | – | **CG230-8** (4") |
| – | – | – | – | – | – | – | – | – | – | – | **CG230-10**(8") |

**CG430HYC Hydraulic King Pin Press Set**
- CG420A hydraulic ram and pump delivers up to 20 tons of controlled power to remove stubborn king pins on large vehicles with king pin diameters up to 1 1/4"
- Also removes brake shoe anchor pins on trucks
- Wide side arm construction
- Uses three pilots: 7/8" x 4", 7/8" x 6", and 7/8" x 8"
- Includes two guide bushings: 1 3/8" x 7/8" and 1 3/8" x 3 1/4"

**CG430HYC2S Hydraulic King Pin Press Set**
- CG430HYC Set with CG420A2S ram and two-stage pump

## 35 Ton Capacity Hydraulic

| Stock No. | Pressure Screw | Yoke Adaptor | Work Head | Yoke Post (2) | Pilot Guide | Post Nut (2) | 1 15/16" Bushing | 1 9/16" Bushing | 1 13/16" Bushing | Hydraulic Power Pack | Pilots |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CG730HY | CG730-1 | CG730-2 | CG730-3 | CG730-4 | CG730-6 | CG750-7 | CG730-7 | CG730-8 | CG730-9 | CG420A | **CG730-12** (6 3/4") |
| – | – | – | – | – | – | – | – | – | – | – | **CG730-10** (2 1/4") |
| – | – | – | – | – | – | – | – | – | – | – | **CG730-11** (4 1/2") |
| – | – | – | – | – | – | – | – | – | – | – | **CCG730-15** (6") |
| – | – | – | – | – | – | – | – | – | – | – | **CG730-13** (9") |
| – | – | – | – | – | – | – | – | – | – | – | **CG730-16** (9 1/2") |
| – | – | – | – | – | – | – | – | – | – | – | **CCG730-14** (11 1/4") |

**CG730HY2S** CG730HY Set with CG420A2S ram and two-stage pump

**CG730HY Hydraulic King Pin Press**
- For use on large trucks and semi trucks with king pin diameters from 1"–2"
- Similar to CG430HYC except it uses 35 ton hydraulic power components (CG720 ram, CG420-2A pump, CG420-3-1 hose and CG420-4 quick coupler)
- Includes three guide bushings and seven pilots

**CG730HY2S King Pin Press Set**
- CG730HY Set with CG420A2S ram and two-stage pump

**CG730 King Pin Press Set**
- CG730HY Set less the hydraulic power components



CG230A

## Manual Set for 3/4 and 1 Ton

| Stock No. | Spread, inches | Reach, inches | Pressure Screw | Screw Yoke | Screw Yoke Post (2) | Post Nut (2) | General Use Head | 1 1/4" Bushing | 7/8" Diameter Pilots | Adaptor |
|---|---|---|---|---|---|---|---|---|---|---|
| CG230A | 5 1/8 | 12 3/16 | CG230-1 | CG230-2A | CG230-4 | CG230-5 | CG230-3A | CG230-6 | **CG230-9** (6") | **CG230-11** |
| – | — | — | – | – | – | – | – | – | **CG230-7** (2") | – |
| – | — | — | – | – | – | – | – | – | **CG230-8** (4") | – |
| – | — | — | – | – | – | – | – | – | **CG230-10** (8") | – |

**CG230A Truck King Pin Press Set**
- Spread 5 1/8"; Reach 12 3/16"
- Includes: 1 1/4" bushing guide, adaptor and 4 7/8" diameter pilots 2", 4", 6" and 8"

**Applications:**
Heavy trucks, buses and vans having king pins larger than 7/8", including Ford® 3/4 ton and 1 ton trucks and vans.

## Wheel Hub Removal Adaptor

**DHP1 Wheel Hub Removal Adaptor for Dodge® Vehicles**

- Designed to remove the front hubs found on 3/4 ton (2500 series) and 1 ton (3500 series) *Dodge* pickup trucks
- Cut the flat rate for changing out U-joints, front differential service, ball joints and any front hub service
- On average it takes 3.4 hours to do both sides using a sledge hammer, torch or heavy duty slide hammer. With the DHP1, it takes about one hour to do both sides
- No broken rotors when using a sledge hammer
- No heavy slide hammers to use
- Wheel bearing and seal will not get damaged



DHP1

**FHP1 Wheel Hub Removal Adaptor for Ford® Vehicles**

- Designed to take off the front hubs found on the F250® and F350® series *Ford* pickup trucks
- Cut the flat rate for changing out U-joints, front differential service, ball joints and any front hub service
- Soft insert of socket will not damage the studs



FHP1

## Pullers

**CJ129A Universal Wheel Hub Puller**

- Remove front wheel/axle assembly on all front wheel drive *Ford*, GM®, Chrysler® and most imported cars
- Also use to remove rear brake drums on tapered axles such as those found on AMC® and *Chrysler* vehicles
- Removable anvil fits over 1 1/8" hex on pressure screw
- Includes adjustable legs



CJ129A

**4567SH Bolt-on Axle Shaft Puller**

- Breaks axles loose on *Ford* and *GM* vehicles and light trucks with flange-type axles
- Includes housing, three removable jaws, 10 lb slide hammer and 1 1/2"-12 x 23 1/2" slide screw with a 1 1/2" hex
- Fits any bolt pattern with a 4"–7" bolt circle



4567SH

**YA498A Front Wheel Drive Hub Puller**

- For most US and import vehicles with independent front suspension
- Pressure screw size is 5/8"-18w x 5 1/2"



YA498A

## Slide Hammer and Shaft

**CJ1250 12 lb Slide Hammer**

- Designed to pull rear axles
- Slide hammer is approximately 25 1/4" long with a 5/8"-18 thread
- Can be used with the YA498A hub puller



CJ1250



⚠WARNING
• Screen puller application
• Read safety precautions on pages W1 to W4

# DRIVE LINE: DIFFERENTAL


M3548A


M3586


M3587


IMDM360


A176


S6657

## Differential Service Tools

| Stock No. | Wrench Size, inches (mm) | Drive Size, inches | OD Wrench End, inches (mm) | OD Drive End, inches (mm) | Bolt Clearance, inches (mm) | Hex Depth, inches (mm) | Overall Length, inches (mm) |
|---|---|---|---|---|---|---|---|
| M3548A | 2 3/4 | 3/4 | 3 9/16 | 1 3/4 | 2 5/16 | 1 7/32 | 3 3/4 |
| M3586 | 1 7/8 | 3/4 | 2 3/8 | 1 3/4 | 2 | 1 1/8 | 2 3/4 |
| M3587 | (36) | 3/4 | 2 | 1 3/4 | 1 9/16 | 1 | 2 1/4 |
| IMDM360 | (36) | 1/2 | (50.8) | (46) | (41.3) | (22.2) | (57.2) |

**M3548A Diesel Pinion Nut Impact Socket**
- Use on pinion nuts only

**M3586 Pinion Nut Impact Socket**
- Use to remove pinion nut on Dana® 80 series axles on late model Ford® and Dodge® trucks
- Designed to handle the specific application

**M3587 Pinion Nut Impact Socket**
- Use to remove pinion nut on 2005 Cadillac® CTS, 2003 GM® and 2004 *Dodge* trucks with 11.5" AAM axles
- Additional applications: removal of late model BMW® axle shafts plus *BMW* E38, E39, M3 and SUVs with 36 mm 12-point axle nuts
- Designed to handle the specific application

**IMDM360 Impact Socket**

**Applications:** Use to remove pinion nuts on 2003 *GM* and 2004 *Dodge* trucks with 11.5 AAM axles. Other used include Duramax® diesel front crankshaft bolts and late model *BMW* axle shafts.

**A176 Differential Adjusting Wrench**
- For most differentials where 9/32" and 17/32" adjustment nuts are found
- Useful on transmissions, steering gears and some water pumps where adjustable spanner wrench is required
- 10" long

**S6657 Shallow Impact Socket**
- 57 mm, 12-point, 1/2" drive

**Application:**
For removing and installing the differential adjusters on 2011 and newer *GM* 2500 and 3500 HD (9.25") front axles

# FRONT WHEEL DRIVE TOOLS


YA3050


YA3080


YA3085


KD3191

## Boot and Joint Tools

**YA3050 Boot Clamp Pliers**
- For earless type clamps, including those found on late model *GM* inboard CV universal joints

**YA3080 Boot Clamp Pliers**
- For ear-type clamps
- Sturdy enough for ear type clamps, including late model *GM* outboard CV universal joints
- Use with a torque wrench to meet required specifications

**YA3085 Boot Banding Tool**
- For reinstallation of Band-it® or Band-it Jr.® boot bands

**KD3191 Joint Clamp (Blue-Point®)**
- Use to wind up the free end of the clamping band
- Holds tension until band can be clipped down
- For use with *Band-it*-style free end clamps, roll band, and clips or *Band-it Jr.*-style preformed clamps
- Socket with ratchet is used to turn the actuating screw for adjustment



FBG1



CVBOOTLG



CVBOOTRP



CVBOOTSM

## Boot and Joint Tools (Blue-Point®)

**FBG1 Flex CV Boot Installer**
- Reduce CV boot installation to less than 20 minutes
- Tool stretches the CV boot, allowing it to slip over the trunion for rapid installation and reduced fatigue
- Includes flex boot Installer, FBGAR air regulator and storage case
- Use CV boots listed on this page

**FBGAR Air Regulator**
- Air regulator for FBG1 flex CV boot installer

**CVBOOTKIT Complete CV Boot Replacement Kit**
- Six each CVBOOTSM
- Four each CVBOOTLG
- Two each CVBOOTRP

**CVBOOTXS ATV Replacement Boot**
- Fits most ATV boot applications
- Includes boot, clamps and grease

**CVBOOTXSPK ATV Replacement Boot Kit**
- Package of 12 CVBOOTXS

**CVBOOTLG Large CV Boot**
- Fits most cars and SUVs with large CV boots
- Includes boot, clamps and grease

**CVBOOTLGPK Large CV Boot Kit**
- Package of 12 CVBOOTLG

**CVBOOTSM Small CV**
- Fits most cars and SUVs with small CV boots
- Includes boot, clamps and grease

**CVBOOTSMPK Small CV Boot Kit**
- Package of 12 CVBOOTSM

**CVBOOTRP Universal Rack and Pinion Kit**
- Fits rack and pinion boots on most cars
- Includes boot, clamps and grease

**CVBOOTRPPK Universal Rack and Pinion Boot Kit**
- Package of 12 CVBOOTRP
- Includes boot, clamps and grease



HST100-1



FABLM8E

## Half Shaft Removal Tools

**HST100-1 Half Shaft Removal Tool**
- 0.900" diameter
- Easily removes half shaft on most US and import front wheel drive vehicles with gentle tap from brass mallet

**HST100-2 Half Shaft Removal Tool**
- 0.940" diameter
- Easily removes half shaft on most US and import front wheel drive vehicles with gentle tap from brass mallet

## Front Wheel Drive Service Tools

**FABLM8E Metric Long Ball Hex Driver**
- 8 mm hex, 3/8" drive
- For 1978 and later Dodge® Omni and Plymouth® Horizon standard transmission drive axle flange bolts



WARNING • Read safety precautions on pages W1 to W4

# DRIVE LINE: TRANSMISSION



YA2340



YA7244A



XLE1012A



S5902



EEPV508



SLEPL200



LDT3812



LDTM3812



FIH9057B



YA321

## Transmission Service Tools

**YA2340 Sealing Cap Set**
- Retain transmission fluid by sealing transmission and transaxles when drive shaft or drive axle is removed on most US and import vehicles
- Side gear centering for Ford® transaxles
- Five caps cover a range of 1"–2 3/16"
- Segmented design prevents caps from slipping

**YA7244A Quick Connect/Disconnect Tool**
- For late model *Ford* vehicles using push lock connectors on transmission cooler lines as well as on fuel lines
- Diameter is 1 1/4"

**XLE1012A TORX® Box Wrench**
- Box end *TORX* sizes are E10 and E12
- Drive shaft must be removed when towing 1980 Chevrolet® Corvette® and 1/2, 3/4 and 1 ton GMC® and *Chevrolet* trucks
- Designed to access drive line fasteners
- Also services AMC® drive lines

**S5902 Oil/Transmission Plug Wrench**
- Box ends are 17 mm, 6-point and 21 mm, 12-point
- Designed for VW® transmission drain plugs
- 258 mm long

**EEPV508 Automatic Transmission Pressure Gauge Set**
- Use on all major manufacturer US and import vehicles
- Includes: two gauge assemblies for high- and low-pressure ranges, nine adaptors to test a wide variety of US and import automatic transmissions, comprehensive instruction manual with applications table and storage case
- Four special fittings are also included for connection to hard-to-reach test ports in areas requiring a 45° or 90° angle
- High-pressure gauge assembly includes 3.5" diameter gauge and 10' flexible hose with fluid coupler
- Low pressure gauge assembly includes 2.5" diameter gauge and 6' flexible hose with fluid coupler

**SLEPL200 TORX Plus® External Socket**
- SLEPL series of *TORX Plus* sockets with shallow countersink are designed for use on external *TORX Plus* low-profile head fasteners so the user can fully engage the fastener head
- For removal and installation of low-profile drive plate and flywheel bolts on QR25 Nissan® motors with automatic transmissions
- It is similar to the J-45816 *Nissan* specialty tool
- For flywheel bolts on QR25 *Nissan* motors with manual transmissions, use the 3/8" drive FTX50TPE male T50 *TORX Plus* Socket

**LDT3812 Transmission Oil Cooler Line Disconnect Tool**
- Two sizes (3/8" and 1/2") designed to disconnect transmission cooler lines
- Use 3/8" size for 2003 and later *Ford* V8 Explorer® plus 2004 and later *Ford* F150® and Cadillac® vehicles
- Use 1/2" size for *Ford* F250®, F350® and F450® Super Duty trucks

**LDTM3812 Camshaft Seal Kit**
- Easily removes and installs camshaft and crankshaft seals without damage
- Compact puller with unique extracting hooks engage seal for quick removal
- Interchangeable sleeves and mandrels allow easy installation of new seal
- Fits seals from 21.5 mm– 64 mm

**FIH9057B Transmission Line Quick Disconnect Tool**
- For 3/8" and 1/2" O.D. transmission and fuel lines on certain *Ford* and *Cadillac* models
- Constructed from durable 30% glass filled nylon allows more pressure to be applied and delivers a longer tool life
- Compact design allows access in tight quarters

**Applications**:
*Ford*: Explorer® (2002 and later with five-speed automatic transmission), F150 trucks (2003 late production series with four-speed automatic transmission), F150® trucks (2004 and later – all models), Thunderbird and Lincoln® LS (2003 and later), *F250/F350* truck series (2004 and later)
*Cadillac*: SRX (2004 and later), CTS (2003 and later), STS (2005 and later)

**YA321 Sealing Cap Set (Blue-Point®)**
- Five polyethylene caps to service all US and most import transmissions when the drive shaft is removed
- Caps keep dirt out of the transmission and prevent fluid loss



207FHRM

## Low-Profile Hex Sockets

| Stock No. | Drive Size, inches | External Hex, mm | Length, inches (mm) |
|---|---|---|---|
| FHRM7 | 3/8 | 7 mm | 1 (25.4) |
| FHRM8 | 3/8 | 8 mm | 1 (25.4) |
| FHRM10 | 3/8 | 10 mm | 1 (25.4) |
| FHRM12 | 3/8 | 12 mm | 1 (25.4) |
| FHRM13 | 3/8 | 13 mm | 1 (25.4) |
| FHRM14 | 3/8 | 14 mm | 1 (25.4) |
| CPT110A | 3/8 | 17 mm | 1 (25.4) |

**207FHRM Low-Profile Socket Set**
Includes FHRM7–FHRM14 (7 mm–14 mm) Low-plus CPT110A (17 mm) Low-Profile Hex Sockets (7pc).



S8673C1



S8673B3

## Bushing/Oil Seal Pullers and Driver

- Designed to easily remove or replace transmission rear extension housing bushings and oil seals on most Ford®, GM®, Chrysler® and AMC® automatic transmissons
- Refer to chart below for specifications and applications

| Stock No. | Type | O.D., inches | Depth, inches | Application |
|---|---|---|---|---|
| S8673C1 | Driver | — | 1 15/16 | *Ford* C-4 Series, *GM* 200, 350 and 375 Series |
| S8673B3 | Seal Installer | 2 3/4 | 1 15/16 | *Ford* C-4 Series, *GM* 200, 350 and 375 Series |

## Transmission Service Tools

**CPT110A Drain Plug Socket**
- Use on VW® transmission drain plugs
- Additional applications include removing front wheels on Triumph® Daytona® and America® motorcycles
- 17 mm, 6-point socket is for *VW* transmission drain plugs
- 3/8" drive, 1" long



CPT110A



SRP400B



SRP4



PRT600A

## Snap Ring Pliers

- Parallel jaw lock-ring pliers (high leverage) for easy lock-ring removal/installation
- Cushion grips offer comfort while resisting transmission fluids
- Natural steel finish with a tough protective clear coating to prevent corrosion

**SRP400B Snap Ring Pliers Set**

**SRP1C Snap Ring Pliers**
- 90° angle serrated jaws (for *GM* transmission output shaft)
- 3/32" tip width; 1/16 tip thickness; 8 15/16" long

**SRP2B Snap Ring Pliers**
- 90° angle serrated jaws with dimples for lock rings with tabs
- 3/32" angle tip width; 1/8" tip thickness; 8/78" long

**SRP3B Snap Ring Pliers**
- Straight tip serrated jaws
- 3/32" wide tip; 8 7/8" long

**SRP5C Snap Ring Pliers**
- Straight non-serrated tip with dimples for lock rings with tabs
- Seven pivot points create compound high-leverage for easy lock-ring expansion
- Jaws always remain parallel
- 1/4" tip width; 1/8" tip thickness; 10/18" long

**SRP4 Snap Ring Pliers**
- 3/32" wide ends with 1/8" diameter dimple for snap rings with tabs
- Jaws bent at a 90° angle
- 14" long

**PRT600A Transmission Service Set**
- For *Chrysler*, *GM* and *Ford* vehicles
- Includes the following six tools:

**PRT21 High Range Seal Tool**
- 2 1/2" x 1/2" spring steel blade
- 7 1/2" long

**PRT22 High Range Seal Tool**
- .015" high carbon wire loops on each end
- 6 1/2" long

**SRPC3800 Convertible Retaining Ring Pliers**
- Straight .038" tips
- 6 7/16" long

**SRPC7000 Convertible Retaining Ring Pliers**
- Straight .007" tips
- 7 7/16" long

**PR15 External Snap Ring Pliers**
- Wide (1/16") tips are angled at 90°
- 8 3/4" long

**PR16 External Snap Ring Pliers**
- Wide (3/16") notched tips
- 8 3/4" long

**⚠WARNING**
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# DRIVE LINE: TRANSMISSION


CJ193


CJ193-1-1


YA9348


YA9648


YA328A

## Transmission Pump Puller

**CJ193 Transmission Pump Puller**
- Removal of front pump on GM®, Ford® and Chrysler® transmissions requires two pullers
- Includes 1 1/4 lb slide hammer and 3/8"-16 x 14" slide screw

**Applications**: Most *GM*, *Ford* C-4, C-5 AOD (Automatic Overdrive), and *Chrysler* TF904-72 ON.

**CJ193-1-1 Optional Adaptor**
- M10-1.5 male end is designed to work on *Ford* and *Chrysler* transmission pumps
- 3/8"-16 female end screws onto slide screw of CJ193
- 2 1/4" long

## Seal/Bushing Installers and Removers

**YA9348 Transmission Seal Remover/Installer for *GM* vehicles**
- Removes and installs *GM* transmission shift selector shaft seals without draining the fluid
- 5/8" drive size, 3/8"-16 UNC-2B thread
- Remover bolt has a 9/16" head and 3/8"-16 UNC-2A thread

**YA9648 Removal/Installation Tool**
- Applications on 1996 and later *GM* trucks and Astro® vans with 4L60E and 4L80E transmissions

## Magnetic Angle Locator (Blue-Point®)

**YA328A Angle Locator**

Precise, accurate tool to determine angle measurements
- Ideal for checking drive shaft angle
- Red degree indicator located behind numbers for exact reading of graduations
- Fractional and metric scales molded into base of tool in 1/8" and centimeters
- Large 1 7/8" x 7/8" magnet in base for secure retention

# DRIVE SHAFT


UJP1

## Universal Joint Tools

**UJP1 Universal Joint Press Set** Press frame features large throat and vise mount capability for U-joint applications. Locking cup design holds cup in place. Large, coarse thread pressure screw for extra strength and maximum force. Grease Zerk fitting for smooth screw action. Adaptor hardness of 42–46 Rc. Includes application chart and storage case.

**BJP1F Press Frame**
- 7 13/16" throat opening; 3 1/2" depth; 6" height; 10 13/16" length

**BJP1-1 Sleeve Adaptor** 2.12" length.

**BJP1-2 Pressure Screw** 1 1/8-7 UNRC, 7/8" hex.

**BJP1-4 Pressure Pad** Universal Joint, 3 3/16" length.

**BJP1-5 Adaptor** .90"–1.33"

**BJP1-7 Adaptor** 1.68"–1.89"

**BJP1-8 Adaptor** 1.78"–2.00"

**BJP1-17 Grease Fitting**

**ME7A207 Retaining Ring**
- Retaining ring included in BJP1 and UJP1 sets

**ME7A208A Large Snap Ring**
- Large snap ring included in BJP1 and UJP1 sets

**ME7A209 Small Snap Ring**
- Small snap ring included in BJP1 and UJP1 sets

**ME9A34 Steel Ball**
- Steel ball included in BJP1 and UJP1 sets

**PAKPB061 Storage Case**

# CLUTCH


GA454A


SP2031A


YA7646


A144A


ATS2987


A37M


A145

## Clutch Service Tools

**GA454A Adjusting Wrench for Spicer® Clutch**
- For internal adjustment of *Spicer* angle spring and multiple lever clutches
- Eliminates the need for prybars that could damage clutch parts
- 15" long

**SP2031A Pilot Bearing Puller**
- Attaches to slide hammer shafts with 3/4"-16 or 5/8"-18 threads
- Pressure screw adaptor is made of stress-resistant steel
- Industrial finish

**YA7646 Clutch Coupling Tool for *Ford* Vehicles**
- Reach and disconnect the hydraulic clutch line from the clutch slave cylinder without damage to the coupling or clutch line
- Same as *Ford* No. T88T-70522-A

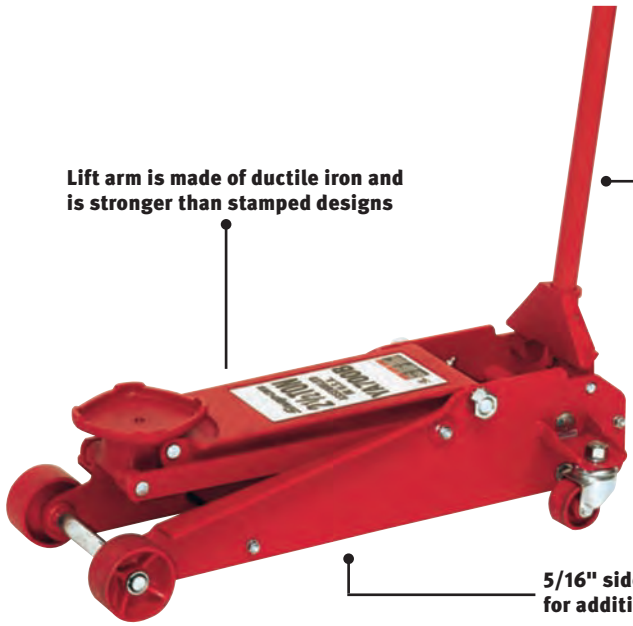
**Applications**:
Current *Ford* vehicles with hydraulic clutch including light duty trucks, Bronco® II, Ranger®, Explorer® and 1989 and later Thunderbird® and Mercury® Cougar with manual transmission and hydraulic clutch

**A144A Flywheel Turner**
- Use when replacing clutch pressure plate
- Turns flywheel to predetermined point that might be bypassed when "bumping" with starter
- 12 1/8" long

**ATS2987 Automatic Transmission Clutch Spring Compressor *(Blue-Point)***
- Use to compress clutch springs on most automatic transmission clutch units
- Packaged in ATS2987-21 storage case

**A37M Clutch Aligner Set**
- For vehicles with standard transmissions, including many import cars
- Allows quick aligning for complete range of single disc clutches (16 collet sizes ranging from 0.465" –1.181")
- Packaged in PB21 storage case

**A145 Clutch Aligner Set**
- Smaller companion to A37M
- Includes five double-ended collets ranging in size from .578"–.810"




**YA700B**



**YA1707**



**RACEJACKSET**

## Service Jacks

| Stock No. | YA700B | YA1707* | RACEJACKSET** |
|---|---|---|---|
| Capacity, tons | 2 1/2 | 3 1/2 | 1 1/2 |
| Maximum Lift Height, inches | 23 | 21 5/8 | 17 3/8 |
| Low Height, inches | 4 3/4 | 4 | 3 1/2 |
| Saddle Size, inches | 5 3/4 | 4 1/4 | 5 |
| Frame Length, inches | 30 1/2 | 29 7/8 | 25 1/8 |
| Handle Length, inches | 45 3/4 | 50 | 47 1/2 |
| Warranty | 2 Years | 1 Year | 1 Year |
| Weight, lb | 96 | 103 | 46 |

*Blue-Point®
**Includes ALUMSTAND on p.603

**RACEJACKSET Set, Service Jack and Stands, Aluminum, 3pc**
- Dual pump design quickly brings saddle to service height
- Diamond cut, slip-resistant handle with foam bumper pad protects vehicles

**⚠WARNING**

- Do not exceed capacity of jack or jack stands
- Do not work on vehicle supported by jack, use jack stands
- Use jack and jack stands only on hard level surfaces
- Read safety precautions on pages W1 to W4

# LIFTING: SERVICE JACKS



YA657C



YA660C

## Long Chassis Service Jacks (Blue-Point®)

- YA667C and YA662C feature an air actuated pump to raise lift arm quickly
- Hydraulic pump mechanism is operated by handle or foot pedal pump
- Knob style load release in handle end for precise control
- T-handle provides additional positioning assistance

| Stock No. | Type | Capacity, tons | Maximum Lift Height, inches | Low Height, inches | Saddle Size, inches | Frame Length, inches | Handle Length, inches | Minimum Operating Pressure, PSI | Warranty | Weight, lb |
|---|---|---|---|---|---|---|---|---|---|---|
| YA657C | Hydraulic | 4 | 24 | 5 | 5 1/2 | 50 5/8 | 42 1/8 | — | 1 Year | 156 |
| YA667C | Air/Hydraulic | 4 | 24 | 5 | 5 1/2 | 50 5/8 | 42 1/8 | 140 | 1 Year | 159 |
| YA660C | Hydraulic | 10 | 27 | 7 | 7 3/8 | 54 3/4 | 42 1/8 | — | 1 Year | 427 |
| YA662C | Air/Hydraulic | 10 | 27 | 7 | 7 3/8 | 54 3/4 | 42 1/8 | 140 | 1 Year | 441 |



YA1731A



YA731B

## Air Operated Truck Jacks *(Blue-Point)*

- Air operated lifting mechanism for ease of operations
- Adjustable extension screw raises saddle height
- Uses standard shop air supply (110–175 PSI)
- Rubber wheels allow ease in positioning

| Stock No. | Capacity, tons | Low Height, inches | Maximum Lift Height, inches | Power Raise, inches | Screw Extension, inches | Handle Length, inches | Base Size, inches | Minimum PSI (for rated load) | Weight, lb |
|---|---|---|---|---|---|---|---|---|---|
| YA1731A | 22 | 9 7/8 | 20 1/4 | 6 3/8 | 4 | 48 3/4 | 22 7/8 x 12 1/2 | 150 | 78 |
| YA731B | 20 | 9 3/8 | 17 5/8 | 5 1/2 | 2 3/4 | 39 1/2 | 8 x 5 1/2 | 140 | 69 |



YA1228



YA1229A



YA1233A



YAS1233A

## Hydraulic Bottle Jacks *(Blue-Point)*

| Stock No. | Capacity, tons | Low Height, inches | Maximum Height, inches | Screw Extension, inches | Base Size, inches | Handle Length, inches | Cap Diameter, inches | Operating Force, lb |
|---|---|---|---|---|---|---|---|---|
| YA1228 | 8 | 8 7/8 | 17 5/8 | 2 3/4 | 4 3/4 x 4 3/4 | 18 1/8 | 1 3/8 | 101 |
| YA1229A | 12 | 9 1/2 | 18 5/8 | 3 1/8 | 5 1/4 x 5 1/8 | 18 1/8 | 1 3/4 | 102 |
| YAS1229A* | 12 | 6 | 10 5/8 | 1 5/8 | 5 1/4 x 5 1/8 | 18 1/8 | 1 3/4 | 89 |
| YA1233A | 20 | 9 1/2 | 18 5/8 | 3 1/8 | 6 1/4 x 5 7/8 | 18 1/8 | 2 | 109 |
| YAS1233A* | 20 | 6 1/2 | 11 1/4 | 1 5/8 | 6 1/4 x 5 7/8 | 18 1/8 | 2 | 101 |

*Low-profile model



YA874B



YA875B



YA512



ALUMSTAND



YA4712



YA4716

## Jack Stands (in pairs)

| Stock No. | Capacity, tons | Low Height, inches | Maximum Height, inches |
|---|---|---|---|
| YA874B | 3 (per pair) | 12 | 19 |
| YA875B | 6 (per pair) | 16 3/8 | 25 3/8 |
| YA512* | 12 (per pair) | 17 1/2 | 27 1/2 |
| ALUMSTAND* | 3 (per pair) | 10 3/8 | 15 3/8 |
| YA4712* | 12 (per pair) | 19 3/4 | 30 1/4 |
| YA4716* | 6 (per pair) | 15 3/4 | 24 3/8 |

*Blue-Point®

**YA4712 Pneumatic Jack Stands *(Blue-Point)***
- Pneumatic cylinder automatically raises saddle to service height
- Saddle raises by pressing lever, automatically locks into place upon release

**YA4716 Pneumatic Lift Jack Stands *(Blue-Point)***
- Pneumatic cylinder automatically raises saddle to service height
- Saddle raises by pressing lever, automatically locks into place upon release
- Built with the professional user in mind

## Utility Stand *(Blue-Point)*
- Slim design maximizes work spaces and storage
- Acme screw allows for precise height adjustment

| Stock No. | Capacity, tons | Low Height, inches | Maximum Height, inches | Base Size, inches | Cap Size, inches |
|---|---|---|---|---|---|
| YA779B | 3/4 | 53 1/4 | 80 | 12 (diameter) | 5 5/16 x 2 7/16 |



YA779B



## Hydraulic Wheel Dolly *(Blue-Point)*
- Provides smooth, positive power for the removal and installation of single, tandem and duplex tires and wheels
- Lift arms can be adjusted to handle different wheel combinations

| Stock No. | Capacity, tons | Lift Range, inches | Lifting Arm (length), inches | Lifting Arm (spread), inches | Length, inches | Width, inches | Height, inches |
|---|---|---|---|---|---|---|---|
| YA765D | 3/4 | 2 1/2–8 3/8 | 26 | 27 1/2 | 45 1/8 | 39 1/2 | 34 5/8 |



YA765D

**⚠WARNING**

- Do not exceed capacity of jack or jack stands
- Do not work on vehicle supported by jack, use jack stands
- Use jack and jack stands only on hard level surfaces
- Read safety precautions on pages W1 to W4

# LIFTING: TRANSMISSION JACKS/FUEL TANK STANDS


YA715A


YA714D


YA876C


YA727B


YA780

## Transmission Jacks (Blue-Point®)

**YA715A 1/2 Ton Air/Manual Hydraulic Transmission Jack**
- Uses air for speed of operation and manual pump for precise control
- Extra wide base lowers center of gravity and promotes stability
- Rugged steel wheels and full-swivel ball bearing casters
- Adjustable ratchet style saddle
- Unique, handy release pedal provides controlled lowering of load

**YA714D 1/2 Ton High Lift Transmission Jack**
- Crank for precise and easy alignment of saddle
- Four adjustable load support arms fit most transmission pan flanges
- Foot pedal pump permits hands-free operation
- Wide base and four casters for stability

**YA876C 1/2 Ton Hydraulic Transmission Jack**
- Adjustable head can be tilted for optimum alignment of transmission bolt patterns
- Four wheel caster design allows easy movement and positioning
- Rugged steel wheels and full-swivel ball bearing casters
- User friendly 360° rotating pumping socket for maximum directional operation

**YA727B 1 Ton Wishbone Hydraulic Transmission Jack**
- Use on bus, truck, farm, automotive and construction vehicles
- Load-restraint chain included
- Two heavy cast adjustable mounting plates
- Four wedges to support load

**YA780 Transmission Jack Bracket**
- Fits most FWD and RWD automatic transmissions
- Use to stabilize transmission when being removed or installed
- Used with a transmission jack

## Transmission Jack Specifications

| Stock No. | Capacity, tons | Maximum Height, inches | Saddle Base, inches | Lifting Head Size, inches | Handle Length, inches | Chassis Length, inches | Chassis Width, inches | Tilt | Minimum Height, inches | Exp.Saddle Area, inches | Jack Size, inches | Weight, lb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YA715A | 1/2 | 78 1/8 | 8 7/8 x 7 1/8 | 9 x 9 | 11 | — | 20 | 12° | 37 7/8 | 21 x 21 | 34 1/8 x 36 1/8 | 196 |
| YA714D | 1/2 | 76 5/8 | 8 7/8 x 7 1/8 | 15 1/2 x 15 1/2 | 11 | — | 33 1/2 | 12° | 37 1/2 | 21 x 21 | 34 1/8 x 36 1/8 | 161 |
| YA876C | 1/2 | 24 3/4 | 12 5/8 x 7 7/8 | 9 x 9 | 22 1/2 | 31 | 20 | 60° (fwd), 18° (rear), 12° (right or left) | 8 1/2 | 17 x 9 3/8 | 31 1/8 x 15 | 106 |
| YA727B | 1 | 44 3/4 | 18 5/8 x 12 1/4 | 15 1/2 x 15 1/2 | 19 1/2 | 48 | 29 7/8 | 44° (fwd), 39° (rear), 13° (left and right) | 10 | 20 1/2 x 18 1/2 | 47 1/2 x 28 1/4 | 309 |


YA712A

## Fuel Tank Stand

**YA712A Fuel Tank Stand**
- Easily service fuel tank, fuel pumps and other components
- Handles fuel tanks up to 40 gal (empty)
- Includes anchoring straps and grounding wire
- Measures 9 1/4" H x 32" L x 15 3/8" W

# MOTORCYCLE JACKS


YA1715

## Motorcycle Jack

**YA1715 Motorcycle Jack *(Blue-Point)***
- 1,500 lb capacity
- Low height of 4 1/2", maximum height of 14 3/4"
- Double rubber-lined pad provides extra protection to motorcycle
- Pull handle assists user to maneuver jack into position
- One foot operation for ease of use
- Safety straps to secure motorcycle

HYBRID INNOVATION

## Battery Lift

**YA785 Hybrid Battery Lift**
- Removes and installs battery assemblies on most Hybrid vehicles
- Accommodates battery packs with a special harness to adapt to specific lift points
- Provides a safe alternative to manual lifting
- Minimizes potential damage to vehicle interior
- Compact design, easily folds down requiring minimal storage space
- Harness is designed specifically for Hybrid electrical batteries and rotates 360°

**Specifications**
- Lifting Capacity: 350 lb (159 kg)
- Maximum Reach: 45" (1,143 mm)
- Lift Weight: 179 lb (81.2 kg) when fully assembled with hydraulic cylinder
- Width: 34" (864 mm) x 51" (1,295 mm) high when assembled
- Maximum Lift Height: 82.5" (2,096 mm)
- Lift collapses to 28" (711 mm) wide x 34" (864 mm) long x 60" (1,524 mm) high for storage




YA785



A238



GA197A



YA2670A



YA2673A



YA554A

## Engine Hoist and Sling

**A238 Engine Sling**
- 40" flexible cable each end with a fitting drilled for 1/2" diameter bolts

**GA197A Lifting Pulling Tool**
- Maximum lift of 6', minimum of 2'
- Anchored hook swivels a full 360°

**YA2670A Engine Support Kit and Hoist**
- Ideal for FWD transmission removal and installation
- Supports engine and provides 15° adjustability in each direction
- Rests on drip rails between fenders across engine bay
- Accommodates engine compartments from 46"–61 1/2"
- Includes YA2671A Lifting Assembly

**YA2671A Lifting Assembly**
- Replacement Lifting Assembly for YA2670A

**YA2673A Offset Lifting Bar**
- Attaches to the YA2670A and radiator core support
- Provides additional lifting and support

**YA2674A W-Car Offset Bar for GM® Vehicles**
- Designed to assist with *GM* W-Car body style

**YA2675A Swivel Adaptor Set**
- Provides the ability for the leg plates to swivel
- Ideal for engine compartments that are wider at the windshield

**YA2676A Leg Plates for Honda® Vehicles**
- Adapts to fenders on *Honda* vehicles
- Used with YA2675A Swivel Adaptor Set

**YA554A Engine Lift Plate**
- Bolts to intake manifolds on US two- or four-barrel carbureted V6/V8 engines and throttle body V6/V8 engines
- 1 1/2 ton lift capacity

**⚠WARNING**

- Do not exceed capacity of jack or jack stands
- Do not work on vehicle supported by jack, use jack stands
- Use jack and jack stands only on hard level surfaces
- Read safety precautions on pages W1 to W4

# CHARGE. TEST. BOOST. INVERT. MAINTAIN. DIAGNOSE.

Take charge and be ready for anything with Snap-on® battery service equipment. With these top-of-the-line tools, you can handle anything 6, 12 and 24V that pulls into your shop. That's real power.

**Battery Charger Plus™ —** Batteries have changed – make sure your charger keeps pace. Smart charge most batteries at the rate you need. Check out the new EEBC400 and EEBC400F.

**The D-Tac™ Elite —** A diagnostic charger, battery starting and charging system tester, engine starter, digital multi-meter, and cable voltage drop tester with flash-reprogram mode and more.

**Booster Packs —** Professional-quality equipment that's perfect for the shop or field.



## Battery Chargers

**EEBC500 Battery Charger Plus™**

- Plus: Exclusive flash reprogramming power supply maintains consistent OEM specified voltage up to 60A
- Adaptive: Standard automotive, deep cycle, AGM and gel cell batteries each require a different charging cycle
- Versatile: Charges 6V, 12V and 24V batteries with 4A, 15A and 60A charging rates
- Convenient: GFCI outlets for auxiliary power to lights and other accessories: handy storage compartment for optional battery hand tools
- Smart: Fully automatic operation: microprocessor-controlled algorithms optimize the charge cycle without overcharging. Includes manual mode for timed charging
- Powerful: 300A engine starting power
- Informative: Digital display: voltage, % of charge and alternator % of performance
- Professional: Rugged, streamlined design.
- Higher working height handle helps relieve stress on lower back




**EEBC500**

| Specifications | EEBC500 | EEBC500INT† | EEBC500SOJ |
|---|---|---|---|
| Output Currents ADC | 60/15/4 | 60/12/4 | 60/15/4 |
| Output Voltages VDC | 6/12/24 | 6/12/24 | 6/12/24 |
| Input Voltage (Rated), VAC | 120 | 230/240 | 100 |
| Crank Assist Duty Cycle | 1/36 | 1/36 | 1/36 |
| DC Lead Type | Fixed | Fixed | Fixed |
| DC Lead Length | 7'6" | 7'6" | 7'6" |
| DC Lead Gauge | 4 AWG | 4 AWG | 4 AWG |
| DC Clamps | 500A | 500A | 500A |
| AC Cord Length, feet | 9 | 9 | 9 |
| GFCI | Yes | No | No |
| Voltmenter | Digital | Digital | Digital |
| Timer | Digital | Digital | Digital |
| Ventilation | Fan Cooled | Fan Cooled | Fan Cooled |
| Foam Filled Wheel Size, inches (mm) | 10 | 10 | 10 |
| Weight, lb | 86 | 90 | 90 |
| Dimension L x W x H, inches | 20.4 x 16.5 x 30.5 | 20.4 x 16.5 x 30.5 | 20.4 x 16.5 x 30.5 |
| Outdoor Use | Yes | No | No |
| Country of Use | North America | Australia, Europe, UK | Japan |
| Power Supply Cord | Included | EEBC5CABLE-A, E, U | Included |

† CE

TECHNICAL SUPPORT 1-866-713-6007

**EEBC500CVR *Battery Charger Plus* Cover**

- Protective cover for the EEBC500 *Battery Charger Plus* series and the EEBC400 series

**EEBC5CABLE-A Power Supply, Australia**

- Power supply, Australia. Use only with EEBC500INT

**EEBC5CABLE-E Power Supply, Europe**

- Power supply, Europe. Use only with EEBC500INT

**EEBC5CABLE-U Power Supply, United Kingdom**

- Power supply, United Kingdom. Use only with EEBC500INT

**EEBC500-15 Lead Set**

- 15' for EEBC500 series




**EEBC500CVR**



**EEBC5CABLE-A**



**EEBC5CABLE-U**



**EEBC5CABLE-E**

**⚠WARNING**

- Charger must be OFF when connecting or disconnecting leads
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4

# BATTERY CHARGERS







EEBC400




EEBC100

## Battery Chargers

### EEBC400 Battery Charger Series

- Adaptive: Standard automotive, deep cycle, AGM and gel cell batteries each require a different charging cycle
- Smart: Fully automatic operation: microprocessor controlled algorithms optimize the charge cycle without overcharging. Also includes manual mode for timed charging

### EEBC100 Manual Charger (Blue-Point®)

- Manually set charging time as required
- 200A 12V and 100A 6V engine start available for emergency starting
- 40A rapid charge charges in .5–1.0 hours
- 10A fast charge charges in 3–5 hours
- Rugged retractable handle provides convenient storage
- UL® listed

| Specifciations | EEBC400 | EEBC400F | EEBC400INT | EEBC100 |
|---|---|---|---|---|
| Output Currents ADC | 50/10/4 | 50/25/10/4 | 50/10/4 | 40/10/2 |
| Output Voltages VDC | 6/12 | 12/24 | 12/24 | 6/12 |
| Input Voltage (Rated), VAC | 120 | 120 | 230 | 120 |
| Crank Assist Rating, ADC | 250 | 250 & 225 | 250 | 200 |
| Crank Assist On Time (seconds) | 20 | 20 | 20 | 5 |
| DC Lead Length | 7.0' | 6.0' neg/10.0' pos | 7.0' | 6.0' |
| DC Lead Gauge | 6 AWG (Cu) | 6 AWG (Cu) | 6 AWG (Cu) | 8 AWG (Cu) |
| DC Clamps | 500A | 500A | 500A | 300A |
| AC Cord Length, feet | 7.0' | 7.0' | IEC (receptacle) | 6.0' |
| Voltmeter | Digital | Digital | Digital | None |
| Timer | Digital | Digital | Digital | 135 Minute |
| Ventilation | Fan cooled | Fan cooled | Fan cooled | Fan Cooled |
| Blow Molded Wheel Size, inches (mm) | 10 (254) | 10 (254) | 10 (254) | 6 (152) |
| Weight, lb | 85 | 85 | 85 | 40 |
| Dimension L x W x H, inches | 20.4 x 16 1/2 x 30 1/2 | 20.4 x 16 1/2 x 30 1/2 | 20.4 x 16 1/2 x 30 1/2 | 13.8 x 13 1/2 x 20 |
| Outdoor Use | Yes | Yes | No | No |
| Country of Use | North America | North America | Australia, Europe, UK | North America |
| Power Supply Cord | Inclued | Included | EEBC5CABLE-A, E, or U | Included |
| Warranty | 2 Years | 2 Years | 2 Years | 1 Year |

## Bench Charger

| Specifications | Input | Output | Battery Range (Optimal) | Charging Cable Length | Dimensions, inches | Shipping Weight, lb (kgs) |
|---|---|---|---|---|---|---|
| EEBC61210 | 120V AC, 60 Hz, 4.4A | 6V or 12V DC, 1A–10A | 25–200 AH | 6.0' | 10.75 L x 4.5 W x 7.875 H | 4.94 (2.24) |



EEBC61210

**EEBC61210 Bench Top Battery Charger (Blue-Point®)**
- Automatic operation plus an intelligent microprocessor-controlled charging sequence for use on a wide variety of battery types
- Charge conventional, maintenance-free, AGM, gel cell, deep cycle and marine batteries
- Simply select the correct battery size: Charger will initiate the automatic charging process

## Battery Maintainers

**EEBM500 4A 6/12 Volt Battery Maintainer**
- Fully automatic 6V/12V operation, 4A charging rate
- Compatible with conventional, maintenance-free, AGM, gel cel, spiral wound and deep cycle batteries
- LED charging status indication
- Includes quick connect output cord with clamp set, ring terminal set and 12V adaptor output accessories
- Ergonomic design with large buttons for easy use while wearing gloves
- Reverse polarity and battery fault warnings

**EEBM500-1 Clamp Set**

**EEBM500-2 Ring Kit**

**EEBM500-3 12V Plug**




EEBM500

## Power Inverters

**EEPI175 Power Inverter**
- 175 watt power inverter provides 110V AC power inside your vehicle
- Plugs into vehicle 12V power outlet
- Convenient size fits in cup holder
- Two USB ports to power small electronic devices

**EEPI175CAMO Power Inverter**
- Camouflage pattern, same features as EEPI175

**EEPI2250 Power Inverter**
- 2,250 watts of continuous power and 4,500 watts peak power to run a wide variety of tools, electronics and appliances
- Stable, clean and reliable power with high surge capacity for use in the most demanding applications
- Precise electronics to enable proper charging of electronics: laptops, cell phones and gaming devices
- Three 120V AC outlets
- For tow trucks, fleets, construction vehicles and military use
- Unit must be hard wired into vehicle




EEPI175




EEPI175CAMO




EEPI2250

**⚠WARNING**

- Charger must be OFF when connecting or disconnecting leads
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4

# BATTERY SYSTEM TESTERS




EECS306C




EECS306C-CVR

## D-TAC™ Battery System Diagnostic Tester/ Charger/Engine Starter

**EECS306C *D-TAC* Elite**

- *D-TAC* Elite is a diagnostic charger, battery, starting and charging system tester, engine starter, DMM, cable voltage drop tester with flash reprogram mode and more
- EECS306C *D-TAC* Elite includes EECS304C MicroVAT™ ELITE Tester, EECS306C-5 Battery Test Cables (10'), EECS306C-6 Post Adaptors and EECS500-1 Printer Paper Roll
- Integrated printer and cart
- Multitasking, once a diagnostic charge session has been started, the *MicroVAT* Elite (top analyzer) can be removed from the charger and used to diagnose other vehicles while the charger continues to diagnose and charge the original battery
- Conductance and deep scan battery test technology with 150A load capability (clicking sound heard when load is applied)
- Diagnostic Charge Cycle continuously monitors battery watching trends while maximizing charge acceptance minimizing charge time
  –No wasted time trying to charge defective batteries
  –Temperature (temperature sensor built into unit)
  –Will not damage a battery during the charging process
- Charging System Test uses the most innovative and decisive method, digital signal processing
- Cable Voltage Drop Test determines health of vehicle battery cables (with optional EECS306C-3 Cables)
- Built-in printer provides test results and custom shop information
- 3 1/2" large full color 1/4" VGA display, color icons and test result graphs
- Visual and voice prompts in English, Spanish, French, Italian, Dutch or German help you through the diagnostic process
- Digital Multimeter (with optional EECS306-4 Lead Set)
  –Low volt automotive, amps, ohms, diode and basic oscilloscope
  –Temperature via built-in infrared sensor or optional probes (EETH501C fluids, EETH502B surface, EETH503B air)
- USB and Infrared (IR) connectivity
  –USB software upgradeable for future enhancements
  –IR & Certificate printing on PC with optional EECS306C-7
- Heavy duty ready – for more accuracy and capability, add the optional EECS306C-2 Dual Range Amp Clamp and EECS306C-3 Cable Voltage Drop Test Cables
- UL®/CUL® listed
- Patents pending

**EECS306C-CVR Protective Cover**

**SS3242 Instructional DVD**




EECS304C

## *MicroVAT* ELITE Battery Starting/Charging System Tester

**EECS304C *MicroVAT* Elite Tester**

- The *MicroVAT* ELITE is a battery, starting and charging system tester, DMM, cable voltage drop tester and more
- Charging system test uses the most innovative and decisive method – digital signal processing
- Cable voltage drop test – determine health of vehicle battery cables with optional EECS306C-3 cables
- Built-in printer – provides test results and custom shop information
- 3 1/2" large full color 1/4" VGA display – color icons and test result graphs
- Visual and voice prompts in English, Spanish, French, Italian, Dutch or German help you through the diagnostic process
- Digital multimeter (with optional EECS306C-4 lead set)
  –Low volt automotive, amps, ohms, diode and basic oscilloscope
  –Temperature via optional Snap-on® probes or built in infrared sensor
- USB and infrared (IR) connectivity
  –USB software upgradeable for future enhancements like hybrid
  –USB data collection: use any thumb drive to move info to excel
  –IR & certificate printing on PC with optional EECS306C-7
- Heavy duty ready – for more accuracy and capability, add optional EECS306C-2 dual range amp clamp and EECS306C-3 cable voltage drop test cables
- Upgrade your EECS304C *MicroVAT* Elite to EECS306C *D-TAC* Elite by ordering EESC304-306
- CE – DE, ES, FR,IT, GB, NL and JP
- Patents pending

TECHNICAL SUPPORT 1-866-592-8052



EECS150



EECS350



EECS550



EECS750

| Specifications | EECS150 | EECS350 | EECS550 | EECS750 | EECS304C |
|---|---|---|---|---|---|
| Model | Basic | Enhanced | Wireless | Advanced | Microvat |
| CCA Range | 100–1,400 | 100–1,700 | 100–2,000 | 100–2,000 | 100–2,000 |
| CCA Input | • | • | • | • | • |
| Volts | 12 | 6/8/12/24 | 6/8/12/24 | 6/8/12/24 | 6/12/24 |
| Rating Systems | SAE, EN, IEC | SAE, EN, IEC, DIN, JIS | SAE, EN, IEC, DIN, JIS | SAE, EN, IEC, DIN, JIS | SAE, EN, IEC, DIN, JIS |
| Battery Types | Standard, AGM | Standard, AGM, EFB | Standard, AGM, EFB | Standard, AGM, EFB | Standard, AGM |
| Battery Packs | No | No | Yes Series | Yes Series/Parallel | Yes Series |
| Displays Battery Condition | • | • | • | • | • |
| Displays Battery Voltage (SOC) | • | • | • | • | • |
| Display % of CCA | • | • | • | — | — |
| Tests Discharged Batteries | • | • | • | • | • |
| Reverse Polarity Protection | • | • | • | • | • |
| Cable Integrity Technology | • | • | • | • | • |
| Displays State-of-Charge Graph | — | • | • | • | • |
| Detects and Displays Bad Cell | — | • | • | • | • |
| Temperature Compensation | — | • | ± 32 °F | 4 ranges | X – IR Temp Measured |
| Poor Connection Detection | — | • | • | • | • |
| Custom Header / Shop Info | — | • | • | • | • |
| Retention Magnet | — | • | • | Hanger | • |
| Post Adaptors | — | • | • | • | • |
| Surface Charge Warning | — | — | • | • | • |
| Integrated Printer | — | — | — | • | • |
| Voice Prompts | — | — | — | — | • |
| System Test | Yes – voltmeter | Yes – starting/ charging/ripple voltage | Yes – starting/ charging/ripple voltage | Yes – menu driven routine w/ ripple detection and graph | Yes – menu driven routine includes DSP technology, advanced alternator diagnostics |
| Printer Capable | None | Opt., IR printer or PC | IR to PC | Integrated | Integrated |
| Communication | — | IR | IR, Bluetooth | IR, USB | IR, USB |
| Wireless Controller | — | — | Included Bluetooth | No | No |
| Display | LCD backlit (3.1" diag.) | LCD backlit (3.1" diag.) | LCD backlit (3.1" diag.) | Color 3 1/2" | Color 3 1/2" |
| Clamps | Small | Medium | Medium | Large | Large |
| Cable length | 2' Fixed | 4' Fixed | 2' Fixed | 10' Replaceable | 10' Replaceable |

## Battery System Testers

- Horizontal hand hold position with easy thumb-access buttons to enhance the user experience
- Superior accuracy with CCA required input and conductance technology for rendering battery, starter and charging system status

## D-TAC™/MicroVAT™ Optional Accessories

**EECS306C-2 Amp Clamp**
- High (0A–700A); Low (0A–70A)

**EECS306C-3 Cable Drop Cables**
- Cable voltage drop test cables for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite

**EECS306C-4 Multimeter Probes**
- Digital multimeter probe set for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite

**EECS306C-5 10 ft Test Cables**
- Battery test cables for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite. 10' long (included)

**HHGA-PRINTER Infrared Printer**
- Optional printer for EECS350 & EECS550.

**HHGA-18 Paper Roll**
- Replacement paper roll

**EECS306C-6 Post Adaptors Included**
- Clamp-on inductive low-amp probe for old EECS306B series *D-TAC* plus battery systems testers and EECS304B1B *MicroVAT*
- 0A–15A range for testing low current circuits
- 5' length; 10 mA resolution

**EECS306C-7 IR Dongle**
- Cable voltage drop test cables for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite

**EECS304C-1 Soft Storage Case**
- Soft-sided carrying case for EECS304C *MicroVAT* Elite.

**EECS500-1 Printer Paper**
- For EECS304C and EECS306C.



EECS306C-2



EECS306C-3



EECS306C-4



HHGA-PRINTER

**⚠WARNING**

- Charger must be OFF when connecting or disconnecting leads
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4

# BOOSTER PACKS



EEJP500



EEJP500V24



EEJP500iCAMO

## Portable Booster Packs

- Complete jump pack lineup: 12V, 24V and one for hunting, camping and emergency 110V AC power

| Specifications | EEJP500 | EEJP500V24 | EEJP500iCAMO |
|---|---|---|---|
| Battery Size | 22 aH | 22 aH (2 each) | 22 aH |
| Cranking Amps | 330 | 500 | 330 |
| Cold Cranking Amps | 275 | 415 | 275 |
| Built-in Charger (requires heavy duty shop cord) | Yes | Yes | Yes |
| Charger | 3 Amp 110 VAC | 3 Amp 110 VAC | 3 Amp 110 VAC |
| Automatic | Yes | Yes | Yes |
| 12 Volt Cord Included | EEJP500-8 | EEJP500-8 | EEJP500-8 |
| Cable Length (Positive and Negative) | 60” | 60” | 48” |
| Cable Gauge | 4-gauge | 2-gauge | 4-gauge |
| Charge Indicator | Digital | Digital | Digital |
| 12 Volt Outlet | Yes | Yes | Yes |
| Weight, lb | 28 | 44 | 34 |
| Reverse Polarity (off position only) | Audible | Audible | Audible |
| On-Off Switch | Yes | Yes | Yes |
| Digital Readout | Yes | Yes | Yes |
| Volt Meter for Internal and vehicle battery | Digital | Digital | Digital |
| % of Charge Indicator for internal battery | Yes | Yes | Yes |
| Vent/Cooling Fan | Yes | Yes | Yes |
| Dual 110V AC Recepticles, 400W Inverter | — | — | Yes |
| USB Port | — | — | Yes |
| Flex Light | — | — | EEJP500LITE |

### EEJP500 Jump Pack (12 Volt)

- For powerful starting of multiple vehicles
- Powerful 330 cranking amps and 275 cold cranking amps from high output AGM battery
- Smart multi-function digital display indicates internal battery percent of charge and voltage, plus vehicle battery voltage

### EEJP500V24 Jump Pack (12 and 24 Volt)

- Heavy Duty starting for heavy duty vehicles
- Powerful 500 cranking amps and 415 cold cranking amps from twin high output AGM batteries
- Smart multi-function digital display indicates internal battery percent of charge and voltage, plus vehicle battery voltage
- Tough two-gauge, long reach 60" cables for connection to hard-to-reach batteries

### EEJP500iCAMO Power Invertor (12 Volt)

- Great electricity source during a power outage
- Powerful 330 cranking amps from high output AGM battery
- Smart multi-function digital display indicates invertor wattage, internal battery percent of charge and voltage, plus vehicle battery voltage
- Versatile Unit includes 400 Watt Power Inverter with Dual 110V AC receptacles and halogen flex neck lamp
- USB Port for powering or recharging portable electronic devices

TECHNICAL SUPPORT 1-866-713-6007

## Portable Booster Packs

**EECS309B Portable Booster Pack**
- 1,700 amp peak amp battery power for quick starting power – works on even deeply discharged batteries
- 30" four-gauge clamp leads (included) are detachable, via heavy duty brass sockets for easy field replacement of cables
- Two insulated posts provide secure separation and storage for the clamps, when not in use
- 12V socket allows recharging, and also provides a 12V source to power external devices, such as radios, lights, etc. (5' power cord included)
- Fast recharge via 120V 4 amp wall charger; includes charging status indicator lights

**Optional Accessories:**

**EECS309B-5 Positive Lead and Clamp 60"**

**EECS309B-6 Negative Lead and Clamp 60"**

**EECS309B-9 Motorcycle Leads (positive and negative)**




**EECS309B**

**EECS660 Portable Booster Pack (Blue-Point®)**
- 1,700 peak for starting power in heat or cold
- Long reach 46" four-gauge cables
- Industrial grade clamps grab and hold on battery terminals
- Quickly plug heavy duty shop extension cord into front of unit for built-in charging
- 12V DC power for convenience




**EECS660**

**EEJP111M USB Charger/Mini Jump Starter *(Blue-Point)***
- Small light weight Lithium-ion pack for charging phones, starting stalled cars and more
- Ideal for personal use emergency jumps on power sport, motorcycle and 4/6 cylinder vehicles
- Scrolling display with user instructions
- USB port 5V DC, 2A for charging devices
- Ultra bright LED hazard or work light
- Memory saver compatible (order EECS5MEM OBDII cable)
- 12V port and AC charger included

TECHNICAL SUPPORT 1-866-328-2921



**EEJP111M**

## Cables/Clamps

- Superior booster cables with heavy gauge 100% copper stranding
- Clamp bodies are fully insulated and have recessed copper jaws
- Heavy duty clamp springs bite securely on top or side battery posts

**BC20500 Booster Cable Set**
20' long, four-gauge, 413 strands copper wire

**BC15500 Booster Cable Set**
15' long, four-gauge, 329 strands copper wire

**BC25500P Plug In Style Booster Cables**
- Starting cable and connection harness
- Heavy-gauge 25' cables plug into bumper mounted socket to reach any stalled vehicle without having to lift the truck's hood
- Polarized socket mounts to service truck bumper and connects to truck battery
- 500A clamps are fully insulated with vinyl four-gauge, 413 strands of copper wire

**YA159A Cable Clamp Set**
One pair of heavy duty, copper jaw clamps. 500A clamps, 100% copper live jaw



**BC20500**



**BC25500P**

**⚠WARNING**
- Do not short portable booster pack leads against each other
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4

# BATTERY SERVICE TOOLS



MT302BR

**Hard Grip Handle Colors**

| Red | Orange | Green | Yellow |
|---|---|---|---|
| R | O | G | Y |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS

## Remote Start Switch

- 5' leads allow safer engine cranking while beneath or beside the vehicle so hands are away from belts and moving parts
- Switch housing prevents dirt and moisture from affecting the switch
- Heavy duty contacts reduce arcing
- Safety shield helps prevent accidental activation
- Switch rated at 40A at 12V or 20A at 24V
- Patented Instinct® comfort-designed handle

**Applications:**

- To "bump" the engine to inspect, align and/or remove parts
- Start the engine from under the hood with the key on

| Stock No. | MT302B |
|---|---|
| Voltage | 6V, 12V and 24V |
| Cord Color | Black |
| Cord Type | Straight |
| Cord Material | EDPM |
| Cord Length, feet | 5 ft (1.5m) |
| Wire Gauge | 12 |
| Switch Amps | 40A @ 6V and 12V; 20A @ 24V |
| Outside Wire Diameter | 0.2 in (5 mm) |
| Handle Type | *Instinct* |
| Handle Color | Red, Orange, Green, Yellow |
| Terminal Clip | Copper |
| Boot Material | Flexible Composite |
| Overall Length | 5 ft, 5 in (1.65 m) |
| Weight | 0.82 lb (0.37 kg) |

**MT302BR Remote Start Switch, Red Handle**
**MT302BG Remote Start Switch, Green Handle**
**MT302BO Remote Start Switch, Orange Handle**
**MT302BY Remote Start Switch, Yellow Handle**



2004BSKA



2005BSKA

## Service Kits

**2004BSKA Battery Service Kit, 4 pc**

**Includes:**
208BCP Angle Nose Pliers
BTC10 Side Terminal Cleaner
BTC3A Terminal Brush
YA249 GM® Battery Terminal Wrench
C0410B Kit Bag

**2005BSKA Battery Service Kit, 5 pc**

**Includes:**
208BCP Angle Nose Pliers
B260A Cable Clamp Pliers
BTC10 Side Terminal Cleaner
BTC7B Terminal Cleaner
CJ92 Self Locking Cable Clamp
C0506 Kit Bag

## Cable Clamp Tools



208CCP



B260A

**208CCP Angle Nose Pliers**

- Rounded nose protects battery from damage
- Jaws are offset 30° for better leverage
- 7 3/4" long

**B260A Cable Clamp Pliers**

- Spreads and cleans cable clamps
- Prybar on one end
- 7 3/8" long



GA486A



CJ92

**GA486A Cable Clamp Puller**

- Removes cable clamps without damaging posts
- 4" long

**CJ92 Cable Clamp Puller**

- Self-locking jaws securely grip terminal and pull without damage to post
- 1 3/4" spread

## Terminal Tools (Blue-Point®)

**BTC3A Terminal Brush**
- Stiff wire bristles thoroughly clean posts and clamps
- 3 3/8" long

**BTC7B Terminal Cleaner**
- Cleans posts and cable clamps
- Includes a small, circular wire brush with protective cap to clean side terminals
- Plastic body

**BTC8A Terminal Cleaner**
- Cleans posts and cable clamps
- Plastic body
- 3 1/2" long

**BTC10 Side Terminal Cleaner**
- Cutters on one side clean battery contacts; brush cleans cable contact
- 4 1/2" long

**YA9484 Battery Terminal Crimper**
- Ideal for replacing or repairing battery cable terminal ends
- Design helps prevent overcrimping
- Terminal sizes 6 ga. through 4/0

**YA249 Battery Terminal Wrench for GM® Battery**
- Ratcheting box wrench design for use on *GM* side terminal batteries
- 5/16" hex, 5 1/2" long

**YA249L Side Battery Terminal Wrench (5/16")**
- Extra long (9 3/4") for connecting/disconnecting battery side terminals on 1994 and later Ford® Aerostar® vans and *GM* vehicles including: 1994 and later Pontiac® Grand AM®, Grand Prix®,"W" body cars, plus Buick® Regal®, Oldsmobile® Cutlass, Chevrolet® Lumina and Lumina APV
- 5/16" wrench size


BTC3A


BTC7B


BTC8A


BTC10


YA9484


YA249


YA249L

## Hydrometers *(Blue-Point)*

**BT101 Battery Hydrometer**
- Determines specific gravity from 1.100–1.300
- No temperature tables required or difficult float reading to observe
- Design enables both customer and technician a viewing opportunity to see the state of the battery acid

**BB4C Hydrometer/Thermometer**
- Measures specific gravity from 1.100–1.300 and includes a quick reference, color coded "poor," "fair" or "good" scale plus a temperature correction scale
- 14 3/4" long


BT101


BB4C

## Fillers *(Blue-Point)*

**BB6A Filler Bulb**
- 6 oz fluid capacity
- Hard rubber stem features an overflow for dripless filling
- 10 1/2" long

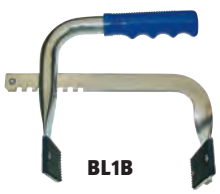
**GA207A Automatic Filler**
- Insert spout into fill hole and press down
- Fills without overflow


BB6A


GA207A

## Carrier *(Blue-Point)*

**BL1B Battery Carrier**
- For top post and side terminal batteries
- Rubber pads securely grip battery widths from 5"–7"
- Plastic hand grip provides a firm hold


BL1B

**⚠WARNING**

- Plastic coating on handle does not protect against electric shock
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4

# THE LATEST A/C TECHNOLOGY. NOW THAT'S COOL.

When your air conditioning equipment does most of the work automatically, that means A/C with a great return on investment. Couple that with hand-held equipment that delivers quick, accurate results, and you have a very cool system.

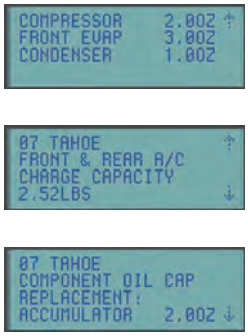
**A/C Recyclers and Leak Detectors —** Designed and manufactured to meet all current EPA and SAE standards, reduce refrigerant usage in your shop, and protect the ozone; SAE J2791 and J2913 certified detectors are also available, which uncover the smallest of leaks.

**System Coverage —** From vacuum pumps and manifold sets to UV leak detection kits and digital thermometers, your A/C needs are covered.

**REDUCE CALLBACKS.**

You have enough to do without doing the same job twice. But with accurate Snap-on® A/C equipment, make a drastic cut back on callbacks. With microprocessor-controlled operation and automatic detection mechanisms, you're working with smarter equipment.









EEAC325B




EEAC325BH

## KOOL KARE™ PLUS A/C Service Center (R134a)

| Specifications | EEAC325B | EEAC325BH |
|---|---|---|
| Operating Temperature Range | 50 °F–120 °F (10 °C–49 °C) | 50 °F–120 °F (11 °C–49 °C) |
| Relative Humidity | Up to 80% non-condensing | Up to 80% non-condensing |
| Operating Pressure | 450 PSI (max.) | 450 PSI (max.) |
| Storage Temperature Range | -4 °F–140 °F (-20 °C–60 °C) | -4 °F–140 °F (-20 °C–60 °C) |
| Compressor | 1/3 HP, 1.1 CFM reciprocating | 1/3 HP, 1.1 CFM reciprocating |
| Vacuum | 28 inches Hg at sea level | 28 inches Hg at sea level |
| Vacuum Pump | 1/3 HP, 3.0 CFM, reciprocating, 40 microns | 1/3 HP, 3.0 CFM, reciprocating, 40 microns |
| Gauge Ranges | High Side: 500 PSI (34 BAR) max. / Low Side: 350 PSI (24 Bar) max. | High Side: 500 PSI (34 BAR) max. / Low Side: 350 PSI (24 Bar) max. |
| Recovery Amount | 23 lb (10.43kg) | 23 lb (10.43kg) |
| Recovery Rate | 1 lb per minute (max.) | 1 lb per minute (max.) |
| Refrigerant Charge Amount | 0–22 lb (9.98 kg) max. | 0–22 lb (9.98 kg) max. |
| Onboard Refrigerant Capacity | 30 lb (14 kg) | 30 lb (14 kg) |
| Charge Oil Bottle | 12 oz (360 ml) | 12 oz (360 ml) |
| Drain Oil Bottle | 12 oz (360 ml) | 12 oz (360 ml) |
| Dimensions | 34" D x 46" H x 24" W | 34" D x 46" H x 24" W |
| UV Oil Dye Injection | Yes | Yes |
| Warranty | 2-Year | 2-Year |
| Vehicle Database | Yes | Yes |

TECHNICAL SUPPORT 1-866-769-2788

EEAC325A1 – Spin on filter dryer for EEAC324A/EEAC324B and EEAC325A/EEAC325B A/C Recyclers. Avoid A/C recycler downtime. Keep extra EEAC325A1 filters on hand, since the new SAE J-2788 standard requires filter dryer replacement after 150 lb of refrigerant used. Filter life prompt occurs when 100 lb of refrigerant have been filtered. Mandatory filter lockout will occur after 150 lb of refrigerant have been filtered.

**EEAC325B/EEAC325BH Shared Features:**
- Fully automatic air purge and built-in oil injection
- Meets SAE J-2788 standard of 95% refrigerant recovery and ± .5 oz charge accuracy
- 20% increase in refrigerant recovery saves refrigerant
- Increased charge accuracy reduces A/C repair call backs
- Extra long 11 1/4' hoses for heavy duty applications
- Microprocessor controlled operation
- SAE®, UL® and CSA® listed
- Simple, menu driven operation
- Automatic high pressure and tank shutoff
- Automatic purge of air and other non-condensable gases
- Multilingual (English, Spanish, French)
- Complete auto sequence programmability
- Larger gauges, larger 4 x 20" display and vacuum leak test
- Vehicle database from 1995–2009 for refrigerant and oil specifications

**EEAC325B Only Features:**
- Imports charge capacity directly into charge mode
- Programmable vacuum hold time
- Upgradeable software

**EEAC325BH Only Features:**
- Do not turn any vehicles away from the shop
- One machine that services both conventional vehicles and hybrids properly and safely
- Menu selectable function gives user ability to clear residual oil from A/C Recover, Recycle, and Recharge machine's fluid circuit and hoses minimizing risk of oil cross contamination

**Includes:**
- A/C capacities database that enhances productivity
- Automatic air purge
- Recovery accuracy ± 1.0 oz
- Charge accuracy ± 1/2 oz
- Protected by two-year warranty

**EEAC325A1 Filter Dryer**
- Use on EEAC324A/EEAC324B and EEAC325A/EEAC325B
- Mandatory filter lock out will occur after filtering 150 lb of refrigerant

**EEAC325B2 High side service hose**
**EEAC325B3 Low side service hose**
**EEAC325A4 Oil drain bottle**
**EEAC325A5 High side service coupler**
**EEAC325A6 Low side service coupler**



⚠WARNING
• Wear safety shield (user and bystander)
• Read safety precautions on pages W1 to W4

# AIR CONDITIONING: RECYCLING/RECHARGING SYSTEMS (R134A)




EEAC324B

## ECO™ PLUS A/C Service Center (R134a)

**EEAC324B A/C Service Center**

- Great performance at a semi-automatic value price
- Intuitive interface uses up/down screen menu options
- Menu display guides technician through service process

| Specifications | EEAC324B |
|---|---|
| Operating Temperature Range | 50 °F–120 °F (10 °C–49 °C) |
| Relative Humidity | Up to 80% non-condensing |
| Operating Pressure | 450 PSI (max.) |
| Storage Temperature Range | -4 °F–140 °F (-20 °C–60 °C) |
| Compressor | 1/3 HP, 1.1 CFM reciprocating |
| Vacuum | 28 inches Hg at sea level |
| Vacuum Pump | 1/4 HP, 1.5 CFM, reciprocating, 40 microns |
| Gauge Ranges | High Side: 500 PSI (34 BAR) max. / Low Side: 350 PSI (24 BAR) max. |
| Recovery Amount | 23 lb (10.43 kg) max. |
| Recovery Rate | 1 lb Per minute (max.) |
| Refrigerant Charge Amount | 0–22 lb (9.98 kg) max. |
| Onboard Refrigerant Capacity | 30 lb (14 kg) |
| Charge Oil Bottle | 12 oz (360 ml) |
| Drain Oil Bottle | 12 oz (360 ml) |
| Dimensions | 34" D x 46" H x 24" W |
| UV Oil Dye Injection | Yes |
| Warranty | 2-Year |
| Vehicle Database | No |

TECHNICAL SUPPORT 1-866-769-2788

## Service Center Accessories

**EEAC325ACV A/C Service Center Cover**
- Protects EEAC324A, EEAC324B, EEAC325A, EEAC325B and EEAC325BH from dust, moisture and shop environments

**EEAC325B2013 Database Update**
- Vehicle Refrigerant and Oil Capacity Database Update
- Updated vehicle database now includes many US and Import vehicles through 2013
- Helps technician be more efficient and accurately charge a vehicle with the proper amount of refrigerant by putting information right at their fingertips
- Saves money and potential AC system problems by preventing overcharging
- Database additions cover approximately 1,800 more vehicle/model combinations
- This database is specifically written and designed for the EEAC325B and EEAC325BH

**Application:**
- SD card contains updated database of vehicle A/C capacities (oil and refrigerant) for US and import vehicles as well as light trucks
- Sell EEAC325B2013 to customers who purchased their EEAC325B prior to January 1, 2014

**ACTFILTERPL A/C Filter (Blue-Point®)**
- Filters and separates A/C sealants, dyes, debris, lubricants and other contaminants
- Damage results from Type I sealants or Type II entering A/C service equipment from a vehicle during servicing
- ACFILTERPL not required or recommended for J2788 certified EEAC324A/EEAC325A and EEAC324B/EEAC325B recyclers

**ACTFILTER1 Replacement Filter Kit**
- Replacement filter for ACTFILTERPL

**SS3294 A/C Merchandising Banner**
- Durable, weather resistant plastic
- Measures 82" x 34"
- Includes 60" ropes at corners




EEAC325ACV



ACTFILTERPL




SS3294

## Filter Dryers

**EEAC325A1 Filter Dryer**
- Use on EEAC324A/EEAC324B and EEAC325A/EEAC325B
- Mandatory filter lock out will occur after filtering 150 lb of refrigerant

**EAK0095C01AB Filter Dryer**
- Use on EEAC307C, EEAC308C and EEAC310A (R12 side)

**EAK0095C02AB Filter Dryer**
- Use on EEAC313A (R134a side)



EAK0030C01AB

## Master Dryer Kit

**EAK0030C01AB Master Dryer Kit**
- Filter/dryer should be changed regularly depending on usage of unit
- Kit includes filter and instructions
- Use on EEAC301B, EEAC304D, EEAC313A (R12 side), EEAC316A, EEAC318A, EEAC319A and EEAC320A

**EAK0030C02AB Master Dryer Kit**
- Use on EEAC313A (R134a side)




EAK0029C01AB

## Oil Change Kits

**EAK0029C00AB Compressor Kit**
- Use on EEAC308C, EEAC319A and EEAC320A

**EAK0029C01AB Compressor Kit**
- Use on EEAC310A, EEAC313A, EEAC316A, EEAC318A, EEAC324A/EEAC324B and EEAC325A/EEAC325B
- Includes two quarts of oil, parts and instructions

**ACT71-0A Vacuum Pump Kit**
- 32 oz bottle




ACT71-0A



**⚠WARNING**
- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# AIR CONDITIONING: SERVICE EQUIPMENT (R134A AND R1234YF)


ACT825


ACT795UVA


ACT785B


ACT760B

## Refrigerant Gas Leak Detectors

| Specifications | ACT825 | ACT795UVA† | ACT785B† | ACT760B† |
|---|---|---|---|---|
| Sensitivity Range | 0.05 oz/yr, medium<br>0.25 oz/yr, low 0.5 oz/yr | 0.05 oz/yr (R134a) | .05 oz/yr (R134a),<br>.03 oz/yr (R22) | .05 oz/yr (R134a),<br>.03 oz/yr (R22) |
| UV Mode | 12 UV LEDs | 3 UV LEDs | — | — |
| UV Wavelength | 385–410 nm | 395–415 nm | — | — |
| Sensing Tip Life | >2,000 hours | >300 hours | >300 hours | >300 hours |
| Power Supply | 2 “D” alkaline batteries | 4 “AA” alkaline batteries | 4 “AA” alkaline batteries | 4 “AA” alkaline batteries |
| Battery Life | 60 hours | 8 hours continuous | 8 hours continuous | 8 hours continuous |
| Warm-Up Time | <40 seconds | <20 seconds | <20 seconds | <20 seconds |
| Automatic and Manual Calibration | Automatic | Yes | Yes | Yes |
| Probe Length inches | 15.5 | 17 | 17 | 17 |
| Weight, lb (kg) | 1.8 (0.8) | 1.5 (.68) | 1.5 (.68) | 1.5 (.68) |
| Warranty | 3 Years | 3 Years (2 on Sensor) | 3 Years (2 on Sensor) | 3 Years (2 on Sensor) |
| Numerical Display | Vertical Color Coded Signal Level Bars | 7 segment digital display (1–9) | 7 segment digital display (1–9) | — |
| Alarm Near Sensor | Alarm on microprocessor | Visual probe LED | Yes | — |
| Carrying Case | Included | Included | Included | — |

† CE

**ACT825 Heated Sensor Leak Detector**
- SAE® Certified Electronic Leak Detector with Color LCD display
- Displays relative magnitude of leaks detected
- Displays unit readiness – Wait, Ready or Interference
- Low, Medium and High sensitivity with visual indication
- Displays the selected mode – Peak, Hold or Mute
- Displays accumulated sensors hours on request with low battery indicator
- Large Color LCD Display
- Flexible 15.5" probe

**ACT795UVA Heated Sensor Leak Detector**
- Patented three LED UV lights 385–415 nm wavelength for optimum air conditioning dye fluorescence
- No UV enhancement eye glasses needed
- Detects all commercially available dyes
- Unique digital alarm with numeric leak size indicator
- Long life, stable sensor
- Automatic and manual* calibration and reset to ambient levels
- Three adjustable sensitivity levels
- True mechanical pump
- Low battery indicator
- *SAE* J2791 (R134a) and *SAE* J2913* Certified
- Mute feature

**ACT785B Heated Sensor Leak Detector**
- Unique digital alarm with numeric leak size indicator
- Long life, stable sensor
- Automatic Calibration – Useful in heavily contaminated areas. The unit automatically recalibrates (re-zeroes) to ambient levels, which stops the constant alarm, only responding to higher levels of refrigerant and allows searching for the true source of the leak
- Manual* Calibration – Useful for smaller leaks. This also allows for recalibration to ambient levels, but only when the user chooses to do so. User may want the calibration to remain constant when searching for small leaks
- Three adjustable sensitivity levels
- True mechanical pump
- Low battery indicator
- *SAE* J2791 (R134a) and *SAE* J2913 (HFO-1234yf) Certified, EN14624 Certified
- Mute feature
- Garage tough
- Visual LED leak alarm near sensor
- Carrying case included
- Inspection light utilizing bright 6,000 MCD LEDs
- CE approved

**ACT760B Heated Sensor Refrigerant Leak Detector**
- Heated Sensor Technology
- Long life, stable sensor
- Automatic and manual calibration and reset to ambient levels
- Three adjustable sensitivity levels
- True mechanical pump
- Low battery indicator
- *SAE* J2791 (R134a) and *SAE* J2913* (HFO-1234yf) Certified
- Mute feature
- Garage tough

*Added Feature



ACT120A

## Electronic Charging Scale (Blue-Point®)

**ACT120A Electronic Refrigerant Scale**
- Use with R12 or R134a refrigerants
- Reads transfer amount during charging or recovery operations
- Reads in pounds or kilograms
- Auto off function after three hours

| Specifications | ACT120A |
|---|---|
| Capacity, lb (kg) | 240 (110 Kg) |
| Accuracy | ±.16 oz (±0.01 kg) or 0.1% of reading (whichever is greater) |
| Resolution | 0.01 lb (0.01 kg) |
| Operating Temperature | 32 °F–120 °F (0 °C–49 °C) |
| Platform | 9" (228.6 mm) square |
| Power Supply | 9V battery (included) |
| Battery Life | Approx. 40 hrs |



ACTUVPROKT

## Metered UV Injection Kit

**ACTUVPROKT Metered UV Injection Kit**
- New technology dye injection solution
- One precise squeeze of trigger per application
- More accurate than caulk style guns
- Includes high capacity 12 oz cartridge that covers 96 applications

**ACTUVPRO12 Dye Cartridge (12 oz)**
- 12 oz dye cartridge for ACTUVPROKT

**ACTUVPRO Injection Gun, Hose, Coupler**
- Injection gun only for ACTUVPROKT



ACTUVQUADKT



ACTUVINJKTA



ACTUVMINI4

## Ultraviolet Leak Detector Kits (LED Light) *(Blue-Point)*

**ACTUVQUADKT UV Leak Detection Kit**
- Includes four LED UV light, mini dye injector, A/C dye cartridges, hose with R134a coupler, R12 adaptor, 1 oz of coolant dye, 1 oz of oil/fuel/ATF dye, 10 A/C service labels and UV glasses

**ACTUVMINI4 Mini LED UV Flex Light and UV Goggles Kit**
- Bright LED light with 12" flexible probe gets in tight spots
- Comfort grip light handle with conveniently located on/off button
- Includes flex light and UV safety glasses

**ACTUVC10 Dye Cartridge**
- Ten-application dye cartridge with ten A/C service labels

**ACTUVINJKTA A/C Leak Detection Kit**
- Detects A/C refrigerant leaks quickly and easily
- Universal A/C dye is SAE® certified and OEM approved

**Includes:**
- Universal A/C dye to service up to 40 vehicles ACTUVKITRHT for refills
- Exclusive gun style injector and dye cartridge
- Powerful 1 W Luxeon® light
- Compatible with fluorescent dyes
- UV Glasses
- Convenient storage case
- R134a adaptor
- Service stickers

**ACTUVKITRHTA Dye Cartridges, 1 oz (Qty 4)**

**⚠WARNING**

- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# AIR CONDITIONING: SERVICE EQUIPMENT (R134A AND R12)





ACTUVDYEKIT

## Ultraviolet Leak Detector Kits (High Intensity Light)

**ACTUVDYEKIT UV Leak Detection Kit**
Includes high intensity light (ACTUVDYEKIT1), dye injector and cartridge with 25 applications, hose with R134a coupler (ACTUVDYEKIT2), R12 adaptor (ACTUVDYEKIT4), (25) A/C service labels (ACTUVDYEKIT5), UV safety glasses (GLASS20BKY) and storage case (ACTUVDYEKIT6).

**ACTUVDYEKT1 High Intensity UV Light**
- High intensity 12V DC/50 W compact light gets in tight spots
- Coiled cord extends to 14' with clips for attachment to battery

**ACTUVDYEKT2 Injection Hose**
- Hose with R134a coupler for ACTUVDYEKIT

**ACTUVDYEKT3 Replacement Injector Handle**
- Replacement injector handle for dye injector in ACTUVDYEKIT

**ACTUVDYEKT4 R12 Adaptor**
- R12 adaptor for ACTUVDYEKIT

**ACTUVDYEKT5 A/C Service Labels**
- Pack of 25 A/C service labels for ACTUVDYEKIT

**ACTUVC25 Dye Cartridge**
- 25-application dye cartridge with (25) A/C service labels

**GLASS20BKYA Safety Glasses**
- Black frame with amber lens



ACTUVKITC

## Ultraviolet Leak Detector Kits

- Inject dye in low side port on automotive A/C system, circulate and check for leaks with the UV Mini Light
- Detect leaks as slow as 1/4 oz per year
- Use optional dyes to check for leaks in engines, transmissions, hydraulic systems and power steering systems

**ACTUVKITC R12/R134a UV Leak Detection Kit (Blue-Point®)**
**Includes:**
**ACTUVGUN Injection Gun Kit *(Blue-Point)***
**ACTUVGUN3 Injection gun *(Blue-Point)***
**ACTUVGUN5 R134a Injection gun adaptor *(Blue-Point)***
**ACTUVGUNA9 R12 System injection gun adaptor**
**ACTUVGUNB8 Universal dye cartridge (8 oz)**
- Universal dye cartridge
- 64 applications
- SAE®-J2297 certified and OEM approved dye
- Service stickers included

**ACTUVLITE4 UV Enhancing Glasses *(Blue-Point)***
**ACTUVLITEA8 Swivel head UV light (12V, 50 W) *(Blue-Point)***
**ACTUVGUNA Injection Gun Kit *(Blue-Point)***



ACTUVGUNB8



ACTUVGUNB

## Ultraviolet Leak Detector Dye Cartridges/Accessories

| Stock No. | Description |
|---|---|
| ACTUVGUNP1 | PAG Oil Cartridges/46 Viscosity (six, 8 oz) |
| ACTUVGUNP2 | PAG Oil Cartridges/100 Viscosity (six, 8 oz) |
| ACTUVGUNP3 | PAG Oil Cartridges/125 Viscosity for GM® (six, 8 oz) |
| ACTUVGUNP4 | PAG Oil Cartridges/150 Viscosity (six, 8 oz) |
| ACTUVGUNE1 | Ester Oil Cartridges/100 Viscosity (six, 8 oz) |
| ACTUVGUN2 | Universal A/C Dye Cartridge (4 oz) |
| ACTUV10PAK | Universal Dye Cartridges (ten, 1/4 oz) |
| YAUVCOOL | Coolant Dye Cartridges. (six, 1 oz) |
| YAUV4N1 | Engine/Transmission/Hydraulic/Power Steering Accessory Dye Cartridges (six, 1 oz) |
| ACTUVKITJR1 | A/C Dye Cartridges (six, 1/4 oz) |
| ACTUVKITJR2 | A/C Dye Cartridges (six, 1 oz) |

## Universal AC Dye

**ACTR53625 Universal A/C Fluorescent Dye, 2 oz**
- Universal Dye for Automotive and HVAC A/C Systems
- Cost efficient Concentrated Formula – SAE® Approved J2297 Dye
- 25 applications per 2 oz bottle, 1/12 oz per application
  – Automotive: One application equals 1/12 oz (2.5 ml), per 10 oz (300 ml) oil
  – HVAC: One application equals 1/12 oz (2.5 ml) per 7 lb (3.2 kg) refrigerant
- Inject this dye using any standard dye/oil injector including recommended Snap-on® injector Part #ACT53134A
- Compatible with all oils

**Applications**:
Inject 1/12 oz of concentrated dye into Automotive or HVAC A/C system. Allow to circulate throughout system. Use UV light to locate leak in A/C system.




**ACTR53625**

## Hybrid A/C Compressor Oil

**ACT92707 Synthetic Hybrid A/C Compressor Oil**
- High Dielectric formula provides advanced Hybrid A/C compressor protection
- Formulated for vehicles with electric A/C compressors
- Provides outstanding lubricity and compressor protection
- High Dielectric nonconductive formula
- Contains conditioners, inhibitors and anti-wear agents

**Applications:**
Used to recharge or top off electric A/C compressors oil charge




**ACT92707**

## Ultraviolet Flashlights (Blue-Point®)

**ECFUV150 UV Leak Detection Flashlight**
- Very high intensity LED technology
- 15x brighter than regular LED lights
- Power comparable to 150 W lamps
- Inspection range of up to 20'
- Compatible with all standard dyes
- Fluorescence enhancing glasses and charger included



**ECFUV150**

**ECFUVDUAL UV Leak Detection Flashlight**
- Pinpoints A/C, oil, fuel, ATF, PS, hydraulics, coolant and auto body leaks
- Use with blue lamp with fluorescent dye, white lamp for general component inspection
- 100,000 hour LEDs never need replacing
- UV inspection range up to 6' (1 m–8 m)
- Powered by three AAA alkaline batteries (included)
- Flashlight, holster and fluorescence enhancing glasses included



**ECFUVDUAL**

**ECFUVLEDA UV Rechargeable Flashlight**
- 400 nm wavelength – The sweet spot for A/C, oil and coolant dye leak detection
- 95-minute run time at constant power output
- Plug in charger and UV-enhancing glasses included
- Focusing lens enables broad and narrow searches
- Lithium Ion battery
- Compact aluminum housing
- On/Off switch located on handle



**ECFUVLEDA**

**ECFUV17 True UV Flashlight**
- 17 true LED bulbs provide impressive UV illumination
- Aluminum body with textured grip for durability and ease of use
- 25,000 hour bulb life for excellent reliability
- Uses three readily available AAA alkaline batteries
- On/Off switch located on handle
- Amber UV safety glasses also included

**Specifications**
- UV Wavelength – 380–385 nm
- 25,000 hour LED bulb life
- 22 hours run time under normal work conditions



**ECFUV17**



**⚠WARNING**
- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# AIR CONDITIONING: SERVICE EQUIPMENT (R134A, R12, R1234YF)



ACTR5150A

## Digital Manifold Gauges (R134a)

**ACTR5150A Digital Manifold Gauge Set (R134a) (Blue-Point®)**

- Displays refrigerant and oil capacities
- Large easy-to-read LCD screen displays pressure and vacuum readings for R134a
- High quality aluminum block manifold
- Performs system leak check at conclusion of the evacuation process
- Heavy duty hook folds and stores on back
- Rubber boot for added protection
- Includes digital manifold, three 72" hoses and two manual couplers in a storage case



ACT51234A



ACTR1234YF

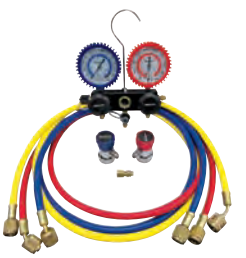
## Manifold Test Gauge (R134a/R12)

**ACT51234A R12/R134a Manifold Test Gauge**

- Three sets of hoses (72" red and blue plus 96" yellow) permit true interchange between R12 and R134a refrigerants
- Large, 1/4 turn positive open/close manifold ball valves
- Oversize sight glass for easy flow viewing
- Extra large 80 mm gauge face for better visibility
- Manual high and low couplers for quick connections
- Nylon barrier hoses meet EPA®, SAE® and UL® standards

**ACTR1234YF Manifold Gauge Set**

- For vehicles using new 1234yf refrigerant
- Red and blue nylon barrier hoses with 12 mm – male fittings on both ends
- R1234yf high and low side couplers



ACTR9600

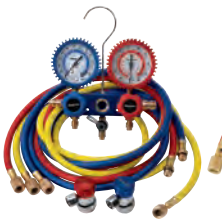
## Heavy Duty Manifold Test Gauges

**ACTR9600 Heavy Duty Manifold Set**

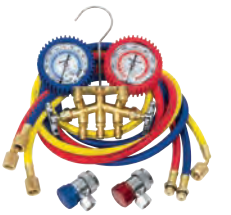
- Heavy duty A/C manifold for large trucks, buses and reefer applications
- Larger profile aluminum block vs. smaller import blocks on competitive units
- Heavy duty conversion couplers for durability
- Couplers are spring loaded to prevent damage to valve cores
- Silicon dampened gauges for durability
- Extra-long 96" length Goodyear® hoses – one each: red, blue and yellow for added reach



ACTR5134A



ACTR4151A



ACTR4131A

## Manifold Test Gauges (R134a)

**ACTR5134A Manifold Gauge Set**

- Extra large
- 80 mm gauge face and oversized sight glass for better visibility
- Large, 1/4 turn open/close manifold ball valves
- Manual high and low couplers for quick connections
- 72" red and blue nylon barrier hoses meet *EPA*, *SAE* and *UL* standards
- 96" yellow charging hose

**ACTR4151A Manifold Gauge *(Blue-Point)***

- Manual couplers are spring-loaded to eliminate service valve damage
- Extruded aluminum body with solid brass fittings
- High side and low side silicon anti-flutter gauges (65 mm) reduce vibration
- Sight glass permits visual monitoring of refrigerant flow
- 96" yellow charging hose plus 72" red and blue hoses

**ACTR4131A A/C Manifold Set (*Blue-Point*)**

- Anti-flutter gauges smooth out needle movement
- Easy grip all-metal side-mounted knobs
- Piston type free-floating valves reduce O-ring wear
- Manual R134a couplers
- 60" red, blue and yellow inner nylon layer hoses meet *EPA*, *SAE* and *UL* standards
- Yellow hose includes shutoff valve

**ACTR4772-3 High Side Quick Coupler**

**ACTR4772-2 Low Side Quick Coupler**



ACT1234PKT



ACT91339

## AC Service Kits

**ACT1234PKT Manifold Repair Kit**

- Includes various replacement lens, knobs, O-rings, gaskets and more
- Use to service ACTR4151, ACT9500C, ACTR5134 and ACT51234 manifold gauges

**ACT91339 O-Ring Kit**

- Complete O-ring assortment for use on R134a and R12 A/C systems. Included 18 common o-ring sizes (270 total).

## Replacement Hoses (R134a)

- Low permeation hoses for internal equipment connections
- 1/2" ACME® fittings
- Hoses comply with SAE® J2197

**ACTRR72 Replacement Hose, Red, R134a, 72"**
Red, 6' length

**ACTRR96 Replacement Hose**
Red, 8' length

**ACTRB72 Replacement Hose, Blue, R134a, 72"**
Blue, 6' length

**ACTRB96 Replacement Hose**
Blue, 8' length

**ACTRY72 Replacement Hose, Yellow, R134a, 72"**
Yellow, 6' length

**ACTRY96 Replacement Hose**
Yellow, 8' length



ACTRB72



ACTRY96

## Replacement Hoses (R12)

- 6' hoses include 1/4 turn manual shutoff valves
- Comply with *SAE* J2196
- 6' and 8' hoses also available with automatic shutoff valves

**ACTB72 Replacement Hose (R12)**
Blue, 6', 1/4 turn manual shutoff valve

**ACTB72A Replacement Hose (R12)**
Blue, 6', automatic shutoff valve

**ACTR72A Replacement Hose (R12)**
Red, 6', automatic shutoff valve

**ACTY72 Replacement Hose (R12)**
Yellow, 6', 1/4 turn manual shutoff valve

**ACTY72A Replacement Hose (R12)**
Yellow, 6', automatic shutoff valve



ACTB72



ACTR72A



ACTB72A



ACT2100



ACTMAN2100

## A/C Hose Crimping Tools

**ACT2100 Hydraulic A/C Hose Crimper Set (Blue-Point®)**

- Recrimp or install most barbed and beaded fittings
- Allows user to create standard or custom length A/C hoses
- Set contains the hand-operated hydraulic crimping tool (ACT21001), four sets of dies for standard fittings and four sets of dies for reduced barrier fittings

**ACTMAN2100 Manual A/C Hose Crimper Set *(Blue-Point)***

- Manual version of the ACT2100 hydraulic hose crimper
- Easily mounts to workbench or held securely in a vise
- Includes a complete set of dies covering standard #6, #8, #10 and #12 hose sizes

**ACT21001 Crimping Tool**

- Hand operated hydraulic A/C hose crimper used to recrimp or install new fittings on A/C hoses

| Stock No. | Description | Fitting Size | Hose Size |
|---|---|---|---|
| ACT21003 | Standard Die Set | #8 | 13/32" |
| ACT21004 | Standard Die Set | #10 | 1/2" |
| ACT21005 | Standard Die Set | #12 | 5/8" |
| ACT21006 | Reduced Barrier Die Set | #6 | 5/16" |
| ACT21007 | Reduced Barrier Die Set | #10 | 1/2" |
| ACT21008 | Reduced Barrier Die Set | #12 | 5/8" |



ACT28B



ACT9005



ACT9103



ACT9106



ACT9006

## Vacuum Pumps (R12) *(Blue-Point)*

| Specifications | No. of Stages | Free Air Displacement | Ultimate Vacuum | Motor | Pump Speed | Electrical Specs | Shipping Weight, lb |
|---|---|---|---|---|---|---|---|
| ACT28B | — | Air Operated | 28 in Hg | — | — | — | 5 |

## Vacuum Pumps (R134a/R12) *(Blue-Point)*

| Stock No. | No. of Stages | Free Air Displacement | Ultimate Vacuum | Motor | Pump Speed | Electrical Specs | Shipping Weight, lb |
|---|---|---|---|---|---|---|---|
| ACT9005 | 1 | 1.5 CFM | 75 Microns | 1/6 HP | 3,450 RPM | 110V 60 Hz | 16 |
| ACT9103 | 1 | 3 CFM | 75 Microns | 1/4 HP | 1,720 RPM | 110V 60 Hz | 17 |
| ACT9106 | 1 | 6 CFM | 75 Microns | 1/4 HP | 1,720 RPM | 110V 60 Hz | 22 |
| ACT9006 | 2 | 6 CFM | 15 Microns | 1/3 HP | 3,440 RPM | 110/220V 50/60 Hz | 24.6 |

**ACT9005 Vacuum Pump**

- High efficiency, single stage 1.5 CFM pump
- Ultimate vacuum of 100 microns
- Three inlet port sizes: 1/4, 3/8 *SAE* and 1/2" *ACME*
- Gas ballast valve helps prevent oil contamination
- Easy access oil fill port
- 1/6 HP
- 120V AC motor
- Weight: 16 lb, oil capacity: 6 oz

**ACT9006 Vacuum Pump**

- High efficiency, two stage six CFM pump
- Ultimate vacuum is 25 microns
- Three inlet port sizes: 1/4, 3/8 *SAE* and 1/2" *ACME*
- Easy access oil fill port
- 1/3 HP 120V AC motor
- Weight: 38 lb, oil capacity: 8 oz

**⚠WARNING**

- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# AIR CONDITIONING: SERVICE EQUIPMENT (R134A, R12, R1234YF)



ACT1297



ACT2105



ACT413A



ACT1300B



ACTR82375



ACT53134A

## Valve Core Tools (R134a/R12)

**ACT1297 Master Valve Core Tool Set (R134a/R12)**

- Unique design offers locking device to hold shaft in place when removing or installing valve core
- Makes removal and installation of Shrader valve cores possible on fully charged systems

**Includes:**

- High side R12 adaptor for GM®/Ford® vehicles (1/4" x 3/16")
- High side R12 adaptor for *Ford* vehicles (1/4" x 1/8")
- R134a high side connector (16 mm)
- R134a low side connector (13 mm)
- 1/4" FL swivel connector
- Box for set component storage
- Large bore valve core remover/installer assembly for *GM* vehicles
- JRA R134a valve core remover/installer assembly
- Eton R134a low side valve core remover/installer assembly
- Eton R134a high side valve core remover/installer assembly

**ACT2105 Orifice Tube Service Kit**

- Install and remove any style orifice tube
- Remove broken screens and tubes
- Includes auger point shaft puller, for *GM* vehicles, brass extension, puller, remover arbor, remover nut and storage case

## Can Tapper Valve

**ACT413A Can Tap Valve**

- Fits R134a (2 7/8"), R12 (2 1/2") and Oil (2") US standard charge cans
- Includes 1/2" ACME®-M and 1/4" FL-M ports
- Internal safety check valve prevents system backflow
- Composite construction with brass ports
- Includes insert for smaller cans

## Seal and Clutch Service

**ACT1300B A/C Clutch Remover Set**

- Simplifies removal/installation of A/C compressor clutch and clutch plates
- Provides access to shaft seals
- For use with *Ford*, Chrysler® and *GM* vehicle A/C compressors

## Oil and Dye Injectors

**ACTR82375 Oil Injector (R134a only)**

- Use to add refrigerant oil or large amounts of UV leak-detection dyes to A/C systems
- Quickly adapts to manifold gauge sets or charging equipment
- 1/2" *ACME* male x 13 mm R134a low side female threads
- 2 oz capacity
- R134a use only

**ACT53134A Oil Injector**

- Great for use on standard R134a, hybrid R134a and R1234yf systems
- Any dye/oil can be put into the AC53134A and injected into system
- Dye/oil can be injected in while system is under a vacuum, or against the pressure while the system is full and running
- Heavy duty anodized aluminum construction for years of reliable use
- Injection measurements in 1/10 oz for concentrated dye, 1/4 oz for standard dye and ml



TEMP2A



TEMP10



ACT73A



ACT83A



ACT2030

## Thermometers

**TEMP2A Digital Thermometer (Blue-Point®)**
- Use on A/C systems, cooling systems and other applications
- Reads temperature of liquids, solids and gases
- Easy to read display in °F and °C
- Magnet: cover holds unit in place
- Tip cover protects probe during storage
- Temperature ranges: -58 °F–300 °F (-50 °C–150 °C)
- Resolution: ± 0.1 °F (± 0.1 °C)
- Accuracy: ± 2.0 °F (± 1.0 °C)
- Response time: updates every 1.5 seconds
- Battery: MTACDC1-1 with 35-minute auto power off
- Probe length: 3 1/2" (89 mm)
- Overall length: 7" (178 mm) with case
- CE

**TEMP10 Pocket Digital Thermometer *(Blue-Point)***
- Measures liquid, air and surface temperatures via sturdy stainless-steel probe
- Digital display for easy viewing
- Angled viewing head can be rotated 180°
- Convertible from Fahrenheit (F) to Centigrade (C)
- Temperature ranges: -58 °F–300 °F (-50 °C–150 °C)
- Plastic carrying sheath

**ACT73A Dual Scale Dial Type Thermometer *(Blue-Point)***
- Range 0 °F–220 °F in 2° increments
- Checks temperature of condenser, outside air and cooling power
- 1 3/4" diameter

**ACT83A Dial Type Thermometer *(Blue-Point)***
- Range 0 °F–220 °F in 2 ° increments
- Immerse stem about 2" in liquids, 4" in gases
- 1" diameter

**ACT2030 A/C Temperature Tester *(Blue-Point)***
- Quickly and easily determine A/C system performance
- Microprocessor compares temperature at the A/C vent and outside ambient temperature
- Automatic shutoff
- Includes diagnostic chart and tech tips
- Powered by 9V battery (included)
- Range 32 °F–120 °F

## R12 SERVICE TOOLS



ACT106B



ACT1009A



ACT1008A



ACT119

## Adaptors/Valves/Connectors

**ACT106B Expansion Tube Remover**
- For most GM® vehicle models
- 4" long

**ACT1009A Orifice Tube Remover**
- Use as CCOT and FFOT screen extractor
- Use in conjunction with ACT106B

**ACT1008A Orifice Tube Tool**
- Services A/C systems
- 6 1/4" long

**ACT119 Quick Connect Set**
- Simplifies connecting to core valve service fittings
- Includes straight coupler and a 90° coupler that accept either of two adaptors

# AIR CONDITIONING: SERVICE TOOLS


ACT1046C


ACT111B


ACT118B


TR109


ACT1290A


ACT81290


ACT499A


R404


RF818SC


TLE80A


ACT407


EECT4H


GOGGLE1


ACT1370

## Service Tools

**ACT1046C Flush Kit**
- Pressure flush condensers, evaporators and refrigerant lines after A/C system is completely discharged
- Designed to work with any lightweight flushing material that can be mixed with pressurized air
- Includes flush gun, hose, canister and canister adaptor

**ACT111B Compressor Oil Injector Adaptor**
- Aluminum body holds up to 2 oz of oil
- Uses pressure differential of the high and low side of A/C system

**ACT118B Spring Lock Coupler Set (Blue-Point®)**
- Four-piece set aids in disconnecting refrigerant line couplings on many 1981 and later Ford® vehicle A/C systems
- Color coded: red, 3/8"; blue, 1/2"; black, 5/8"; and beige, 3/4"

**TR109 Valve Core Tool**
- Use to remove or replace valve cores on A/C systems (large bore)
- 6 3/4" long

**ACT1290A Universal Valve Core Service Tool**
- Removes and replaces standard size Schrader-style valve cores plus the larger size found in GM® vehicle systems

**ACT81290 Universal Valve Core Service Tool**
- Use on R12/R134a standard valve cores and JRA/EATON large bore R134a valve cores

**ACT499A Spanner Wrench**
- Adjustable three stud design for R-4 compressors in *GM* vehicles
- Applications on some *GM*, Warner®, Pitts® and Ogura® vehicle clutches

**R404 Refrigeration Ratcheting Box Wrench**
- Four popular square sizes: 3/16", 1/4", 5/16" and 3/8"
- Quick ratcheting action with reverse levers at both ends

**RF818SC Refrigerant Ratcheting Box Wrench**
- 9/16" six point for servicing compressor valve caps on one end
- 1/4" female square on other end for vehicles without Schrader valves

**TLE80A 1/4" Drive TORX® 6-Point Socket**
- Service size E8 *TORX* fasteners on many compressors

**TLE60A 1/4" Drive *TORX* 6-Point Socket**
- Service size E6 *TORX* fasteners on 1977 and later Eaton® and York® compressors

**ACT407 Fin Straightener and Cleaner**
- Multihead tool handles 8, 9, 10, 12, 14 and 15 fins per inch
- 4 1/4" long

**EECT4H Circuit Tester**
- Used to detect power and ground, also to find shorts and breaks
- Patented Instinct® handle for style and comfort
- Molded internal contact links with the LED assembly top dimple for low loss signal transfer
- Smart LED design has more brilliant light output and longer life than traditional bulb
- Finger turn screw on strain relief is easy on/off, has flexible wire protection at the critical bending point and is O-ring sealed
- Low power consumption and smart circuit design
- Copper clip is a superior quality component for maximum electrical signal transfer
- Superior flex wire glides past components and remains flexible, even in cold conditions
- Rubber Boot material stays flexible

TECHNICAL SUPPORT: 1-888-382-6522

**GOGGLE1 Protective Goggles**
- Durable molded frame with flexible elastomer seals comfortably for a custom fit around nose, cheeks and forehead
- Quick adjust headband clips permit fast and easy fitting
- Indirect ventilation system channels and directs airflow over the lens
- Uvex® 4C+™ lens coating protects against fogging, scratches and ultraviolet rays
- ANSI® Z87.1-1989

**ACT1370 Disconnect Set *(Blue-Point)***
- Convenient plastic holder included
- Useful on air conditioning spring couplings as well as push-lock connectors on radiator and transmission lines
- Includes six tools for disconnecting spring couplings on *Ford*, *GM* and Chrysler® air conditioning lines
- Works on fuel lines and can be used as push-lock connectors on radiator and transmission lines
- Included sizes are 5/16", 3/8", 1/2", 5/8", 3/4" and 7/8"

# TURN YOUR COOLING BUSINESS INTO COLD HARD CASH.

When you keep every vehicle running cool – every time – that means more business comes your way. Snap-on helps you with the latest technology in cooling system products and complete cooling system coverage. From cooling system pressure testers, to radiator cap adapters, to cooling system fillers, Snap-on makes your job a breeze.



# COOLING: RADIATOR TOOLS


SVTSRAD262A


SVTSRAD262U


RADKITPLUSA


RADKITPLUSJR


YA4505

## Vacuum Cooling System Filler

**SVTSRAD262A Vacuum Cooling System Filler**
- Eliminates cooling system air locks that cause overheating
- Ideal for vehicle specific shops or municipal garages
- Expands the versatility of SVTS262C cooling system tester
- Adaptors available separately for virtually all import and US vehicles
- Gauge includes internal shock resistance feature and protective rubber boot to assure an accurate reading
- Includes main body assembly, Venturi® and hose assembly, suction hose assembly, instruction manual with complete adaptor list

**SVTSRAD262U Universal Cooling System Filler**
- Universal version does not require cooling system adaptors
- Includes two universal style cones to cover most applications

**RADKITPLUSA Cooling System Vacuum/Filler**
- Easily eliminate cooling system air locks that can cause overheating
- Vacuum test checks for system leaks prior to filling
- Gauge protector helps prevent damage to gauge housing
- Push-button vacuum valve for easy operation
- Fills system quickly by siphoning directly from the mix container
- Requires 90 PSI (4.2CFM) air supply
- Includes *Venturi* assembly gauge and gauge protector, refill hose assembly, adaptors for most applications, universal fit cone adaptor, hose assembly and instruction manual with complete adaptor list in storage case

**RADKIT5 Radiator Neck Adaptor Kit**
- Radiator neck fitting adaptor kit for RADKITPLUSA
- Includes four adaptors in sizes .54", 1.36", 1.57" and 1.86"

**RADKITPLUSJR Vacuum Cooling System Refiller**
- Reduces system filling time, eliminates airlocks and checks for system leaks
- Compact size allows access in restricted underhood areas
- Cone adaptor ensures unit will work on most US and import passenger vehicles and light trucks
- Push-button control valve eliminates the need to interchange hoses
- Shop air (90 PSI) quickly draws a powerful vacuum
- Eliminates system bleeding and purging

**YA4505 Universal Radiator Adaptor (Blue-Point®)**
- 95% application coverage on cars and light trucks
- Replaces as many as 25 other costly radiator adaptors
- Compatible with radiator necks or reservoir tanks
- Can be used with RADKITPLUSA or RADPLUSA cooling system fillers, YA4000B vacuum and pressure pump and SVTS262A, SVTS262B and SVTS262C cooling system testers


YA2090


RCR1


YA9190


2009FPI


YA7747


CG25


GA424A


LDTSP4

## Radiator and Freeze Plug Tools

**YA2090 Radiator Cap Wrench *(Blue-Point)***
- Grips and removes radiator caps with or without wings
- 7 1/2" in length

**RCR1 Radiator Coolant Reservoir Cap Tool**
- 3/8" drive tool is used to remove stubborn radiator coolant reservoir caps on BMW® vehicle engines
- Will not mar the reservoir cap like pliers can
- Made of nylon
- 2006–present *BMW* vehicles

**YA9190 Universal Radiator Drain Plug Socket *(Blue-Point)***
- Double slotted end of this 3/8" drive socket will fit most radiator drain plugs that have thumb wings
- Will fit Acura®, Honda®, Toyota®, Lexus® and other import vehicles

**2009FPI Freeze Plug Installer Kit**
- 18 1/2" long installing tool with ball type swivel for easy positioning
- Seven installer heads in 20 mm, 25 mm, 30 mm, 35 mm, 40 mm, 45 mm and 50 mm sizes

**YA7747 Pneumatic Adaptor *(Blue-Point)***
- Speeds freeze plug installation
- Use with 2009FPI Installer Kit
- 401" Parker-style shank enables use with air hammers

**CG25 Freeze Plug Puller**
- Freeze plugs up to 2" in diameter
- 1/4" thick yoke receives 2 7/8" long self-tap screw
- Drill 17/64" hole first

**GA424A Belt Tension Gauge**
- Range is 30–180 lb (130–800 N•m)
- Squeeze handle, place gauge on drive belt, release handle and read

**LDTSP4 Quick Disconnect Fittings Set**
- Includes sizes 3/8", 1/2", 5/8"–30% and 5/8"–39%
- **Applications:** 1996 and newer GM® vehicles, many 2004 and newer Daimler Chrysler® vehicles, some 2005 and newer Mercedes® vehicles, V-Rod®, Freightliner®, Peterbilt®, Volvo® and White®. Handy spring action keeps the tool on the line for ease of use. Teeth fit perfectly into tight tolerance of Jiffy-tite® connectors. When rotated, allows the line to be pulled without damage to the connector or retaining clip. Fits the most popular *Jiffy-tite* fittings found on oil cooler lines used on transmissions and radiators and on other applications



AF102



YAUVCOOL



GDCT16

## Antifreeze and Coolant Testers

**AF102 Antifreeze Hydrometer (Blue-Point®)**

- Degree of protection indicated by direct reading; no temperature compensating scales required
- Range of -60 °F–32 °F
- Range of -51 °C–0 °C
- Tests hot and cold solutions

## Leak Testers

**GDCT16 Combustion Leak Tester *(Blue-Point)***

- Provides an easy and quick way to diagnose engine overheating problems
- Checks for leaks between the combustion chamber and the cooling system
- Test head and gasket for combustion leaks before removing the radiator
- Double chamber in testing unit provides a high level of accuracy
- For use on water-cooled gas and diesel engines
- Kit includes complete test chamber, 16 oz bottle of testing fluid and instructions

**GDCT161 Leak Detector Fluid *(Blue-Point)***

- 16 oz bottle of leak testing fluid for the GDCT16 combustion leak tester

**YAUVCOOL Leak Detector Fluid *(Blue-Point)***

- Six 1 oz bottles of dye for coolant systems for use with ACTUVLITEA



SVTS272



SVTS263A



SVTS2000

## Cooling System Testers

**SVTS272 Cooling System Tester**

- New pump will achieve higher pressures needed for new vehicles
- Design reduces physical effort by nearly one-half
- Includes the four most commonly required adaptors
- Easy identification: adaptors look like the caps from the systems they test
- Safe pressure relief system protects technician from exposure to coolant
- Pump can produce up to 30 PSI to pressure test cooling system of cars and light trucks and even heavy duty trucks with included adaptors
- Set can test over 90% of the vehicles in the field
- Set can pressure test most US or Asian made vehicles
- Add additional adaptors required to test European made vehicles

**SVTS263A Cooling System Pressure Tester, Air Powered**

- Uses pressure-regulated shop air to pressure test cooling systems for leaks
- Sensitive pressure regulation allows safe testing of small systems
- Sufficient capacity to fill large systems in seconds
- Stainless-steel rugged and chrome plated components ensure maximum durability and a lasting finish
- Compatible with most commonly used cooling system adaptors
- Pressure gauge has internal shock absorber protection and rubber boot
- Safety spring release cap assembly limits pressure to no more than 32 PSI
- Convenient swivel hook allows unit to be hung from under vehicle hood
- Includes three of the most common cooling system adaptors: TAB10036, SVT262-28A and TA38C

**SVTS2000 Coolant Barrier Pressure Tester**

- Change cooling-system components without draining system
- Uses shop air to create light vacuum that prevents coolant from draining as a component is changed
- Large hose and higher air flow allows even overfilled systems to be worked on without draining
- Clear intake hose allows technician to see when coolant is being pulled into the tool
- Switch from coolant retention to pressure testing just by turning a valve handle



WARNING • Read safety precautions on pages W1 to W4

# COOLING: RADIATOR TOOLS


SVT262-28A


SVT262-29


TA16B


TA23A


TA18B


TA26A


TA27


TA31A


TA30A


TA32A


TA33A


TA34A


TA36GM


TA37


TA38C


TA39A


TA41


TA40


TA44


TA45


TA46


TA47


TA48


TA49


TA50


TA52


TA53


TA54


TA56


TA57


TA58


TA59


TA445


TA446


TA4503


TA245A


TA246A


TA345A


TA346A


TA4505


TA4504


A4503A

## Cooling System Tester Accessories

Radiator adaptors and cap adaptors listed below can be used with the SVTS262 Series and SVTS263 Series cooling system testers. See SVTS262C cooling system tester instruction manual for complete listing of specific model year applications.

| Radiator Adaptor | Cap Adaptor | Vehicle Applications |
|---|---|---|
| SVT262-28A | SVT262-29 | Acura®, Chevrolet®, Chrysler®/Dodge®/Eagle®/Plymouth®, Ford®/Lincoln®/Mercury®, Geo®, Honda®, Hyundai®, Infiniti®, Isuzu®, Lexus®, Mazda®, Mitsubishi®, Nissan®, Subaru®, Suzuki® and Toyota® |
| TA16B | TA23A | VW® and Audi® |
| TA18B | TA26A | Volvo®, Saab®, Jeep®, Sterling® and Renault® |
| TA27 | – | *Volvo* large trucks with 63 mm x 3 mm threaded filler neck |
| TA31A | TA30A | *VW* |
| TA32A | TA33A | Buick®, Cadillac®, *Chevrolet, Ford,* International®, Mercedes®, Oldsmobile®, Pontiac® and Saturn® |
| TA34A | TA246A | *Ford,* Jaguar®, *Pontiac,* Porsche®, Range Rover® and Saab®. Use with TA246A cap adaptor |
| TA36GM | TA37 | *Cadillac, Chevrolet, Geo,* GMC®, *Pontiac, Oldsmobile* and *Saturn*. Use with TA37 cap adaptor |
| TA38C | TA39A | *Acura, Chevrolet, Chrysler, Geo, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki* and *Toyota*. Use with TA39A cap adaptor |
| TA41 | TA40 | *Audi* and *VW* |
| TA44 | TA45 | *Mercedes* |
| TA46 | TA47 | *Ford, Jaguar* and *Mazda*. Use with TA47 cap adaptor |
| TA48 | TA49 | *Toyota* |
| TA50 | – | *Volvo* large trucks with 48 mm x 3 mm male thread on filler neck |
| TA52 | TA53 | *Mazda* 3 (2004 and later) and *Volvo* S40/V50 (2004 and later) |
| TA54 | – | Freightliner® trucks with 60 mm x 3 mm male thread on filler neck |
| TA56 | TA57 | Cobalt SS (2005 and later) and *Saturn* Ion Redline (2004 and later) with Supercharger cooling systems |
| TA58 | TA59 | 2007 *Dodge* Sprinter® Van with 42 mm x 2.5 mm thread on filler neck |
| TA445 | TA446 | BMW® 3-series (2006 and later) and 5- and 6-series (2005 and later) |
| TA4503 | – | 1980s GM® X and J body cars |
| TA245A | TA246A | *BMW* and *Mercury*. Use with TA246A cap adaptor |
| TA345A | TA346A | *BMW* and *Range Rover* |
| TA450A | Truck Adaptor Set | For trucks with "B" size (2 $^{11}/_{16}$" OD) filler neck adaptors. Includes A450-1A rubber plug |
| TA4505 | TA4504 | For trucks with "B" size (2 $^{11}/_{16}$" OD) filler neck adaptors |
| A450-1A | Rubber Plug | Use with TA450A truck adaptor kit or as a replacement plug for A4503A *GM* adaptor kit |
| A450-2A | Rubber Gasket | Use with TA450A truck adaptor kit or as a replacement gasket for A4503A *GM* adaptor kit |
| A4503A | GM Adaptor Set | Tests system pressure on closed cooling systems on *GM* 2.5L "X" body cars and 1.8L "J" body cars |


TAB10022


TAB10025


TAB10031


TAB10034


TAB10036


TAB10041


TAB10044


TAB10046

## Cooling System Adaptor Set (Blue-Point®)

| Radiator Adaptor | Vehicle Applications |
|---|---|
| TAB10022 | Pre-1990, VW®, Audi® and Porsche®: Boxster®, Cayman, 911 |
| TAB10025 | Volvo®, Saab® and Jeep® |
| TAB10031 | *VW* 1990–1998 |
| TAB10034 | Ford®, Jaguar®, *Saab* and Saturn® |
| TAB10036 | GM®, *Ford, Jaguar,* Mazda® and Nissan® |
| TAB10041 | *VW, Audi* and *Porsche* |
| TAB10044 | Mercedes-Benz® and Chrysler® |
| TAB10046 | *Ford, Jaguar* and *Mazda* |
| TAB10048 | Some Lexus®, Scion®, Toyota® (especially hybrids) |
| TAB10052 | *Mazda* 3, most *Volvos*, Range Rover® and 2012 *Ford* Fiesta |
| TAB10056 | Chevrolet® Cobalt and *Saturn* Ion |
| TAB10245 | Pre-1988 BMW® and Merkur |
| TAB10345 | Most *BMW* (1998–2006) and *Range Rover* |
| TAB10445 | *BMW* 2005 and later |


TAB10048


TAB10052


TAB10056


TAB10245


TAB10345


TAB10445

**SVTAB1400 Cooling System Adaptor Set *(Blue-Point)***
- TAB series adaptors feature a composite metal/plastic construction for a lower cost option
- Includes (14) radiator composite metal/plastic radiator adaptors
- Storage case has extra storage compartments to accommodate the pump and gauge assembly and original three adaptors from the SVTS262C set
- Includes all TAB series adaptors (except TAB10036) plus TA4503 adaptor
- See instruction manual for a complete listing of all applications

**PBSVTA1417 Storage Case**
- Storage case for SVTAB1400
- Removable cover for display


SVTAB1400

## Cooling System Tester (Bladder Sealing System) *(Blue-Point)*

| Stock No. | Description | Application |
|---|---|---|
| SVT27515 | Pressure Pump | — |
| SVT2752 | Gauge, 0–30 PSI (0–207 kPa) | — |
| SVT2753 | Spare Bladder | — |
| SVT27516 | Valve Seal Kit | — |
| SVT27517 | Head Assembly | — |
| SVT2756 | Neck Extension (Blue) | *VW* header tanks |
| SVT2757 | Neck Extension (Red) | Japanese micro vehicles |
| SVT2758 | Neck Extension (Black) | *Audi/VW* header tanks |
| SVT2759 | Cap Adaptor (Blue) | Standard bayonet, *Ford* header tank, *GM* N-body |
| SVT27510 | Cap Adaptor (Yellow) | *Jeep, Saab, Audi/VW* external thread header tanks |
| SVT27511 | Cap Adaptor (Green) | Small Japanese deep, *Audi/VW* internal thread header tanks |
| SVT27512 | Cap Adaptor (Red) | Small Japanese shallow, late model *Audi/VW* external thread header tanks |
| SVT27513 | Cap Adaptor (Orange) | Late model *BMW*, Land Rover® and *Range Rover* |
| SVT27514 | Cap Adaptor (Gray) | Late model *Mercedes-Benz* with thread type |


SVT275

**SVT275 Cooling System Tester**
- Inflatable bladder-sealing system enables use with most passenger and light commercial vehicles
- Tests header tanks and radiator systems as well as thread type and bayonet style caps
- Locate leaks from head gaskets, radiator and heater cores, Welch plugs and housings, water pumps and hoses
- Test cap relief pressure and seal condition
- Suitable for marine applications
- Fluid drain tube allows coolant to be returned to reservoir or safely collected for recycling
- Cycle tested to over 1,500 inflations
- Set includes SVT2751–SVT27514 (14pc) plus air supply hose and instruction manual in storage case

**⚠WARNING** • Read safety precautions on pages W1 to W4

# COOLING: TESTERS



SVTA6100

## Truck Cooling System Adaptor Set

**SVTA6100 Large Truck Cooling System Adaptor Set**
- Designed for use with the SVTS262C but compatible with virtually any cooling system tester
- Ideal for servicing large trucks (Volvo®, Kenworth®, Freightliner® and more)
- Pressure test the eight different filler necks found on modern large trucks when combined with the pump and TAB10036 adaptor from the SVTS262B, SVTS262C or SVTS263A sets
- Can also be combined with the SVTS263A air powered cooling system pressure tester to provide virtually 100% truck coverage
- Includes TA27, TA50, TA54, TA32A, TA4505 and TA58 adaptors plus instruction manual in PBSVTA600 storage case

# SERVICE TOOLS



YA1000A



PWC60



HCR1

## Hose Cutters and Removers (Blue-Point®)

**YA1000A Multi Cutter**
- Ideal for cutting heater hoses, fuel line hoses, copper wiring, PVC pipes, wiper hoses and air brake hoses, plus any resilient or semi-resilient material with a 0–1 1/8" diameter
- Comfort contoured handles with plastic grips
- Wire loop for safe storage: 9 5/8" long

**PWC60 Compound Leverage Hose Cutter**
- 8 1/2" compound action multiplies normal hand pressure to easily slice through rubber and plastic hose up to 1 1/8" in diameter
- Includes stainless-steel cutter blades and internal components

**HCR1 Heater Hose Coupler Removal Tool**
- Removes broken heater hose couplers on GM® vehicles
- Can be used with an impact wrench



YA9325-1



YA9325-2



YA9521



YA9526



YA9980



YA6160



YA6210

## Fan Clutch Wrenches/Pulley Holders *(Blue-Point)*

**YA9325-1 Metric Flat Wrench**
36 mm wrench size, 343 mm long

**YA9325-2 Crowfoot Wrench**
58 mm wrench size, 58.7 mm long

**YA9521 Flat Wrench**
36/48 mm wrench size, 356 mm long

**YA9526 Fan Clutch Wrench for Ford® Vehicles**
- 40 mm open end wrench
- Use with YA9325-2 or YA9522
- Applications include 4.9 L Econoline® vans (1992–1996) and 4.9 L F-Series pickups (1993–1996)

**YA9980 Water Pump Fan Clutch Pulley Holder**
- Use on vehicles with pressed on pulleys
- Use on *GM* (6.0 L V8 1999 and later) and Chrysler® (3.9 L V6, 4.7 L V8, 5.2 L V8, 5.9 L V8, 8.0 L V10 1998 and later)
- Cannot be used on *Chrysler* 4.7 L V8 using factory replacement water pumps

**YA6160 Universal Fan Clutch Pulley Holder**
- Removes and replaces the fan clutch on vehicles using "bolt on" water pump pulleys
- Reverse pulley holder for assembly operations
- Use with YA9521 36/48 mm wrench or YA9526 40 mm wrench for many *Chrysler*, *Ford*, Lincoln®, Mercury® and *GM* applications

**YA6210 Fan Clutch Wrench for BMW®/Audi®/VW® Vehicles**
- 32 mm fan clutch wrench is used with YA6160 fan clutch pulley holding tool to service *Audi* vehicles (1996 and later), *VW* Passat® 3.0 L V6 (1998 and later) plus *BMW* 3, 5, 6, 7, 8, X and Z series vehicles
- YA6160 works on all models listed except 4.0 L and 4.4 L V8 engines
- Made from heat-treated steel
- Overall length of 17" (431.8 mm)



YA6180



FCT706



YA6120

## Fan Clutch Wrenches/Pulley Holders (Blue-Point®)

**YA6180 Fan Clutch Wrench**
- Use on GM® and Ford® diesel and gas engines with a 48 mm fan clutch nut
- Provides the extra leverage needed to remove the fan clutch nut
- Overall length of 20 1/8"
- Head width of 4 1/8"
- Head thickness of 3/8"

**FCT706 Fan Clutch Wrench**
- Fan clutch wrench for heavy duty truck engines
- Hole pattern on tool aligns with fasteners on fan hub
- Use with open end wrench to remove fan clutch. 24 1/2" length for maximum leverage

**Applications:** International® (VT365, T444E, DT466, DT350 and HT530), *Ford* Power Stroke® (7.6 L and 6.0 L), Detroit Diesel® (Series 40) and John Deere® engines.

**YA6120 Fan Clutch Wrench Set**
***Ford*/Lincoln®/Mercury® Applications:** E-Series trucks 4.9 L (1984–1991), F-Series trucks 4.9 L (1984–1992), Bronco® II and Ranger® 2.8 L (1984–1985), *Ranger* 2.9 L (1986–1992), Aerostar® 3.0 L (1986–1988), *Aerostar* and *Ranger* 4.0 L OHV (1990 and later), Explorer® 4.0 L OHV (1991 and later), Mazda® Navajo 4.0 L OHV (1991–1994), *Mazda* B4000 4.0 L OHV (1995 and later), *Explorer* 4.0 L V6 SOHC (1997 and later) and Mountaineer® 4.0 L V6 SOHC (1998 and later). ***GM* Applications:** Astro and Safari® vans 4.3 L, Blazer, Jimmy and Bravada® SUV 4.3 L, S10, Sonoma and Isuzu® Hombre pickups with 2.2 L 4 cylinder and 4.3 L V6, C1500, C2500, C3500, K1500, C1500/C2500/C3500/K1500 Sierra pickups, G1500/G2500 Chevrolet® Express, G1500/G2500 Savana vans 4.3 L V6, 5.0 L V8 and 5.7 L V8; and Suburban®, Tahoe®, Yukon®, Escalade®, Denali® and Envoy® 5.7 L V8.



HCP48CF



HCP9



HCP10



HCP20

## Hose Clamp Pliers

**HCP48CF Mobea Hose Clamp Pliers**
- Three position joint gives wider jaw spread
- For 3/4"–2" diameter clamps
- Radial jaw serrations allows user to grip and adjust hose

**HCP9 Corbin Heater Hose Clamp Pliers *(Blue-Point)***
- 9" length
- Removes or replaces all spring wire hose clamps
- Deep slotted jaws swivel 180° and lock in three different positions

**HCP10 Mobea Heater Hose Clamp Pliers *(Blue-Point)***
- 9" length
- Same as HCP9, except for new style hose clamps found on *GM*, *Ford*, VW®, BMW®, Toyota®, Volvo® and Audi® cars

**HCP10RK Service Kit *(Blue-Point)***
- Includes one pair of replacement tips plus a replacement spring for HCP10

**HCP20 Mobea Heater Hose Clamp Pliers *(Blue-Point)***
- For heater and radiator hoses found on 1988–1990 *GM*, *Ford*, Chrysler® and most imports
- Jaws pivot to almost any angle



YA497A



PHP1



PHP3



HCP313

## Hose Clamp Pliers *(Blue-Point)*

**YA497A Hose Removal Pliers**
- Simplify removal of 5/32"–1/2" vacuum and fuel hoses
- 8" in overall length

**PHP1 Hose Clamp Pliers**
- Clamp off hoses up to 1 1/4" in diameter
- Swivel jaws for parallel clamping action
- 9 1/4" in overall length

**PHP2 Hose Clamp Pliers**
- Clamp off hoses up from 1 1/4"–2 3/4" in diameter
- Swivel jaws for parallel clamping action
- 4 3/8" jaw length
- 14" long

**PHP3 Hose Clamp Pliers**
- Clamp off hoses up to 3/4" in diameter
- Swivel jaws for parallel clamping action
- 1 1/4" jaw length
- 5 1/2" long
- Black industrial finish

**HCP313 Adjustable Hose Clamp Pliers Set**
- Enables technician to access, release, remove and install constant tension hose clamps
- Newly designed superior ratchet mechanism for ease of operation
- 360° rotating deep slotted tips firmly grip clamps at any angle
- Ergonomically designed with solid rivet construction for long life and durability
- Extended reach for easy access to engine compartment
- Soft-touch grips are double dipped for increased comfort and control
- Heat-treated steel for strength and corrosion resistance
- Electroplated arms and tips for durability
- Set includes HCP13 straight, HCP1345 45° and HCP1390 90° angled heads for optimum positioning

**HCP13 Straight Hose Clamp Pliers**
**HCP1345 45° Hose Clamp Pliers**
**HCP1390 90° Hose Clamp Pliers**

**⚠WARNING**

- Do not use "cheater bars" on handles
- Plastic coated handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# COOLING: REMOTE HOSE CLAMP PLIERS



SHCP1A



SHCP2

**SHCP1A Remote Hose Clamp Pliers**
- Used to remove standard, space-saver and pre-opened hose clamps up to 2"
- Unique jaw design works on all three clamp types
- Heavy Duty 5/64" cable for extra long life
- Bi-mold grips with cable snap feature
- Five-stop ratchet lock with slide guide
- Easy replacement cable fixture

**SHCP2 Remote Hose Clamp Pliers**
- Infinite Locking Positions – Friction locking mechanism allows user to hold the clamp open at any position from closed to fully opened
- Ergonomic Grip – Low constant operating force applied to the wide comfortable pistol grip results in reduced effort and hand fatigue during operation
- Increased Accessibility – Longer cable is flexible over its entire length, allowing it to reach in and around obstacles that "slide style" remote hose clamp pliers cannot
- Longer Clamp End – Longer flexible engaging end works on larger clamps in any position on the hose
- Lifetime warranty on handle–Repair kit available for cable and jaws

# SERVICE TOOLS



SGA173BR



SGA174BG



SGA175BO



SGA1710BR



SGA1711BG



SGA1712BO



SGA176BR



SGA177BR



SGCP1BR



SGRHT2BO



SGRHT6BR



SGRHTLB3BR

**Soft Grip Handle Colors**

| Red | Orange | Green |
|---|---|---|
| R | O | G |

ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS

## Soft Grip Hose Picks

- Ideal for removing and replacing hoses and clamps
- Unique hose blade design for getting around the most difficult obstacles
- Soft, solvent-resistant handle material provides a sure, comfortable grip

| Red | Green | Orange | Finish | Blade Length, inches (mm) | Length, inches (mm) | SGRHT2BR | SGRHT2BG | SGRHT2BO | SGRHT6BR | SGRHT6BG | SGRHT6BO | SGRHTLB3BR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SGA173BR | SGA173BG | SGA173BO | Chrome | 5.43 (137.9) | 10.33 (262.4) | • | • | • | • | • | • | |
| SGA174BR | SGA174BG | SGA174BO | Chrome | 4.94 (125.5) | 9.84 (249.9) | | | | • | • | • | |
| SGA175BR | SGA175BG | SGA175BO | Chrome | 4.61 (117.1) | 9.51 (241.6) | | | | • | • | • | |
| SGA1710BR | SGA1710BG | SGA1710BO | Chrome | 11.66 (296.1) | 16.56 (420.6) | • | • | • | • | • | • | |
| SGA1711BR | SGA1711BG | SGA1711BO | Chrome | 10.89 (276.6) | 15.79 (401.1) | | | | • | • | • | |
| SGA1712BR | SGA1712BG | SGA1712BO | Chrome | 11.00 (279.6) | 15.91 (404.1) | | | | • | • | • | |
| SGA176BR | – | – | Industrial Finish | 5.62 (142.9) | 10.50 (266.7) | | | | | | | • |
| SGA177BR | – | – | Industrial Finish | 5.19 (131.8) | 10.09 (256.2) | | | | | | | • |
| SGCP1BR | SGCP1BG | SGCP1BO | Industrial Finish | 5.15 (130.8) | 10.00 (254) | | | | | | | • |

**SGA173BR Radiator Hose Pick**
- Use for easy-access applications

**SGA174BR Radiator Hose Pick**
- Perfect for tight-access firewall applications

**SGA175BR Radiator Hose Pick**
- Ideal for getting behind hoses and pulling

**SGA1710BR Radiator Hose Pick**
- Longest pick for extra reach

**SGA1711BR Radiator Hose Pick**
- Length and angle are designed for tight-access and long-reach firewall applications

**SGA1712BR Radiator Hose Pick**
- Long pick easily maneuvers around obstacles

**SGA176BR Radiator Hose Pick**
- 45° pick for restricted-access applications

**SGA177BR Radiator Hose Pick**
- 90° pick for restricted-access applications

**SGCP1BR Cotter Pin Puller**
- Make short work of pulling even large pins
- Heat-treated shank provides maximum strength
- Soft grip handle: 8 1/2" long

# COMPLICATED JOBS. SIMPLE SOLUTIONS.

Simply put, Snap-on innovation takes the complexity out of complex jobs. Our entire selection of shop equipment streamlines the process to make your job easier.

**THE BASICS FOR THE SHOP.**

Start here for the building blocks of a successful business. Air compressors, abrasive blast systems, vices, workbenches, fluid maintenance tools, paint equipment and more.

**THE BASICS FOR THE TECHNICIAN.**

For all the day-to-day needs: lighting, lubrication, creepers, measurement and body repair tools, just to name a few.



# LIGHTING: FLASHLIGHTS

## High-Output LED Flashlights

- Precision-machined aircraft aluminum
- Crush resistant 2,000+ lb
- O-ring provides ultra-tight seal
- Shock-proof and water-resistant
- Three-way tactical switch (momentary on/constant on/lockout mode)

| | Stock No. | Battery Type | Number of Batteries | Effective Range (up to) | Lumens | Overall Length, inches | Run Time (hours) |
|---|---|---|---|---|---|---|---|
|  | **ECF900** | AAA | 1 | 190 ft (58 Meters) | 53 (50,000 Hr LED) | 2 7/8" | Approx. 1 hour 20 minutes on high. Approx. 26.0 hours on low |
|  | **ECF900R** | AAA | 1 | 190 ft (58 Meters) | 53 | 2 7/8" | Approx. 1 hour 20 minutes on high. Approx. 26.0 hours on low |
|  | **ECF925CR** | AA Alkaline | 1 | 266 ft (81 Meters) | 55 | 3 7/8" | Approx. 1 hour 45 minutes on high. Approx. 40 hours on low |
|  | **ECF950BR** | 123A Lithium Alkaline | 2 | 131 ft (40 Meters) | 31 | — | Approx. 17 hours 30 minutes on high. Approx. 85 hours on low |
|  | **ECF965CR** | AA Alkaline | 2 | 443 ft (135 Meters) | 150 | 5 7/8" | Approx. 1 hour 10 minutes on high. Approx. 60 hours on low |
|  | **ECF975BR** | 123A Lithium Alkaline | 2 | 636 ft (194 Meters) | 200 | 6" | Approx. 3 hours on high. Approx. 40 hours on low |
|  | **ECF985** | 3.7 volt, 2200mAh Lithium Ion Rechargeable | 1 | 495 ft (151 Meters) | 227 | 6 1/4" | Approx. 2 Hours 25 minutes on high. Approx. 41 hours on low |
|  | **ECF985R** | 3.7 volt, 2200mAh Lithium Ion Rechargeable | 1 | 495 ft (151 Meters) | 227 | 6 1/4" | Approx. 2 hours 25 minutes on high. Approx. 41 hours on low |
|  | **ECF990R** | 3.7 volt 2200mAh Lithium Ion Rechargeable | 1 | 728 ft (222 Meters) | 540 | 7 7/8" | Approx. 1 hour 50 minutes on high. Approx. 7 hours on medium. Approx. 50 hours on low |

## Penlight LED Flashlights

| | Stock No. | Battery Type | Number of Batteries | Lumens | Overall Length, inches | Run Time (hours) |
|---|---|---|---|---|---|---|
|  | **ECFPEN5B** | AAA | 2 | 144 | 4 3/4 | Approx. 1 hour on high. Approx. 34 hours on low |
|  | **ECFPEN5BK** | AAA | 2 | 144 | 4 3/4 | Approx. 1 hour on high. Approx. 34 hours on low |
|  | **ECFPEN5R** | AAA | 2 | 144 | 4 3/4 | Approx. 1 hour on high. Approx. 34 hours on low |




**ECFH3**

**ECFH1 AA/AAA Flashlight Holder**
- Magnetic base offers secure hold of AA/AAA flashlights
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed

**ECFH2 D-Cell Flashlight Holder**
- Magnetic base offers secure hold of D cell flashlights
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed

**ECFH3 C-Cell Flashlight Holder**
- Magnetic base offers secure hold of C cell flashlights with width of 3/4"–1 1/8"
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed

## Flashlight (Blue-Point®)

**ECFPEN7HOA Rechargeable Penlight**
- Bright, broad illumination covers wide area
- Seven high-output front-facing LEDs
- Spot lens on bottom of light for inspection

**Applications**
- Compact size fits in shirt pocket



ECFPEN7HOA

**ECFB200BL Penlight, Blue**
**ECFB200S Penlight, Silver**
- High intensity 3 W, 100 lumen penlight
- 6.25" length, 1/2" diameter
- Includes pocket clip and protective rubber tip
- Includes three AAA batteries



ECFB200BL



ECFB200S

**ECFCLPSIDE Large Sideways Clip Case**
- Horizontally designed, *Snap-on* branded smart phone case for large-screen smart phones (*iPhone*, *Samsung Galaxy* Series and similar)
- Made of durable ballistic nylon to protect from impacts
- Perfect for rugged work or play environments of nearly every kind
- Rugged flex clip ensures confident attachment to waistbands, belts or straps up to 2 3/16"
- Internal pocket holds credit cards, ID, currency and more for convenient access
- Features secure hook and loop lid closure
- Dimensions: 5.5" x 3" x 1.7"



ECFCLPSIDE

**ECFCLPSIDEXL Extra Large Sideways Clip Case**
- Same features as ECFCLPSIDE
- Dimensions: 6.4" x 3.5" x 1"

## Small Storage Cases

**ECFLASHOLDER Flashlight Stretch Holster**
- Rugged Snap-on® branded holster for AAA, AA, L123, C & D cell flashlights – fits from 5/8"–1 1/2" diameter barrels
- Two durable elastic side panels expand to keep flashlights from AAA to D secure
- Also doubles as a useful hands-free device – angle up to see, read, work with both hands
- Open-ended design allows easy access to the flashlight's tail cap
- Durable clip rotates 360° and locks in eight different positions
- Clip fits belts up to 2 3/8" wide
- External case dimensions: 5.85" x 2.0" x 1.6"



ECFLASHOLDER

**ECFCLPCARGO Tall Cargo Clip Case**
- *Snap-on* branded cell phone case for wider phones absorbs shocks and shields from the elements
- Universally sized to fit large-screen smart phones (iPhone®, Samsung® Galaxy® Series and similar) with bigger displays that need extra protection
- Made of extremely durable ballistic polypropylene
- Fully rotates for access at any angle, and even locks in eight different positions
- Two pockets on the case – one inside and one in the back – hold identification, cash, credit cards, wireless headset or headphones
- Perfect for those who work and play in rugged environments, and want extreme protection for their valuable smart phones
- Features super strong rotating flex clip that is designed to fit waistbands, belts or straps up to 2 3/8" (6 cm)
- External case dimensions: 5.8" x 3.1" x 2.3"



ECFCLPCARGO

## Rotating Flashlights *(Blue-Point)*

**ECFLED24 Rotating Magnetic LED Work Light**
- 24 high-output LEDs provide bright illumination
- Sturdy blue aluminum housing for durability
- Rotating head allows directional positioning
- Powerful magnetic base for secure mounting
- Includes three AAA batteries



ECFLED24

**ECFLED48 48 LED Rotating Magnetic Work Light**
- 48 high-output LEDs produce more than 2,000 lux at 24"
- Strong magnet mounts securely on any ferrous surface
- Pivoting ball joint base permits positioning at any angle
- Includes three AA alkaline batteries
- Two times as bright as the original 24 LED version



ECFLED48

**ECFLEX3 3 SMD LED Flexible Base Shop Light**
- Three super-efficient SMD LEDs produce 550 Lux @ 0.5 meters, 110 lumens light output
- Three AAA alkaline batteries provides three hours' run time
- 9.5" heavy duty flex arm allows for multiple positions
- Light base features six strong Neodymium-Iron-Boron Magnets
- Bottom hook and hang hole for positional flexibility
- One-year warranty



ECFLEX3



WARNING
• Do not remove or bypass the grounding prong on any electrical plug
• Read safety precautions on pages W1 to W4

# LIGHTING: RECHARGEABLE SHOP LIGHTS



ECFLED84



ECFBARLED



ECFSP200A

## Rechargeable Shop Lights

**ECFLED84 Rechargeable Shop Light**
- 84 high-output SMD LEDs produce approx. 550 lumens
- Bright spotlight on top
- Two brightness levels – 100% & 50%
- 4,400 mAh lithium ion rechargeable battery
- Includes 1A USB charger and cable

**ECFBARLED Rechargeable Shop Light**
- 500 lumens light output for broad illumination
- 3.7V, 4,000 mAh Li-ion battery, 5 hour charger, 3 1/2 hour runtime
- Dual position switch-100% & 50% power levels
- Top and Bottom ratcheting hooks for versatile positioning
- All key parts are user-replaceable reducing downtime on any necessary repairs
- Rechargeable features saves money on batteries

**ECFSP200A High-Output Bar LED Shop Light**
- 120° wide viewing angle
- High-output LED BAR
- Includes 110V charger cord and charge base
- Battery capacity 1,300 mAh
- LED life time approximately 15 years
- Continuous operation for up to three hours
- UL®/CSA® listed



ECFLED68SPBK

## Cordless LED Shop Light with Spot

- 68 high-output LEDs with diffusion tube provide high light output to work surfaces
- USB charger cord and charger for multiple options recharging
- 350 lumen light output, 180° light angle coverage
- Bright spot light 60 lumens output
- Multi-position folding top hook for increased usability
- Cordless, rechargeable compact shop light – take it anywhere
- Rechargeable Lithium-Ion 3,300 mAh battery offers three hours' continuous light
- IP56 rating for water and dust resistance

**ECFLED68SPB Cordless LED Shop Light w/ Spot, Blue**
**ECFLED68SPBK Cordless LED Shop Light w/ Spot, Black**
**ECFLED68SPG Cordless LED Shop Light w/ Spot, Green**
**ECFLED68SPO Cordless LED Shop Light w/ Spot, Orange**
**ECFLED68SPR Cordless LED Shop Light w/ Spot, Red**



ECFBP6

## High-Output Rechargeable Shop Lights

**ECFBP6 High-Output Rechargeable Shop Light, Blue**
- Six super-efficient SMD LEDs produce 500 Lux @ 0.5 meters, 350 lumens light output
- 2,000 mAh Lithium-Ion battery provides three hours' run time, requires four hours' charge time
- USB charger and cable included for easy charging anywhere
- Sealed against moisture and dust – IP65 rated
- Two brightness settings – 100% and 50% for longer run time
- 180° hinge for mounting flexibility
- Strong magnet in base for mounting to ferrous surfaces
- Retractable hook and stand for multiple positioning options
- Recessed front lens reduces likelihood of surface scratches

**ECFBP6G High-Output Rechargeable Shop Light, Green**
**ECFBP6O High-Output Rechargeable Shop Light, Orange**



ECFLED6HOA

## Rechargeable Shop Light (Blue-Point®)

**ECFLED6HOA High-Output Rechargeable Shop Light**
- Six ultra-high-output SMD (surface mount diode) LEDs
- Wide-oval light pattern for broad area coverage
- Bright spot light on top for inspection applications
- Dual position switch – toggle between front light and spot light
- Dual magnets – on back of light and bottom base
- Ratcheting hinge for multi-angle use
- Includes 110V AC charger and 12V in car charger
- Serviced by Snap-on® repair centers

## Rechargeable Utility Lights

- Ten SMD front-facing LEDs provide high light output to work surfaces
- USB charger cord and charger for multiple options recharging
- 90° light angle with high light output – 170 lumens
- Bright spot light – 50 lumens output
- Two brightness level design
- Slim design for use in tight places
- CSA®/UL®, BC (California Energy Commission) approved

**Applications:**

- Cordless, rechargeable compact shop light that you can take anywhere
- Use under hood, under car, under dash



ECFSLIMRCAG

**ECFSLIMRCA Slim Rechargeable Shop Light, Red**
**ECFSLIMRCAB Slim Rechargeable Shop Light, Blue**
**ECFSLIMRCABK Slim Rechargeable Shop Light, Black**
**ECFSLIMRCAG Slim Rechargeable Shop Light, Green**
**ECFSLIMRCAO Slim Rechargeable Shop Light, Orange**

## Rechargeable Utility Light

**ECUB128A 128 LED Under Hood Light**

- Light distributed 180° to illuminate the entire engine compartment
- Diffusion tube technology eliminates shadows
- 128 high-output LEDs create 700 lumens
- Light distributed 180° to illuminate the entire engine compartment
- Cordless design prevents entanglement while providing convenience
- Rechargeable Lithium-Ion 4400 mAh battery offers three hours of continuous light
- IP56 rated for water and dust resistance
- Under-hood bracket telescopes from 47"–71" to fit most vehicles



ECUB128A

## Compact Shop Light Series

**ECFHKY Mini Rechargeable Shop Light**

- Six ultra-high-output surface-mount LEDs with rotating head
- Precision lens provides spread for even light distribution
- USB charging cable included
- Strong magnet in base to attach to all ferrous surfaces
- Run time 3 hours on high, 5 hours at 50% brightness
- Fully charges in 4–5 hours
- 90' angle of light coverage
- 2000 mAh Lithium-Ion battery



ECFHKY

## 4 LED Rechargeable Folding Shop Light

**ECFPKTHP4 4 LED Rechargeable Folding Shop Light**

- Four surface-mount diode LEDs offer a significant increase in brightness over previous model
- 1,200 mAh battery provides up to 2 1/2 hours of run time
- 90° light angle for broad illumination of workspace
- Belt/pocket clip to keep the light handy at all times
- Magnet on bottom base enables multi-angle use



ECFPKTHP4

## 12 LED Compact Lights

**ECFONELITE 12 LED Compact Light, Red**

- 12 SMD LEDs produce 100 lumens on high, 65 lumens on medium
- Uses 3AAA alkaline batteries for 7 hours runtime on high or 12 hours on medium
- Robust rubber boot protects the light from drop hazards
- Compact enough to take anywhere
- Super-Durable Super Portable
- Strong magnet on back attaches to ferrous surfaces
- Pocket clip for added versatility
- Dual position switch – 100% and 65% power levels
- Available in red, green and orange

**ECFONELITEG 12 LED Compact Light, Green**
**ECFONELITEO 12 LED Compact Light, Orange**



ECFONELITE



**⚠WARNING**

- Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4

# LIGHTING: SHOP LIGHTS



ECU415BK



ECU444AKT

## Single Tube

| Stock No. | Lamp Style | Voltage | Bulb Type | Bulb Wattage | Bulb Length, inches | Cord Type | Cord Length, feet | Replacement Bulb | Overall Length, inches |
|---|---|---|---|---|---|---|---|---|---|
| ECU415BK | Tubular | 120V AC | Single | 15 | 17 | 18/2 SJTOW | 25 | ECU250A17 | 25 |
| ECU444AKT | Tubular | 120V AC | Single | 15 | 41 | 18/2 SJTOW | 25 | ECU4443A | 44 1/4 |

**ECU415BK 15 W Fluorescent Utility Light**
- Uses a single tube 15 W fluorescent bulb (ECU250A17)
- High impact material in handle and top cap for durability
- Cord length 25'

**ECU444AKT Underhood Utility Light**
- Fits hood widths from 47"–80"
- Uses a single 15 W fluorescent tube (ECU4443A)
- Padded hooks prevent damage to hood
- Flexible 25' cord resists oil and water



ECU325BK



ECU425ABK

## Twin Tube

| Stock No. | Lamp Style | Voltage | Bulb Type | Bulb Wattage | Bulb Length, inches | Cord Type | Cord Length, feet | Replacement Bulb | Overall Length, inches |
|---|---|---|---|---|---|---|---|---|---|
| ECU325BK | Tubular | 120V AC | Twin | 13 | 7 | 18/2 SJTOW | 25 | ECU325-4 | 13 |
| ECU350BK | Tubular | 120V AC | Twin | 13 | 7 | 18/2 SJTOW | 50 | ECU325-4 | 13 |
| ECU425ABK | Angle Head | 120V AC | Twin | 13 | 7 | 16/3 SJOW | 25 | ECU325-4 | 14 |

**ECU325BK 13 W Compact Fluorescent Utility Light**
- High-impact material in handle and top cap for durability
- Diffuser optimally spreads light transmission
- Metal hanging hook for flexibility

**ECU350BK 13 W Compact Fluorescent Utility Light**
- High impact material in handle and top cap for durability
- Diffuser optimally spreads light transmission
- Metal hanging hook for flexibility

**ECU425ABK 13 W Angle Head Fluorescent**
- Case and lens made from impact-resistant proprietary material
- Ratcheting metal hanging hook for better positioning
- 25' cold weather cord is flexible to -58° F, resists chemicals and abrasions
- Uses ECU325-4 rough service bulb

**ECU325-4 Rough Service Bulb**
- Silicon cocoons internal components in base to extend starter life
- Superior durability in harsh conditions
- Fits most twin tube 13 W lights



ECU300

## Utility Light Accessories

**ECU300 Magnetic Utility Light Clamp**
- Expandable clamp on a magnetic base
- Can be used with many fluorescent utility lights or D cell flashlights



ECFLOOD

## Flood Light

| Stock No. | Lumens | Brightness | Weight | Dimensions, inches (mm) | Cable Gauge | Operating Voltage | Power Consumption | Temperature Range | Cable Length |
|---|---|---|---|---|---|---|---|---|---|
| ECFLOOD | 2,500 | 4,000 lux @ 0.5m | 4.85 lb (2,200 g) | 8.78" W x 8.39" H x 3.03" D (223 mm W x 213 mm H x 77 mm D) | 18AWG | Input: 110V/50–60Hz Output: 24V DC (cord volts) | 35W | -4 °F–104 °F (-20 °C–40 °C) | 25' (7.62m) |

**ECFLOOD LED Flood Light**
- Powerful and uniformly bright illumination from 70 high-output SMD LEDs
- Compact, robust construction with aluminum frame protected by rubber edge work
- IP65 resistant to water and dust infiltration
- Various uses requiring extreme illumination, general repair, body shop use, under car, construction and home improvement



## Extension Cords (Blue-Point®)

**EC267D Extension Cord**
- 25', 16/3 gauge SJTW cord stays flexible in cold weather
- Oil and water resistant

**EC268D Extension Cord**
- 50', 16/3 gauge SJTW cord stays flexible in cold weather
- Oil and water resistant



EC267D EC268D



## Flexible Lights *(Blue-Point)*

**ECF1600 Bendable Light**
- 10" flexible shaft with high-intensity lamp
- Heavy duty barrel handle and switch
- Includes two AA batteries

**YA5100B Bendable Light**
- 15" flexible shaft with 24" extension cover for added reach
- Brilliant krypton lamp runs on two AA cells

**YA5100B-1 Flashlight Switch**
- Replacement switch for YA5100B

**YA5100-2 Flashlight Bulb**
- Replacement bulb for YA5100B



ECF1600

YA5100B

## Magnifier

**YA537 Pocket Magnifier**
- Folding magnifier includes dual 3x lenses for combined 6x effect



YA537



⚠WARNING
- Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4

# FLUID MAINTENANCE: FLUID TRANSFER SERVICE EQUIPMENT

## Fluid Evacuators and Transfer Pumps

Easily remove engine gear and transmission oil, coolant and brake fluids. Unit creates vacuum, providing a clean, fast and simple way to evacuate or dispense a wide range of fluids. 8 L auto shutoff prevents overflow. 2.3 gal (8.8 L) total capacity. Durable polyethylene construction is impervious to automotive and household chemicals.



VAC201



VAC300

**VAC201 Manual Fluid Evacuator/Dispenser**
- No electrical or compressed air required
- Sturdy base with exterior pump helps prevent tipping
- Complete system includes manual fluid evacuator, main hose assembly (5/16 I.D. x 54" long) plus two rigid dipstick tubes for engine oil removal (3/16 I.D. x 34" and 1/8 I.D. x 34")

**VAC300 Pneumatic Fluid Evacuator**
- Quiet operation results from air muffler on the Venturi® pump
- Unit can be used away from air source by creating a vacuum, closing both shutoff valves and transporting unit to the job
- Connect tubing and release valves to evacuate fluid
- Complete system includes air-operated fluid evacuator with *Venturi* and air shutoff valve on base, main pour spout connector, main hose assembly (5/16 I.D. x 58" long), brake bleeding hose assembly with in-line fluid control (1/4 I.D. x 60" long) plus two rigid dipstick tubes for engine oil removal (3/16 I.D. x 34" and 1/8 I.D. x 34")

**FLUIDPUMP Fluid Transfer Pump**
- Transfer/siphon all types of fluids, including coolant, oil, transmission fluid and water
- Use to inflate sports balls, bicycle tires, flotation devices and more
- Durable, non-corrosive polyethylene
- Includes pump, two 4' lengths of fluid hose, two intake/discharge hose connectors, air pressure hose, dipstick tube and dipstick/fluid hose adaptor

TECHNICAL SUPPORT 1-877-776-8486



FLUIDPUMP

## Fuel System Maintenance




EEFS505012




EEFS106AC2

**EEFS505012 Fuel System Cleaning Fluid (Blue-Point®)**
(12) 17 oz cans of fuel system cleaning fluid for Fuel System Decarbonizer EEFS505A.

**EEFS106AC2 Diesel Engine Detergent**
- Professional detergent for cleaning diesel engines
- Four 32 oz bottles
- Use to remove contaminants in engines and fuel systems
- Includes six units of three-step cleaner
- Each unit includes one bottle of air intake cleaner, one bottle of combustion chamber cleaner and one bottle of fuel conditioner
- Use with EEFS103 series of diesel tune decarbonizing equipment

**EEFS308A5 Filter Pack**
Replacement filter pack for EEFS305A FuelKare™ Fuel Service System.

**AEC061004011 Fuel System Cleaning Solution**
Four 1 L bottles of fuel system cleaning solution for the EEFS305A *FuelKare* Fuel Service System.



A106



S3624



A127



OFSKIT

## Filter Sockets

**A106 Oil Filter Socket**

- Low-profile (1.68 O.D. x 1.04" long) 6-point design to remove the plastic oil filter on GM® Ecotec®, 2.0 L, 2.2 L and 2.4 L, 4 cylinder engines
- Features the Flank Drive® wrenching system
- Chrome finish for longer life and easy cleanup
- Wrench size: 1 1/4" (32 mm); 3/8" square drive

**Applications:** Saturn®: L-Series (2001), ION® and Vue (2002 and later), *GM*: Cavalier, Sunfire®, Grand Am®, Sonoma, S10, Alero, (2002 and later), Pontiac®: G6 and Solstice® (2006), Chevrolet®: HHR, Cobalt, Cobalt SS (2006), Malibu® (2002–2006), Saab®, some general applications

**S3624 Filter Flip Socket**

- One tool will remove/install all three filter caps on Ford® 6.0 L Power Stroke® diesel powered vehicles such as Super Duty Series Pickups, Econoline® Vans and Excursions®
- Use for removal and installation of the oil filter cap plus primary and secondary fuel filter caps on these vehicles
- Not impact use
- Requires optional 3/8" drive extension (FX1 or FXWP1 1 1/2" long). Additional 24 mm Applications
- Buick® vehicles: VVT-V6 Rendezvous Ultra, LaCrosse CSX
- Cadillac® vehicles: VVT-V6 CTS, STS, SRX
- *Saturn* vehicles: L-3000 V6. Additional 35/36 mm

**Applications/Specifications**

- Audi®/Volkswagen®: VR6 engine
- BMW®: 6, 8 and 12 cylinder engines
- Mercedes-Benz®: diesel engines
- Mini-Cooper® engines or vehicles
- Volvo®: 40 and 50 series, XC90 with 3.2 L 6 cylinder engine S3624 Specifications
- Square Drive Size: 3/8"
- Wrench Sizes: 24 mm and36 mm
- Wrenching Configuration: *Flank Drive*
- OD Major: 1.80" (45.7 mm)
- OD Minor: 1.38" (34.9 mm)
- Length: 1.73" (43.9 mm)
- Finish: Nickel/Chrome

**A127 Oil Filter Socket**

- Remove and install 27 mm (1 1/16") oil filters on 2003 and later *Mercedes* 1.8 L 4 cylinder engines
- Additional applications: aftermarket oil filters with 1" nut at the top of canister
- 1 1/16" wrench size, 3/8" drive

**OFSKIT Oil/Fuel Filter Socket Set**

- Includes: A127 and A106 oil filter sockets, S3624 filter flip socket and A129 fuel filter socket for Cummins® Diesel (4pc) in storage tray



S9615A

## Pan Plug Wrench

**S9615A 12-Point Fractional/Metric Box Wrench**

- 9/16" and 15 mm 12-point box ends fit most popular *GM* drain plugs
- 10° offset at each end for maximum clearance
- Both box ends feature *Flank Drive* wrenching system
- 9 23/32" long

## Oil Filter Crusher (Blue-Point®)

**CRUSH1A Oil Filter Crusher**

- Removes approximately 95% of excess oil from spent filters
- Features self-lubricating seal
- 10,000 lb of crushing force with simple hookup to 60–120 PSI air line
- 10–15 second time cycle
- Pivoting door prevents oil from dripping into work area when loading or unloading filters
- Won't operate when door is open
- Crushing chamber is 8 1/2" H x 6" square
- Height 23"; Weight 70 lb

**CRUSH1EX100 Air Filter**




CRUSH1A



⚠WARNING

- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# LUBRICATION: OIL FILTER


YA4050B


YA4275


YA4250


YA4274A


YA4022

## Oil Filter Pliers

**YA4050B Oil Filter Pliers (Blue-Point®)**
- Grips oil filters for easier removal
- Jaws are offset 20° from handle to increase accessibility
- Jaw opening range of 2 1/4"–4"
- 12" long

**YA4275 Oil Filter Pliers *(Blue-Point)***
- Use on filters from 4 1/4"–7" (108 mm–178 mm) diameter
- Spring action size adjustment assures a solid grip on filter
- Offset handle offers increased accessibility
- Heavy duty forged levers
- Cushioned grips for comfort
- Industrial black finish
- Overall length 19"

**Applications:** Include truck, tractor and high torque diesel engines

**YA4250 Oil Filter Pliers *(Blue-Point)***
- Slip joint design provides jaw opening range of 3 5/8"–6"
- 12" long

**YA4274A Oil Filter Pliers *(Blue-Point)***
- Use on filters from 2 1/2"–5 1/4" diameter
- Offset handle offers increased accessibility
- Heavy duty forged levers
- Cushioned grips for comfort
- Industrial black finish
- Overall length 13 1/2"

**YA4022 Long Reach Oil Filter Pliers *(Blue-Point)***
- Removes stubborn and overtightened oil, fuel and hydraulic filters plus fuel sending units and more
- Easy to maneuver around hot exhaust manifolds
- 23" long with tremendous holding power
- 32 teeth jaws adjust to two sizes for optimum grip


YA995


A91E


YA342C


OFW12418


GA333C


FWA6296A


FW656714A

## Oil Filter Wrenches

| Stock No. | Size | Steps | Flats | Style | Sq. Dr., inches | Application |
|---|---|---|---|---|---|---|
| **YA995*** | 3" | 2 | 15 | Cup | 3/8 | Fram®, AC®, Wicks®, NAPA®, Sears®, Motorcraft®, Hastings® and Baldwin® filters. Has 1" external hex. |
| **YA996*** | 76/80 mm | 2 | 14/15 | Cup | 3/8 | OEM® and Purolator® filters on VW®, Nissan®, and Toyota®. Has 1" external hex. |
| **A91E** | — | — | — | Strap | — | Large diameter oil filters 1"–6". Includes both 3/8" and 1/2" square drives. |
| **YA342C*** | — | — | — | Band | 1/2 | For 4 5/8"–5 1/4" diameter filters |
| **OFW12418*** | — | — | — | Band | 1/2 | 4 1/8"–4 21/32" (105 mm–118 mm) oil filters |
| **OFW125532*** | — | — | — | Band | 1/2 | 5 5/32"–5 21/32" (130 mm–143 mm) oil filters. Similar to OFW12418. |
| **GA333C*** | — | — | — | Band | Handles | 2 7/8"–3 1/4" diameter oil filters |
| **GA340A*** | — | — | — | Band | Handles | 3 1/2"–3 7/8" diameter oil filters. Similar to GA333C above. |
| **YA341A*** | — | — | — | Band | Handles | 4 1/8"–4 7/16" diameter oil filters. Similar to GA333C above. |
| **FWA6296A*** | 62/96 mm | — | — | Adjustable | 3/8 | Adjustable filter wrench for 62 mm–96 mm diameter oil filters. 3/8" square drive, 3/4" external hex. |
| **FWA62121A*** | 62/121 mm | — | — | Adjustable | 3/8 | Adjustable filter wrench for 62 mm–121 mm diameter oil filters. 3/8" square drive, 3/4" external hex. |
| **FW656714A*** | 65/67 mm | 2 | 14 | Cup | 3/8 | *Fram*-PH4386, PH4967, PH6017, PH6018 and PH6607 |
| **FW7614A*** | 76 mm | 1 | 14 | Cup | 3/8 | Champion®, Champ®, Lee®, *Purolator*, Mopar®, *VW*, Porsche®, BMW®, Mercedes® |
| **FW9315A*** | 93 mm | 1 | 15 | Cup | 3/8 | Casite®, *Champ*, *Champion*, GM®, *Fram*, *Hastings*, *Purolator*, Wix®, *Nissan*, *VW*, *Porsche*, Renault® |
| **FW757715A*** | 75/77 mm | 2 | 15 | Cup | 3/8 | *NAPA*, *AC* Delco®, Castrol®, STP®, Penske® |
| **FW7630A*** | 76 mm | 1 | 30 | Cup | 3/8 | *Fram*, IAPCO®, *Motorcraft*, Parts Plus®, Pennzoil® |
| **FW8015*** | 80 mm | 1 | 15 | Cup | 3/8 | *Motorcraft*, *Parts Plus*, Penske®, *Purolator* |

**Blue-Point*

**OFTOY468 Oil Filter Wrench**
- Oil filter wrench for cartridge type filters found on Toyota®, Lexus® and Scion® vehicles
- Manufactured from heavy duty chrome vanadium material
- Will withstand loads required to remove over tightened or frozen oil filter covers
- 1/2" square drive and 24 mm (15/16") hex
- 65 mm across flat
- Manufactured from heavy duty chrome vanadium materia



**OFTOY468**

**OFWTOY3KTA Toyota Oil Filter Wrench Kit (3pc)**
- Deliver maximum torque for easy removal of To*yota o*il filter canisters
- Engages filter housing at multiple contact points
- Engages end flutes and housing exterior
- Drain hose assembly included to aid in the oil draining process on those models equipped with a drain on the filter cap
- One wrench for 4 cylinder vehicles and one for the 6 and 8 cylinder models



**OFWTOY3KTA**

F**WK7A Oil Filter Wrench Set (Blue-Point®)**
- Wrenches in set cover 95% of US and import automobile and light truck oil filters
- Storage/carrying case keeps wrenches together for quick access
- Includes laminated application chart
- FWK7A set includes FW656714A, FW757715A, FW7614A, FW7630A, FW8015, FW9315A and FWA62121A oil filter wrenches



**FWK7A**

## Swivel Oil Filter Wrenches *(Blue-Point)*

**OFW1 Oil Filter Wrench**
- Fits small oil and fuel filters 2 3/8"–2 5/8"

**OFW2 Oil Filter Wrench**
- Fits smaller filter size on many US and imported vehicles 2 7/8"–3 1/4"

**OFW3 Oil Filter Wrench**
- Fits most popular 3.625" filters 3 1/2"–3 7/8"

**OFW4 Oil Filter Wrench**
- Fits most tractors and other farm implement equipment 4 1/8"–4 1/2"

**OFW4KT Oil Filter Wrench Set**
- Set includes OFW1, OFW2, OFW3 and OFW4 Swivel Oil Filter Wrenches



**OFW4KT**

# LUBRICATION: GREASE AND OIL


OFTOY38


OFA38


OFHON33


OFA33


OFGMFORD


OFA35


OFHARLEY


OFHD

## Funnels/Spouts

**OFTOY38 Oil Filler for Toyota®/ Lexus®/Scion®**
- Fits all *Toyota, Lexus* and *Scion* models (except *Toyota* Prius®) with threaded oil filler cap
- Prevents unwanted mess by sealing onto filler neck

**OFA38 Oil Funnel Adaptor for OFTOY38**
- Two-piece adaptor set for select *Prius* and Yaris® vehicles
- Custom fit to the valve cover filler neck
- Made of durable plastic

**OFHON33 Threaded Oil Filler**
- Prevents unwanted mess by sealing onto filler neck

**Applications:**
Honda® (Accord®, Civic®, Element®, Fit, S2000) vehicles; Acura® (All models except MDX and RDX); Nissan® (most models); Dodge® Cummins® Turbo Diesels from 2001–2008; Ford® Turbo Diesel trucks (9.0 L, 6.4 L, 6.9 L and 7.3 L)

**OFA33 OFA33 Oil Funnel Adaptor for OFHON33**
- Two-piece adaptor set for select *Honda* vehicles
- For the following Acura® vehicle: MDX
- For the following *Honda* vehicles: Pilot®, Ridgeline®, Odyssey®
- Made of durable plastic
- Custom fit to the valve cover filler neck

**OFGMFORD Threaded Oil Filler**

**Applications:** Chevy®: Cobalt, Silverado®, Tahoe®, Trailblazer® and Vans; GMC®: Sierra, Envoy®; Pontiac®: Grand Prix®, G6®; Saturn®: SL1; Cadillac®: CTS; Ford®: Explorer®, F150®, Mustang®; Mercury®: Mountaineer®. Prevents unwanted mess by sealing onto filler neck.

**OFA35 Oil Funnel Adaptor for OFTOY38**
- Made of durable plastic
- Custom fit to the valve cover filler neck
- Two-Piece Set: OFA35-1 short adaptor with male threads OFA35-2 elbow adaptor

**Applications:**
2013–2014 *GMC* Sierra and *Silverado* vehicles

**OFHARLEY Motorcycles Oil Filler for Harley-Davidson®**
- Prevents any unwanted mess; fastens and seals onto filler neck
- ABS plastic
- Smooth surface so not to scratch painted surface
- For *Harley Davidson* Touring bikes and Dyna series motorcycles 2007–present
- Additional Kia® Applications: Forte (2013–current), Rio (2013–current), Soul (2013–current), Sorento® (2011–current), *Sorento* (2011–current), Sportage® (2014)

**OFHD Motorcycles Oil Filler for *Harley-Davidson***
- Allows access to the fuel filter and pump as the lock ring is connected to the pump
- Oil filler for 1999–2006 *Harley-Davidson* Touring Motorcycles with the “Push in Style” oil caps
- Prevents any unwanted mess; fastens and seals onto filler neck
- ABS plastic
- Smooth surface will not scratch painted surface



OFKIT

**OFKIT Master Oil Funnel Kit**
- Made of durable ABS plastic
- No need to hold funnel while pouring in oil
- Fastens and seals to filler neck to prevent spills
- Kit includes a 45° angled extension to avoid obstructions
- Funnel and five adaptors fit hundreds of vehicles including Acura®, Ford®, GM®, Honda®, Hyundai®, Jaguar®, Land Rover®, Lexus®, Mazda®, Nissan® and Toyota®



FUNN1



FUNN15



FUNN2



GA96B

## Funnels/Spouts cont.

| Stock No. | Size | Neck Style | Screw Caps | Color |
|---|---|---|---|---|
| FUNN1* | 1 pint | Small | • | Orange |
| FUNN15* | 1.5 qt | Large | • | Red |
| FUNN2* | 1.25 qt | Large | • | Blue |

*Blue-Point®

**GA96B Transmission Filler *(Blue-Point)***
8 1/2" oval funnel with filter screen. 30" long.



YA734A



YA728A



YA4190A



GA471



GA472



GA473A

## Manual Grease Guns

| Stock No. | Specification | PSI | Loading | Capacity | Flexible Hose | Rigid Extension | Nozzle |
|---|---|---|---|---|---|---|---|
| YA734A* | Pistol Grip | 6,000 | Bulk or Cartridge | 16 oz Bulk and 14 1/2 oz Cartridge | 18" | 6" | — |
| YA728A* | Lever | 6,000 | Bulk or Cartridge | 16 oz Bulk and 14 1/2 oz Cartridge | 18" | 6" | — |
| YA4190A* | Mini | — | Cartridge | 3 oz | — | — | — |
| GA471* | Pistol Grip | 4,500 | Bulk, Cartridge or Filler Pump | 3 oz | — | 5 1/2" | 8 1/4" |
| GA472* | Pistol Grip | 5,000 | Bulk, Cartridge or Filler Pump | 14 oz | — | 3 1/2" | 13 1/4" |
| GA473A* | Lever | 10,000 | Bulk, Cartridge or Filler Pump | 14 oz | — | 5 3/8" | 19 1/4" |

*Blue-Point



YA775



YA771B



YA772B

## Air Powered Grease Guns

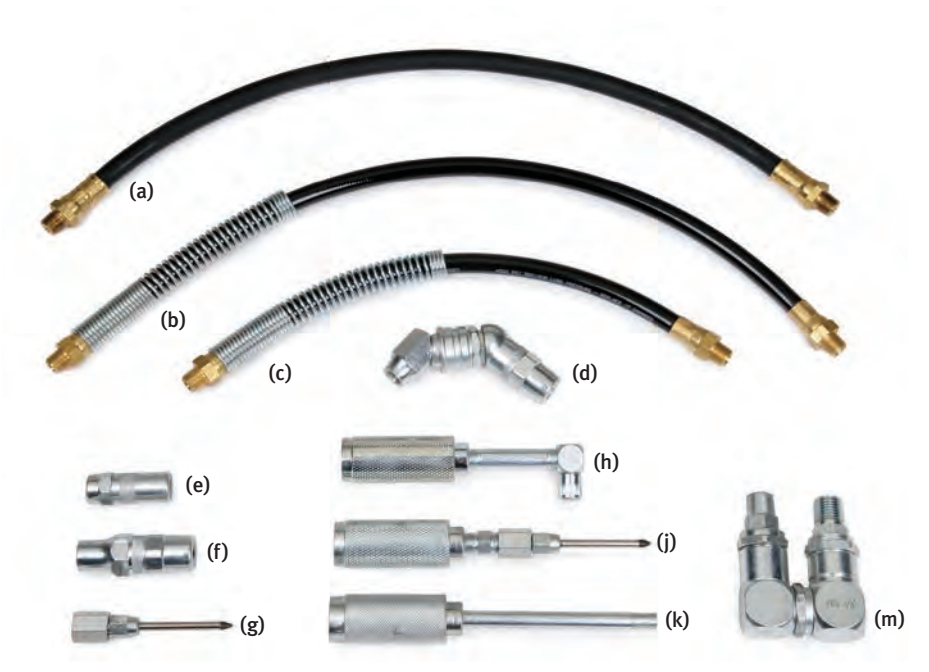
| Stock No. | PSI | Air Operating PSI | Pump Ratio | Loading | Capacity | Flexible Hose | Rigid Extension | Nozzle |
|---|---|---|---|---|---|---|---|---|
| YA775 | 6,000 | 100 | 60:1 | Bulk, Cartridge or Filler Pump | 14 oz Cartridge | — | 7 1/2" | — |
| YA771B* | 6,000 | 35–80 | 40:1 | Bulk, Cartridge or Filler Pump | 14 oz Cartridge | 18" | 6" | — |
| YA772B* | 4,000 | 40–100 | 40:1 | Bulk, Cartridge or Filler Pump | 14 oz Cartridge | 18" | 6" | — |

*Blue-Point



WARNING • Read safety precautions on pages W1 to W4

# LUBRICATION: GREASE AND OIL




**YA7500**



**YA747**



**YA801**

## Dispensing Accessories (Blue-Point®)

**YA7500 Grease Dispensing Accessory Pack**
- Includes YA760–YA750 in a storage tray

**(a) YA758 Flex Whip Hose**
- For hand-operated grease guns only, 18" long

**(b) YA752 Flex Whip Hose**
- 18" long version of YA751

**(c) YA751 Flex Whip Hose**
- For powered and hand operated grease guns
- 4,500 maximum PSI, 12" long

**(d) YA754 Swivel Coupler**
- Swivels 360°, locks in position every 45°

**(e) YA755 Coupler**
- Fits all hydraulic type grease fittings

**(f) YA753 Heavy Duty Coupler**
- Fits all hydraulic type grease fittings

**(g) YA750 Needle Nozzle**
- 2 3/4" long

**(h) YA757 Angle Lube Adaptor**
- 4 1/2" long with 90° head allows fast and complete lubrication of steering and suspension systems on late model FWD vehicles

**(j) YA761 Needle Nozzle Coupler**
- This is the YA750 with a locking sleeve adaptor for quick attachment to a hydraulic coupler

**(k) YA756 Extension Coupler**
- Lubricates recessed fittings, 6" long
- Locking sleeve adaptor allows quick attachment to hydraulic coupler of any control valve or lever gun

**(m) YA760 Universal Swivel**
- High pressure swivel, 5,000 maximum PSI
- 1/2"-27 male x 1/4" NPT(m) threads

**YA747 Grease Control Valve**
- 1/4" NPT(f) inlet, 7,500 maximum PSI
- Includes 6" extension tube and YA753 coupler

**YA801 Needle Type Adaptor**
- 4 7/8" long adaptor for universal joint fittings, water pumps and metal covered springs

**GA472-2 Grease Fitting Coupler**
- Push-on design with neoprene nipple and ball
- Features spring check valve

**GA472-9 Flexible Polybraid Hose**
- Oil, grease and solvent resistant with brass end fittings

## Grease Fitting Cleaner

**UFREE1 Grease Fitting Cleaning Tool**
- Quickly and easily frees up joints and fittings for proper greasing and lubrication
- Inject light viscosity oil into the grease joint via the grease fitting to break up and remove dirt, rust and debris
- Pump in new grease after freeing the joint
- Includes injection cleaning tool, 4 3/4" long flexible hose to access tight places and storage case



UFREE1

## Oil Spray and Suction Guns

**YA746 Oil Spray Gun**
- Siphon type spray gun for spraying lubricating oils, cutting oils and cooling oils
- Includes 6' vinyl suction hose with strainer

**YA745A Oil Spray Gun (Blue-Point®)**
- 16 oz capacity
- Fast, clean method for removing or adding transmission and gear oil
- Special follower is impervious to oil, grease and water



YA746



YA745A

## Bearing Packers

**A180A Manual Bearing Packer**
- Simultaneously pressure packs inner and outer wheel bearings 3/4" minimum ID and 4" maximum O.D.
- Use with pressurized lube equipment or hand grease gun
- Includes dust cover

**YA470C Manual Bearing Packer *(Blue-Point)***
- Packs 50–65 bearings with one grease filling
- Apply manual pressure to flush and pack bearing with grease
- Includes dust cover
- 4 1/2" high

**YA742 Manual Bearing Packer**
- Unit features large packer head
- Handles bearings to 9 1/2" O.D. and minimum 9/16" I.D.
- Includes adaptor to service smaller bearings of 1–1 3/4" O.D.



A180A



YA470C



YA742



⚠WARNING • Read safety precautions on pages W1 to W4

# LUBRICATION: GREASE AND OIL


YA739


YA737


YA738


YA736

## Grease and Gear Oil Pumps/Manual

**YA739 Manual Gear Oil Pump**
- Fits any 25 lb–50 lb original refinery container
- Delivers 1 oz per stroke using SAE 90 gear oil at 70 °F
- Includes 5' of 1/2" low-pressure hose with dispensing nozzle

**YA737 Manual Operating Grease Pump**
- Clamps securely to any 25 lb–50 lb original refinery container
- Handles any ball or roller bearing with 5/8"–1 1/2" I.D. and 3 1/4" maximum O.D.
- Primes and pumps even when using heavy grease at low temperatures
- Follower plate prevents funneling of grease

**YA738 Manual Gear Oil Pump**
- Fits any 120 lb original refinery container
- Powerful 50:1 ratio pump with 20 cu-in displacement
- Includes rollaround base, straight swivel, 7' of 1/4" high-pressure hose, quick connect air coupler, follower plate, YA747 grease control valve and YA760 universal swivel

## Grease Pumps/Air

**YA736 Air Powered Grease Pump**
- Fits any 20 lb–50 lb original refinery container
- Powerful 50:1 ratio pump utilizes 20 cu-in displacement
- Includes: 6' of 1/4" high-pressure hose, quick connect air coupler, follower plate, YA747 grease control valve and YA760 universal swivel


YA759

**YA759 Air Powered Grease Pump**
- 50:1 ratio pump
- Uses 120 lb container size and handles all grades of lubricant
- Features internal muffler for quiet operation and a prelubricated air motor requiring no external oiler
- Exclusive microlapped hardened steel air valve and seat to assure a long and productive service life, no packings to wear out
- Shovel-type foot valve adds mechanical priming to normal suction
- Casters offer unit mobility
- Does not include barrel


YA762

## Dollies

**YA762 Band Dolly**
- Provides mobility for 25 lb–50 lb original refinery containers
- Includes jam swivel casters and screw clamp for secure adjustment



PBT5X29

## Transmission Table

**PBT5X29 Transmission Table (Shown with Optional Drawer)**
- 5' long

**PBT2120 Drawer**
- Optional drawer
- 20" x 20" x 5"


YA743

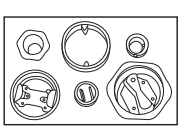

YA749

## Drains

**YA743 Waste Oil Drain**
- Fits standard 16 gal drum
- Includes: float gauge in drum cover, telescopic drain bowl adjustable from 42 3/4"–70" and roll around base (drum not included)

**YA749 Drain**
- 24 1/2" diameter
- Fits 6" or larger drain bowls
- Prevents spillage when removing transmission pans


A172A



## Drum Plug

**A172A Drum Plug Socket**
- One socket removes virtually all screw-in drum plugs or caps
- Spring-loaded inner wrench handles smaller plugs and recesses automatically when removing large plugs
- Use with a 1/2" drive ratchet or impact wrench

## Oilers (Blue-Point®)

**OC5A Oiler**
- 5 1/2" small pressure oiler has a long, tapered spout with a screw on tip
- 1 7/8" O.D.
- Includes base holder

**OCF5 Oiler**
- Similar to OC5A Oiler with a flexible spout


OC5A


OCF5



## Engine Calibration and Setup Kit *(Blue-Point)*

**YA871 Whistle Alert (Flexible)**
- Insert Whistle Alert into any 14 mm spark plug hole, turn the engine over and listen for the whistle to locate top dead center for the compression stroke

**YA870 Whistle Alert (Rigid)**
- Same as YA871 except it can also be used with YA866 compression gauge extension

**YA8661 Spark Plug Hole Adaptor**
- Adapts the 14 mm thread on YA866/YAL866 TDC Indicators, YA868 compression gauge extension and YA865 engine lock to accommodate 18 mm spark plug threads

**YA8662 Spark Plug Hole Adaptor**
- Adapts the 14 mm thread on YA866/YAL866 TDC Indicators and YA868 compression gauge extension to accommodate 12 mm spark plug threads


YA8661


YA8662


YA9680


YA1150


ML6000


CC100


YA9730


ML6000COMBO

## Timing

**YA9680 Camshaft Pulley Tool *(Blue-Point)***
- Designed to hold the camshaft pulley in place while turning the center shaft bolt
- Extremely useful on transverse mounted V6 engines such as Nissan® Maxima®/VG30 engine and Toyota® Camry®/3VXFE and 1MZFE engine
- Rear pulleys on these vehicles are located in close proximity to the shock tower making it difficult to remove/replace the center shaft without this tool

**YA1150 Small-Pin Cam Gear Holder *(Blue-Point)***
- Small diameter (10 mm) grooved pins fit snugly into the small holes in the cam gear.
- Long handle with cushioned grip provides excellent leverage so the cam gear bolt can be tightened or loosened
- This tool is a companion to YA9680, which has larger diameter pins for cam gears with larger holes

**YA9730 Timing Belt Tensioner Compressor *(Blue-Point)***
- For 1995 and later T-100, Tacoma® and 4Runner®
- Turn square compress tensioner, then install locking pin (YA9730-5 included with YA9730)

**ML6000 Cam Lock Tool/Timing Gear Clamp *(Blue-Point)***
- Prevent engine damage resulting from incorrect timing
- Maintain valve timing during belt replacement on twin and quad cam engines
- Compact design allows access in transverse engines
- Fits timing gear diameters from approximately 4"–6" (101 mm–152 mm)
- Fits gear spacing approximately 0.06"–3" (1.6 mm–76 mm)

**CC100 Single Cam Clamp *(Blue-Point)***
- Single cam clamp can be used on engines where the dual clamp ML6000 will not fit
- Compact design permits easy operation in confined engine areas
- Prevent engine damage resulting from incorrect timing
- Maintain valve timing during belt replacement on twin and quad cam engines
- Simple and easy to use
- Manufactured from high-strength industrial polymers which will not corrode or damage engine pulleys

**ML6000COMBO Cam Clamp Set *(Blue-Point)***
- Includes four CC100 single cam clamps and one ML6000 dual cam clamp in storage tray



WARNING • Read safety precautions on pages W1 to W4

# ENGINE SERVICE: SERVICE TOOLS



CGH1236



YA4660



MCH1280



ML5000



TGH15



TSK5KT

## Timing

**CGH1236 Cam-Gear Holder**
- Tool holds the hex at gear hub making removal and tightening of cam gear bolt easy and accurate
- Hole at center of the tool allows a socket to be inserted through the tool for removal and replacement of the cam gear bolt
- Fits a large number of vehicles, 18 different models from 1995–2011

**YA4660 Camshaft Sprocket Holding Tool (Blue-Point®)**
- Pivoting design allows fit in most cam and injection pump gear sizes
- Detent grooves on holding pins gives user a sure hold
- Use as a counter holder when loosening or tightening sprocket retainer bolts

**MCH1280 Cam Holder for Mercedes® Vehicles**
- This tool ensures that the cam does not move, enabling the tech to complete the job without any worry of needing to re-time the motor
- Unique tool designed to lock the left intake cam in place while servicing the cam chain drive system
- Lock placed in rear intake cam and bolted to cylinder head locking the cam keeping it from rotating – reduces chance of mistake in the cam timing
- Keeps related components in time with each other, eliminating need for additional man hours to hold cam in place

**Applications**
- Used on 272 and 273 Series *Mercedes Benz* engines

**ML5000 DOHC Lock Tool *(Blue-Point)***
- Locks cam shaft sprockets in place to preserve engine timing during belt or chain replacement
- Knurled pins on unit lock on to the groove on the inside of the cam wheel
- Unit base is constructed from anodized aluminum
- Pins are steel
- Works with most import and US cars and light trucks

**TGH15 Timing Gear Holding Tool *(Blue-Point)***
- Securely holds timing gear during removal and installation

**TSK5KT Timing Service Kit *(Blue-Point)***
- Complete kit for timing belt replacement and service
- Securely holds timing gear during removal and installation
- Allows rotation of cam gear to align valve timing marks
- Single-lever locking design is easy to use
- Slimline design allows maximum access
- Kit includes TGH15 Timing Gear Holding Tool and CC100PK Single Cam Clamp Set



A121A



A119B



A120



S6152



YA6555



EEPV507

**A121A Oil Pressure Sender Switch Socket**
- For 1987 and later Ford®, GM® and Chrysler® vehicles
- 1 3/16", 12-point wrench size, 3/8" drive
- 3 11/16" long

**A119B Oil Pressure Sender Switch Socket**
- For 1986 and earlier *Ford*, *GM* and *Chrysler* vehicles
- 1 1/16" special wrench configuration, 3/8" drive
- 2 1/16" long

**A120 Oil Pressure Sender Switch Socket**
- For 1987 and later *Ford*, *GM* and *Chrysler* vehicles
- Can also be used for 1999 Mitsubishi® Eclipse® with the 2 L DOC non-turbo 420A engine
- Same design as A119B but longer
- 1 1/16" special wrench configuration, 3/8" drive
- 3 11/16" long

**S6152 Oil Pressure Sender Switch Crowfoot Wrench**
- Same applications as A119B but designed for switches with difficult access
- 1 1/16" wrench opening, 3/8" drive

**YA6555 Oil Pump Removal Tool for *GM* Vehicles (Blue-Point®)**
- Designed to work on most *GM* V6 engines
- No need to remove the intake manifold
- Makes removal of the oil pump drive fast and easy

**Applications:** *GM* 2.8 L V6 (1987–1989), 3.1 L V6 (1990–1994), 3100 V6 (1994–2005), 3.4 L V6 (1999 and later)

## Oil Pressure

**EEPV507 Oil Pressure Gauge Set**
- Use on diesel and gasoline engines
- Includes standard and metric adaptors for most US and import cars, trucks, tractors and stationary engines
- Includes: 0–100 PSI (0–700 kPa) gauge assembly

| Part Number | Description |
|---|---|
| EEPV5F-1 | 2" Pipe Nipple |
| EEPV5F-2 | 1/4" M x 1/8" F Hex Bushing |
| EEPV5F-3 | 3/8" M x 1/8" F Hex Bushing |
| EEPV5F-4 | 1/8" FNPT Coupling |
| EEPV5F-5 | 1/8" M x 1/8" F Street Elbow |
| EEPV5F-6 | 1/8"-28 BSPT |
| EEPV5F-7 | M10 x 1.0 Tapered Thread |
| EEPV5F-8 | M10 x 1.0 Adaptor |
| EEPV5F-9 | M10 x 1.25 Adaptor |
| EEPV5F-10 | M12 x 1.5 Adaptor |
| EEPV5F-11 | M12 x 1.75 Adaptor |
| EEPV5F-12 | M14 x 1.5 Adaptor |
| EEPV5F-13 | M16 x 1.5 Adaptor |
| EEPV5F-14 | M18 x 1.5 Adaptor |
| EEPV5F-15 | 5/16"-24 Adaptor |
| EEPV5F-16 | 7/16"-20 Adaptor |
| EEPV5F-0 | Male Quick Connect Plug |
| EEPV5-100G | Pressure Gauge and Boot Assembly (100 PSI) |
| EEPV5-BOOT1 | Gauge Boot |
| EEPV507-H | Hose Assembly |
| EEPV507-PB | Plastic Box |

## Drain Plugs

**PMP410A Internal Metric Pipe Plug Socket**
- 10 mm female square
- For removing or replacing standard transmission drain plug
- 3/8" drive, 3/4" O.D., 1" long
- Female pipe plug socket (for Renault® LeCar)

**PMM410A External Pipe Plug Socket**
- 10 mm male square
- For removing or replacing oil pan plug
- 3/8" drive, 11/16" O.D., 1" long

**S5902 Oil/Transmission Plug Wrench**
- Box ends are 17 mm, 6-point and 21 mm, 12-point
- Designed for VW® transmission drain plugs
- 258 mm long



PMP410A



PMM410A



S5902



**⚠WARNING**
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# ENGINE SERVICE: SERVICE TOOLS


GDCT16


S6132A


S6160


S6194


S6214


YA6611


FRT12

## Cylinder Head

**GDCT16 Combustion Leak Tester**
- Provides an easy and quick way to diagnose engine overheating problems
- Checks for leaks between the combustion chamber and the cooling system
- Test head and gasket for combustion leaks before removing the radiator
- Double chamber in testing unit provides a high level of accuracy
- For use on water-cooled gas and diesel engines
- Kit includes complete test chamber, 16 oz bottle of testing fluid and instructions

**GDCT161 Leak Detector Fluid (Blue-Point®)**
- 16 oz bottle of leak testing fluid for the GDCT16 combustion leak tester

**S6132A Metric Valve Cover Bolt Socket**
- For GM® vehicles, 1976 and later Honda® vehicles and other import and US vehicles
- 10 mm, 12-point wrench size
- Allows access to head bolts, valve and rocker covers and oil pan bolts
- Deep clearance for bolts with extended tip as used on spark plug wire harness
- 3/8" drive; 11/16" O.D.
- 4 1/8" long

**S6160 Extra Long Head Bolt Socket**
- Use on 1986 and later Nissan® engines with 12 mm head bolts
- 8" length reaches past cam and rocker assembly to service head bolts
- Thin-profile socket and shank will reach through access hole and past overhead camshaft
- Additional high torque applications include removal and installation of universal joint flange bolts on Ford®/Mercury® cars such as Mustang®, Crown Victoria® and Lincoln®, plus *Ford* Explorer®, Ranger® and F150®/F250® trucks
- 12-point, industrial finish, 1/2" sq. drive

**S6194 Head Bolt Socket**
- Use on Toyota® and *Nissan* cars and trucks and *Honda* cars with 12 mm head bolts
- 4 1/8" length reaches past cam and rocker assembly to service head bolts
- Thin-profile socket and shank reach through the access hole and past overhead camshaft
- Additional high torque applications include removal and installation of universal joint flange bolts on *Ford Explorer*, *Ranger* and *F150/F250* trucks
- 12-point, industrial finish, 1/2" sq. drive

**S6193 Head Bolt Socket**
- Use on all 1981 and later *Toyota* and *Nissan* cars and pickups and 1976 and later *Honda* vehicles and other import and US cars with 10 mm head bolts
- Additional uses include drive shaft universal joint attaching bolts for *Ford* vehicles
- 4 1/2" length reaches past cam and rocker assembly to service head bolts
- Thin-profile socket and shank will reach through the access hole and past overhead camshaft
- 12-point, industrial finish, 1/2" drive

**S6195 Head Bolt Socket**
- Same as S6193 except for 14 mm head bolts

**S6214 Head Bolt Socket**
- Remove and install headbolts on 1995 and later Subaru® vehicles
- Length of socket allows the removal and installation of headbolts with engine in the car
- 54.1 mm length. 14 mm size. 1/2" drive. 12-point

**YA6611 Head Handler *(Blue-Point)***
- Convenient and balanced T-handle design helps move cylinder heads faster and easier
- No need to "bear hug" the cylinder head during movement
- Attached floating washer for increased surface contact
- Comfortable, secure gripping surfaces for hands
- M6 x 1.0 threads
- Package of two

**YA6612 Head Handler *(Blue-Point)***
- Same as YA6611 except has 1/4" x 20 threads
- Package of two

**YA6613 Head Handler *(Blue-Point)***
- Same as YA6611 except has M8 x 1.25 threads
- Package of two

**FRT12 Three-Valve Insert Kit for *Ford* Vehicles *(Blue-Point)***
- Repair cylinders without removing the head
- Custom guide, tap and drill for quick and simple repair of damaged threads
- Unique insert installer makes the job quick and easy
- Works on three-valve 5.4 L and 6.8 L engines built before 10/9/2007
- Also works on three-valve 4.6 L engines built before 11/30/2007 found on many 2004–2008 *Ford*, *Lincoln* and *Mercury* vehicles
- Set includes Tap, Core Drill, Guide, Insert Installer, Insert and Storage Case



S6192A



CJ147A



ADT30KT



CJ113B



CJ117C



YA1350

## Power Steering/Alternator/Water Pump

**S6192A Water Pump Socket**
- 1/2" square drive socket features dovetail design to deliver positive engagement when applying high torque
- Black industrial finish

**Applications:** 1992–1998 Cadillac® Northstar® 4.6 L V8; 1997–1998 Oldsmobile® Aurora 4.0 L

**S6192A-1 Water Pump Socket Stabilizing Strap**
- Bolts on water pump to secure S6192A water pump socket in place during water pump removal and replacement
- Includes two M6 x 12 bolts for securing strap to water pump
- Black industrial finish

**Applications:** 1992–1998 *Cadillac Northstar* 4.6 L V8; 1997–1998 *Oldsmobile* Aurora 4.0 L

**CJ113B Power Steering/Alternator Pulley Installer**
Designed for US vehicles. 1" pulley driver hex, 7/16" pressure screw hex, thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end). 4 5/8" long.

**CJ113C4 Pulley Installer Shaft**
- Thread size of 5/8"-18UNF (puller end), 3/8"-16UNC (alternator end)

**CJ117C Power Steering and Alternator Pulley Puller**
Includes short adaptor to remove small flange-type pulley; use long adaptor on GM® 200/Platform vehicles. Can also remove Chrysler® alternator pulleys that have double grooves (Replace pulleys with CJ113B Installer). Long adaptor included to handle pulleys on *GM* minivans. Nickel/chrome finish, industrial finish screw. Designed for most US vehicles (replace pulley with CJ122 sets).

**CJ122 Power Steering Pulley Installer Set**
Includes CJ113B Installer and CJ113C4 Pulley Installer Shaft. Thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end).

**CJ124A Power Steering/Alternator Pulley Puller**
This is a larger version of CJ117C. Designed for *Chrysler*, Ford® and earlier *GM* vehicles.

**CJ147A Power Steering Gear Lower Pinion Bearing Puller**
- Required tool to comply with *GM R*ecall Bulletins #02049 and #03062 regarding power steering gear lower pinion bearing separation

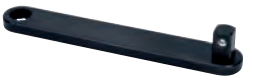
**ADT30KT Alternator Pulley Kit**
- Aids installation and removal of Alternator Decoupler Pulleys either OWC (one way clutch) or OAD (Overrunning Alternator Decoupler)
- Varying lengths of hex, Torx® and spline configurations allow user to handle unique combinations for a difficult task
- Master kit eliminates the need to shop around for hard-to-find tools and reduces service bay downtime that can erode a technician's profit
- One Way Clutch (OWC) Pulleys and Overrunning Alternator Decoupler (OAD) Pulleys exist on over 20 million cars and growing
- Tool can be used on all major ADP Manufacturers including INA®, Gates® and Litens®
- The most comprehensive kit on the market
- Features a combination of hex bits, *Torx* bits, spline sockets, and specialty bits to work in conjunction to remove pulleys from alternator
- Drop forged and precision CNC components to meet the tight tolerances of the application

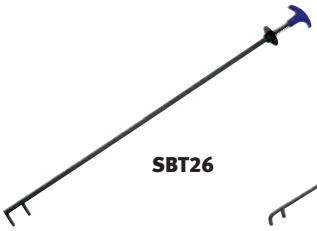
**Applications include:** Audi®, BMW®, Buick®, *Cadillac*, Chevrolet®, *Chrysler*, Citroen®, Dodge®, Fiat®, Ford®, Honda®, Lexus®, Mercury®, Opal®, Pontiac®, Peugeot®, Porsche®, Renault®, Saturn®, Seat®, Scion®, Toyota® and VW® vehicles

**YA1350 *Toyota* Water Pump Pulley Wrench (Blue-Point®)**
- Essential tool for preventing pulley damage when removing or installing bolts
- Fixed pin dimension for quick, easy installation
- Unique bend to clear engine compartment obstacles
- Wrench head shaped for generous clearance around the bolts

**⚠WARNING**
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# ENGINE SERVICE: SERVICE TOOLS


SRD6


SBT26


YA9417


SBTL33


YA9350B


YA9340


GA424A

## Belt Tensioning Tools (Blue-Point®)

**SRD6 Belt Tensioner Release Tool**
- 6" long adaptor with 1/2" male square
- The female triple square drive allows the user more flexibility to work around obstacles by coming in at different angles with a 1/2" breaker bar
- Similar to Snap-on® 6" torque adaptors but with a male square
- If using with a torque wrench, please refer to *Snap-on* part # SS306G Torque Chart for formula to obtain the correct applied torque

**Heavy Duty Applications:**
- For serpentine belt tensioners with a 1/2" square drive opening found on Series 60 Detroit Diesel® and Caterpillar® engines
- Other heavy duty applications include buses and delivery vans where the doghouse or engine shrouding can get in the way and make the work area very tight

**Automotive Applications:**
- 1/2" serpentine belt tensioners on Dodge®/Chrysler® vehicles (2.0 L and 3.0 L engines), Ford® vehicles, Lincoln® and Mercury® vehicles (2.3 L, 3.0 L, 4.2 L and 4.6 L engines), GM® vehicles (2.5 L, 4.7 L, 5.0 L and 5.7 L engines)

**SBT26 Serpentine Belt Tool**
- Works on all serpentine belts
- Clamping jaw allows user to position serpentine belt without the belt slipping out of the tool
- Positive grip allows belt routing in tight access areas
- Ergonomic handle provides comfort and ease in use
- Lightweight steel body for durability and strength

**YA9417 Belt Tensioning Tool**
- General use belt tool for installation and removal of V-belts and timing belts
- Two-pin design and long length allow user to push and pull belts as needed for access in restricted areas

**SBTL33 Serpentine Belt Tool**
- Flexibility allows for easy adjustment of belt around various pulley positions
- LED lighted portion of tool ensures easy visibility in dark engine compartments
- Extra long 33" length allows for deeper reach around crank shaft pulley
- Reverse gripping feature allows for two-handed positioning of tool

**YA9350B Ratcheting Belt Tensioning Wrench Set**
- Allows direct access to belt tensioners without removing engine accessories or frame components
- Covers almost 90% of all vehicles equipped with spring-loaded serpentine belt tensioners
- Includes YA9350B1 wrench (15 mm) and YA9350-2 to YA9350-9 adaptors
- All adaptors feature a 15 mm external hex drive for use with the YA9350B1 wrench

**Applications:** *Chrysler* (*Dodge* and Plymouth®), *Ford* (*Lincoln* and *Mercury*), *GM*, Isuzu®, Jeep®, Lexus®, Mazda®, Mitsubishi®, Saturn®, Toyota®, VW® vehicles

**YA9350B1 Belt Tensioning Wrench**
15 mm single hex.

**YA9350-2 Adaptor**
14 mm single hex. 15 mm external hex drive

**YA9350-3 Adaptor**
3/8" square drive. 15 mm external hex drive

**YA9350-4 Adaptor**
3/8" square drive. 15 mm external hex drive

**YA9350-5 Adaptor**
1/2" square drive. 15 mm external hex drive

**YA9350-6 Adaptor**
13 mm single hex. 15 mm external hex drive

**YA9350-7 Adaptor**
16 mm single hex. 15 mm external hex drive

**YA9350-8 Adaptor**
15 mm single hex. 15 mm external hex drive

**YA9350-9 Adaptor**
19 mm single hex. 15 mm external hex drive

**YA9340 Serpentine Belt Wrench**
- Use to release any serpentine belt tensioner with 1/2" square drive opening
- Ratcheting action allows better positioning of the tool, which allows more swing angle than a solid-type serpentine belt wrench
- Reversible ratchet head is only 1" thick so it will fit between tensioner face and fan blades on S Series 60 *Detroit Diesel* and some *Caterpillar* engines
- Also great for working on buses and delivery vans where the doghouse or engine shrouding restrict access
- Compact overall length keeps handle from coming in contact with radiator hoses, charged air cooler pipes, hydraulic lines or frame rails
- Vinyl grip for comfort
- 13" overall length

**GA424A Belt Tension Gauge**
- Range is 30 lb–180 lb (130–800 N•m)
- Squeeze handle, place gauge on drive belt, release handle and read

## Belt Tensioning Tools (Blue-Point®)

**SBT60 Serpentine Belt Tensioner Wrench**
- Saves time by reducing the number of parts removed to change belts
- Double ended to fit more models
- Extra-long for more leverage



SBT60

**SBT12 GM® Ecotec® Serpentine Belt Tensioner Wrench**
- Designed to ease service of serpentine belt on *Ecotec* 2.2 L and 2.4 L in-line 4 cylinder engines in *GM* vehicles
- Service serpentine belt without removal of engine mount or lower air filter housing
- Allows access to tensioner from top of engine compartment
- Double square drive gives improved leverage and flexibility
- Low profile fits into space between tensioner and frame rail



SBT12

**SBIT1 Stretch Belt Tool**
- Allows belt to be rotated onto pulley without twisting the belt, which can cause damage to the belt
- Low profile to allow for tight access applications
- Groove on underside of tab fits on outer lip of pulley to prevent tool from slipping off the pulley

**Applications:**
2007–2009 Ford®/Lincoln® (Edge, MKZ/MKX) 3.5 L used on water pump. 2009 Chevrolet®/GMC®/Cadillac® (Express, Silverado®, Tahoe®, Suburban®, Colorado®, Avalanche®, Sierra, Savana, Yukon®, Canyon®, Escalade®) 4.8 L, 5.3 L , 6.0 L, 6.2 L used on air conditioner compressor. 2008–2009 Hummer® (H3, H3T, H2) 5.3 L and 6.2 L used on air conditioning compressor.



SBIT1

**SBIT2 Stretch Belt Tool**
- Easily install stretch belts on late model European vehicles
- Allows belt to be rotated onto pulley without twisting the belt and causing damage
- Low profile to allow for tight access applications
- Groove on underside of tab fits on outer lip of pulley to prevent tool from slipping off the pulley

**Applications:**
BMW®: Models 118, 120, 318, 320, 325, 330, 335, 520, 525, 530, 535, 635, 730, X3® and X5®; Volvo® vehicles: Models C30, S40 and V50; Mercedes®: 3.0 L Diesel Engines



SBIT2

**SBT2KT Stretch Fit Belt Kit**
- Universal installation and removal of all stretch belts
- Easy to use process for both removal and installation
- Allows removal and reuse of stretch fit belts
- Includes SBTI Install Tool, SBTR Removal Tool and informative instructional DVD

**SBTI Stretch Fit Belt Install Tool**

**SBTR Stretch Fit Belt Removal Tool**



SBT2KT



**⚠WARNING**
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

# ENGINE SERVICE: SERVICE TOOLS



YA188G



YA188LR



YA188MKT

## Harmonic Balancer (Blue-Point®)

**YA188G Harmonic Balancer Installer**
- Includes seven adaptors for use on a wide range of engines
- Adaptor sizes: 7/16"-20, 1/2"-20, 9/16"-18, 3/4"-16, M12 x 1.5, M14 x 1.5 and M16 x 2.0

**YA188LR Long-Reach Harmonic Balancer Installer**
- Traditional harmonic balancer installers cannot be used to install the harmonic balancers on V8s and V6s for late model GM®, Ford®, Chrysler® and Dodge® vehicles
- Kit includes tools for all three US vehicle makers
- Reduce the risk of stripping threads inside the crank
- Reduce the risk of breaking crank bolts
- Kit includes YA188LR-1 thru–YA188LR-5

**YA188LR-1 Center Screw (M16 x 2.0)**
- Use on *GM* 4.8 L, 5.3 L, 5.7 L, 6.0 L and 7.0 L engines (2008–2012 model years)

**YA188LR-2 Center Screw (M12 x 1.5)**
- Use on *Ford* 3.0 L, 3.5 L, 4.6 L, 5.4 L and 6.8 L engines (2004–2012 model years)

**YA188LR-3 Center Screw (M14 x 1.5)**
- Use on *Chrysler*/*Dodge* 4.7 L, 5.7 L and 6.1 L V8 engines (2006–2012 model years)

**YA188LR-4 Pressed Bearing and Nut**

**YA188LR-5 Center Screw (M12 x 1.75)**
- Use on *Chrysler*/*Dodge* 3.7 L V6 engines (2006–2012 model years)

**YA188MKT Master Harmonic Balancer Installer Kit**
- Includes traditional installer adapters as well as long-reach adapters for late model applications
- Services harmonic balancers as well as underdrive pulleys and recessed crank threads on *Dodge* Hemi®, *GM* Gen III/IV and *Ford* 4.6 L and 5.4 L modular engines
- Works on most European vehicles including BMW® and VW® as well as Toyota®, Honda®, Kia® and Hyundai® vehicles



CJ146



YA6490A



YA6010A



HIW3A

**CJ146 Harmonic Damper Pulley Puller**
- Remove the crankshaft harmonic balancer on 1990 and later 3.3 L and 3.8 L *GM* engines
- Shoulder bolt adaptors provide correct installation depth, preventing damage to the crank sensor and interrupter rings
- Includes three CJ146-1 adaptors and one CJ146-2 extension plus vinyl storage pouch; requires Snap-on® CJ98-1 yoke and CJ83-3 pressure screw for use (not included)

**YA6470 Harmonic Dampener Pulley Holding Tool**
- Harmonic dampener pulley holding tool for *GM* trucks and SUVs
- Easily removes and installs the bolt holding the pulley
- Industrial black finish helps protect against corrosion

**Applications:** 1999 and later GEN III 4.6 L, 5.3 L and 6.0 L V8 engines

**YA13350 Harmonic Dampener Pulley Puller**
- Use on 3.6 L Camaro® engines
- Unique design accesses pulley on internal pulley ledges

**YA13450 Harmonic Dampener Pulley Puller**
- Use on 3.5 L and 5.7 L *Dodge* engines
- Unique design accesses pulley on internal pulley ledges

**YA6490A Harmonic Damper Pulley Puller**
- New spring-loaded legs allow for leg position retention
- Provides greater ease and control when installing the puller in confined areas
- Removes harmonic damper pulleys found on many *Chrysler* and *GM* engines
- Used on autos, pickups, SUVs and vans

**YA6491A Harmonic Damper Pulley Puller Update Kit**
- Updates earlier YA9740 pullers to the same applications as the new YA6490A
- Kit updates other pulley pullers that are similar to the YA9740 series of pullers
- Add YA6491 Update Kit to existing YA9740 series pullers to add these new applications: *GM*: 4.2 L straight 6 cylinder: Chevy® Trailblazer®, GMC® Envoy®, Oldsmobile® Bravada® (2003 and later), Buick® Rainier (2004 and later), 3.5 L Straight 5 cylinder: *Chevy* Colorado®, *GMC* Canyon® (2004 and later), Hummer® H3® (2006 and later), 2.8 L straight 4 cylinder: *Chevy Colorado*, *GMC Canyon* (2005 and later)

**YA6010A Harmonic Dampener Pulley Holding Tool *(Blue-Point)***
- Saves time during removal and installation of the crank bolt on most engines in *Honda* and Acura® vehicles. Verify exact model year/engine size coverage with tool instructions
- When used with a 1/2" drive breaker bar or ratchet, prevents the pulley from rotating when removing/installing the pulley bolt

**HIW3A Hand Impact Wrench *(Blue-Point)***
- Remove/replace harmonic balancer pulleys without removing the radiator
- Accesses restricted areas where an air impact wrench will not fit or when air supply is unavailable
- Use with any 1/2" impact socket
- Molded rubber hand guard
- Max torque: 600 ft-lb
- Overall length: 22 1/16"

## Specialty Tools (Blue-Point®)

**YA7200 Ignition Module Wrench for Ford® Vehicles**
- For 1982 and later *Ford* ignition modules
- Ratcheting ends are offset 25°
- One end has 7/32", 6-point; other end a T20 TORX® bit

**YA8640 Cam Belt Wrench for VW®/Audi® Vehicles**
- For adjusting camshaft spur belts that have idler pulleys with pin holes
- Vinyl handle grip

**YA6760 Timing Belt Pulley Holder for *VW*/*Audi***
- Holds crank pulley stationary for crank bolt removal and installation to the factory torque requirement
- Three-bolt design for secure holding
- 1/2" drive for use with a breaker bar
- Heat-treated for strength with high quality black finish

**Applications:** 1.8 L 4 cylinder turbo: *VW* and *Audi* vehicles 1998–2006; 2.0 L 4 cylinder: *VW* vehicles 1993–2005; 2.0 L 4 cylinder turbo: *VW* and *Audi* vehicles 2006 and later

**YA9870 Tension Pulley Spanner Wrench**
- Easily adjust camshaft spur belts having idler pulleys with pin holes on Mitsubishi®, Plymouth® and Eagle® vehicles
- Protruding pins on the wrench grip the center of the idler pulley and rotate it around its off center retaining bolt
- Rotation allows for the camshaft spur belt tension adjustment
- Designed for use on: 1990–1993 *Mitsubishi* Eclipse®, *Eagle* Talon and *Plymouth* Laser 2.0 L DOHC (non-turbo); 1990–1993 *Plymouth* Laser 2.0 L DOHC (turbo); 1990 and later *Mitsubishi Eclipse* and *Eagle* Talon 2.0 L DOHC (turbo); 1994–1996 *Mitsubishi* Montero® 3.5 L DOHC; 1994 and later *Mitsubishi Montero* 3.5 L SOHC; 1994 and later *Mitsubishi* Galant® 2.4 L SOHC; and 1994 and later *Mitsubishi* Mirage™ 1.8 L SOHC vehicles

**YA4590A Hood Prop**
- Three-piece telescoping shaft locks in any position
- Range is 20"–48 1/2"
- Will work on front or sides of any car or truck
- Made of steel tubing and features locking levers on each section
- Includes holding support to prevent slippage

**YA45904 Hood Prop Adaptor**

**YA65500 Cam Seal Remover**
- Special tool speeds camshaft seal removal on most V6 engines in Toyota® and Lexus® vehicles
- Unique press-and-pull cup design eliminates the difficult pick method
- Use on *Toyota* 3.0 L and 3.3 L V6 (1996 and later) and *Lexus* 3.0 L and 3.3 L V6 (1990 and later) vehicles
- Kit includes cup, press rod, washer, nut and large stud
- Heat-treated alloy steel

**YA6551 Cam Seal Remover/Installer**
- Kit provides accurate and fast camshaft seal removal and installation on *Toyota* (1996 and later) and *Lexus* (1990 and later) 3.0 L and 3.3 L V6 engines
- Eliminates possibility of camshaft damage
- Heat-treated alloy steel and high quality hardware
- Includes removal cup, press rod, washer, nut and large stud

**YA7960 Camshaft Seal Kit**
- Easily removes and installs camshaft and crankshaft seals without damage
- Compact puller with unique extracting hooks engage seal for quick removal
- Interchangeable sleeves and mandrels allow easy installation of new seal
- Suits seals from 21.5 mm–64 mm


YA7200


YA8640


YA6760


YA9870


YA4590A


YA65500


YA6551


YA7960



WARNING • Read safety precautions on pages W1 to W4

# ENGINE SERVICE: SERVICE TOOLS



S9842A

## Thermal Vacuum Switch

**S9842A Thermal Vacuum Switch Socket**
- For US vehicles through 1988
- 7/8", 6-point wrench opening, 1/2" drive
- 3 1/8" long



S6158

## Turning/Moving

**S6158 Engine Barring Socket**
- Use 4 L–6.6 L small block V8s in Chevrolet® vehicles
- Designed to turn the engine over when it is on engine stand
- 1/2" drive



SPS2

## Seal Puller

**SPS2 Universal Seal-Puller Set**
- Small seal puller used for common seal sizes and large seal puller used for larger seal sizes
- 2" and 4" pins for various seal diameter sizes with clearance requirements
- Surface area on hook helps prevent seal puller from piercing through the seal (0.25" where competitive units are smaller at 0.12")
- Pin creates a pivot point on the surface of the seal, thus distributing the force evenly over a larger surface area when compared to a traditional seal puller design

# VALVE: SERVICE TOOLS



S6132A

## Cover Bolt Socket

**S6132A Metric Valve Cover Bolt Socket**
- For GM® vehicles, 1976 and later Honda® vehicles and other import and US vehicles
- 10 mm, 12-point wrench size
- Allows access to head bolts, valve and rocker covers and oil pan bolts
- Deep clearance for bolts with extended tip as used on spark plug wire harness
- 3/8" drive; 11/16" O.D.
- 4 1/8" long



YA8825

## Valve Adjustment Tools (Blue-Point®)

Valve adjusting tools for current VW® vehicles. These two tools are designed to be used together on all late models requiring the *VW* #2078 tool, which includes all current 5 cylinder *VW*s and Audi® 5000.

**YA8825 Valve-Adjusting Tool**
- For Toyota® and other overhead camshaft engines using spacer shims
- Shim pliers push between the shim and camshaft, allowing the included YA8825-1 wedge tool to be placed between the valve lifter ledge and camshaft for easy shim replacement

**YA8825-1 Wedge Tool**
- Wedge tool to be placed between the valve lifter ledge and camshaft for easy shim replacement



YA8895

## Metric Jam Nut Type Adjustment Tools *(Blue-Point)*

Include an idle adjustment screwdriver within a socket and handle for holding adjustment screw in place while the jam nut is tightened. Handle pivots from one side to the other so the socket "window" is always visible.

**YA8895 Valve Adjustment Tool**
- For all cars with 10 mm jam nut valve screws

**YA8880 Valve Adjustment Tool**
- For all cars with 12 mm jam nut valve screws

## Valve Keeper Tools (Blue-Point®)

**GA318A Overhead Valve Tool**
- Removes and replaces valve keepers on all gas and diesel overhead valve engines, even VW® Rabbit®, motorcycle, marine and aircraft engines
- Magnetically retains keepers and will not bend valve stems
- Use in place of c-clamp or other type of compressor
- Use only with a soft-faced hammer



GA318A

**GA317 Metric Valve Keeper Remover/Installer**
- Quickly removes and installs valve keepers on most overhead cam engines with valve stems from 4.5 mm–7.5 mm
- Push or tap tool with hammer to remove valve keepers
- Magnet in tool body captures keepers for quick removal and valve disassembly
- To install keepers, load keepers then push or tap to install
- Used on vehicle or on workbench



GA317

## Camshaft/Crankshaft Tools *(Blue-Point)*

**GA285 Camshaft Bearing Remover and Inserter Set**
- Removes and inserts bearings in all engines
- Five driving plugs handle a range of 1.475"–2.690"
- Fits slightly undersized or oversized bearings
- Sturdy storage box



GA285

**YA6380 Camshaft Seal Installer Set**
- Quickly and easily install the crankshaft seal on most 4 cylinder and V6 engines that have 10 mm and 12 mm x 1.25 cam bolts



YA6380

## General Service *(Blue-Point)*

**YA8230 Valve Stem Seal Pliers**
- Removes valve stem seals from overhead camshaft engines including four valve-per-cylinder engines that have restricted access to the valve stem seal
- Gripping serrations in the pliers tip easily grab both OEM and aftermarket seals with ease
- Easy-grip handles



YA8230

**VL2 Valve Holder**
5/8" and 13/16" diameter suction cups.

**VL3 Valve Holder**
1 1/8" and 1 3/8" diameter suction cups.



VL2

**YA6290 Valve Stem Seal Pliers**
- Use in restricted areas with a clearance problem above the cylinder head
- Pliers head rotates from 0°–90°
- Jaw tip features a thin edge for hooking under stubborn valve stem seals
- Four vertical ridges on jaws aid in holding the valve stem seal
- Vinyl handle grips for comfort and control



YA6290

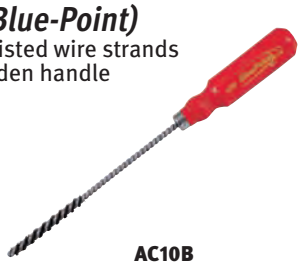
# VALVE GUIDE SERVICE TOOLS

## Valve Guide Brushes *(Blue-Point)*
- Brush wire is woven into twisted wire strands
- Each features a fluted, wooden handle

**AC10B Valve Guide Brush**
5/16" diameter brush.

**AC11B Valve Guide Brush**
11/32" diameter brush.

**AC12B Valve Guide Brush**
3/8" diameter brush.



AC10B

## Metric Valve Guide Removers
- Designed for use with Snap-on® air hammers
- Can also be used as drift punches

**PHG97A Valve Guide Remover**
5 mm pilot. 189 mm long.

**PHG96A Valve Guide Remover**
7 mm pilot. 189 mm long.

**PHG83A Valve Guide Remover**
8 mm pilot. 190 mm long.



PHG83A

**PHG86A Valve Guide Remover**
9 mm pilot. 190 mm long.



WARNING • Read safety precautions on pages W1 to W4

# VALVE: SERVICE TOOLS



CF811B



CF19B



CF700C

## Valve Lifters (Blue-Point®)

**CF811B C-Clamp Compressor**
- 1"–2" capacity. For "L" head, valve in head, high compression engines and vehicles with overhead valves
- Activating mechanism prevents cocking of valve spring as it is compressed

**CF19B C-Clamp Compressor**
- Compact model includes CF19-3A jaws for 1/4"–1 1/16" diameter springs on small, air-cooled engines and CF19A5 jaws for both 17 mm and 20.8 mm diameter springs on Honda® engines

**CF700C Valve Spring Compressor**
- 7/8"–2 1/2" capacity. Operates on 90–150 PSI, but develops up to 3x output pressure. Tool measures 1" x 8"

**CF700-2 Replacement Jaw Set**
- Medium, offset jaws with 1"–2" capacity
- For CF811B and CF700C

**CF700C-1 Optional Jaw Set**
- For CF811B and CF700C
- Large, straight jaws with 1 1/2"–2 1/2" capacity



YA9140B



YA3271



VST100

## Valve Spring Compressors *(Blue-Point)*

**YA9140B Universal Valve Spring Compressor**
- Removes/installs the valve spring without removal of the cylinder head from the engine
- US and import servicing of single and double overhead cam engines, including Audi®, Chrysler®, Infiniti®, *Honda*, Hyundai®, Lexus®, Mazda®, Mitsubishi®, Nissan®, Porsche®, Saturn®, Toyota®, Volvo® and VW® vehicles

**YA3271 Valve Spring Compressor**
- For most cars and trucks with overhead valves
- Works with cylinder head on or off the engine
- Removable hand wheel provides option to use 5/8" socket or wrench in confined quarters

**VST100 Cam Operated Valve Spring Compressor**
- Eliminates the need for cylinder removal and the need to readjust tool to each spring
- Works on most overhead valve engines



CG90

## Valve Spring Depressor

**CG90 Valve Spring Depressor**
- Self-leveling action compensates for any helix angle spring
- Jaw length can be adjusted
- Pulls with equal pressure on both

## Valve Spring Replacement Tools

**M2112PK Timing Chain Holder For Lexus® vehicles (2 pk)**
- *Lexus* V6 Valve Spring Replacement Tool
- For *Lexus* safety recall ALE
- M2112PK includes two M2112s as two are required to hold timing chain

**Application:**
M2112PK holds timing chain during valve spring replacement or any other service requiring camshaft removal. Saves technician time as the engine can be turned over with the cam shaft out and with the timing chain installed.

**M2113 For VVT Gear Holder *Lexus* Vehicles**
- *Lexus* V8 Valve Spring Replacement Tool
- For *Lexus* engine designation 1 UR-FSE 4.6 L V8
- For *Lexus* safety recall ALE

**Application:**
M2113 holds the intake VVT gear during valve spring replacement. Saves technician time as the engine can be turned over with the cam shaft out and with the VVT gear in and timing chain installed. M2113 can be used instead of using wire ties.



M2112PK



M2113



## Ridge Reamer (Blue-Point®)

**WR30A Ridge Reamer**
- Lathe type reamer is for 3"–5" diameter cylinders
- Centers itself in cylinder

**WR30A10 Replacement Cutter Bit**



WR30A

## Cylinder Bore

**GA3627 Cylinder Bore Gauge**
- Measure cylinder wear without removing pistons
- Check cylinder diameter when used with micrometer
- Range is 2.6"–7" in .001" increments and measures to a bore depth of 8"
- Includes gauge, six extensions (0.2", 0.4", 0.6", 0.8", 1.0" and 2.0") plus storage case



GA3627



## Ring Expanders

**PRS8 Piston Ring Expander**
- Installs piston rings from 3/64"–1/4" thick
- Eliminates breakage or distortion of rings
- 7" long

**PRS10 Piston Ring Expander**
- 2 3/4"–4 1/4" ring capacity
- Remove or install both step cut and diagonal cut rings
- Spring tension eliminates the need for adjustment

**PRS12 Piston Ring Expander**
- Similar to PRS10 but with 4 1/2"–7" ring capacity
- Excellent for heavy duty diesel applications



PRS8



PRS10



⚠WARNING • Read safety precautions on pages W1 to W4

# PISTON: SERVICE TOOLS



RC150A



RC40C



RCL30



RCW60



RC980



RC500



RC510A



HLE24

## Ring Compressors

Clutch control holds tension band in position as piston is inserted into cylinder. 1/2" wide spring bands equalize tension over belt width so ring assembly may be compressed into groove until flush with piston. “V” beads on lower edge of belt keep tool from entering cylinder. RC40C can be used upside down for Chevrolet®, Mercury® and Ford® trucks with angled blocks.

**RC150A Ring Compressor**
- Four band
- 3 1/2"–7" capacity, 7" deep

**RC50C Ring Compressor**
- Two band
- 3 1/2"–7" capacity, 3 1/2" deep

**RC40C Ring Compressor**
- Two band
- 2 1/8"–5" capacity, 3 1/2" deep

**RCL30 Ring Compressor**
- One band
- 2 1/2"–5" capacity
- May be disassembled and removed from around connecting rod when used on small aircraft, motorcycle or other engines that require the cylinder to be pushed over the piston during assembly

**RCW60 Ring Compressor**
- One band
- 3"–5" capacity, 1 1/2" deep
- Low-friction wrinkle band construction with thumbscrew for precise adjustment
- Used on small aircraft and motorcycle engines where cylinders are pushed over piston during assembly

**RC980 Ring Compressor Set**
- Works both horizontally and vertically with pliers grip handle
- Fine tooth ratcheting mechanism
- Includes six hardened steel bands: 2 7/8"–3 1/8", 3 1/8"–3 3/8", 3 3/8"–3 5/8", 3 5/8"–3 7/8", 3 7/8"–4 1/8" and 4 1/8"–4 3/8"

**RC980-7 Optional Band** 4 1/2"–4 3/4" capacity
**RC980-8 Optional Band** 4 3/4"–5" capacity
**RC980-9 Optional Band** 5"–5 1/4" capacity
**RC980-9.5 Optional Band** 5 1/4"–5 1/2" capacity
**RC980-10 Optional Band** 5 1/2"–5 3/4" capacity
**RC980-11 Replacement Pliers**

## Ring Groove Cleaners

**RC500 Piston Ring Groove Cleaner**
For pistons with grooves of 5/64", 3/32", 1/8", 5/32" and 3/16" with diameters from 2 1/2"–5".

**RC500-1 Replacement Cutter Blade**
Replacement cutter blade.

**RC500-11 Optional Cutter Blade**
For 1/8", 1/4", 5/16", 2.5 mm and 3 mm grooves.

**RC510A Piston Ring Groove Cleaner**
For pistons with grooves of 5/64", 3/32", 1/8", 5/32" and 3/16" with diameters from 1"–5".

**RC510-1 Replacement Cutter Wheel**

**RC510-6 Replacement Knurled Nut**

**RC510-3 Adaptor**
Adapts RC510A for use on pistons with diameters of 1–2 3/4".

**RC510-7M Replacement Metric Cutter Wheel**

## Dead Blow Hammer

**HLE24 Piston Dead Blow Hammer**
Made of material that will not damage the piston. Shot-filled head drastically reduces rebound. Head length is 7 3/4". Diameter is 1 1/4"–1 1/2" with a reach of 5 1/2" to the handle shoulder. Overall length is 12 3/4".



A57Q

### A57Q Bushing Remover/Inserter Set

- For standard and specialized bronze, steel, rubber or Enlox bushings
- Range of adaptor sizes covers nearly all shackle and steering bushings
- New bushings are inserted by tightening screw, which forces the bushing into place without hammering
- Sleeve permits forcing out of old bushings
- Useful where limited space prevents driving them out
- Five smallest adaptors are used only with the smallest driver

| Stock No. | Description |
|---|---|
| A57CA | Screw (1/2"-20) |
| A57-35 | Screw (5/8"-18) |
| ME4A2 | Nut (1/2"-20) |
| ME4A4 | Nut (5/8"-18) |
| A57-3 | Washer (1/2" ID, 1 1/4" OD) |
| A57-37 | Sleeve Adaptor (.500" ID x .625" OD) |
| A57-39 | Sleeve Adaptor (.640" ID x 2.047" OD) |
| A57-41 | Sleeve Adaptor (1.000" ID x 2.047" OD) |
| A57-38 | Sleeve Adaptor (1.500" ID x 2.047" OD) |
| ESD1428 | Bearing (1/2" ID, 1" OD) |
| ME11A1 | Bearing (5/8" ID, 1 1/8" OD) |
| A57-36 | Sleeve (4 15/16" long, 2 1/16" ID) |
| A57-27 | Puller (1/8"-27 taper thread) |

| Stock No. | Dimension, inches O.D. | Dimension, inches Small O.D. | Dimension, inches Large I.D. | Dimension, inches Large O.D. |
|---|---|---|---|---|
| A57-15 | Bushing Driver for Adaptors A57-16–A57-26 | | | |
| A57-16 | .339 | .434 | — | — |
| A57-17 | .430 | .497 | — | — |
| A57-26 | .492 | .622 | — | — |
| A57-18 | — | .493 | — | .559 |
| A57-25 | — | .554 | — | .684 |
| A57-14A | Bushing Driver for Adaptors A57-8–A57-20 | | | |
| A57-8 | .555 | .622 | — | — |
| A57-19 | .601 | .668 | — | — |
| A57-7 | .618 | .747 | — | — |
| A57-6 | .678 | .809 | — | — |
| A57-5 | .728 | .856 | — | — |
| A57-24 | .742 | .997 | — | — |
| A57-10 | .789 | .918 | — | — |
| A57-11 | — | .851 | — | .980 |
| A57-22 | — | .907 | — | 1.046 |
| A57-12A | — | .919 | — | 1.027 |
| A57A13 | — | .993 | — | 1.122 |
| A57-46 | — | 1.034 | — | 1.136 |
| A57-20 | — | 1.055 | — | 1.184 |
| A57-23A | — | 1.101 | — | 1.230 |
| A57-45 | — | 1.250 | 1.125 | — |
| A57-42 | — | 1.406 | 1.187 | — |
| A57-48 | 1.206 | 1.500 | — | — |
| A57-29 | 1.222 | 1.372 | — | — |
| A57-40 | 1.367 | 1.625 | — | — |
| A57-44 | — | 1.812 | 1.375 | — |
| A57-43 | — | — | 1.625 | 2.000 |
| A57-47 | — | — | 1.859 | 2.000 |
| A57-49 | — | — | — | 13/16 opening |
| A57-51 | — | — | — | 17/32 opening |
| A57-50 | — | — | — | 1 3/8 opening |



A57CA



ME4A2



A57-3



A57-37



ESD1428



A57-36



A57-27



A57-15



A57-16



A57-18



A57-14A



A57-8



A57-5



A57-11



A57-46



A57-20



A57-45



A57-42



A57-48



A57-44



A57-43



A57-49



A57-51



⚠WARNING • Read safety precautions on pages W1 to W4

# BUSHING/SEAL: DRIVER SETS



A261M

## Metric Heavy Duty Bushing Driver Set

**A261M Metric Bushing Driver Set**

- Includes an extra large driver handle and adaptors in 40 mm–80 mm sizes
- Packaged in PB117 storage box

## A261M Set Components

| Stock No. | Description |
|---|---|
| A257-1 | Large Driver Handle |
| A157-5 | Driver Nut, 1/2"-20 |
| A261M1 | Adaptor (40–44 mm) |
| A261M2 | Adaptor (42–45 mm) |
| A261M3 | Adaptor (45–48 mm) |
| A261M4 | Adaptor (48–52 mm) |
| A261M5 | Adaptor (50–53 mm) |
| A261M6 | Adaptor (55–60 mm) |
| A261M7 | Adaptor (60–65 mm) |
| A261M8 | Adaptor (65–70 mm) |
| A261M9 | Adaptor (70–75 mm) |
| A261M10 | Adaptor (75–80 mm) |



A158B

## Heavy Duty Bushing Driver Set

**A158B Heavy Duty Bushing Driver Set**

- Includes eight basic adaptors for servicing bushings on trucks, tractors and buses
- Adaptors are secured to threaded driver shaft by knurled nut
- Industrial finish
- Set comes packaged in PB34 storage box

## A158B Set Components/Adaptors

| Stock No. | I.D., inches | O.D., inches |
|---|---|---|
| A257-1 | Large Driver Handle | — |
| A157-5 | Driver Nut, 1/2"-20 | — |
| A257-23 | 1 5/16 | 1 7/16 |
| A257-24 | 1 3/8 | 1 1/2 |
| A257-25 | 1 7/16 | 1 9/16 |
| A257-26 | 1 1/2 | 1 5/8 |
| A257-27 | 1 9/16 | 1 11/16 |
| A257-28 | 1 5/8 | 1 3/4 |
| A257-29 | 1 11/16 | 1 13/16 |
| A257-30 | 1 3/4 | 1 7/8 |



A157C

## Standard Bushing Driver Set

**A157C Standard Bushing Driver Set**

- Adaptors held on drivers with knurled nut
- Small and medium drivers (A157-3 and A157-2) fit all smaller bushings (A157-6–A157-12); large driver (A157-1) fits remaining bushings (A157-13–A157-22)
- Set comes packaged in PB20 storage box

## A157C Set Components/Adaptors

| Stock No. | I.D., inches | O.D., inches | Stock No. | I.D., inches | O.D., inches |
|---|---|---|---|---|---|
| A157-1 | Large Driver Handle | — | A157-11 | 5/8 | 3/4 |
| A157-2 | Medium Driver Handle | — | A157-12 | 11/16 | 13/16 |
| A157-3 | Small Driver Handle | — | A157-13 | 3/4 | 7/8 |
| A157-4 | Driver Nut, 5/16"-24 | — | A157-14 | 13/16 | 15/16 |
| A157-5 | Driver Nut, 1/2"-20 | — | A157-15 | 7/8 | 1 |
| A157-6 | 3/8 | 7/16 | A157-16 | 15/16 | 1 1/16 |
| A157-22 | 15/32 | 17/32 | A157-17 | 1 | 1 1/8 |
| A157-7 | 7/16 | 1/2 | A157-18 | 1 1/16 | 1 3/16 |
| A157-8 | 1/2 | 5/8 | A157-19 | 1 1/8 | 1 1/4 |
| A157-9 | 9/16 | 11/16 | A157-20 | 1 3/16 | 1 5/16 |
| A157-10 | 5/8 | 11/16 | A157-21 | 1 1/4 | 1 3/8 |



A257

## Complete Heavy Duty Bushing Driver Set

**A257 Complete Heavy Duty Bushing Driver Set**

- Complements the A157C set by adding 27 larger adaptors for transmission work as well as many other automotive and industrial applications
- Industrial finish
- Set is arranged in PB27 storage box

## A257 Set Components/Adaptors

| Stock No. | I.D., inches | O.D., inches | Stock No. | I.D., inches | O.D., inches |
|---|---|---|---|---|---|
| A257-1 | Large Driver Handle | — | A257-36 | 2 1/8 | 2 1/4 |
| A157-5 | Driver Nut, 1/2"-20 | — | A257-37 | 2 3/16 | 2 5/16 |
| A257-23 | 1 5/16 | 1 7/16 | A257-38 | 2 1/4 | 2 3/8 |
| A257-24 | 1 3/8 | 1 1/2 | A257-39 | 2 5/16 | 2 7/16 |
| A257-25 | 1 7/16 | 1 9/16 | A257-40 | 2 3/8 | 2 1/2 |
| A257-26 | 1 1/2 | 1 5/8 | A257-41 | 2 7/16 | 2 9/16 |
| A257-27 | 1 9/16 | 1 11/16 | A257-42 | 2 1/2 | 2 5/8 |
| A257-28 | 1 5/8 | 1 3/4 | A257-43 | 2 9/16 | 2 11/16 |
| A257-29 | 1 11/16 | 1 13/16 | A257-44 | 2 5/8 | 2 3/4 |
| A257-30 | 1 3/4 | 1 7/8 | A257-45 | 2 11/16 | 2 13/16 |
| A257-31 | 1 13/16 | 1 15/16 | A257-46 | 2 3/4 | 2 7/8 |
| A257-32 | 1 7/8 | 2 | A257-47 | 2 13/16 | 2 15/16 |
| A257-33 | 1 15/16 | 2 1/16 | A257-48 | 2 7/8 | 3 |
| A257-34 | 2 | 2 1/8 | A257-49 | 2 15/16 | 3 1/16 |
| A257-35 | 2 1/16 | 2 3/16 | | | |



A160M

## Standard Metric Bushing Driver Set

**A160M Metric Bushing Driver Set**

- Includes three driver handles and adaptors in 10 mm–42 mm sizes
- Packaged in PB118 storage box

## A160M Set Components

| Stock No. | Description | Stock No. | Description |
|---|---|---|---|
| A157-1 | Large Driver Handle | A160M6 | Adaptor (18–20 mm) |
| A157-2 | Medium Driver Handle | A160M7 | Adaptor (20–22 mm) |
| A157-3 | Small Driver Handle | A160M8 | Adaptor (22–24 mm) |
| A157-4 | Driver Nut, 5/16"-24 | A160M9 | Adaptor (25–27 mm) |
| A157-5 | Driver Nut, 1/2"-20 | A160M10 | Adaptor (28–30 mm) |
| A160M1 | Adaptor (10–12 mm) | A160M11 | Adaptor (30–34 mm) |
| A160M2 | Adaptor (12–14 mm) | A160M12 | Adaptor (32–36 mm) |
| A160M3 | Adaptor (14–16 mm) | A160M13 | Adaptor (35–40 mm) |
| A160M4 | Adaptor (15–17 mm) | A160M14 | Adaptor (38–42 mm) |
| A160M5 | Adaptor (16–18 mm) | | |



A1310A

## Bearing Race and Seal Driver Set

**A1310A Bearing Race and Seal Driver Set (Blue-Point®)**

- Collars fit most standard wheel bearing sizes
- Three largest sizes fit most late model four wheel drive vehicles

## A1310A Set Components

| Stock No. | Description |
|---|---|
| A1306-1 | Handle (5 3/4" long) |
| A1306-2 | Collar (1 9/16" long) |
| A1306-3 | Collar (1 3/4" long) |
| A1306-4 | Collar (1 31/32" long) |
| A1306-5 | Collar (2 5/16" long) |
| A1306-6 | Collar (2 17/32" long) |
| A1306-7 | Collar (2 15/32" long) |
| A1310-1 | Collar (2 27/32" long) |
| A1310-2 | Collar (3" long) |
| A1310-3 | Collar (3 3/16" long) |



YA2480

## YA2480 Seal Driver Set Components

| Stock No. | Description | Stock No. | Description |
|---|---|---|---|
| A1306-1 | Handle (5 3/4" long) | YA2480-8 | Adaptor (#8) |
| A1306-1-1 | Adaptor Mounting Bolt | YA2480-9 | Adaptor (#9) |
| YA2480-17 | Steel Backup Washer | YA2480-10 | Adaptor (#10) |
| YA2480-1 | Adaptor (#1) | YA2480-11 | Adaptor (#11) |
| YA2480-2 | Adaptor (#2) | YA2480-12 | Adaptor (#12) |
| YA2480-3 | Adaptor (#3) | YA2480-13 | Adaptor (#13) |
| YA2480-4 | Adaptor (#4) | YA2480-14 | Adaptor (#14) |
| YA2480-5 | Adaptor (#5) | YA2480-15 | Adaptor (#15) |
| YA2480-6 | Adaptor (#6) | YA2480-16 | Adaptor (#16) |
| YA2480-7 | Adaptor (#7) | | |



ASD1

## Bearing Race and Seal Driver

**ASD1 Universal Adjustable Bearing Race/Seal Driver**

- Three-stepped jaws quickly adjust to accommodate bearing races and seals from 0.7"–3.39" (18 mm–86 mm) — eliminating the need for a driver and several different heads
- Step 1 jaw range: 0.7"–2.2" (18 mm–56 mm)
- Step 2 jaw range: 1.5"–3.0" (39 mm–77 mm)
- Step 3 jaw range: 1.89"–3.4" (48 mm–86 mm)
- Total depth/reach: 1.57" (40 mm)
- Can be used on US, Asian and European-built vehicles, including motorcycles
- Takes up less space in your tool storage than a typical bearing race/seal driver set
- Not included in A1310A Bearing Race and Seal Driver Set



WARNING • Read safety precautions on pages W1 to W4

# COVERS

High density sponge rubber is laminated to vinyl, providing better protection and adherence to the fender.




JCKS6A




JCKS7A




JCK7DBL




JCK8




JCK15D




KAC1224TCA

## Fender Covers

**JCKS6A Fender Cover**
- Measures 21" W x 30" L
- Raised ribbing along the center section provides tool holding space

**JCKS7A Fender Cover**
- Measures 22 1/2" W x 30" L
- For use on vehicles with broad fenders
- Raised ribbing along the center section provides tool holding space

**JCK7DBL Fender Cover**
- Measures 26" W x 36" L
- For use on shorter fenders of most new vehicles
- Raised ribbing

**JCK7D Fender Cover**
Same as JCK7DBL in red.

**JCK8 Fender Cover**
- Measures 26" W x 36" L
- Nonslip, non-absorbent surface conforms to the fender of any vehicle
- Easy to clean with soap and water

**JCK15D Fender Cover**
- Heavy duty vinyl material protects all surfaces
- Measures 29" W x 52" L

**KAC1224TCA Motorcycle Gas Tank Cover**
- Fits Harley-Davidson® Dyna, Softail® and Touring models
- Fits various models of Yamaha®, Victory®, Triumph® and Kawasaki® motorcycles plus many more
- Non-marring cover uses a non-abrasive inner liner that will not slide off




SEATCOVERBLU




SEATCOVERBLK

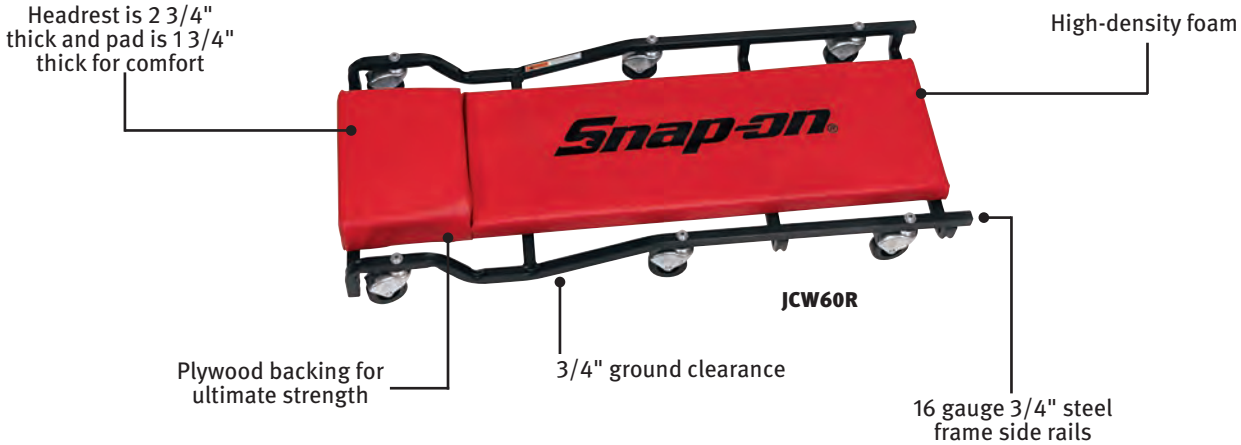



SEATCOVERRED

## Seat Covers

- Universal fit for virtually all vehicles
- Reinforced expansion panels
- SAS technology = safety access system enabled
- Side airbag compatible
- Seat-lever compatible
- In-seat seat belt compatible
- Premium weight – 4 oz for durability and long life
- Water-resistant and machine washable

**SEATCOVERBLU Snap-on® Racing Seat Cover (Blue)**
**SEATCOVERBLK *Snap-on* Racing Seat Cover (Black)**
**SEATCOVERRED *Snap-on* Racing Seat Cover (Red)**




JCW60R



JCW60O



JCW60MAX4



JCW8A

## Standard Creepers

| Stock No. | Pad Color | Overall Size, inches | Pad Length | Pad Width | Number of Casters | Caster Diameter |
|---|---|---|---|---|---|---|
| **JCW60BL** | Black | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW60R** | Red | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW60WLD** | Orange | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW60O** | Orange | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW60G** | Green | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW60MAX4** | Realtree® MAX-4® | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW8A*** | Black | 40 L x 17 W x 4 H | 39" | 11" | 4 | 2 1/2" |

*Blue-Point®



JCW65ABL



JCW65AR



JCW65AG

## Adjustable Creepers

| Stock No. | Pad Color | Overall Size, inches | Pad Length | Pad Width | Number of Casters | Caster Diameter |
|---|---|---|---|---|---|---|
| **JCW65ABL** | Black | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW65AR** | Red | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW65AO** | Orange | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW65AG** | Green | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |
| **JCW65AMAX4** | *Realtree MAX-4* | 40 L x 17 W x 4 H | 39" | 11" | 6 | 2 1/2" |

**⚠WARNING**

- Do not stand on or use as a cart
- Read safety precautions on pages W1 to W4

# CREEPERS




## Heavy Duty Creepers

| Stock No. | Pad Color | Overall Size, inches | Pad Length | Pad Width | Number of Casters | Caster Diameter |
|---|---|---|---|---|---|---|
| JCW70ABL | Black | 40 L x 22 W x 5 3/4 H | 39" | 13" | 4 | 4" |
| JCW70AR | Red | 40 L x 22 W x 5 3/4 H | 39" | 13" | 4 | 4" |



JCW75ABL



JCW75AR

## Heavy Duty Adjustable Creepers

| Stock No. | Pad Color | Overall Size, inches | Pad Length | Pad Width | Number of Casters | Caster Diameter |
|---|---|---|---|---|---|---|
| JCW75ABL | Black | 40 L x 22 W x 5 3/4 H | 39" | 13" | 4 | 4" |
| JCW75AR | Red | 40 L x 22 W x 5 3/4 H | 39" | 13" | 4 | 4" |



JCW45BL



JCPW40B

## Specialty Creepers/Accessories

**JCW45BL Black Premium Creeper**

- Curved body supports for comfort and keeps creeper under you while maneuvering around
- Six inline roller casters have minimal contact with the ground, allow for quick directional changes and provide minimal rolling resistance
- Lightweight design is optimized for strength and has side and bottom handles to easily carry to the job
- Durable polyethylene material withstands shop chemicals and temperature extremes
- Reliefs on each side to allow for maximum arm clearance when working underneath vehicles
- Built to withstand the rigors of the professional shop environment
- 38" L x 17" W x 4" H

**JCPW40B Padded Creeper**

- 13" wide padded creeper with 6" all-rubber tires
- Provides a smooth ride over rough terrain
- Constructed from 1" 16 gauge steel tubing
- Overall dimensions: 39" L x 29" W x 9 1/2" H




JCW80R



JCW80O



JCW80MAX4



JCW85BL

## Seat Creepers

| Stock No. | Pad Color | Overall Size, inches | Seat Size, inches | Drawer Size, inches |
|---|---|---|---|---|
| JCW80BL | Black | 14 1/4 L x 19 W x 15 H | 10 L x 14 1/4 W | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW80R | Red | 14 1/4 L x 19 W x 15 H | 10 L x 14 1/4 W | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW80O | Orange | 14 1/4 L x 19 W x 15 H | 10 L x 14 1/4 W | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW80G | Green | 14 1/4 L x 19 W x 15 H | 10 L x 14 1/4 W | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW80MAX4 | Realtree® MAX-4® | 14 1/4 L x 19 W x 15 H | 10 L x 14 1/4 W | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW85BL* | Black | 17 3/4 L x 15 W x 23 H | 17 3/4 L x 10 W x 8 H | 9 7/8 L x 11 1/2 W x 1 3/4 D |
| JCW85R* | Red | 17 3/4 L x 15 W x 23 H | 17 3/4 L x 10 W x 8 H | 9 7/8 L x 11 1/2 W x 1 3/4 D |

*Bucket seats



JCW90ABL



JCW95AR

## Adjustable Seat Creepers

| Stock No. | Overall Size, inches | Seat Size, inches | Adjustment Range |
|---|---|---|---|
| JCW90ABL | 15 L x 15 W x 21 1/2 H | 13 3/4 L x 13 3/4 W | 14"–19 1/4" |
| JCW95ABL | 17 3/4 L x 15 W x 28 1/4 H | 17 3/4 L x 10 W x 8 H | 14"–19 1/4" |
| JCW95AR | 17 3/4 L x 15 W x 28 1/4 H | 17 3/4 L x 10 W x 8 H | 14"–19 1/4" |



KRJC23AAPV

**KRJC23AAPV Creeper Hanger**
- Secures creepers to roll cabs
- Adjustable to four different creeper widths
- Two hook bolts and a lock rod are included
- 16 13/16" length
- Black textured finish

**⚠WARNING**

- Do not stand on or use as a cart
- Read safety precautions on pages W1 to W4

# MEASURING: MICROMETERS AND SETS



MIC1B



MIC103B

## Digital Micrometers, inches (Blue-Point®)

- Standard reading in .001" increments on digit display
- Vernier style reading in .0001" increments
- Large easy-to-handle insulated frame, carbide-tipped anvils, positive locking clamp and ratchet stop thimble

| Stock No. | Range, inches | Increments, inches |
|---|---|---|
| MIC1B | 0–1 | 0.01 |
| MIC2B | 1–2 | 0.01 |
| MIC3B | 2–3 | 0.01 |
| MIC4B | 3–4 | 0.01 |
| MIC5B | 4–5 | 0.01 |

**MIC103B Fractional Set *(Blue-Point)***
MIC1B, MIC2B and MIC3B in fitted case with standards.



MIC3-4E



MIC0-3E

## Electronic Micrometers

| Stock No. | Range | MIC0-3E |
|---|---|---|
| MIC0-1E | 0"–1" (0–25.4 approx. mm) | • |
| MIC1-2E | 1"–2" (25.4–50.8 approx. mm) | • |
| MIC2-3E | 2"–3" (50.8–76 approx. mm) | • |
| MIC3-4E | 3"–4" (76–101 approx. mm) | |
| MIC4-5E | 4"–5" (101–127 approx. mm) | |

**MIC0-3E Electronic Micrometer Set**

- Supplied in protective metal case with foam insert
- Foam insert with two extra pockets for additional Micrometers (3–4" and 4–5")
- Supplied with two standards 1" and 2"
- Accuracy (in) ± .0001", (mm) ± .002 mm
- Includes a large, easy-to-read, high-contrast LCD digital readout
- Hard and stable one-piece friction thimble permits one-hand operation of micrometer and uniform contact pressure
- No-glare satin chrome finish on thimble and sleeve minimizes annoying surface glare under bright lights indoors
- Balanced frame design for comfortable and accurate measuring
- Hardened, CNC machine ground and hand lapped spindle screw
- Inch/millimeter metric conversion provides simple, universal, standardized unit of measurement at any position
- Measurement hold button
- Micro-lapped carbide measuring faces
- Preset button to install any reading at any position
- Automatic off functionality



MIC1MB



MIC103MB

## Digital Micrometers, mm *(Blue-Point)*

- Standard reading in .01 mm increments on mechanical digital display
- Large easy-to-handle insulated frame, carbide-tipped anvils, positive locking clamp and ratchet stop thimble

| Stock No. | Range, mm | Increments, mm |
|---|---|---|
| MIC1MB | 0–25 | 0.01 |
| MIC2MB | 25–50 | 0.01 |
| MIC3MB | 50–75 | 0.01 |
| MIC4MB | 75–100 | 0.01 |
| MIC5MB | 100–125 | 0.01 |

**MIC103MB Digital Metric Micrometer Set *(Blue-Point)***
MIC1MB, MIC2MB and MIC3MB in fitted case with standards.



MICB1B



MICB103B

## Outside Micrometers, inches *(Blue-Point)*

- Large easy-to-handle insulated carbide-tipped anvils, positive locking clamp and ratchet stop thimble

| Stock No. | Range, inches | Increments, inches | MICB103B |
|---|---|---|---|
| MICB1B | 0–1 | .0001 | • |
| MICB2B | 1–2 | .0001 | • |
| MICB3B | 2–3 | .0001 | • |
| MICB4B | 3–4 | .0001 | |
| MICB5B | 4–5 | .0001 | |

**MICB103B SAE Set *(Blue-Point)***
Includes: MICB1B, MICB2B, MICB3B (3pc) in fitted case with standards.



MICED1B



MICINSIDE12

**MICED1B Electronic Digital Micrometer *(Blue-Point)***

- Display reads to 0.00005" (0.001 mm)
- Zero set for absolute and incremental measuring modes
- Auto shutoff after ten minutes
- Insulated frame, hardened body, carbide-tipped anvil, positive locking clamp and ratchet stop thimble

**MICINSIDE12 Inside Micrometer Set *(Blue-Point)***

- Range is 2–12" in .001" increments
- Includes inside micrometer head and a series of coil spring pressure contact rods



MIC22

## Micrometer Test Gauges (Blue-Point®)

- Test gauges are used as micrometer standards
- Accuracy meets Federal Specifications

| Stock No. | Size |
|---|---|
| MIC22 | 1" |
| MIC32 | 2" |
| MIC42 | 3" |
| MIC52 | 4" |
| MIC2M2 | 25 mm |
| MIC3M2 | 50 mm |



MROUND4

## Small Hole Gauge Set

| Stock No. | Range, inches |
|---|---|
| CM4311 | 0.125–0.200 |
| CM4312 | 0.200–0.300 |
| CM4313 | 0.300–0.400 |
| CM4314 | 0.400–0.500 |

**MROUND4 Small Hole Gauge Set**

- Knurled knob at handle for size adjustment
- Full round gauging surface with flat bottom



TEE6



MTEE6

## Telescoping Gauge Sets

| Stock No. | Range, inches | TEE6 | MTEE6* |
|---|---|---|---|
| TEE6-1 | 5/16–1/2 | • | |
| TEE6-2 | 1/2–3/4 | • | |
| TEE6-3 | 3/4–1 1/4 | • | |
| TEE6-4 | 1 1/4–2 1/8 | • | |
| TEE6-5 | 2 1/8–3 1/2 | • | |
| TEE6-6 | 3 1/2–6 | • | |
| CM4349* | 5/16–1/2 | | • |
| CM4350* | 1/2–3/4 | | • |
| CM4351* | 3/4–1 1/4 | | • |
| CM4352* | 1 1/4–2 1/8 | | • |
| CM4353* | 2 1/8-3 1/2 | | • |
| CM4354* | 3 1/2–6 | | • |

**Blue-Point*

**TEE6 Telescoping Gauges**

- Constant spring tension gives uniform contact pressure
- Both plungers are easily locked at any desired setting
- Handles are rigidly attached to the contact plungers and are automatically self-centering



DM6

| Stock No. | Description | DM6 |
|---|---|---|
| DM61 | 4" Rod | • |
| DM62 | 5" Rod | • |
| DM63 | 6" Rod | • |
| DM64 | 7" Rod | • |
| DM65 | 8" Rod | • |
| DM66 | 9" Rod | • |
| DM67 | Micrometer Head | • |
| PBDM6 | Storage Case | • |
| DM6 | Depth Micrometer Set | • |

**DM6 Depth Micrometer Set *(Blue-Point)***

- Measure depths of slots, counterbores, holes and keyways up to 6" in depth
- 4" satin chrome base for greater stability
- Graduated in .001" increments



GA2-6B

## Bore Gauge

**GA2-6B Dial Bore Gauge**

- All anvils laser marked for easy selection
- Gauge chart for quick and easy anvil selection
- Supplied in metal case with foam insert
- Ergonomic design with nonslip insulating grip
- Carbide contacts for extended wear
- Graduations 0.0005"
- Approximate depth 6"

# MEASURING: CALIPERS/MAGNETIC BASE



CAL6D



CAL6E



CAL6V

## Calipers

**CAL6D Dial Caliper, 6"**
- White-faced dial caliper, 0"–6" range, .001" graduations
- Accuracy (in) ± .001"
- Sharp, clear dial graduations
- Adjustable bezel
- Double rack pinion gears provides anti-backlash control
- Hardened stainless-steel, all-metal construction
- Beryllium copper gib in the slide assembly and polished bar guarantees smooth operation
- Depth rod covers rack to protect against damage
- Lock screw for sliding jaw and dial bezel
- Fine adjustment thumb wheel
- Supplied in plastic case with foam insert

**CAL6E Electronic Caliper, 6"**
- Stainless-steel, .0005" resolution, and 0"–6" measuring range
- Lightweight and comfortable
- Auto-off after 30 minutes, last measuring position is retained
- Inch/millimeter conversion reads .0005" or 0.01 mm
- Accuracy (in) 0"–4" (± .001") 4"–6" (± .0015")
- Accuracy (mm) 0mm–100mm (± 0.025 mm) 100 mm–150 mm (± 0.04 mm)
- Hardened stainless-steel body
- At .320" the digits on this tool are easy to read
- Beryllium copper gib in slide assembly and polished bar guarantees smooth operation
- Integrated depth rod
- Fine adjustment thumb wheel
- Zero at any position
- Supplied in plastic case with foam insert

**CAL6V Vernier Caliper, 6"**
- Caliper includes metric/inch readings, 150 mm/6" range, .02 mm/.001" graduations
- Accuracy (in) 0"–4" (± .001") 4"–6" (±.0015")
- Accuracy (mm) ± .025 mm per 300 mm
- Lock screw for sliding jaw
- Hardened stainless-steel depth rod
- Sharp, black graduations on satin chrome finish bar
- Laser etching on the vernier plate and bar guarantees an easy-to-read caliper
- Beryllium copper gib in the slide assembly and polished bar guarantees smooth operation
- Supplied in plastic case with foam insert



MCAL6A



MCAL12A



PMF147A

## Calipers (Blue-Point®)

**MCAL6A Electronic Digital Caliper**
- Range is 0"–6" (0 mm–150 mm) in 0.0005" (0.01 mm) resolutions
- Use for inside, outside, depth and step measurements
- Inch/metric conversion with one button
- Large LCD display
- Hardened stainless-steel frame

**MCAL12A Electronic Digital Caliper *(Blue-Point)***
- Essential tool for working on larger vehicles, trucks, tractors and earth moving equipment
- Range is 0"–12" (0 mm–305 mm) in 0.0005" (0.01 mm) resolutions
- Use for inside, outside, depth and step measurements
- Inch/metric conversion with one button
- Large LCD display with floating zero set
- Locking nut and thumb roll for smooth action

**PMF147A US/Metric Dial Type Caliper**
- Range is 0"–6" (0 mm–150 mm) in 0.001" (0.1 mm) increments
- Includes storage case

## Dial Test Indicator Sets

**GA3400 Universal Dial Test Indicator Set**
- Small dial indicator set
- .200" range with .001" graduations
- Easy-to-read white on black dial face
- Traditional fixed clamp-style attachment
- Excellent choice for machining applications

**GA3640 Long Range Dial Test Indicator Set**

**GA3645 Long Range Dial Test Indicator Set**

**GA3634 Ball Joint/Disc Brake Test Indicator Set**
- All purpose indicator sets
- Perfect for general use
- Indicator with 0"–1" range and .0005" graduations
- Easy-to-read white on black dial face
- GA3640 uses a fixed magnetic base
- GA3645 uses a conforming magnetic base for more mounting options
- GA3634 uses locking pliers and a flexible gooseneck for non-magnetic applications and difficult areas
- Ideal for brake and undercar work

**GA3450 Universal Pinion Depth Gauge**
- Rear pinion depth gauge
- Accurate pinion depth setup for vehicles up to 1 ton
- Premeasure pinion depth to use with OEM gear sets



GA3400



GA3640



GA3645



GA3634



GA3450

## Dial Test Indicator Set Specifications

| Stock No. | Range | Graduations | Reading |
|---|---|---|---|
| GA3400 | .200" | .001" | 0–100 |
| GA3640 | 1.00" | .0005" | 0–50 |
| GA3645 | 1.00" | .0005" | 0–50 |
| GA3634 | 1.00" | .0005" | 0–50 |
| GA3450 | 0.00"–4.00" | .0005" | 0–50 |

## Contact Points and Extensions

**GA3601 Dial Indicator Extension**
- Use with GA3400, GA3634, GA3640 and GA3645 dial test indicators
- 4–48 female thread allows the extension of any contact point for special applications
- 6" long

**GA3609 Contact Point Set**
- Use with GA3400, GA3634, GA3640 and GA3645 dial test indicators
- 4–48 female thread allows the extension of any contact point for special applications
- Extensions can be joined together to extend reach
- Contact points feature a polished tip with radius end and are manufactured from hardened steel
- Includes four 1" extensions, four contact points (0.2", 0.4", 0.6" and 0.8") plus holder for set components



GA3601



GA3609



WARNING • Read safety precautions on pages W1 to W4

# MEASURING: DIAL TEST INDICATOR GAUGES



GA1UD



GA1D



GA1FPMB



GA3JAMB

## Dial Gauges

Graduations .001" and Reading 0–100

**GA1UD Universal Back Plunger Dial Indicator**

- Range .200"
- Accurate, reliable and simple to operate
- Rugged, with few moving parts
- Smooth in operation
- Indicator with three contact points and adaptor
- Shank diameter is 1/4" (6.3 mm)
- Knurled bezel

**GA1D Dial Indicator**

- Range 1.000"
- Dial Indicator has shockless, hardened steel gear train and jewel bearings
- Massive bridge for rigid bearing support
- Unbreakable crystal
- Rugged simple unit construction with a “universally fitting” design
- Hardened stainless-steel stem, gears and pinions
- Sharp bezel serrations for positive grip

**GA1FPMB Flex-O-Post Magnetic Base**

- Complete assembly is for use with all test, back-plunger, AGD, dial and miniature dial indicators
- The flexible post is an assembly of short tubular steel sections and precision ball joints, linked by an internal steel cable
- The indicator snug on the end of the post can be rotated through 360° and locked in any position
- This makes it possible to use indicators in awkward places that are hard to reach with conventional holding devices
- Assembled to the magnetic base, the post has a vertical reach of approximately 15" (380 mm) and a horizontal reach of approximately 10" (250 mm)
- The base has three precision-ground magnetic contact surfaces
- V-step holds base to arbors, shafts, chucks

**GA3JAMB Triple Joint Arm Magnetic Base**

- This versatile indicator holder has three pivots available for positioning the indicator where needed
- All pivots are controlled by one tightening knob
- Works with any indicator with a 3/8" (9.5 mm) stem, standard dovetail mount, body clamp or with a 1/4" (6.3 mm) or 3/16" (4.7 mm) shank
- The working area is within a hemisphere having a radius of approximately 12" (300 mm)
- The very sensitive fine-adjustment is located on the magnetic base to eliminate indicator deflection when it is being adjusted



CM6416

## Magnetic Base

**CM6416 Holder (Blue-Point®)**

- Magnet has on/off switch
- Base is 2 3/8" x 1 7/8" x 2 1/2"
- Post 7" x 15/16"; Rod 6" x 25/64"
- Will grip flat or curved metal surfaces

# LEVELS AND FEELER GAUGES



YA328A



TL900L

**YA328A Angle Locator**

- Ideal for checking drive shaft angle
- Red degree indicator located behind numbers for exact reading of graduations
- Fractional and metric scales molded into base of tool in 1/8" and centimeters
- Large 1 7/8" x 7/8" magnet in base for secure retention

**TL900L 9" Aluminum Lighted Level *(Blue-Point)***

- Lighted level for more accurate readings under all conditions
- Machined Billet Aluminum for added durability
- Rare earth magnets attach to ferrous surfaces
- 45°, 90° and 180° scales for flexibility
- Uses two AAA alkaline cells (included)
- Auto shutoff feature after ten minutes extends battery life



FB310B



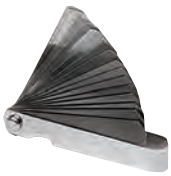
FB325A



FB335



FBL325A



FBM320



FB31S

## General Use

| Stock No. | No. of Blades | Blade Dimensions, inches | Blade Size | Increments | Description |
|---|---|---|---|---|---|
| FB310B | 13 | 1/2 x 3 | .001", .0015", .002"–.008", .010", .012", .013", .015" | — | Double stamped with US and metric sizes |
| FB325A | 25 | 1/2 x 3 | .0015", .002"–.025" | .001" | Double stamped with US and metric sizes |
| FB335 | 35 | 1/2 x 3 | .0015", .002"–.035" | .001" | Swedish feeler blade steel |
| FBL325A | 25 | 1/2 x 12 | .0015", .002"–.021", .025", 027", .030", .040 | .001" | Long blade, double stamped with US and metric sizes |
| FBM320 | 20 | 1/2 x 3 | .05 mm–1 mm | .05 mm | Metric Feeler Gauge Set |
| FB31S | 31 | 1/2 x 3 | .0015"–.035" | — | General use thickness gauge |



FB316B



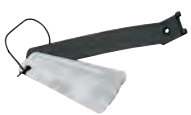
FB326B

## Ignition

| Stock No. | No. of Blades | Blade Dimensions, inches | Blade Size | Increments | Description |
|---|---|---|---|---|---|
| FB316B | 18 | 1/4 x 1 3/4 | .010", .012", .013", .015"–.022", .024"–.026", .028", .030", .032", .035" | .001" | Short Blade, Ignition/Spark Plug Gauge Set |
| FB326B | 26 | 1/2 x 3 | .008", .010", .012", .013", .015", 017", .018", .020", .022", .024"–.026", .028", .030", .032", .035" | .001" | Double stamped with US and metric sizes |



FB300A



FB308D



FB322



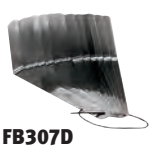
FB328A



FBM322

## Bent and Step Blades

| Stock No. | No. of Blades | Blade Dimensions, inches | Blade Size | Increments | Description |
|---|---|---|---|---|---|
| FB300A | 25 | 1/2 x 3 | .006"–.030" | .001" | Feeler Gauge Set |
| FB308D | 12 | 1/2 x 3 | .008"–.010", .011"–.013", .013"–.015", .014"–.016", .015"–.017", .017"–.019", .018"–.020", .020"–.022", .023"–.025", .025"–.027", .026"–.028", .028"–.030" | .001" | Step Feeler Gauge Set |
| FB322 | 22 | 1/2 x 3 3/8 | .004"–.006",.025"–.027" | .001" | "Go-No" blades with 2 sizes each. |
| FB328A | 2 | 1/2 x 3 | .011"–.013", .013"–.015" | — | For valve adjustment on GM® 8.2 L engines, double stamped with US and metric sizes |
| FBM322 | 2 | 1/2 x 3 | .20 mm–.30 mm, .40 mm–.50 mm | — | 10 3/4" long bent handle. |



FB307D

## Diesel

| Stock No | No. of Blades | Blade Dimensions, inches | Blade Size | Increments | Description |
|---|---|---|---|---|---|
| FB307D | 14 | 1/2 x 4 1/2 | .008", .011"–.014", .016"– .018", .020", .023"–.025", .027", .029" | .001" | Bent Blade Cummins® Diesel, blade ends are bent at 90° angle: blades are secured on FB307C1 ring |



⚠WARNING • Read safety precautions on pages W1 to W4

# MEASURING: FEELER/SPARK PLUG GAUGES



FB305A



FB3330



FBP10



FBS5

## Specialty Feeler Gauges

| Stock No. | No. of Blades | Blade Dimensions, inches | Blade Size | Increments | Description |
|---|---|---|---|---|---|
| FB305A | 6 | 1/2 x 3 | .006", .008", .010", .012", .014", .016" | .002" | Non-magnetic, double stamped fractional and metric sizes |
| FB3330 | 25 | 1/2 x 4 | .010", .012", .014", .016", .018", .020", .022", .024", .027", .030" | .001" | Double stamped with fractional and metric sizes |

**FB3330 Easy Grip Feeler Gauge Set**
- Double stamped with fractional and metric sizes
- Ten feeler gauges with orange screwdriver-type handles in FB33301 wood box
- Blades feature a 45° offset for use on valve tappets and air gapping applications
- Includes: 25 blades available in all (.006"–.030")

**FBP10 Pocket Feeler Blade**
- Flat, ramp style feeler gauge handles full range of spark plug gapping requirements from .020"–.080"
- Reverse side has metric scale to 2 mm
- Orange screwdriver-type handle with pocket clip, 5 1/2" length

## Feeler/Gap Gauge Set

**FBS5 Feeler and Gap Gauge Set**
- Five-piece set includes: FB300A bent blade feeler gauge, FB305A non-magnetic feeler gauge, and FB325A general use feeler gauge, plus GA461C and FB360C spark plug gap gauges in the FBS5-1 kit bag



FB301A



FB302A



FB303B



GA461C



FB360C



FB361A

## Spark Plug Gauges/Gappers (Blue-Point®)

**FB301A Wire Gap for Point Ignition Systems Gauge**
- Includes eight wires in sizes .020", .022", .025", .028", .030", .032", .035" and .040" and electrode bender

**FB302A Wire Gap for Aircraft, Motorcycle and Small Engines Gauge**
- Includes eight wires in sizes .015", .016", .018", .020", .025", .028", .030" and .035" and electrode bender

**FB303B Wire Gap for Electronic Ignition Systems Gauge**
- Includes six wires in sizes .044", .045", .050", .054", .060" and .080" and electrode bender

**GA461C Gap for Point Ignition Systems Gauge**
- Includes six wires protruding 1/4" from edge of metal disc
- Wire sizes are .025", .030", .034", .035", .040" and .045"
- Built-in electrode bender
- Double stamped with decimal and metric sizes

**FB360C Gap for Electronic Ignition Systems Gauge**
- Includes six wire sizes: .040", .044", .045", .050", .060" and .080"
- Double stamped with decimal and metric sizes

**FB361A Gapper Gauge**
- Pocket size gapper features an inclined ramp for setting gap
- 1 1/2" diameter. Range .020"–.100"
- Double stamped with decimal and metric sizes

## Decimal/Metric Conversion Chart

| Decimal, inches | Metric, mm | Decimal, inches | Metric, mm | Decimal, inches | Metric, mm | Decimal, inches | Metric, mm | Decimal, inches | Metric, mm | Decimal, inches | Metric, mm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0010 | 0.025 | 0.007 | 0.178 | 0.015 | 0.381 | 0.023 | 0.584 | 0.031 | 0.787 | 0.042 | 1.067 |
| 0.0015 | 0.038 | 0.008 | 0.203 | 0.016 | 0.406 | 0.024 | 0.610 | 0.032 | 0.813 | 0.044 | 1.118 |
| 0.0020 | 0.051 | 0.009 | 0.229 | 0.017 | 0.432 | 0.025 | 0.635 | 0.033 | 0.838 | 0.046 | 1.168 |
| 0.0025 | 0.064 | 0.010 | 0.254 | 0.018 | 0.457 | 0.026 | 0.660 | 0.034 | 0.864 | 0.052 | 1.321 |
| 0.0030 | 0.076 | 0.011 | 0.279 | 0.019 | 0.483 | 0.027 | 0.686 | 0.035 | 0.889 | 0.054 | 1.372 |
| 0.0040 | 0.102 | 0.012 | 0.305 | 0.020 | 0.508 | 0.028 | 0.712 | 0.036 | 0.914 | 0.056 | 1.422 |
| 0.0050 | 0.127 | 0.013 | 0.330 | 0.021 | 0.533 | 0.029 | 0.737 | 0.038 | 0.965 | 0.060 | 1.524 |
| 0.0060 | 0.150 | 0.014 | 0.356 | 0.022 | 0.559 | 0.030 | 0.762 | 0.040 | 1.016 | 0.080 | 2.032 |

## Feeler Blades and Holder (Blue-Point®)

**FB6B0015 thru FB6B040 (12") Feeler Gauge Blades**
Includes 34 blades as follows:

| Stock No. | Blade Size | Stock No. | Blade Size | Stock No. | Blade Size | Stock No. | Blade Size |
|---|---|---|---|---|---|---|---|
| FB6B0015 | .0015" | FB6B009 | .009" | FB6B018 | .018" | FB6B027 | .027" |
| FB6B002 | .002" | FB6B010 | .010" | FB6B019 | .019" | FB6B028 | .028" |
| FB6B0025 | .0025" | FB6B011 | .011" | FB6B020 | .020" | FB6B029 | .029" |
| FB6B003 | .003" | FB6B012 | .012" | FB6B021 | .021" | FB6B030 | .030" |
| FB6B004 | .004" | FB6B013 | .013" | FB6B022 | .022 | FB6B032 | .032" |
| FB6B005 | .005" | FB6B014 | .014" | FB6B023 | .023" | FB6B035 | .035" |
| FB6B006 | .006" | FB6B015 | .015" | FB6B024 | .024" | FB6B040 | .040" |
| FB6B007 | .007" | FB6B016 | .016" | FB6B025 | .025" | | |
| FB6B008 | .008" | FB6B017 | .017" | FB6B026 | .026" | | |



FB6B040

**FB312 Feeler Gauge Holder**

## Thread Identification

**T1DG Drill Gauge**
- Leaves the right amount of stock for approximately 65% full thread
- Easy-to-read white lettering on matte black finish
- Shows correct drill body size
- 60 holes with number sizes and decimal equivalents
- Made of hardened steel to resist wear
- Tested for accuracy and hardening

**T27GS SAE Thread Gauge**
- 27 leaves – 1/4-28 TPI

**T28GM Metric Thread Gauge**
- 28 leaves – .25 mm–2.5 mm
- Quickly determine the pitch of various threads
- Leaves on most gauges have a special narrow design, permitting checking of internal threads as well as external threads
- Clearly graduated on polished finish
- Locking device

**T60K Thread Measurement Kit**
- Drill gauge with both fractional and metric thread pitch gauges in one kit
- Drill Gauge provides correct sizing of a tap drill for any commonly sized machine screw tap in “NF” National Fine or “NC” National Coarse Thread Series. Nos. 1–60 and .228"–.040"
- Leaves on most gauges have a special narrow design, permitting checking of internal threads and external threads
- Leaves the right amount of stock for approximately 65% full thread
- Easy-to-read white lettering on matte black finish
- Shows correct drill body size
- 60 holes with number sizes and decimal equivalents
- Made of hardened steel to resist wear
- Tested for accuracy and hardening
- Clearly graduated on polished finish
- Locking device
- Fits in your pocket
- Packaged in red plastic box with foam insert



T60K





COMBOSQ3



SQUAREB12



SQUARECOMB12

## Measuring Sets

**COMBOSQ3 Combination Square**
- Includes reversible lock bolt, scriber, spirit level in both square head and protractor head
- Direct reading double 180° protractor
- Forged and hardened steel heads with smooth black enamel finish
- Spring-tempered steel blade
- Blade has non-glare satin chrome finish
- Blade has deep, black filled, chemical machined graduations that will last a lifetime
- Supplied in protective plastic case with foam insert

**SQUAREB12 Machinist’s Measuring Set**
- Includes SQUAREB90 sliding head and RULER12BSQ steel rule in fitted storage case

**SQUARECOMB12 Combination Measuring Set**
- Includes SQUAREB180 protractor, RULER12BSQ steel rule plus SQUAREB90 and SQUAREB45 sliding heads in fitted storage case

**SQUAREB90 Sliding Head (90°)**
- 90° square head with bubble level and scriber points

**SQUAREB180 Protractor Head (180°)**
- Protractor is graduated 180° in both directions
- Includes bubble level

**RULER12BSQ Steel Rule (12")**
- Precision ground and hardened steel blade for greater accuracy
- Graduated in 1/8" and 1/16" increments on one side and 1/32" and 1/64" increments on the other

**SQUAREB45 Sliding Head (45°)**
- Center head for 45° angles only



WARNING • Read safety precautions on pages W1 to W4

# MEASURING: STRAIGHT EDGES AND STEEL RULES



GA438A

## Precision Straight Edges

- Use with feeler gauges to check for distortion in engine blocks, cylinder heads, flywheels, main bearing saddles, cam bearing saddles, cam covers and bell housings
- Precision working edge ground to within .0002" per 12" in length
- Great stability with 1/4" thickness and 1 1/2" width
- Convenient hanging hole and edge protector

**GA435 Precision Straight Edge**
18" long.

**GA438A Precision Straight Edge**
24" long.

**GA535 Precision Straight Edge**
35" long.



RULER6



RULER12



RULER120



RULER600



RULER601



RULER602

## Steel Rules

**RULER6 Steel Rule, 6"**
- Graduations in 8ths, 16ths, 32nds, 64ths
- Spring-tempered steel
- Non-glare satin chrome finish
- Deep, black filled, chemical machined graduations that will last a lifetime
- Quick reading, end graduations
- Burr-free

**RULER12 Steel Rule, 12"**
- Graduations in 8ths, 16ths, 32nds, 64ths
- Spring-tempered steel
- Non-glare satin chrome finish
- Deep, black filled, chemical machined graduations that will last a lifetime
- Quick reading, end graduations
- Burr-free

**RULER120 US/Metric Steel Rule**
- 12" stainless-steel rule
- 1/32" increments for first 3", 1/16" increments for last 9"
- Metric edge is etched with mm and cm increments

**RULER600 Steel Rule**
- 6" stainless-steel rule
- Graduated in 1/32" and 1/64" increments

**RULER601 Steel Rule (6")**
- 6" stainless-steel rule
- Graduated in 1/10" and 1/50" increments on one side, 1/32" and mm increments on the other

**RULER602 US/Metric Pocket Rule (6")**
- 6" stainless-steel rule with pocket clip
- 1/32" and 1/64" increments on one side, mm and cm increments on the other

# TAPE RULES




TPMA10




TPMA12




TPMA25




TPMAM5




TPMA25EM



TPM100

## Auto-Retracting Tape Rules

**TPMA10 Tape Rule (10')**
1/2" x 10' tape. Includes inch/metric scale with fractions.

**TPMA12 Tape Rule (12')**
3/4" x 12' tape. Includes inch scale with 16" stud markings.

**TPMA25 Tape Rule (25')**
1" x 25' tape. Includes inch scale with 16" stud markings.

**TPMAM5 Tape Rule (5 m)**
19 mm x 5 m tape. Includes metric scale.

**TPMA25EM Tape Rule (25')**
1" x 25'/7 m tape. Includes inch/metric scale with fractions.

## Steel Housing Tape Rule

**TPM100 Tape Rule (Blue-Point®)**
- Includes inch/metric scale
- Quick rewind design for ease of use
- Rewinding lever conveniently stored in housing
- Nonslip grip provides confidence and comfort

## LED Lighted Magnetic Pick-up Tools (Blue-Point®)

**UPT1LT LED Magnetic Pick-up Tool**
- Steel magnetic head lifts 8 lb and will not attach to unwanted metal surfaces
- Telescopes from 6 3/4 –27 3/4"

**UPT2LT LED Magnetic Pick-up Tool**
- Rotating magnetic heads lift up to 8 lb
- Telescopes from 8"–32 3/4"

**UPTLP2 Pen Light Pick-up Tool**
- Newly designed steel magnetic head lifts 8 lb and shields the sides from attaching to unwanted metal surfaces
- LED light illuminates dark areas
- Stainless-steel handle telescopes from 8"–32 3/4"



UPT1LT



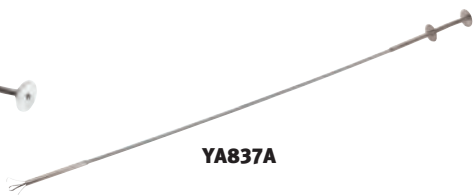
UPT2LT



UPTLP2



GA265A



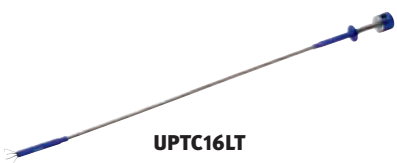
YA837A



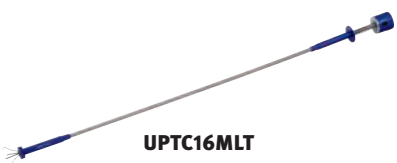
GA353B



DPTC24



UPTC16LT



UPTC16MLT

## Claws (Flexible) *(Blue-Point)*

| Stock No. | No. of Claws | Max. Jaw Opening, inches | Flexible Section Length, inches | Overall Length, inches |
|---|---|---|---|---|
| GA265A | 2 | 1 | 8 | 17 3/4 |
| YA837A | 4 | 3/4 | 16 | 23 1/2 |
| GA353B | 4 | 1 | 8 | 17 1/2 |
| DPTC24 | 4 | 1 1/4 | 24 | 24 1/2 |
| UPTC16LT | 4 | 1 | 16 3/4 | 26 |
| UPTC16MLT* | 4 | 1 | 16 3/4 | 25 11/16 |

*Lighted

**UPTC16MLT Lighted Flexible Spring Claw**
- Magnet able to pick up a maximum of 5 lb
- Four-jaw claw opens wide to secure hard-to-reach objects
- Heavy duty aluminum plunger with convenient side switch turns on/off bright LED light as needed
- Tightly wound, flexible spring snakes into tight areas
- Comes with two round CR2032 lithium batteries
- 25 11/16" long



WARNING • Read safety precautions on pages W1 to W4

# MIRRORS/PICK-UP TOOLS Blue-Point®


PTS5


PT28E


PTIM5


PT30C


PT5C


UPT15


PT5CBL


UPT35


PHT5


UPT50A


PHT5RD


UPT65


PT7B


US225


ECFM20


DPTM24


PT40B


UPT2FL


PT10C

## Magnetic

**PTS5 Magnetic Pick-Up Tool/ Scribe**
- Magnet in one end and a replaceable carbide steel scribe tip at the other
- 5" long, do not use as a pry bar or punch
- Includes pocket clip

**PTIM5 Pick-Up and Inspection Tool**
- Magnet end lifts 1 1/2 lb
- Length is 26 3/4" extended, closes to 5 7/8"
- Mirror end is 1 1/4" in diameter
- Includes pocket clip

**PT5C Telescopic Magnetic Pick-Up Tool**
- 5 7/8" extends to 25 9/16"
- Chrome finish
- Magnet lifts up to 2 lb
- Includes pocket clip

**PT5CBL Telescopic Magnetic Pick-Up Tool (Blue)**

**PHT5 Magnetic Pick-Up Tool**
- Lifts 2 1/2 lb
- Chrome plated shaft extends from 5 1/2"–25 1/2"
- Powercap® shields sides of magnet for focused lifting
- Black cushion grip will not slip in oily or wet hands

**PHT5RD Magnetic Pick-up Tool (Red)**
- Tool lifts 2 1/2 lb
- Telescopes from 5 1/2"–25 1/4"
- *Powercap* shields sides of magnet for focused lifting

**PHT5BL Magnetic Pick-up Tool (Blue)**

**PHT5GR Magnetic Pick-up Tool (Neon Green)**

**PHT5OR Magnetic Pick-up Tool (Orange)**

**PT7B Magnetic Pick-Up Tool**
- Lifts 1 lb, 6" long

**ECFM20 Flexible Magnetic Pick-Up Tool**
- 18" (457.2 mm) flexible shaft gets in tight places
- Long lasting, bright LED light source
- Anodized aluminum housing for lightweight and resistance to corrosion
- Powerful neodymium magnet lifts 1.1 lb (0.5 kg)
- Powered by three "N" alkaline 1.5V batteries (included)

**PT40B Flexible Magnetic Pick-Up Tool**
- Magnet lifts 3 1/2 lb
- Length is 21", including a 14" flexible section

**PT10C Pick-Up Tool**
- Lifts 1 lb, 8 5/8" long

**PT28E Pick-Up Tool**
- Lifts 2 lb
- 16 3/4" long and extends to 26 3/4"
- Aluminum head
- Probe O.D. is 1/2"

**PT30C Pick-Up Tool**
- Lifts 6 1/2 lb
- 17" long and extends to 27 1/8"

**UPT15 Telescoping Magnetic Pick-Up Tool**
- Lifts 2 lb
- 6 5/8" long and extends to 33 1/4"

**UPT35 Telescoping Magnetic Pick-Up Tool**
- Lifts 4 1/2 lb
- 6 5/8" long and extends to 33 1/4"

**UPT50A Telescoping Magnetic Pick-Up Tool**
- Lifts 10 lb
- 6 5/8" long and extends to 33 1/4"

**UPT65 Telescoping Magnetic Pick-Up Tool**
- Goblet shaped magnetic head directs the flux to the front of the magnet to lift 16 lb
- Head shields the sides of the magnet from attaching to unwanted ferrous surfaces
- Telescopes from 9"–34 1/4"

**UPTM65K Magnetic Inspection Kit**
- Includes UPT65 pick-up tool and US225 inspection mirror in vinyl pouch

**US225 Inspection Mirror**
- Attaches to UPT65 pick-up tool
- Dual ball adjustment provides 2 1/4" diameter infinite positioning

**DPTM24 Flexible Magnetic Pick-Up Tool**
- When retracted, magnet will not adhere to untargeted ferrous metals
- Depress plunger to expose magnet from shroud and grab desired object
- 24" flexible shaft easily maneuvers through tight spots
- Cushion grip handle provides comfort and control

**UPT2FL Flexible Magnetic Pick-Up Tool**
- 29" aluminum shaft can be easily bent at any angle
- *Powercap* slides over the magnet and shields its sides from attaching to unwanted metal surfaces
- Will pick up 5 lb with power cap

## Hinged Mirrors

**UIM2FL Flexible Inspection Mirror**
- 32" aluminum shaft can easily be bent to any angle
- 2 1/4" mirror is encased in a rugged stainless-steel head
- All-angle ball joint holds mirror head tightly at any angle
- Textured cushion grip will not slip in wet or oily hands

**GA294 Rectangular Mirror**
- Double ball joints allow mirror to swivel 360°
- Electrolytic plated copper backing
- Non-rotating telescoping rods
- Vinyl grip
- 2 1/8" x 3 1/2" mirror
- Closed length is 11 1/4"; extended length is 15 1/4"

**GA295 Round Mirror**
Similar to GA294 except with a 2 1/4" diameter mirror. Closed length is 10"; extended length is 14".


UIM2FL


GA294


GA295


GA51B


GA52B


GA53A

| Stock No. | Overall Length, inches | Mirror Size, inches | Glass Replacement Mirror | Plastic Replacement Mirror |
|---|---|---|---|---|
| GA51B | 16 1/2 | 1 11/16 x 2 9/16 | GA51B1 | GA51B1P |
| GA52B | 11 | 1 3/16 x 1 1/2 | GA52B1 | – |
| GA53A | 16 1/2 | 2 5/16 x 3 3/8 | GA53A1 | GA53A1P |

## Pocket Mirrors

**PTM143 Round Pocket Mirror**
Handle extends from 4 1/2"–17". 1 1/4" in diameter. Hinge mechanism allows 360° adjustment. Includes pocket clip.


PTM143

**CF143MA Round Pocket Magnifying Mirror**
Handle extends from 4 1/2"–17". 1 1/4" in diameter. Hinge mechanism allows. Includes pocket clip. 360° adjustment.

**PTM147 Round Pocket Mirror**
Handle extends from 4 1/2"–17". 3/4" in diameter. Hinge mechanism allows 360° adjustment. Includes pocket clip.

**PTM157 Oval Pocket Mirror**
Handle extends from 4 1/2"–17". 1" x 2" oval. Hinge mechanism allows 360° adjustment. Includes pocket clip.


PTM157

## Lighted Mirrors

**YA5160A Lighted Adjustable Mirror**
- Mirror size is 1 1/8" x 2 1/8" with 1x magnification
- Thumb wheel adjustment on handle
- Light at base of 18" long flexible handle powered by two (AA) batteries (included)


YA5160A

**YA51601 Replacement Mirror**
**YA51602 Replacement Mirror**
**YA5160A3 Replacement Bulb**

## Telescoping Mirrors

**UIM125 Telescoping Inspection Mirror**
1 1/4" diameter mirror. 6 1/2" long and extends to 35".

**UIM225 Telescoping Inspection Mirror**
2 1/4" diameter mirror. 6 1/2" long and extends to 35".


UIM225

**UIM225RD Telescoping Inspection Mirror**
Same as UIM225 but with red handle.

**UIM225GR Telescoping Inspection Mirror**
Same as UIM225 but with green handle.

**UIM225OR Telescoping Inspection Mirror**
Same as UIM225 but with orange handle.

**UIM325 Telescoping Inspection Mirror**
3 1/4" diameter mirror. 6 1/2" long and extends to 29 1/2".


TKSS01MIR

**TKSS01MIR Telescoping Hinged Steel Mirror**
- Steel mirror will not shatter if dropped
- Hinged for accurate positioning, telescopes from 7" to 28 1/2" (177.8mm–723.9 mm)
- Mirror surface is 3.12" x 2" (79.4 mm x 50.8 mm)
- In retracted position, it will easily fit in shirt pocket

**UIM2LM Magnifying Inspection Mirror**
- Stainless-steel handle telescopes from 11 1/2" –51 1/2"
- 2 1/4" magnifying mirror enlarges viewing area
- All-angle ball joint holds mirror head tightly at any angle


UIM2LM

**UIM2NR No Swivel Rectangular Telescoping Mirror**
- All-angle ball joint holds mirror head firmly at any angle
- Stainless-steel handle is long, strong and lightweight
- Heavy duty grip will not slip in wet or oily hands
- Adjusts from 6–3/4" to 29–3/4"
- 2 9/16" x 3 3/4" rectangular head


UIM2NR

# MIRRORS/PICK-UP TOOLS: MIRRORS



UIM1LT



UIM2LT



UIM3LT



UIM2RSLT

## LED Telescoping Mirrors (Blue-Point®)

**UIM1LT Lighted Inspection Mirror**
Telescopes from 6 3/4"–35 1/2". Mirror is 1 3/8" diameter.

**UIM2LT Lighted Inspection Mirror**
Telescopes from 6 3/4"–37". Mirror is 2 3/8" diameter.

**UIM3LT Lighted Inspection Mirror**
Telescopes from 6 3/4"–30 1/4". Mirror is 3 3/8" diameter.

**UIM2RSLT LED Lighted Inspection Mirror**
Telescopes from 6 3/4"–30" for fast, accurate inspections. Mirror is 3 1/4" x 1 1/8".

# BRAKE SERVICE TOOLS



YA4000B

## Vacuum Pressure Pump Kit *(Blue-Point)*

**YA4000B Automotive Test Kit**
- Produces vacuum or pressure at the turn of a switch
- Comfortable ergonomic design
- One-finger trigger vacuum/pressure release
- Durable, accurate diaphragm type pressure/vacuum gauge
- Handheld vacuum/pressure pump with 2" compound gauge and rubber boot
- 12 oz fluid reservoir bottle with fluid transfer and storage lids plus fluid pick-up tube
- Kit contains multiple accessories as shown, including tapered manifold plugs, vacuum caps and bleed screw adaptors
- Master cylinder refill kit

**Applications**:
Vacuum and pressure related engine performance diagnostics and tune-ups; brake bleeding; fluid transfer, evacuation and sampling.

**YA4008 Power Steering Adaptor Kit**
- Bleeds trapped air from power steering systems by drawing a vacuum through the reservoir fill neck
- Can also be used to test leaks by placing the system under a vacuum and observing change in gage reading
- Each adapter is designed to fit snugly in the neck of the power steering reservoir to form an air-tight seal when vacuum is applied
- External vacuum source such as the YA4000B hand vacuum pump is required (sold separately)
- Includes four adaptors: YA4008-1 (Ford®), YA4008-2 (GM®), YA4008-3 (universal) and YA4008-4 (right angle)

## Carbide Insert Bit Kits



BTK10A

**BDT063-10 Negative Rake Carbide Bits – 10 Pack**
- Use for EEBR309A, EEBR312A and Ammco® brake lathes

**BDT103-06 Positive Rake Carbide Bits – 6 Pack**
- Use for EEBR310A, EEBR312A and *Ammco* brake lathes

**BDT385-06 Carbide Bits**

**BDT060-10 Positive Rake Carbide Bits – 10 Pack**
- Use for Accu-Turn® brake lathes

**BDT066-10 Positive Rake Carbide Round Tool Bits – 10 Pack**
- Round tool bits for AMMCO940630 tool holder

**BDT428 Positive Rake Round Tool Holder Set**
- RH and LH used with EEBR308A, EEBR309A and EEBR312A for AMMCO940610 tool bits

**BTA10 Carbide Bits**
- For *Ammco* models 3000, 4000, 4100, 6900, 7000 and 7700

**BTF10 Carbide Bits**
- For all FMC lathes

**BTK10A Carbide Bits**
- For all Kwik-Way® lathes as well as older Snap-on® lathe models (YA282, YA278A and YA277 Series)



BDT80

## Silencers

**BDT80 Silencer Band**
- For passenger car/light truck drums
- 1 3/4"

**BDT69 Silencer Band**
- For ventilated rotors

**BDT96-2 Silencer Band**
- For non-vented rotors 6 1/2" diameter
- Package of two

**BDT94-2 Silencer Band**
- For non-vented rotors 9 1/4" diameter
- Package of two

**BDT980 Spring Silencer Assembly**
- For ventilated rotors

## BRAKE: BLEEDER KITS

## Vacuum Type Brake Bleeders



BB9018

**BB9018 Vacuum Brake Bleeder**
- Fast efficient, one person vacuum bleeding
- Works with all braking systems
- Large 3 pint (1.5 liter) container
- Generates 25 in Hg vacuum with air pressure of 100 PSI
- Specially formulated seals allow unit to be used with a variety of fluids
- On/Off valve and Flow Regulator
- Unit can be sealed when not in use to prevent spillage
- Quick release, locking trigger and safety shutoff valve
- Overfill check valve
- Compact design – fits under wheel well
- 19 1/2" (500 mm) suction hose
- Universal brake screw fitting



BB9008

**BB9008KIT Brake Bleeder Kit**
- Includes: BB9008 vacuum brake bleeder and BB5002A auto refiller bottle

**BB9008 Vacuum Brake Bleeder**
- Same as BB9018 except container is 800 mL capacity

**BB9008KIT Brake Bleeder Kit**
- Includes: BB9008 vacuum brake bleeder and BB5002A auto refiller bottle



BB5002A

**BB5002A Auto Refiller Bottle**
- Automatically keeps reservoir filled to the correct level
- 20 fluid oz (592 mL) container
- Retaining clip for positive attachment
- Compact design fits under hood
- Positive venting system supplies continuous flow
- Fits virtually all master cylinder reservoirs: can be sealed when not in use to prevent spillage
- On/Off valve



WARNING
• Follow all safety messages in instructions
• Read safety precautions on pages W1 to W4

# BRAKE: BLEEDER KITS



BB300B19



BB300B22A



BB300B26G



BB300B29G



BB300B39GC



BB300B41-G9



BB300B47G

## Diaphragm Type Brake Bleeder Adaptors (Blue-Point®)

| Stock No. | Description |
|---|---|
| BB300B19 | VW® Adaptor (Water Cooled) |
| BB300B20 | Dual Bleeding Attachment |
| BB300B21 | Pop-off Valve |
| BB300B22A | Adaptor Set (7pc) |
| BB300B26G | Universal Brake Bleeder Adaptor |
| BB300B29G | 3 1/4" Universal Round Adaptor |
| BB300B35G | Universal Adaptor |
| BB300B36G | GM® Dual Reservoir Adaptor |
| BB300B39GC | *GM*/Chrysler® Plastic Reservoir Adaptor |
| BB300B41-G9 | Universal Rectangular Adaptor |
| BB300B42G | Universal Adaptor |
| BB300B45-G9 | Universal Round Adaptor |
| BB300B47G | *Chrysler* Adaptor |




BB100C



YA8925

## Non-Diaphragm Type Brake Bleeder

**BB100C Non-Diaphragm Type Brake Bleeder**

- 1 gallon capacity
- Self-contained, hand-pressurized pump
- More than 10' of hose with shutoff, pressure gauge and quick coupler
- Uses the BB300B Brake Bleeder Adaptors (optional)
- Use only D.O.T. 3 or D.O.T. 4 automotive brake fluid

## Master Cylinder Pressure Cap

**YA8925 Master Cylinder Pressure Cap**

- M45 x 3.50 thread adapts to fluid reservoir and 1/4"-18 and 3.5 mm thread for pressure bleeder
- For Mercedes®, BMW®, Audi® and Porsche®



BT27



BT11



131A



S6118A



BT19A



B1356E



BT15



BT17A



BT10



BT20

## Brake Spring Tools

**BT27 Single Spring Brake Tool (GM®) (Blue-Point®)**
- Tool releases tension on both large and small *GM* single brake springs during servicing

**Large Spring Applications:**
2005 and later Chevrolet® Silverado®, 2004 and later *Chevrolet* Colorado®.

**Small Spring Applications:**
1991 and later *GM* H body (Bonneville®, LeSabre and Delta 88), 1992 and later GM C and U body (Buick® Electra, Olds 88, Cadillac® Fleetwood and DeVille®, Chevy® Lumina APV, Pontiac® Tran Sport and Olds Silhouette), and 1995 and later *Chevy* Lumina and *Chevy* Monte Carlo® vehicles.

**BT11 Brake Spring Tool**
- Services Bendix® brake springs and any spring attached to post
- Socket end removes; hook end replaces
- 9 3/4" long

**131A Brake Spring Pliers**
- Removes or replaces Bendix®, Lockheed® and other hydraulic and mechanical brake springs
- Steel hook on jaw is replaceable
- Handles provide socket type spring remover and hook end replacer
- 13 1/4" long

**31-3B Replacement Hook**
- Replacement hook for 131A brake spring pliers

**S6118A Spring Cap Socket**
- 1/4" drive double-ended socket designed for subcompact brake spring on one end and larger US cars and light trucks on the other
- Industrial finish
- Use with TM4B driver

**BT19A Heavy Duty Brake Spring Tool *(Blue-Point)***
- Heavy duty design
- Remove or install import and US brake springs with or without anchor pins
- Maximum wire I.D. is 1/4", overall length is 8 7/8"

**B1356E Brake Retainer Spring Tool**
- For use on 3/4" retainer spring caps found on most newer vehicles

**BT15 Remover**
- For removing brake springs on full-size cars and pickups with drum-style brakes
- Industrial finish
- 8 15/16" long

**BT17A Retainer Spring Tool**
- For use on 5/8" diameter retainer springs found on most newer vehicles
- Industrial finish
- 8 15/16" long

**BT10 T-Handle Brake Spring Tool**
- Easily relieves tension on single spring brakes for GM vehicles
- Offers an easy way to remove single brake springs, so that brake shoes, emergency brake cables or brake cylinder can be serviced
- Hook grabs the spring while the tool point acts as a fulcrum to pry the spring free

**BT20 Brake Spring Tool for Toyota® vehicles**
- Special tip is designed to engage the shoe hold-down spring cup on *Toyota* vehicles
- For rear parking brake springs on 2000 – current Tacoma®, Tundra®, FJ Cruiser®, 4Runner®, Land Cruiser® and Camry®



⚠WARNING • Read safety precautions on pages W1 to W4

# BRAKE: SERVICE TOOLS



BCS70A

## General Service Sets

| Stock No. | Description |
|---|---|
| FA8E | 1/4" Hex Driver |
| FA10E | 5/16" Hex Driver |
| FA12E | 3/8" Hex Driver |
| FAM8E | 8 mm Hex Driver |
| FTX40E | T40 TORX® Driver |
| FTXB45E | T45 *TORX* Driver |
| FTXB50E | T50 *TORX* Driver |



BTK5

| Stock No. | Description |
|---|---|
| 131A | Spring Pliers |
| B1461 | Adjusting Tool |
| S6110A | Bleeder Wrench |
| S6118A | Spring Cap Socket |
| SGT4BR | 1/4" Dr. Standard Shank Driver |



BTK7A

| Stock No. | Description |
|---|---|
| B1356E | Spring Tool |
| B1458C | Bleeder Wrench |
| B1461 | Adjusting Tool |
| B3404B | Adjusting Tool |
| BT11 | Services Bendix® brake springs |
| S6112 | Bleeder Wrench |
| B1467A | Bleeder Wrench |



RM130

## Disc Brake Gauge and Micrometer

**RM130 Rotor Micrometer (Blue-Point®)**
- Range of .30"–1.3" in .001" graduations
- 3 1/2" deep frame
- Pointed anvil for checking grooves
- Includes 1" checking standard and storage case

**BCS70A Disc Brake Caliper Driver Set**
- For US vehicles (except Chrysler®)
- 7pc

**BTK5 General Brake Service Set**
- 5pc

**BTK7A General Brake Service Set**
- 7pc



GA3634



DG530

RG430

## Disc Brake Gauges and Micrometers

**GA3634 Ball Joint/Disc Brake Test Indicator Set**
- All purpose indicator set
- Perfect for general use
- Indicator with 0"–1" range and .0005" graduations
- Easy-to-read white on black dial face
- Uses locking pliers and a flexible gooseneck for non-magnetic applications and difficult areas
- Ideal for brake and undercar work

**CM6563450 Plastic Case**
For GA3634

## Brake Drum/Rotor Gauges *(Blue-Point)*

**DG530 Digital Drum Gauge**
- Measures automotive and heavy duty brake drums
- Pointed anvils and 4 1/4" long arms allow increased measurement accuracy and coverage
- Selectable depth stops for easier use
- Range 6"–20.65" (150 mm–515 mm): graduations are .0005" (.01 mm)

**RG430 Digital Rotor Gauge**
- Measures brake rotors and ball joints
- Pointed anvil and 3 1/2" long arms for increased measurement accuracy and coverage
- Selectable depth stops for easy use
- Range 0"–5.50" (0 mm–140 mm): graduations are .0005" (.01 mm)


S9523


B1468


BT4651


HSA716


BSA916


S9153B


B1462A


B3404B


B1461


S5912


S6004

## Truck Brake Adjusting Tools

**S9523 Brake Adjuster**
- Star nut turning tool for Chevrolet® trucks with overload springs
- Different angles at each end of tool for clearance
- Blades are 17/32" wide: tool is 5 1/4" long

**B1468 Brake Adjuster**
- For use on GMC® and *Chevrolet* 1 1/2 and 2 ton trucks
- Tips on each end are bent 45° and then twisted 45° to allow access to brake-adjusting mechanism
- 9 1/4" long

**BT4651 Heavy Truck Slack Adjuster Set**
- 5/16" double square configuration
- Automatic slack adjuster tool set includes offset, reversible automatic release tool
- Release tool slides under the button of the pull-pawl on the automatic slack adjuster until fully seated while the wrench is used to adjust the brake-to-drum clearance
- Screwdriver handle for performance and comfort

**HSA716 Slack Adjuster Wrench**
- For brake service and slack adjuster installation on heavy duty trucks equipped with Haldex® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 7/16" hex allows reach to recessed adjusters
- 14 5/8" overall length helps to overcome the anti-reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot

**BSA916 Slack Adjuster Wrench**
- For brake service and slack adjuster installation on heavy duty trucks equipped with Bendix® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 9/16" hex allows reach to recessed adjusters
- 14 1/2" overall length helps to overcome the anti-reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot

## Automotive Brake Adjusting Tools

**S9153B Brake Adjuster**
- Designed to work around obstructions on GM® vehicles
- Blades are 1/2" wide; tool is 7 7/8" long

**B1462A Brake Adaptor**
- For rear brakes of those cars and trucks with trailing arm bolts
- Tang at each end is set at 68°, but in opposite directions for use on left and right hand sides
- 8 1/2" long

**B3404B Brake Adjuster**
- For *Bendix* self-adjusting brakes and other brakes with star adjusting nut (except *Chevrolet*)
- Blades are 17/32" wide with 1/32" tip thickness
- 8 3/16" long

**B1461 Brake Adaptor**
- One end has a wide tang set at a 29° angle for rear brakes; other end is set at a 45° angle for front brakes
- 8 1/4" long

**S5912 Brake Adjuster**
- For use on VW®, Mazda®, Omni and Horizon
- Each tang tapers to a 1/4" tip width
- One tang is straight; other is offset 45°
- 8 1/2" long

**S6004 Brake Adjuster**
- For use on 1969 and later Toyota® when self-adjusting brakes are being dismantled
- One end is offset 15°; other is 60°
- Tapers to 1/4" tips

**S6005 Brake Adjuster**
- Similar to S6004
- For use on 1969 and later *Toyota* when a complete dismantling of the self-adjusting brakes is required
- One end is angled at 60°; other end features a special offset
- Each tang tapers to a 1/4" tip width
- 5 1/4" long

**⚠WARNING**
- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# BRAKE: SERVICE TOOLS


FTSM4E


FTSM6E


MPBS1140O


YA8610B

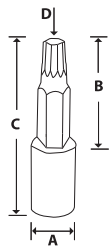

YA2440


GA395


YA9329A


BT350A


BTG8




## Disc Brake Tools

| Stock No. | Size, mm | Finish | Description | Type | A | B | C | D |
|---|---|---|---|---|---|---|---|---|
| FTSM4E | 4 | Chrome | Standard Length | Triple Square | 17.2 | 21.6 | 48.5 | FTSM4E2 |
| FTSM5E | 5 | Chrome | Standard Length | Triple Square | 17.2 | 21.6 | 48.5 | FTSM5E2 |
| FTSM6E | 6 | Chrome | Standard Length | Triple Square | 17.2 | 21.6 | 48.5 | FTSM6E2 |

**FTSM4E Metric Triple Square Driver**
Use on VW®/Audi® door handle screws 1998 and later, brake drum fasteners on *VW* Toureg® plus many other 4 mm and 5 mm triple square applications.

**FTSM5E Metric Triple Square Driver**
Use on *VW/Audi* door handle screws 1998 and later plus many other 4 mm and 5 mm triple square applications. Also use on 2003–2008 Porsche® Cayenne to loosen the cover on the adjustment cable for the emergency brake.

**FTSM6E Metric Triple Square Driver**
Various applications on European vehicles.

**MPBS1140O Prybar/Brake Tool**
- Strong 3/8" square alloy steel bar with straight tip
- 11" total length with 40° offset ensures access into tight wheel wells
- Large, comfortable, high visibility orange handle with striker cap allows good grip versus small, hard-to-hold brake adjustment tools
- Ideal for general prybar applications

**YA8610B Universal Brake Caliper Tool Set (Blue-Point®)**
- Assists in replacement of brake pads on most four-wheel disc brake cars
- Tool and adaptors position brake piston back into caliper to allow clearance for newer, thicker brake pads
- Designed for most *Audi*, Chrysler®, Ford®, GM®, Honda®, Jaguar®, Mazda®, Mini Cooper®, Mitsubishi®, Nissan®, Saturn®, Subaru®, Toyota®, *VW* and Volvo® vehicles
- Set includes one tool and six adaptors in a storage case

**YA6730 Brake Caliper Tool Set *(Blue-Point)***
Combines the main body from the YA8610B set and the YA8610B-7 adaptor.

**YA8610B-7 Brake Caliper Tool Adaptor**
Use on *Mazda* 3 (2004 and later), *Mazda* 5 (2006 and later), *Mini Cooper* (all 2002 and later), *Volvo* S40 (2004 1/2 and later), *Volvo* V50 (2006 and later), *Volvo* C30 (2007 and later), Pontiac® Solstice (2006 and later), *Saturn* Sky (2007 and later) and *Jaguar* X type (2006 and later).

**YA2440 Pad Spreader *(Blue-Point)***
For use on most US and import cars and light duty trucks with single piston disc brakes without parking brakes. Compresses the disc brake piston for easy pad installation.

**GA395 Spreader *(Blue-Point)***
For standard four-piston caliper disc brakes. Frees hands to assemble caliper over rotor. 6 3/4" long.

**YA9329A Piston Rotation Tool *(Blue-Point)***
- Use to rotate piston back into caliper cylinder when replacing pads
- Also rotates parking brake cylinder back into the caliper cylinder on vehicles with four-wheel disc brakes
- For 1975 and later *Ford* and Mercury® plus some import vehicles

**BT350A Brake Piston Press *(Blue-Point)***
- Presses single or dual pistons most cars plus light and heavy duty trucks
- Quick and easy to use: no nuts or bolts involved in pressing operations

**BTG8 Brake Pad/Shoe Gauge Set *(Blue-Point)***
- Color-coded gauges: Red indicates service required, yellow indicates caution and green indicates OK
- Constructed from 20 gauge sheet metal with durable powder-coat finish


BTCP1


BTCP500


BTCP2S

## Disc Brake Tools

**BTCP1 Brake Caliper Press (Blue-Point®)**
- Works on both fixed and floating calipers
- Generates more than 1,600 ft-lb of force to retract the toughest caliper pistons
- Single-lever mechanism used to apply and release force for ease of operation and faster service
- Prevents damage to pistons, hubs or calipers
- Ensures parallel piston retraction on dual and quad piston calipers
- Easy left- and right-side use

**BTCP500 Brake Caliper Press *(Blue-Point)***
- Works on twin and quad piston fixed calipers as well as single and twin piston floating calipers
- Centrally located ratchet evenly spreads force in a parallel manner to prevent misalignment of pistons
- Ratchet technology gives a full 360° swing
- Extended reversing lever allows for easy change from spreading to retracting

**BTCP2S Brake Caliper Press**
- Services vehicles with single and twin floating, twin piston fixed and quad piston fixed calipers
- High strength, lightweight polymer housing offers high impact resistance
- Large 12 mm (1/2") shaft diameter is heat-treated to prevent distortion or damage under heavy load
- Ensures parallel piston retraction to prevent damage to piston and seal
- Press plates rotate thru 180° for efficient operation on left and right brake calipers
- Drive mechanism manufactured from durable high-grade precision-cast heat-treated material
- Compression ratio of 15 to 1 provides output of 440 lb of force by just applying 28 lb of force with your hand
- Compression plates and guide bushings made from high-grade tool steel, heat-treated to ensure minimal distortion under heavy loads
- Brass inserts prevent damage at heavy load pivot points
- Rubber handle overlays provide operator comfort


B1359B

BT518

BT12


YA9070A

BT1360


BT400


TAP1

## Truck Brake Tools

**B1359B Brake Retainer Spring Tool**
- For Chrysler® and Ford® 3/4 ton trucks equipped with Bendix® brakes
- U-shaped end is offset 30°–45° for easy removal of brake shoe to backing plate spring

**BT518 Brake Shoe Tool**
- For large trucks and trailers with air brakes with "S" cam design
- Provides leverage to back out brake shoe and remove roller cam
- Industrial finish

**BT12 Brake Spring Tool**
- Services brake shoe retracting springs on trucks using *Bendix*, Wagner® and Kelsey-Hayes® systems
- Unique shape permits access and leverage

**YA9070A Rear Brake Adjusting Tool**
- For single-axle Lucas-Girling brakes found on 1984 and later F-600 and larger *Ford* trucks and buses
- Has all the right angles to reach through the backing plate
- Industrial finish

**BT1360 Brake Spring Tool**
- Remove brake shoe retaining springs from heavy duty *Ford,* GM®, Dodge® and International® trucks
- Large, comfortable handle
- Constructed for strength and durability

**Applications:** *Ford*: F250®, F350®, P250, P350, P400; *GM*: 1 ton, some 1/2 ton; *Dodge*: B300, D200, D300, P200, P300; *International*: 1200 Series, 1300 Series trucks

**BT400 Brake Spring Tool (Heavy Duty) *(Blue-Point)***
- For brake springs on 3/4 ton and heavier trucks
- T-Handle for generating maximum torque when encountering stiff springs
- Head may be rotated 360° to clear obstacles
- Overall length of 7 3/4"

**TAP1 Truck Anchor Pin and Bushing Press**
- Designed to remove brake anchor pins and bushings on 16 1/2" "Q type" S-cam tractor and trailer brake systems from Dana-Spicer®, ArvinMeritor® (Rockwell®), Eaton®, Timkin® and Fruehauf® without removing wheel hub
- Pressure pad retaining rings hold pads firmly in place
- Two-hand operation
- Interchangeable pressure pads allow removal of bushing alone or simultaneous pin/bushing removal
- Zerk grease fitting lubricates and flushes dirt from pressure screw for long life
- Designed for use with 3/4" impact guns
- Storage case



WARNING • Read safety precautions on pages W1 to W4

# BRAKE: SERVICE TOOLS


S6110A


B1458C


B1463A


S6112


S6111


BBW1271


BBW1272


BBW1273

## Bleeder Wrenches

**S6110A Bleeder Wrench**
- For GM®, Nissan® and Honda®
- 8 mm, 6-point box end; 10 mm on the other
- Ends are offset for clearance
- 192 mm long

**B1460B Bleeder Wrench**
- Similar to S6110A
- 3/8" box end for brake bleeding work and a 7/16" box end for brake shoe eccentric bolt adjustment
- Offset clears drag link arm and recessed backing plate on front wheel
- 9 1/2" long

**B1467A Bleeder Wrench**
- For *GM*, Ford® and Chrysler® vehicles
- Similar to S6110A
- 5/16" and 3/8" single hex box ends are offset for access to bleeder fittings
- 8 1/2" long

**S6143 Bleeder Wrench**
- For most imports
- Similar to S6110A
- 7 mm and 9 mm, 6-point box ends are offset for clearance
- 252 mm long

**B1458C Bleeder Wrench**
- Includes 1/4" and 3/8" single hex box ends
- 9" long

**B1463A Bleeder Wrench**
- 1/4"–3/8", 6-point box ends are tapered for clearance
- 3 3/4" long arms (for smaller bleeder fittings on most compact cars)

**S8184 Bleeder Wrench**
- For fittings on most *GM* vehicles
- Similar to B1463A
- 3/8" and 5/16", 6-point box openings
- 4" long arms

**B1470 Bleeder Wrench**
- Similar to B1463A
- For late model *GM* and most import vehicles
- 8 mm, 6-point box end; 10 mm on the other
- Wrench has a 90° bend for access
- Arms are approximately 100 mm long

**S6112 Bleeder Wrench**
- For some *GM* and Toyota® vehicles, plus select imports
- Similar to B1463A
- 8 mm, 6-point box on one end; 10 mm on the other
- Wrench has 90° bend for access
- Arms are 130 mm long

**S6111 Bleeder Wrench**
- Covers 90% of late-model US applications including late-model *Chrysler,* Dodge®, *Ford*, *GM,* Audi®, Mercedes® and VW® vehicles
- 10 mm and 11 mm 6-point Flank Drive® wrenching configuration
- Ends are offset for extra clearance
- 235 mm long

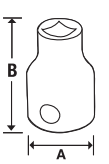
**BBW1271 Brake Bleeder Wrench**
- Special design features to accommodate caliper-mounted electromechanical parking brakes
- Designed to work without removing the wheels
- Easily access difficult-to-reach 11 mm bleeder screws

**BBW1272 Brake Bleeder Wrench**
- Special design features to accommodate caliper-mounted electromechanical parking brakes
- Designed to work without removing the wheels
- Easily access difficult-to-reach 11 mm bleeder screws

**BBW1273 Brake Bleeder Wrench**
- Special design features to accommodate caliper-mounted electromechanical parking brakes
- Designed to work without removing the wheels
- Easily access difficult-to-reach 11 mm bleeder screws

**BBW1270 Brake Bleeder Wrench Set**
- Special design features to accommodate caliper-mounted electromechanical parking brakes
- Designed to work without removing the wheels
- Easily access difficult-to-reach 11 mm bleeder screws
- With the varied geometry of these three wrenches, you will access most other 11 mm brake bleeder screws on all vehicle makes and models


PMP406A




## Wrenches and Sockets

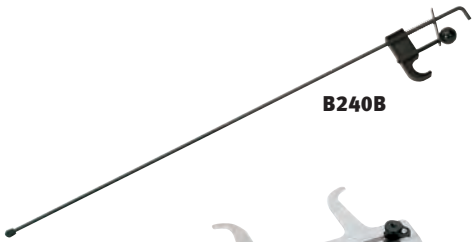
| mm | Stock No. | A | B |
|---|---|---|---|
| 6 | PMP406A | 17.2 | 25.8 |

**PMP406A Internal Metric Pipe Plug Socket**
For rear brake adjustments on 1973–1986 Subaru®.
3/8" drive, 6 mm internal square socket.

## Brake/Throttle Depressor

**B240B Brake and Accelerator Pedal Jack (Blue-Point®)**
- Holds throttle at a constant RPM
- Easily adjusts to desired length
- Adjustment screw fine-tunes desired RPM
- Rubber tip keeps the tool firmly positioned
- Overall length of 40" (102 cm)
- Can also be used as a pedal depressor

**YA2780 Brake Resetting Gauge**
- Automatically sets brake shoe size when measuring against drum walls
- Positive locking section ensures an accurate reading every time
- Improved range of 6 1/2"–13 1/4"


B240B


YA2780

## Emergency Brake *(Blue-Point)*

**SIML160 6-Point Extra Deep Impact Socket**
- Use to remove or replace fuel tank retaining strap nuts
- Also has applications on emergency brake adjustment nuts and stabilizer retainers
- 1/2" square drive; 1/2", 6-point wrench opening
- 5" long

**SIML180 Socket**
- Same design as SIML160, except hex size is 9/16"

**BT22A Parking Brake Cable Tool**
- Designed to remove parking brake cables from the brake backing plate and chassis mounting bracket
- Double ended tool has Ford® Escort®, Topaz® and Tempo® applications on one end while the larger end services most other vehicles

**BR1 C-Ring Pliers**
- Opens the C-ring on the emergency brake actuation lever when changing rear brake shoes on many domestic cars, trucks and imports

**BR2 C-Ring Pliers**
- Holds the C-ring without slipping during installation


SIML160


BT22A


BR1



## 3-Arm Hones and Stone Sets

**CF63A 3-Arm Hone**
For 3/4"–2 1/2" diameter cylinders. Adjustable thumb nut to control tension.


CF63A

### Stone Sets

| Stock No. | Grit (Qty) | Length, inches |
|---|---|---|
| CF63A-100 | 100 (3) | 1 1/8 |
| CF63-240 | 240 (3) | 1 1/8 |
| CF63-400 | 400 (3) | 1 1/8 |

**⚠WARNING**
- Operate hone only while it is within cylinder
- Do not use cheater bars on handles
- Read safety precautions on pages W1 to W4

# BODY: UNIBODY AND FRAME-STRAIGHTENING EQUIPMENT



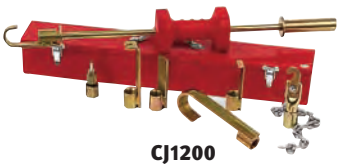
CJ107



CJ114



YA2002



CJ1200



BM175

## Pullers

**CJ107 Body Dent Puller**
- Slide hammer action pulls out dent for filling
- "L" hook included for larger jobs
- 4 lb slide hammer

**CJ114 Body Dent Puller**
- Mainly for rocker, quarter, back and door panels
- Includes screw for puncturing sheet metal plus a bodyman hook and seal hook for larger jobs
- 3 lb slide hammer

**YA2002 Quarter Panel Puller**
- Removes dents from rear quarters and wheel wells
- Two 12" tubes (with different dimensions) fit most wheel well openings
- Use with chain attached to frame machine or portable power unit

**CJ1200 Slide Hammer Puller Set**
- Contains a 12 lb, contour-formed slide hammer and a variety of attachments for auto body repair work

## Alignment Bar

**BM175 Alignment Bar**
- Use to align bumpers, window posts, wheel wells, panels, hoods, decks and brackets
- 6", 1/4" chain has hooks welded to each end for easy attachment to body components
- 4 1/2" long, 1 1/2" diameter tubing

# BODY: BODY REPAIR



YA1544A



YA1545



BM101

## Body Repair Kits (Blue-Point®)

**YA1544A Body Repair Kit**
- 4 ton capacity kit includes hydraulic unit, five "Snap-Set" extensions, spreader and a full selection of attachments for most push applications; 18pc kit includes durable storage case
- Auto pump overload system protects against damage to rams and equipment
- 1/2 ton capacity hydraulic spreader has 2" jaw and spreads from 5/8"–3 3/4"
- Flex head includes permanently-molded rubber pad
- Heavy walled extension tubes stand up to the toughest loads
- Long handle reduces required pumping effort

**YA1545 Body Repair Kit**
- 10 ton capacity kit includes: hydraulic unit, four extensions (4", 10", 18" and 27"), spreader and full selection of attachments in custom-fitted, rugged and wheeled storage case
- Pumps rated from 8,000–10,000 PSI
- Portable for use on the road or in the shop

**Applications:** Pushing, spreading and pressing of vehicle body panels as well as various component parts and assemblies

## Push-Pull Jack

**BM101 Push-Pull Jack**
- Capable of 3,000 lb push-pull power
- Aligns, straightens and removes dents
- Multipurpose hook on jack head, plus a hook on the 55" long friction rod
- Friction rod flexes to maintain constant pressure without bending, while the grooved end prevents slipping
- Three-position handle

## Hammers

**BF618B Wide Nose Peen Hammer**
- Bumps odd fender contours

**BF632B Door Panel Hammer**
- For door and body panel bumping
- Smaller diameter head is offset 45°
- Fiberglass handle

**BF611B Picking and Dinging Hammer**
- Smooths small dents and general dinging

**BF603B Long Spot Pick Hammer**
- For bumping when filing or where metal is covered with sound-proofing material

**BF630B Spot Pick Hammer**
- Same design as BF603B except with blunted pick end

**BF604B Wide Nose Cross Peen Hammer**
- For finishing and caulking

**BF617B Shrinking Hammer**
- Extra large faces for large area work
- Serrated for shrinking and smooth for finishing

**BF614B Long Picking Hammer**
- For turret and fender work

**BF610B Hammer Shrinking**
- Same design as BF617B except the serrated shrinking face is square
- Finishing head on other end

**BF608B Short Curve Cross Peen Hammer**
- Use under fenders with rolled edges: use finishing face for dinging

**BF631B Cross Peen Shrinking Hammer**
- Combines pick end of BF604B and serrated face of BF617B

**BF635 Door Skin Hammer**
- For door skin replacement
- Narrow, rectangular faces work in tight flange area
- High crown straight head with 1 5/16" radius for finishing thin sections without poking holes
- Medium crown head with 25° offset and 3 1/2" radius for working on narrow flanges against the door structure
- Fiberglass handle offers excellent balance and high strength


BF618B


BF632B


BF611B


BF603B


BF630B


BF604B


BF617B


BF614B


BF610B


BF608B


BF631B


BF635

## Hammer Specifications

| Stock No. | Handle Length, inches | Round Face Diameter, inches | Peen End Size, inches | Handle Length, inches | Head Weight, oz. |
|---|---|---|---|---|---|
| BF618B | 12 | 1 9/16 | 3/16 x 7/8 | 12 | 12 1/2 |
| BF632B | 13 | 1 1/4–1 5/8 | — | 13 | 16 |
| BF611B | 12 | 1 15/32 | — | 12 | 8 |
| BF603B | 13 | 1 19/32 | 1/16 x 7/16 | 13 | 12 1/2 |
| BF630B | 13 | 1 19/32 | 1/4 x 7/16 | 13 | 12 1/2 |
| BF604B | 13 | 1 5/8 | 5/8 | 13 | 11 1/2 |
| BF617B | 13 | 1 7/8 | — | 13 | 16 |
| BF614B | 17 | 1 5/8 | — | 17 | 16 |
| BF610B | 13 | 1 7/8 | — | 13 | 16 |
| BF608B | 13 | 1 5/8 | 5/8 x 1/16 | 13 | 11 1/2 |
| BF631B | 13 | 1 7/8 | 5/8 | 13 | 11 1/2 |
| BF635 | 12 | 1 7/16–1 5/8 | 5/8 x 1 1/2, 5/8 x 2 | 12 | 16 |

## Hickory Handles

| Stock No. | Length, inches | Hammers Used On |
|---|---|---|
| BF603-2R | 13 | BF603B, BF604B, BF608B, BF617B, BF610B, BF630B, BF631B, BF633, BF634 |
| BF611-2R | 12 | BF611B, BF615 and BF618B |
| BF614-2R | 17 | BF614B |

**⚠WARNING**

- Do not use chipped, mushroomed, or cracked hammers
- Strike squarely, avoid glancing blows
- Do not strike hard objects, use only for striking sheet metal
- Read safety precautions on pages W1 to W4

# BODY: BODY TOOL SETS



2005BFA



2007BFB

## Body Tool Sets

**2005BFA Body Tool Set**
- Contains CJ114 body dent puller plus BF608B and BF611B body hammers, BF716B dinging spoon and BF711B heel dolly (5pc)

**2007BFB Body Tool Set**
- Seven of the most common tools necessary for professional body work: BF716B spoon; BF608B, BF611B and BF617B body hammers; and BF710B, BF711B and BF712B dollies

# SNIPS



CD10A



CD12A



CD16A

## Tin Snips

Cut straight, circular or irregular patterns; right or left cuts.

**CD7A Duckbill Snips**
1 1/2" blades, 7" long.

**CD10A Duckbill Snips**
2 1/4" blades, 10" long.

**CD12A Combination Snips**
3" blades, 12" long.

**CD16A Bulldog Snips**
2 1/2" blades, 16" long.



AVSOS20



AVS30

## Aviation Snips

- Offset blades allow cut material to flow beneath your hand without curling
- Maneuverable for angle cutting or pattern configurations
- Cuts up to 18 gauge mild steel
- Black oxide finish
- 1 1/8" cutting edge
- 9 1/2" long

**AVSOSR9 Snips**
Green handle. Right hand cut.

**AVSOSL9 Snips**
Red handle. Left hand cut.

**AVSOS20 Aviation Snips Set**
- Includes AVSOSR9 right hand snips and AVSOSL9 left hand snips (2pc)

**AVSS10 Snips**
Yellow handle. Straight cut.

**AVSR10 Snips**
Green handle. Right hand cut.

**AVSL10 Snips**
Red handle. Left hand cut.

**AVS30 Aviation Snips Set**
- Includes AVSR10 right hand snips, AVSL10 left hand snips and AVSS10 straight snips (3pc)



SNP2A

## Light Duty and All-Purpose Snips (Blue-Point®)

**SNP2A Angled Multipurpose Heavy Duty Shears**
- For leather, cloth, plastic, rubber, cardboard, gasket material, rope and other materials
- Ergonomic handles can be used right or left handed; soft molded grip for comfort and control
- Blade is notched for hard wire and twine
- Locking switch ensures safety during storage
- Control switch allows blades to be held in a tighter position for easier handling
- Angled shears allow easier cutting through flat materials

# SHEARS/CUTTER;



HDSCISSORS

## Shears/Cutters

**HDSCISSORS Heavy Duty Shop Scissors**
- For leather, cloth, plastic, rubber, cardboard, gasket material, rope and many other materials
- Ergonomic handles can be used right or left handed



YA444B

## Vinyl Cutter *(Blue-Point)*

**YA444B Vinyl Cutter**
- Cleanly cuts plastic, rubber, vinyl, upholstery, leather, hoses and rope
- Ergo® grip handle with safety lock
- Blade storage in handle
- Includes three stainless-steel replacement blades (YA444B-1)

**YA444B1 Replacement Blades**
- Includes three replacement blades and anvil for YA444B

## Spoons

**BF715B Spoon Dolly**
- For caulking and forming deep pockets in doors and panels
- Head size is 2 1/2" x 1" x 3": 14" total length

**BF716B Light Dinging Spoon**
- Smoothes and levels ridges
- Not for prying
- Head size is 4 1/4" x 2"; 10" total length


BF715B


BF716B

## Steel Dollies

B173.5 -1991 applies to all dollies.

**BF707 Heel Dolly**
- For use in sharp corners and wide radii
- Rubber coating provides cushioning effect
- Measures 3" x 2 1/2" x 1 1/2"

**BF710B Toe Dolly**
- For dinging flat surfaces
- Measures 4 3/4" x 2 1/4" x 11/16"
- 2 1/2 lb

**BF711B Heel Dolly**
- For use in sharp corners and wide radii
- Measures 3" x 2 1/4" x 1 3/8"; 2 1/4 lb

**BF712B General Purpose Dolly**
- For deep, skirted fenders and shrinking when using heat
- Measures 3" x 2 1/4" x 1 3/8"
- 2 1/4 lb

**BF740 Shot Dolly**
- Heavy duty leather pouch is filled with 2 1/2 lb of shot
- Essential for supporting irregular shapes and contours on doors, fenders, and other body panels
- Thin profile to get in tight areas
- Will not scratch surface; 3 3/4" W x 5 3/4" L


BF707


BF712B


BF710B

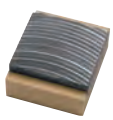

BF740


BF711B

# FILES

## Nib File

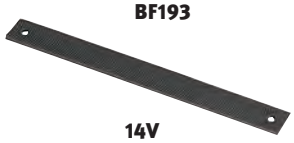
**BF193 Nib File**
- Removes unwanted paint runs, helps eliminate dribbles and drops
- Gently shaves run without digging into surface


BF193

## Flexible Curved Tooth Files

**14V Curved Tooth File**
14", eight teeth per inch. Rough cut. Use with BF775C Handle.

**14V12 Curved Tooth File**
14", 12 teeth per inch. Fine cut. Use with BF775C Handle.


14V

## File Handles (Blue-Point®)

- Wooden, twist-on handles with case hardened threaded steel inserts

**GA616 File Handle**
For 8CT curved tooth file.

**GA617 File Handle**
For 10CT curved tooth file.

**GA618 File Handle**
For 12CT curved tooth file.

**BF775C Flexible File Holder**
- Light and rigid with a large aluminum handle, adjustable turnbuckle and permanently attached strap


GA616


BF775C

# RIVETING AND NUT SETTING

## Nut Setting/Thread Setting Kits *(Blue-Point)*

**HP650 Thread Setter Kit**
- Includes: rugged thread setter tool and an assortment of fractional Klik® Poly-Nuts: 12 each 8-32, 10-24, 10-32; (8) 1/4"-20 and (6) 5/16"-18 threads
- Includes required nose pieces and mandrels for setting the above sizes
- Packaged in a storage case

**HP650M Metric Thread Setter Kit**
- Metric version of the HP650 with metric polynuts, including 25 each 4 mm and 5 mm, (15) 6 mm and (10) 8 mm threads
- Includes thread setter tool, required nose pieces and mandrels packaged in a storage case



HP650M

**⚠WARNING**
- Keep away from children
- Read safety precautions on pages W1 to W4

# BODY: RIVETING AND NUT SETTING



HP200A



HP300



HPKL2



HP2



HPS202

## Rivet Kits (Blue-Point®)

**HP200A Riveter Kit**
- Includes: HP2 rivet tool, 1/8" drill bit and 200 assorted rivets in 1/8" and 3/16" diameters plus a 120° countersink

**HP300 Large Blind Rivet Kit**
- Extra long 21" handled riveter includes three nosepieces
- Includes a bag of 50 Klik-Split® rivets
- Reorder quantities of *Klik-Split* and Klik-Fast® rivets are packaged 50 per bag

**HPKL2 Plastic Rivet Kit**
- For plastic rivets that hold fascia strips, inner fenders and other plastic parts on GM®, Ford®, Chrysler® and VW® vehicles
- Includes: rivet setter and four styles of plastic rivets: two 5 mm types, 2two 6.3 mm types

## Riveting Tools *(Blue-Point)*

**HP2 Rivet Tool**
- Four nosepieces for 3/32"–3/16" diameter rivets
- For 1/8"–5/8" thickness
- Made of aluminum alloy

**HP30N Optional Rivet Nosepiece**
- Use with HP2 rivet tool to replace OEM welded studs on trim molding
- For rivets with 1/8" body diameter
- 7/32" head diameter

**HPS202 Rivet Tool**
- Head swivels 360° to rivet at any angle
- Fasten metal, leather, canvas and vinyl
- Sets 3/32", 1/8", 5/32" and 3/16" rivets
- Four interchangeable nosepieces store in handle when not in use

# DOOR TOOLS



UTS105A

## Upholstery and Trim Tools *(Blue-Point)*

- Remove door and trim panels quickly without damage
- Wide blades on door tools reduce risk of damage during panel removal
- Stainless-steel blades are heat-treated for rigidity
- Comfortable composite handles feature a contour thumb stop for maximum control

| Stock No. | Description | Blade Width, inches | Overall Length, inches | Set Contains: UTS105A |
|---|---|---|---|---|
| UTV614A | "V" Double Step Blade Door Panel Tool | 1 1/4 | 9 1/8 | • |
| UTV615A | "U" Blade Door Panel Tool | 1 1/4 | 9 1/8 | • |
| UTV616A | "U" Blade Mini Trim Panel Tool | 1/2 | 9 | • |
| UTV617A | "V" Blade Mini Trim Panel Tool | 1/2 | 9 | • |
| UTV618A | Reverse "U" Blade Door Panel Tool | 1 1/4 | 10 | • |



YA1201



YA214



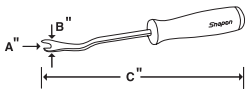
YA331

## Specialty Door Tools *(Blue-Point)*

**YA1201 Door Panel Remover**
- For *GM* and *Ford* vehicles
- Designed to prevent plastic barbed fasteners from being pulled through the panel

**YA214 Door Hinge Adjuster**
- Adjusts door hinge position on most vehicles
- Works on either bolted or welded hinges
- Two-headed pin adaptor allows adjustment on doors with both small and large latches
- 24" overall length

**YA331 Clip Removal Tool**
- Tapered forks slide under most types of auto body clips
- A squeeze of the handles pops the clips out




## Soft-Grip Trim Pad Tools

- Remove fasteners that secure door panels and trim pieces without damage to panel or trim
- Soft-grip handles with contour thumb stop
- Distinct pivot point is designed for appropriate leverage and to discourage twisting that may damage panel or trim piece

| Stock No. | A | B | C | Red (ASG103BR) | Orange (ASG103BO) | Green (ASG103BG) |
|---|---|---|---|---|---|---|
| ASG185BR | 7/32 | 9/16 | 10 | • | | |
| ASG185BO | 7/32 | 9/16 | 10 | | • | |
| ASG185BG | 7/32 | 9/16 | 10 | | | • |
| ASG186BR | 3/8 | 13/16 | 10 | • | | |
| ASG186BO | 3/8 | 13/16 | 10 | | • | |
| ASG186BG | 3/8 | 13/16 | 10 | | | • |
| ASG187BR | 3/8 | 13/16 | 20 | • | | |
| ASG187BO | 3/8 | 13/16 | 20 | | • | |
| ASG187BG | 3/8 | 13/16 | 20 | | | • |
| ASG188BR | 7/16 | 13/16 | 10 | | | |
| ASG189BR | 7/16 | 13/16 | 20 | | | |
| ASG190BR | 3/8 | 13/16 | 20 | | | |


ASG185BR


ASG188BR


ASG186BG


ASG187BO


ASG189BR


ASG190BR


ASG103BR

## Soft Grip Dished Trim Pad Tools

- Smooth dish profile and wide gap to fit vehicles utilizing conical x-mass style retainers for quick removal without damage
- Dished blade for better door panel clip and retainer contact
- Soft grip handle for comfort and control
- Chrome finish helps prevent corrosion and facilitates cleanup

**Applications:** Ford®, GM®, Toyota® and more

| Stock No. | Opening Size, inches | Blade Width, inches | Overall Length, inches | Set Contains: (ASGD102BR) |
|---|---|---|---|---|
| ASGD1BR | 7/16 | 13/16 | 10 | |
| ASGDL1BR | 7/16 | 13/16 | 20 | |


ASGD1BR


ASGDL1BR

## Long Socket, mm

- Long sockets handle the long thread of bumper cover fasteners where deep sockets cannot
- 10mm and 11mm are the most popular fastener sizes for bumper cover bolts found on most European and US vehicles
- Flank Drive® wrenching configuration where the socket grips the fastener on the flanks/flats increasing torque by up to 15%–20%
- Manufactured from special alloy steel, precision forged and heat-treated for optimum strength and durability
- Nickel-chrome plating helps protect against corrosion and makes it easy to wipe clean

| Stock No. | Description | Set Contains: (102STMML) |
|---|---|---|
| STMML10 | Socket, Metric, Long, 10 mm, 6 pt. | • |
| STMML11 | Socket, Metric, Long, 11 mm, 6 pt. | • |


102STMML

## Shallow Torx with Countersink

**FLCE120 *TORX* Socket with Countersink**

- Use to remove/install fasteners that hold window regulators in place for BMW® 5 and 7 Series


FLCE120

**⚠WARNING**

- Plastic handle does not protect against shock
- Read safety precautions on pages W1 to W4

# BODY: DOOR TOOLS



DPT7A



A159



A161B



A177A



A179A



S9614A



S9538A



S6103A



A181

## Door Handle/Trim Pad/Trim Nuts

**DPT7A Door Tool Set**
- Includes the seven most needed tools for removing or replacing door trim, trim pads and handles
- Storage tray

**A159 Door Handle Tool**
- For most GM® cars and trucks (except Cadillac®), plus some Ford® cars
- Plastic dipped offset handle
- 10 7/8" long

**A161B Trim Pad Remover**
- For *GM*, *Ford* and Chrysler® vehicles
- Features a screwdriver type handle
- 7 3/4" long

**A161BO Trim Pad Remover**
- Orange handle, same features as A161B

**A177A Trim Pad Remover**
- For *GM* vehicles and most imports
- Same design as A161B except for different applications
- 7 1/2" long

**A177AO Trim Pad Remover**
- Orange handle, same features as A177A

**A179A Trim Pad Remover**
- For all *GM* door trim panels
- Curved blade helps remove plastic clips and nail type clips without damage to either the clips or the trim

**S9614A Trim Nut Driver**
- For *GM* vehicles
- Similar to S6103A but is for use with 5/16" internal hex trim nuts
- 1/4" drive, 1 7/8" long overall

**S9538A Door Handle Tool**
- For most late model *Chrysler* vehicles
- Hook end is designed for use on older style handles

**S6103A Door Trim Palnut Driver**
- For *Ford* and *GM* vehicles
- For easy servicing of 3/8" internal hex trim nuts used on door trim panels and molding
- 1/4" drive, 1 7/8" long overall

**A181 Trim Pad Remover**
- Services plastic trim fasteners on Honda®, Toyota®, Acura®, Hyundai® and some *Ford* trucks
- Similar in design to A161B. 7 1/2" long
- Not included in DPT7A set

# SPECIALTY TOOLS



YA335



YA336



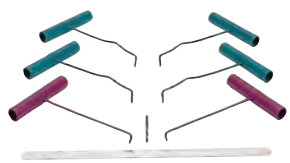
BF801



BF802



BF803



BF200

## Body Clip Tools (Blue-Point®)

**YA335 Body Clip Pliers**
- Steel levers enclosed in PMS plastic to prevent scratches
- Tips have a specified angle and size that deliver the most versatile clip tool on the market
- Eliminates need to buy multiple sets of trim clip pliers for different applications
- Specially designed and patented pliers will remove any clip found on trim, bumpers, etc.

**YA336 Body Clip Pliers**
- Will remove almost any clip type from trim, bumpers, etc.
- Ergonomic tool with special angled tips for access to tight spaces
- Steel levers encased in glass-filled nylon for lightweight comfort
- Length: 9"; Jaw length: 1 1/2"

## Suction Cups

**BF801 Heavy Duty Suction Tool**
- Pull out dents or handle glass
- Handle increases pulling power
- 5" suction cup

**BF802 Heavy Duty Dual Suction Cup Tool**
- For pulling more stubborn dents or lifting larger materials
- Handle has plenty of room for two hands
- Trigger releases both 4" cups simultaneously

**BF803 Suction Cup**
- Two finger grips for easy lifting, two projecting tabs for quick release
- 3 1/4" diameter

## Picks/Rods

**BF200 Pull Rod Set**
- Drill 9/64" holes and pull metal to shape
- Includes four pull rods, two pick pulls, a straight edge and a drill bit
- Rods lift metal without distortion
- No need to remove upholstery



DHS108



DHW1



YA6620

## Door Hinge Tools (Blue-Point®)

| Stock No. | Description | Size | Hex Size | Length |
|---|---|---|---|---|
| BMAS60 | Triple Square Bit | 6 mm | 5/16" | 13/16" |
| BMAS80 | Triple Square Bit | 8 mm | 5/16" | 13/16" |
| BMAS100 | Triple Square Bit | 10 mm | 5/16" | 13/16" |
| BMAS120 | Triple Square Bit | 12 mm | 5/16" | 13/16" |
| SDMTAS30 | TORX® Bit | T30 | 5/16 | 13/16" |
| SDMTAS40 | *TORX* Bit | T40 | 5/16 | 13/16" |
| SDMTAS45 | *TORX* Bit | T45 | 5/16 | 13/16" |

**DHS108 Door Hinge Removal Set**
- Door hinge applications include VW®, Audi®, Jeep® Cherokee® (1997 and 1998) and early model Ford® Escort®
- Various applications on *Audi*, *VW*, and Mercedes® vehicles plus *Mercedes* rear toe adjustment and head bolts on some early models
- Set includes DHW1 ratcheting bit wrench, BMAS60–BMAS120 triple square sockets (6 mm–12 mm) and SDMTAS30–SDMTAS45 *TORX* sockets (T30–T45)
- Plastic storage pouch and bit holder included EU–GB

**DHW1 Reversible Ratcheting Bit Wrench**
- Overall length: 10.75" (273 mm)
- Low head clearance for access to tight spots
- Internal ring in square drive provides more secure bit retention than magnetic models

**YA6620 Door Hinge Bushing Installer for GM® Vehicles**
- Use on *GM* vehicles with replaceable silicon bronze door hinge bushings
- Tool provides easy access to restricted areas of the hinge
- Accurately guides and holds the bushing in place while tapping with a hammer or squeezing with pliers

**Applications:** Chevrolet® S10 and Sonoma (1982–2004), 1/2 and 3/4 ton trucks (1980–1999), one ton trucks (1980–2001), Blazer (1980–2005), Suburban® (1980 and later), Tahoe® (1980 and later), Astro® and Express (1980 and later) and Avalanche® (2002 and later)



LPK620



YA511



YA501F



YA610A



BF272



YA520



LOS145A

## Lock Picks/Lockout Tools *(Blue-Point)*

**LPK620 Master Lock Pick Set**
- 37pc set includes 6pc import rocker pick set, 12pc pick set for *GM* vehicles, 5pc *Ford* automotive rocker lock pick set, 6pc Chrysler® lock pick set, 6pc set for wafer locks on import vehicles, harpoon pick for removing broken keys, tweezer type universal lock turning wrench and a gas cap pick tool

**YA511 Lockout Tool Set**
- Contains 17 specialized tools for unlocking car, van and truck locks
- Includes many of the components of the YA501E set plus additional service components
- Includes a penlight and instruction manual in a kit bag

**YA501F Lockout Tool Set**
- Contains 15 specialized tools for unlocking car, van and truck locks
- Includes J-tool for Japanese vehicles, as well as *GM* tool to service Caprice®, Buick® and Oldsmobile® vehicles
- Included *Chrysler* tool also services Toyota® Camry® vehicles
- BF272 Inflatable Wedge and instuction manual included

**YA610A Lock Opening Reforming Tool**
- Reforms damaged lock openings to original contour on *GM*, *Ford*, *Chrysler* and most import cars

**BF272 Inflatable Wedge**
- Offers safe entry in a lock-out situation without damage to the body finish
- Slip the deflated unit between door frame and body, inflate wedge by slowly applying pumping pressure to pull the door away from vehicle body
- Can also be used to gain entry by separating the weather stripping from the vehicle window or to adjust body panels

**YA520 Door Lockout Kit**
- Includes: Two plastic wedges to create gap between door and frame, Day-Glo® yellow easy-access jim to reach inside door handles and plastic slim jim for use on door knobs

**LOS145A Door Lockout Set**
- No danger of airbag activation or disconnected door linkages
- Actuate the door handle, manual lock button or electric lock button on most cars and trucks
- Includes: 4pc door unlocking tool that screws together without couplers for easy assembly and storage, plastic slim jim, two glow-in-the dark tips, two plastic wedges to create gap between door and frame without damaging door or weather stripping and BF272 Inflatable Wedge
- Use the BF272 to easily separate door from body without damage to the vehicle
- Unlocking tool features a middle extension piece to reach across the car in extended use applications
- For sale to registered locksmiths, police and bona fide repair professionals only

**⚠WARNING**

- Do not use "cheater bars" on handles
- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# BODY: WINDOW AND WINDSHIELD



GA243



YA109C



WK100



WK200



YA208A



A192



S9610

## Window and Windshield Removal Tools

**GA243 Molding Release Tool**
- Use to remove window and windshield moldings on cemented glass

**YA109C Windshield Removal Tool (Blue Point®)**
- Steel cable pull handle
- Replaceable steel cutting blades can be resharpened
- For GM®, Chrysler® vehicles and other cars with windshields set in place with sealant

**WK100 Windshield Knife *(Blue Point)***
- Cuts hardened urethane down to the dash
- Flush blade retention screw helps prevent damage to the dash and moldings
- Rigid aluminum shaft will not flex
- Long length provides cutting leverage and reach
- Cushion grip handle for extra comfort
- Includes one blade
- Uses YA1860 replacement blades
- 18" long

**WK200 Windshield Knife *(Blue Point)***
- Cuts hardened urethane down to the dash
- Flush blade retention screw helps prevent damage to the dash and moldings
- Rigid aluminum shaft will not flex
- Long length provides cutting leverage and reach
- Vinyl grip handle for extra comfort
- Includes one blade
- 24" long
- Uses YA1860 replacement blades

**YA208A Windshield Locking Strip Installation Tool**
- Wedge openings in two widths make short work of installing nearly all locking strips
- Includes special tip for Dodge® truck applications
- 4" contoured handle and 4" metal shank

**A192 Windshield Wiper Arm Removal Tool**
- Easily remove wiper arms on most vehicles
- Both wide and narrow prying ends
- Do not use on wiper arms bolted to the shaft

**S9610 Window Sash Nut Spanner Socket**
- 3/8" drive and 15/32" long
- For *GM* and *Chrysler* cars and light trucks



YA5200A



WSC2



PKNG90



YA6390

## Window Scrapers (Blue-Point®)

**YA5200A Razor Blade Scraper**
- Unique shape fits into tight spots such as the area between dash and windshield
- Use any standard, single-edge razor blade
- Storage for extra blades in screwdriver style handle. 11" long

**WSC2 Plastic Blade Window Scraper**
- Scrapes windows, windshields and more
- Includes a plastic blade, or use any standard, single-edge razor blade
- 8" long tool folds to only 4 5/8"

**PKNG90 Glass/Acrylic Large Scraper**
- Designed for use on glass and acrylic surfaces
- Large handle for easy grip
- Orange color to visually identify difference from black nylon glass-filled products
- Works well when removing dirt/debris, windshield decals, adhesive mounts for mirrors, dealer sticker removal, tree sap, algae removal from fiberglass boats, and removal of window tinting

## Window Holder *(Blue-Point)*

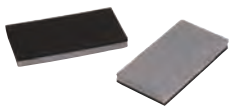
**YA6390 Window Holder**
- Holds side window glass up when working on the regulator
- Suction cups are attached to both sides of the glass with a cable over the door frame, preventing the glass from falling down the door



BF185A



BF190



BF192A



BF195

## Sanding (Blue-Point®)

**BF185A Sanding Block**
- For flat or curved surfaces with wet or dry sandpaper
- 5 x 2 3/4"

**BF189A Sanding Block**
- For flat or curved surfaces with wet or dry sandpaper
- 5 x 2 3/4"

**BF190 Sanding Block**
- All-purpose, multi-radius edge and flat sander
- Flexible body conforms to most sanding surfaces
- 5 1/2" long

**BF192A Sanding Block**
- Double sided, wet/dry sanding block
- Soft side sands irregular surfaces
- Stiff side sands flat and curved surfaces

**BF195 Sanding Block**
- Multi-purpose, radius, groove-angle and corner sander
- Flexible body conforms to most surfaces; 5 1/2" long



BFS1000B



YAUVWATER



NYZ7007HD

## Bumper Cover Paint Stands

**BFS1000B Bumper Cover Painting Stand**
- Stand holds the bumper cover securely for painting
- Five different locking positions on the stand and full 90° rotation provide maximum versatility
- Lightweight at 23 lb and compact to store
- Casters provide full mobility

## Water Body Dye

**YAUVWATER Water Body Dye**
- Ideal for use by auto body and glass repair shops
- Fluorescent dye easily detects gaps causing wind noise plus leaks around sunroofs, door trim, trunk lids, window seals and windshields
- Simply mix bottled dye with water and spray over outer area
- Check for leaks with UV lamp
- Easily cleaned off with water after repair
- Recommended for use with ACTUVLITEA UV light kit

## Mastic Removal Tools

**NYZ7007HD Manual Mastic Removal Kit**
- Hand kit is ideal for aviation, automotive and industrial use, especially for delicate jobs and limited access scraping applications
- NYROC® blades are sharpened with sandpaper, small stone or optional pneumatic sharpener
- Kit includes six 1" *NYROC* blades, six 1/2" *NYROC* blades, three 1/4" *NYROC* blades and ergonomic rubber handle



WARNING • Read safety precautions on pages W1 to W4

# BODY: ANTENNA/MIRROR



YA7575




RRT105



S8703



S9605B

## Mirror and Radio Trim Sockets

**YA7575 Radio Removal Tool for Ford® Vehicles (Blue-Point®)**
- Insert tool components into holes on the radio faceplate to release the retaining clips on the radio
- Same as *Ford* No. T87P-19061-A

**Applications:** 1987 and later Mustang®, 1988 and later Tempo®/Topaz®, 1989 and later Continental®, 1990 and later Taurus®/Sable®, Ranger® Bronco® II, Probe®, Lincoln® Town Car, Mark VII®, Crown Victoria®/Grand Marquis, Thunderbird®/Cougar, F-Series pickups, E-Series vans, 1991 and later Explorer® and 1995 and later Windstar® vehicles

**RRT105 Car Stereo Removal Tool Kit**
- Includes: Six tools for car stereo removal
- Enclosed instruction sheet lists exact model application for each manufacturer
- EU–GB

**Applications:** Audi®, BMW®, *Ford*, Land Rover®, *Lincoln*, Mazda®, Mercedes®, Mercury®, Merkur®, Porsche®, Saab® and VW®

**S8703 Remote Control Mirror Socket**
- Hollow socket clears adjustment lever; two-prong socket has a 3/8" square drive
- 19/32" diameter on drive end; 21/32" diameter on socket end
- 2 1/16" long
- Nickel-chrome finish
- Services many *Ford* and *VW* vehicles

**S9605B Radio Trim Nut Socket**
Similar in appearance and function to S8703. 1/4" square drive. 7/16" diameter on drive end; 9/16" diameter on socket end. 2 5/16" long. Services some GM® and *Ford* vehicles.



S6166



2160ANT

## Antenna Nut Tools

**S6166 Antenna Nut Socket**
- Three-prong socket with 11/16" external hex
- 3/4" diameter, 1 1/2" long
- Services 1987 later Chrysler® vehicles

**2160ANT Antenna Wrench *(Blue-Point)***
- Four configurations will fit most antenna bezel nuts on US and imported vehicles
- 10 mm opening for removing mast-type antennas
- Measures 7 1/4" x 1 1/2" x 1/8"
- Anodized finish

## Spot Weld Cutters (Blue-Point®)

**SWDK4 Spot Weld Cutter Set**
- 4pc cutter set designed for high-speed cutting of up to 2,000 RPM
- Self-centering points minimize walking

**SWDK412 Spot Weld Cutter**
1/2"

**SWDK414 Spot Weld Cutter**
1/4"

**SWDK438 Spot Weld Cutter**
3/8"

**SWDK4516 Spot Weld Cutter**
5/16"



SWDK4

## Infrared Curing Light

**BFLIGHT1500A Infrared Curing Lamp (120V AC)**
- Use to cure paint, primer, body filler, bonding adhesive and plastic repair products
- Adjustable lamp height and pivot
- Four swivel casters for easy maneuverability
- UL® listed

Cure times at 18" from surface:
10 minutes – 2 K primers,
waterborn base coat, filler/stoppers
15 minutes – 2 K plastic repair,
plastic body fillers, acrylic enamels
30 minutes – 2K top coats,
high build primers, structural adhesives
35 minutes – polyurethane,
synthetic enamels, high solids clear


BFLIGHT1500A

**ET1400 Heat Gun**
- Variable temperature selection
- *UL*/CSA® listed
- Up to 1,050 °F with three-way switch


ET1400

## HEADLAMP AIMING

## Headlamp Spring Tool

**HE52B Headlamp Spring Tool**
- For servicing alignment springs
- 3/16" diameter shank anchored in a screwdriver-style handle
- 7" long


HE52B

## Headlamp Adjuster

**RBYF445 Ratcheting Headlight Wrench**
- 8" overall length allows access to headlight adjustment screws Applications work on most late-model Ford® vehicles with 4 mm and 4.5 mm adjusters (found on aerodynamic designs) and headlights with rear mount adjusters


RBYF445



WARNING • Read safety precautions on pages W1 to W4

# PAINT SPRAY: SPRAY GUNS

A new generation of Blue-Point® spray guns for primer, base and clear coat. Designed for the automotive refinishing painter. Lightweight and well-balanced while delivering a quality, first-class automotive finish. Lowest trigger pull among guns in its class.

Unmatched spray pattern size and quality repair kits. Optional interchangeable 125, 250 and 600 cc aluminum cups are available. Optional 3M® PPS adaptor is available. Full one-year warranty.



BLP13HVLP



BLP14HVLP



BLP15HVLP



BLP18HVLP



BLP10MHVLP

## Full Size/Miniature – HVLP

| Stock No. | Fluid Tip, mm | Air Consumption, SCFM | Max. Inlet HVLP PSI (bar, kPa) | Dry Weight without Cup, oz (grams) | Air Inlet Thread Size, NPSM | Cup Size, cc | Application |
|---|---|---|---|---|---|---|---|
| BLP13HVLP | 1.3 | 9.5 | 29 (2.0, 200) | 12.6 (359) | 1/4" | 600 | High solids, colors and clears |
| BLP14HVLP | 1.4 | 9.5 | 29 (2.0, 200) | 12.6 (359) | 1/4" | 600 | High solids, colors and clears |
| BLP15HVLP | 1.5 | 9.5 | 29 (2.0, 200) | 12.6 (359) | 1/4" | 600 | Medium solids, colors and clears |
| BLP18HVLP | 1.8 | 9.5 | 29 (2.0, 200) | 12.6 (359) | 1/4" | 600 | Primer, high viscosity materials |
| BLP10MHVLP | 1.0 | 7.0 | 29 (20, 200) | 11.4 (322) | 1/4" | 125 | Primer, base and clear |



BLPK14HVLP

## Economy – HVLP

| Stock No. | Fluid Tip, mm | Air Consumption, SCFM | Air Inlet Thread Size, NPSM | Air Pressure Range, PSI | Fluid (Water) Delivery | Cup Size, cc |
|---|---|---|---|---|---|---|
| BLPK14HVLP | 1.4 | 14.5 | 1/4" | 30–43 PSI | 190–250 mL/min | 600 |



BLP14CONV

## Full Size – Conventional (non-HVLP)

| Stock No. | Fluid Tip, mm | Air consumption, SCFM | Max. Inlet HVLP psi (bar, kPa) | Dry Weight without Cup, oz (grams) | Air Inlet Thread Size, NPSM | Cup Size, cc | Application |
|---|---|---|---|---|---|---|---|
| BLP14CONV | 1.4 | 9.5 | — | 12.6 (359) | 1.4" | 600 | All automotive colors and clears |

# SPRAY GUN ACCESSORIES



BF7130

## Air/Fluid Hoses

**BF7220 Fluid Hose**
25' x 3/8" I.D. fluid hose with 3/8" FPT connectors.

**BF7130 Air/Fluid Hose Kit**
- 6' hose kit for the BF652 pressure cup
- Kit includes 5/16" I.D. air hose with 1/4" FPT connectors and 1/4" I.D. fluid hose with 3/8" FPT connectors

## Air Caps and Service Kits

**BF16111 Air Cap**
General duty cap (red ring).

**BF16113 Air Cap**
Clear coat cap (gold ring).

**BF16114 Air Cap**
Material organizer cap (blue ring).

**BF501RK Service Kit**
For BF501 spray guns.

**BF590RK Service Kit**
For BF590 spray guns.



BF7505

## Gravity Feed Cup

**BF7505 Aluminum Miniature Gravity Feed Cup**
- 4 oz (125 cc) capacity
- Miniature aluminum gravity feed cup
- Includes adaptor to fit *Blue-Point* HVLP gravity feed spray guns


BF521A


BF520A


BF530A


BF540A

## Air Filters/Air Control Units

**BF521A Air Control Unit**
- Includes regulator with 160 PSI inverted gauge and air cock
- Two regulated outlets
- One filtered main line outlet
- Air Inlet: 1/2" NPT(f). Filter Capacity: 75 CFM
- Regulator capacity: 50 CFM

**BF520A Air Filter**
- Reusable edge type 5 micron filter element
- Highly effective at removing water, oil and other contamination
- Air Inlet: 1/2" FPT Air Outlets: 3/8" FPT and 1/4" FPT (plugged). Filter Capacity: 75 CFM

**BF530A Air Filter**
- Reusable edge type 5 micron filter element
- Highly effective at removing water, oil and other contamination
- Air Inlet: 1/2" FPT Air Outlet: two outlets @ 3/8" FPT
- Filter Capacity: 120 CFM

**BF540A Mechanic's Air Filter**
- Portable, mounts easily anywhere
- Designed for use with quick couplers
- Air Inlet: 1/4" FPT Air Outlets: 1/4" FPT and 1/4" FPT (plugged). Filter Capacity: 75 CFM


BF525


BF555


BF550


BF1210


BF7000

## Air Valves/Air Regulators

**BF525 Air Pressure Regulator**
- Two regulated outlets
- Includes 160 PSI air gauge and air cock (1/4" MPT)
- Capacity: 50 CFM

**BF555 Air Adjusting Valve (with Gauge)**
- Designed for use with HVLP spray guns
- Includes 160 PSI pressure gauge
- Air Inlet: 1/4" MPT Air Outlet: 1/4" FPT (swivel nut)

**BF550 Air Adjusting Valve**
- Precision-tapered valve
- Full open to close with approximately four turns: infinitely adjustable
- Large, easy-to-handle Inlet: 1/4" MPT Air Outlet: 1/4" FPT (swivel nut)

**BF1210 "Green Zone" Air Regulator**
- Reads both inlet pressure and air cap pressures

**BF7000 Disposable InLine Filter**
- Disposable filter removes contaminants that condense in the air hose between wall-mounted filter and spray gun
- Reduces paint defects
- Easy installation
- Card of two filters

## Air Pressure Regulators

**BF1410 Air Pressure Regulator**
- Small, lightweight, true diaphragm mini regulator attaches to any spray gun (including HVLP models) for accurate air pressure lation
- Push/Pull lock pressure setting
- Features easy-to-read 0–160 PSI gauge
- Capacity of 22 CFM (158 SCFM) [623 L/min]

**YA999 Air/Water Separator (Blue-Point®)**
- Separates water from compressed air
- Includes drain valve for periodic draining
- 3 1/2" L. 1 1/2" diameter


BF1410



YA999

**⚠WARNING**
- Use in well ventilated area
- Read safety precautions on pages W1 to W4

# PAINT SPRAY: SPRAY GUN ACCESSORIES



AHCC90C



AHCCP90C

## High-Volume Hose Connectors

**AHCC90C Quick Coupler**
- High-volume 1/4" female quick coupler
- Designed to deliver high volumes of air to spray guns and air tools

**AHCC91C Quick Coupler**
- High-volume 1/4" male quick coupler
- Designed to deliver high volumes of air to spray guns and air tools

**AHCCP90C Impact Wrench Coupler**
- Quick connect 1/4" female nipple
- Designed to deliver high volumes of air to spray guns and air tools

**AHCCP97C Impact Wrench Adaptor**
- Use with AHCC98C high-flow coupler to improve low-pressure performance of 1/2" drive impact wrenches and other high air consumption tools



MRB20

## Paint Gun Hooks / Holders

**MRB20 Magnetic Paint Gun Hook**
- Eliminates having to drill holes in your paint booth to hang your paint gun
- 160 lb of magnetic force

**BF9893 Spray Gun Holder**
- Stand holds up to three gravity feed paint spray guns at one time for refilling
- Adjustable strainer holder
- Steel construction



BF9893

# AIR BRUSHING



BF180B

**BF180B Air Compressor**
- Portable 1/10 HP oil-less diaphragm type compressor features internal bleed
- Compact, lightweight and quiet
- Maximum running pressure of 33 PSI 115V, 60Hz, 2.5A



BF170A

**BF170A Airbrush Set**
- Dual action, internal mix, bottom feed airbrush
- Single needle/nozzle design sprays a variety of reduced acrylics, enamels, lacquers, glazes and airbrush-ready paints
- Excellent choice for multiple applications
- Includes: airbrush, mixing jars, air hose, color cup, extra needle and instruction manual



BF360

**BF360 Airbrush Set**
- Rotating paint reservoir allows gravity or bottom feed
- Engineered to require only one size tip, regulator and needle for application of any properly reduced medium including acrylics gouache, inks, dyes, enamels, lacquers and stains
- Includes: airbrush, two 2 oz jars, one 3/4 oz jar, 6' braided hose, extra needle and tip, plus foam lined storage case



BF171

**BF171 Airbrush Set**
- Single action, external mix, bottom feed airbrush
- Air and paint mix outside the airbrush, creating a larger, coarser dot pattern while providing a heavier spray volume
- For base coating, touch-up projects and automotive painters
- Sprays higher viscosity materials like glazes, stains, enamels and lacquers
- Includes: airbrush, mixing jars, air hose and instructions



BF175TA

**BF175TA Airbrush Set**
- Dual action, internal mix, bottom feed airbrush
- Choice of fine, medium or heavy needle/heads
- Sprays a wide range of properly reduced acrylics, enamels, lacquers, glazes and airbrush ready paints
- Includes: airbrush, mixing jars, air hose, color cup, extra tip, spray regulator, needle and instruction manual in a storage case



BF105

**BF105 Gravity Feed Airbrush Set**
- Ideal for graphic arts and automotive illustration
- Dual action, internal mix, gravity feed airbrush for professional results
- Precise performance for tight line detail
- Single needle, single tip configuration
- 1/3 oz permanently mounted color cup
- Sprays any properly reduced paints
- Operates with lower pressure
- 10–15 PSI
- Optional needle, regulator and tip availabte a finer spray
- Ergonomically balanced for hours of comfortable spraying

# PAINT SPRAY: PAINT GUN CLEANERS/SAFETY EQUIPMENT

## Cabinet Style Paint Gun Cleaner

**PGC500A Paint Gun Cleaner**



PGC500A

- Cleans paint guns in less than two minutes
- Meets SCAQMD air quality rule 1171
- Air safety switch on lid
- Features a high torque rotary vane air motor that requires only 7 CFM at 60 PSI
- Regulator and gauge are included
- Seal-less magnetic drive pump supplies powerful cleaning action, no seals to wear out or replace
- Sprays solvent at 85 PSI
- Reduces solvent consumption up to 90%
- Measures 30" H, 26" L and 24" W in the top

## Paint Gun Cleaning Brushes (Blue-Point®)

**YA7327 Paint Gun Cleaning Brush (Set of 5)**


YA7327

- For "external" paint guns
- Can be used with commonly used cleaning solvents (do not use with solvents marked "corrosive")
- Nylon bristles
- 7 1/2" L

**YA7329 Paint Gun Cleaning Brush (Set of 5)**

- Similar to YA7327 but designed for "fluid tip" paint guns
- 7 3/4" L

**BFCB101 Paint Gun Cleaning Brush Kit**


BFCB101

- General purpose spray gun cleaning kit
- Includes 7pc stainless-steel needle set with handle, 5pc precision mini-twisted brush set, 3/8" pick-up tube brush (12" L), 3/16" nylon end brush, 1/2" nylon body cavity brush, nylon bristle exterior body brush and 1/4" nylon HVLP brush

## Flammables Storage Cabinet

**EQFSC45M Flammables Storage Cabinet**



EQFSC45M

- Store volatile liquids like paints, solvents, alcohol, acetone, gasoline and other chemicals
- 16 gauge walls with full 2" air walls. 45 gallon capacity with 5 gallon spill pan
- Removable fork lift channels for convenient movement and placement of cabinet
- Complies with OSHA #29 CFR 1910, NFPA Code #30 and UFC Code #79
- Spill containment exceeds 5 gallon EPA requirement

| Specifications | Outside Height | Outside Width | Outside Depth | Inside Height | Inside Width | Inside Depth |
|---|---|---|---|---|---|---|
| EQFSC45M | 65" | 43" | 18" | 60" | 40" | 15" |

# ABRASIVE BLAST SYSTEMS: PORTABLE PRESSURE BLAST SYSTEMS

## Air Powered Portable Pressure Blast Systems

**YA441 Pressure Blast System**



YA441

- For cleaning jobs on large surface areas
- Cleans a variety of materials such as concrete, stone, brick and steel
- Unit has a convenient remote control shut down at nozzle handle
- Wheels provide mobility on job site
- Hose length 25', with 1/4" nozzle
- Capacity: 250 lb of abrasive
- Requires 80 CFM at 100 PSI

**YA449A Pressure Blast System (Not Shown)**

- Cleans a variety of materials such as concrete, stone, brick and steel
- Media is controlled by stainless-steel ball valve at nozzle handle
- Capacity: 100 lb of abrasive
- Requires 21 CFM at 100 PSI
- Hose length 10' with 1/8" nozzle

**YA448 Pressure Blaster System**



YA448

- For cleaning jobs where a minimal capacity of media is required
- Cleans a variety of materials such as concrete, stone, brick and steel
- Media is controlled by stainless-steel ball valve at nozzle handle
- Capacity: 40 lb of abrasive
- Requires 21 CFM at 100 PSI
- Hose length 8' with 1/8" nozzle

## Gravity Fed Portable Pressure Blast Systems

**YA432 Gravity Feed Siphon Sandblast System**



YA432

- Portable design is ideal for quick spot cleanups or larger jobs such as body and frame restorations
- Capacity: 40 lb of abrasive
- Hose length 10' with 5/16" nozzle
- Requires 10–18 CFM at 100 PSI

**⚠WARNING**

- Do not direct air or fluid stream at body
- Use in well ventilated area
- Do not expose solvent to flames, sparks or other source of ignition
- Read safety precaution on pages W1 to W4

# ABRASIVE BLAST SYSTEMS: CABINET-TYPE

Snap-on® abrasive blast systems effectively clean metal parts right down to the bare substrate. The applications vary from automotive, manufacturing, restoration to tool and die shops, marine repair and electric motor rebuilders. Cabinet sizes vary from medium sized to larger pressure-fed systems.




YA3825




YA3825PJJ




YA3825PJK




YA3626




YA4826PA

## Clamshell Blast Cabinet

- Features a clamshell lid to assist in loading heavy parts
- Side door for loading smaller parts
- Variable output blast gun with trigger-style control
- High efficiency 135 CFM dust collection system
- Provides user excellent visibility during blasting
- Separates dust from useable media, minimizing waste
- Lower noise output
- Heavy duty steel grating in work area for heavier parts
- Dual fluorescent lights in work area for increased visibility
- Includes 25 lb of glass bead abrasive

| Stock No. | YA3825 | YA3626* | YA4826PA |
|---|---|---|---|
| Inside Dimensions, inches | 16–24 H x 37 1/2 W x 26 D | 23 H x 35 1/2 W x 23 1/2 D | 14–23 H x 48 W x 24 D |
| Side Door Dimensions, inches | 12 H x 17 1/2 W | 12 H x 18 W | 13 H x 19 W |
| Top Opening Dimensions, inches | 25 H x 37 1/2 W | 14 H x 37 W | 24 H x 48 W |
| Overall Dimensions, inches | 70 H x 38 W x 26 D | 58 H x 36 W x 24 D | 60 H x 52 W x 25 D |
| Dust Collection Size in CFM | 135 | 100 | 160 |
| Electrical Requirements | 120V AC, 60Hz | 120V AC, 60Hz | 120V AC, 60Hz |
| European Models | YAH3825EUR† | – | – |

NOTE: European model is 230V AC, 50/60 Hz, Single Phase.
*Blue-Point®
CE




YA4224




YA435




YA437

## Industrial Style Blast Cabinets

- Dust collection system provides user with excellent visibility and features polysateen bags to capture dust and debris
- Dual fluorescent lights in work area for increased visibility
- Heavy duty steel grating in work area to support heavier parts

| Stock No. | Inside Dimensions, inches | Dust Collector Size, CFM | Side Door Dimensions, inches | Top Opening Dimensions, inches | Overall Dimensions, inches | Air Supply Required | Electrical Requirements | European Models |
|---|---|---|---|---|---|---|---|---|
| YA4224 | 29 H x 41 W x 23 D | 135 | 17 H x 18 W | 12 H x 39 1/2 W | 73 H x 43 W x 24 D | 25 CFM at 100 PSI | 120V AC, 60Hz | YAH4224EUR† |
| YA435 | 15 to 23 H x 40 W x 26 D | 270 | 13 H x 17 W | 39 x 24 | 66 H x 40 W x 27 D | 18 CFM at 100 PSI | 120V AC, 60Hz | YAH435-EUR† |
| YA437 | 33 H x 42 1/2 W x 44 D | 405 | 35 H x 42 W | — | 78 H x 44 W x 44 D | 25 CFM at 100 PSI | 120V AC, 60Hz | YAH437-EUR† |

NOTE: European models are 230V AC, 50/60 Hz, single phase.

TECHNICAL SUPPORT 1-800-253-3661

†CE

### YA4224 Abrasive Blast Cabinet with Foot Control

- Right hand door for smaller parts and top-opening lid for larger parts
- Foot pedal control for media delivery reduces operator fatigue

### YA435 Abrasive Blast Cabinet

- Right hand door for smaller parts and full front opening door for larger parts
- Variable output blast gun with trigger style control

### YA437 Large Abrasive Blast Cabinet with Foot Control

- Features a turntable to assist in cleaning larger or multiple parts easily
- Right and left hand doors allow access to turntable
- Foot pedal control for media delivery reduces operator fatigue

# SANDBLASTERS

## Vacuum Sandblaster

### YA428A Vacuum Sandblaster

- Blasts away rust, dirt and paint quickly
- Features a vacuum recovery system at the blast nozzle to eliminate mess
- Media is recycled for continuous use
- Dust is captured in container for ease of disposal
- Wheels and casters offer ease in mobility
- Vacuum recovery system's 90 CFM
- Measures 49" x 18" x 18 1/2"
- Requires 14 CFM at 100 PSI and 120V AC 60 Hz
- European model: YAH428AEUR 230V AC 50/60Hz




YA428A

## Small Sandblaster

### PSB500AR Portable Sandblasting Gun

- For cleaning small areas quickly
- Lightweight aluminum construction
- Flat base provides an upright resting position
- Media capacity 4 lb
- Requires 5–12 CFM at 100 PSI




PSB500AR

WARNING

- Use in well ventilated area
- Read safety precautions on pages W1 to W4

# ABRASIVE BLAST SYSTEMS: SANDBLASTING ACCESSORIES



YAD100A



YAD10102A



YAD007A

## Blast System Accessories

| Stock No. | Nozzle | Air Jets | Blast Gun | Blast Gloves | Window Film Replacement | Replacement Filter |
|---|---|---|---|---|---|---|
| YA3626 | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD723A |
| YA4826PA | YAD2304 | – | – | YAD007A | YAD20061 | YADV723A |
| YA3825 | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD714 |
| YA3825PJJ | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD714 |
| YA3825PJK | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD714 |
| YA4224 | YAD10104A | YAD10105A | YAD10102A | YAD007A | YAD20061 | YAD674 |
| YA3423 | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD714 |
| YA435 | YAD115 | YAD104 | YAD100A | YAD007A | YAD20061 | YAD019 |
| YA437 | YAD10104A | YAD10105A | YAD10102A | YAD007A | YAD20061 | YAD018 |
| YA3220 | YAD105 | YAD104 | YAD100A | YAD007A | YAD20061 | N/A |



YAD4000



YAD4003



YA428-1



YA462A



YA466A

## Abrasives

**YAD4000 Steel Grit Abrasive**
For rough cleaning and removing rust and scale. 50 lb bucket.

**YAD4003 Steel Shot Abrasive**
For peening and cleaning castings and forgings. 50 lb bucket.

**YA428-1 C-Garnet Abrasive**
Does not break down as quickly as silica sand. Creates less dust. 50 lb bucket.

**YA461A Glass Bead Abrasive (Coarse)**
For coarse satin finish with minimum surface removal. 40–60 coarse grit, 50 lb bucket.

**YA462A Glass Bead Abrasive (Medium)**
For medium satin finish with minimum surface removal. 60–100 medium grit, 50 lb bucket.

**YA463A Glass Bead Abrasive (Fine)**
Use for fine satin finish with minimum surface removal. 100–200 fine grit, 50 lb bucket.

**YA466A Aluminum Oxide Abrasive**
A tough abrasive used for fast removal of heavy oxidation and burrs. Low dust formula. 50 lb bucket.



YA415A

## Helmet/Hood

**YA415A Cotton Twill Hood**

- Bump Cap protects head, face and neck from dust
- Light duty protector for well ventilated areas



WV1560VIS

## High Visibility Safety Vises

- Coated in high visibility yellow, which conforms to the OSHA safety color standard for physical hazards regulation #1910.144
- Powder-coat finish resists scratches and gives a tough, durable finish
- Handles and lockdowns are black oxide-coated for additional corrosion resistance
- Units feature a straight line design with totally enclosed spindle and nut, replacement pipe and serrated vise jaws
- 360° swivel base

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Pipe Capacity, inches |
|---|---|---|---|
| WV1550VIS | 5 | 5 1/4 | 1/4–2 1/2 |
| WV1560VIS | 6 | 5 3/4 | 1/4–3 1/2 |



WV1745



WV4044

## Mechanic's Vises

- For general purpose service and maintenance shops
- Replaceable, reversible top jaws (one serrated steel, one smooth), built-in pipe jaws, swivel base and large anvil

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Pipe Capacity, inches | Throat Depth, inches | Copper Jaw Cap |
|---|---|---|---|---|---|
| WV1745 | 4 1/2 | 4 | 3 1/4 | 3 | WV4044 |
| WV1755 | 5 1/2 | 5 | 3/8–3 | 3 3/4 | WV4045 |
| WV1765 | 6 1/2 | 6 1/2 | 3/8–3 1/2 | 4 | WV4046 |
| WV1780A | 8 | 7 | 1/8–3 1/2 | 4 3/4 | WV4046 |

## Machinist's Vises *(Blue-Point)*

- Choice of swivel or non-swivel base
- Large anvil, totally enclosed spindle and nut
- 60,000 PSI high ductile iron for main stress parts
- Swivel models feature slip-proof 360° base, serrated teeth and double lockdowns

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Throat Depth, inches | Base |
|---|---|---|---|---|
| WV300N | 3 | 4 3/4 | 2 5/8 | Stationary |
| WV400N | 4 | 6 1/2 | 3 1/2 | Stationary |
| WV450N | 4 1/2 | 7 1/2 | 4 | Stationary |
| WV500N | 5 | 8 | 4 1/4 | Stationary |
| WV600N | 6 | 10 | 5 1/2 | Stationary |
| WV800N | 8 | 12 | 5 13/16 | Stationary |
| WV300S | 3 | 4 3/4 | 2 5/8 | Swivel |
| WV350S | 3 1/2 | 5 1/4 | 2 3/4 | Swivel |
| WV400S | 4 | 6 1/2 | 3 1/2 | Swivel |
| WV450S | 4 1/2 | 7 1/2 | 4 | Swivel |
| WV500S | 5 | 8 | 4 1/4 | Swivel |
| WV600S | 6 | 10 | 5 1/2 | Swivel |
| WV800S | 8 | 12 | 5 13/16 | Swivel |



WV676

## Utility Vises

- Regular duty utility vises can be used for a variety of shop applications
- Replaceable serrated jaws, built-in pipe jaws, swivel base and large anvil to handle a variety of jobs

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Pipe Capacity, inches | Throat Depth, inches |
|---|---|---|---|---|
| WV674* | 4 1/2 | 3 3/4 | 1/8–2 | 2 5/8 |
| WV675 | 5 1/2 | 4 3/4 | 1/8–2 | 3 7/16 |
| WV676 | 6 1/2 | 5 3/4 | 1/8–2 1/2 | 3 11/16 |
| WV656 | 6 | 6 | 1/8–3 | 4 1/4 |
| WV648* | 8 | 7 1/2 | 1/8–3 | 4 1/2 |

*Features built-in pipe jaws, replaceable steel vise jaw inserts, a locking swivel base and rugged 30,000 PSI body casting.



WVC2

## Pipe and Bench Vises (Blue-Point®)

- Large anvil, totally enclosed spindle and nut
- 60,000 PSI high ductile iron for main stress parts
- Replaceable steel vise jaw inserts and milled steel pipe jaws
- Alloy steel slide bar

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Pipe Capacity, inches | Throat Depth, inches |
|---|---|---|---|---|
| WVC0 | 3 1/2 | 4 | 1/8–2 1/2 | 4 1/2 |
| WVC2 | 5 | 7 | 1/8–4 1/2 | 5 5/16 |
| WVC3 | 6 | 9 | 3/8–6 | 6 5/8 |



WV400N



WV400S

**⚠WARNING**

- Keep away from children
- Read safety precautions on pages W1 to W4

# VISES



WVE105RT

## Forged Bench Vises (Blue-Point®)

- Hardened reversible jaws can be reversed for non-marring applications or replaced when worn
- Competitive forged units do not offer replaceable jaws
- 360° swivel base increases versatility because vise can be locked in virtually any position
- Jaw adjustment screws ensure proper alignment and accuracy

| Stock No. | Jaw Width, inches | Maximum Opening, inches | Pipe Capacity, inches |
|---|---|---|---|
| WVE104RT | 4 | 3 15/16 | 1/4–3/4 |
| WVE105RT | 5 | 5 7/8 | 1/2–2 1/2 |
| WVE106RT | 6 | 7 7/8 | 1/2–3 |
| WVE107RT | 7 | 8 7/8 | 3/4–4 |



BLPMV5

## Bench Vises (Blue-Point®)

- Single piece steel blocks for higher load capacity
- Extended anvil
- Lubrication points for maintenance
- Swivel base
- Capacity range from 3.5–9 ton at maximum opening
- Reinforced cantilever support
- Interchangeable jaws
- Diamond ground for better grip
- Heavy duty cast iron construction
- Precise jaw alignment
- Rolled thread spindle for easy locating and tightening parts
- Protected spindle

| Stock No. | Jaw Width, inches |
|---|---|
| BLPMV4 | 4 |
| BLPMV5 | 5 |
| BLPMV6 | 6 |



WVA4



WVF4



WVP4



WVR4

## Jaw Caps

**WVA Series.** Aluminum grooved caps hold uneven and circular pieces.

**WVF Series.** Caps with heat-resistant, laminated fibers help prevent outside materials from being absorbed.

**WVP Series.** Prism caps have horizontal and vertical grooves for marking out, center punching, light tapping and thread cutting.

**WVR Series.** Caps have rubber covers.

| Stock No. | Description | Size, inches |
|---|---|---|
| WVA4 | Aluminum Alloy Face | 4 |
| WVA5 | Aluminum Alloy Face | 5 |
| WVA6 | Aluminum Alloy Face | 6 |
| WVF4 | Fiber Face | 4 |
| WVF5 | Fiber Face | 5 |
| WVF6 | Fiber Face | 6 |
| WVP4 | Prism Face | 4 |
| WVP5 | Prism Face | 5 |
| WVP6 | Prism Face | 6 |
| WVR4 | Rubber Face | 4 |
| WVR5 | Rubber Face | 5 |
| WVR6 | Rubber Face | 6 |

# C-CLAMPS



CL537A

## Medium Duty C-Clamps

- Maximum strength ribbed iron frame
- Steel screw with full standard threads and sliding T-handle
- Large anvil and steel swivel pad to ensure secure clamping
- Deep throat style

| Stock No. | Throat Depth, inches | Capacity, inches | Spindle Dia., inches |
|---|---|---|---|
| CL537A | 4 3/4 | 2 1/2 | 5/16 |
| CL546A | 6 1/4 | 2 1/2 | 3/8 |

## Workbenches and Tables

**BPWORKBENCH Heavy Duty Workbench (Blue-Point®)**
- Full bottom shelf and superior powder-coat finish
- Net weight: 139 lb
- Weight capacity: 1,200 lb
- Top panel: 13 gauge steel
- Bottom shelf: 13 gauge steel
- Steel support: 12 gauge steel
- 60 1/16" W x 30 3/4" D x 34 1/16" H

**EQG2223K5 Open Leg Workbench**
- Heavy 12 gauge steel with die-formed legs welded into a one-piece unit for superior strength
- Includes storage drawer for mounting on an end or at the center of the bench
- 5' W x 29" D x 33 1/2" H

**EQG245U5 Pedestal Workbench**
- Manufactured with a heavy 12 gauge top surface and an integral back flange
- Four drawer pedestal is designed with roller drawer rails for smooth, non-binding operation
- 5' W x 27 1/2" D x 34 1/8" H



BPWORKBENCH



EQG2223K5



EQG245U5

## PRESSES



CG100



CG471-9

## 3 Ton Arbor Press

**CG100 Arbor Press**

Frame is 2" steel channel. Bolts to work bench. Gearing multiplies handle pressure up to 3 ton force. Set includes arbor press frame, CG100-14 utility punch, CG100-15 work block, and CG100-16 adaptor to convert 1/2" drive to 5/16" round drive.

| Specifications | Diameter, inches |
|---|---|
| Dimensions | 18" high, 11 1/8" wide |
| Pressure, tons | 3 |
| Base Size | 11 1/8" x 6 1/8" |
| Vertical Capacity | 12 3/4" |
| Opening Width | 9" |
| Width Between Work Brackets | 9" |
| Pressure Shaft Stroke | 9" (when utility punch is attached) |

**Optional Accessories for CG100:** The adaptors from A57Q bushing driver set can be used with CG100-16 5/16" round drive adaptor. The CJ951 bearing separator fits neatly between the work support brackets.

## Step Plates

Use step plates for the pressing of bearings, bushings and general pressing applications.

| Stock No. | Diameter, inches | CG173 | CG471A |
|---|---|---|---|
| CG173-1 | 5/8 and 1 | • | |
| CG173-2 | 3/4 and 1 1/8 | • | |
| CG173-3 | 7/8 and 1 1/4 | • | |
| CG173-4 | 1 and 1 3/8 | • | |
| CG173-5 | 1 1/8 and 1 1/2 | • | |
| CG471-5 | 1 1/4 and 1 5/8 | | • |
| CG471-6 | 1 3/8 and 1 3/4 | | • |
| CG471-7 | 1 1/2 and 1 7/8 | | • |
| CG471-8 | 1 5/8 and 2 1/16 | | • |
| CG471-9 | 1 3/4 and 2 3/16 | | • |
| CG471-10 | 1 7/8 and 2 5/16 | | • |
| CG471-11 | 2 and 2 7/16 | | • |
| CG471-12 | 2 1/8 and 2 5/8 | | • |
| CG471-13 | 2 1/4 and 2 3/4 | | • |
| CG471-14 | 2 3/8 and 2 7/8 | | • |
| CG471-15 | 2 1/2 and 3 | | • |
| CG471-16 | 2 3/4 and 3 1/4 | | • |
| CG471-17 | 3 and 3 1/2 | | • |



WARNING
• Keep away from children
• Read safety precautions on pages W1 to W4

# AIR COMPRESSORS




**BRA7380V**




**BRA7380VEM**




**BRA8380V**




**BRARS8380H**




**BRA10312H**




**BRA15312H**




**BRA20312H**

## Snap-on® Air Compressors (Three Phase)

| Stock No. | Horsepower, HP | Pump Stages | Tank, gal. | Tank Style | Electrical Req. | Amp Req. | Mag Starter | Hour Meter | Auto Tank Drain | Air Delivery SCFM @ PSI | Max. PSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **BRA7380V*†** | 7 | Dual | 80 | Vertical | 208/230V, 3-phase | 30 @ 208/230V | Yes | Yes | Yes | 23.5 @ 175 | 175 |
| **BRA7380VEM*†** | 7 | Dual | 80 | Vertical | 208/230V, 3-phase | 30 @ 208/230V | Yes | No | No | 23.5 @ 175 | 175 |
| **BRA8380V*†** | 8 | Dual | 80 | Vertical | 208/230V, 3-phase | 30 @ 208/230V | Yes | Yes | Yes | 27.0 @ 175 | 175 |
| **BRARS8380H*** | 8 | Rotary Screw | 73 | Horizontal | 208/230V, 3-phase | 30 @ 208/230V | Yes | Yes | No | 35.0 @ 125 | 144 |
| **BRA10312H*** | 10 | Dual | 120 | Horizontal | 208/230V, 3-phase | 40 @ 208/230V | Yes | No | Yes | 36.0 @ 175 | 175 |
| **BRA15312H*** | 15 | Dual | 120 | Horizontal | 208/230V, 3-phase | 75 @ 208/230V | Yes | No | Yes | 48.0 @ 175 | 175 |
| **BRA20312H*** | 20 | Dual | 120 | Horizontal | 208/230V, 3-phase | 100 @ 208/230V | Yes | No | Yes | 75.0 @ 175 | 175 |

*440/460/480V wiring available
†BRA7380V, BRA7380VEM, BRA8380V are available with horizontal tanks via special order.


BRA5DV30VP


BRAC560V


BRA5140H


BRA517V


BRA7180V


BRA7180VEM


BRA8180V


BRARS8180H


BRA9G3B

## Snap-on® Air Compressors (Single Phase)

| Stock No. | Horsepower, HP | Pump Stages | Tank, gal. | Tank Style | Electrical Req. | Amp Req. | Mag Starter | Hour Meter | Auto Tank Drain | Air Delivery SCFM @ PSI | Max. PSI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **BRA5DV30VP** | 3 (peak) | Single | 27 | Portable | 120/220V, 1-phase | 20 @ 120V, 15 @ 220V | Not Req. | No | No | 7.0 @ 125 | 125 |
| **BRAC560V** | 5 | Single | 60 | Vertical | 208/230V, 1-phase | 20 @ 208/230V | Not Req. | No | No | 13.5 @ 140 | 140 |
| **BRA5140H** | 5 | Dual | 40 | Horizontal | 208/230V, 1-phase | 30 @ 208/230V | Not Req. | No | No | 16.0 @ 175 | 175 |
| **BRA517V** | 5 | Dual | 70 | Vertical | 208/230V, 1-phase | 40 @ 208/230V | Yes | No | No | 17.5 @ 175 | 175 |
| **BRA7180V*** | 7 | Dual | 80 | Vertical | 208/230V, 1-phase | 40 @ 208/230V | Yes | Yes | Yes | 23.5 @ 175 | 175 |
| **BRA7180VEM*** | 7 | Dual | 80 | Vertical | 208/230V, 1-phase | 40 @ 208/230V | Yes | No | No | 23.5 @ 175 | 175 |
| **BRA8180V*** | 8 | Dual | 80 | Vertical | 208/230V, 1-phase | 40 @ 208/230V | Yes | Yes | Yes | 27.0 @ 175 | 175 |
| **BRARS8180H** | 8 | Rotary Screw | 73 | Horizontal | 208/230V, 1-phase | 40 @ 208/230V | Yes | Yes | No | 35.0 @ 125 | 144 |
| **BRA9G3B** | 9 | Dual | 30 | Horizontal | Gas Engine, Electric Start | — | — | No | No | 23.0 @ 175 | 175 |

*BRA7180V, BRA7180VEM, BRA8180V are available with horizontal tanks via special order.

**⚠WARNING**

- Use pressure regulator, lubricator and moisture filter on air line
- Follow maintenance requirements
- Read safety precautions on pages W1 to W4

# AIR PROCESSING EQUIPMENT


AHR424


AHR426


AHR428


AHR430


AHR423


AHR438

## Quick Clamp® Regulators, Filters and Valves

- System utilizes modular design of filters, regulators, lubricators and accessories
- Allows installation and removal of the AHR services units and accessories without breaking a pipe connection
- Clamping device holds AHR product components in rigid combinations

**AHR424 General Purpose Filter**
- Excellent water removal characteristics
- Standard depth type 40 mm filter element
- Particle removal per ISO 8573-1, Class 5 and Class 3

**AHR426 General Purpose Pressure Regulator**
- Features full-flow gauge ports and standard relieving regulators
- Low torque, non-rising pressure adjustment knob has integral locking device
- Balanced valve minimizes effect of variation in inlet pressure on the outlet pressure

**AHR428 Oil Filter Lubricator**
- Features a quick release bayonet bowl, a high visibility prismatic lens and a liquid level indicator
- Lubricates a single tool, cylinder or other air-powered device

**AHR430 General Purpose Filter/ Regulator**
- Low torque, non-rising pressure adjustment knob has integral locking device
- Standard depth type 40 µm filter element
- Particle removal per ISO 8573-1, Class 5 and Class 3

**AHR423 Automatic Drain Valve**
- When fluid reaches full level it activates the float and drains unwanted oil and water automatically
- Can be used in place of a manual drain on the following units: AHR424 and AHR430

**AHR438 Wall Mount Bracket**
- Made of heavy duty metal
- Can be used on the following units: AHR424, AHR426, AHR428 and AHR430

## Filters/Regulators

| Stock No. | Maximum Inlet Pressure, psig (bar) | Temperature Range, °F (°C) | Flow, scfm | Drain Connection Manual | Drain Connection Automatic | Inlet/Outlet Port Size | Gauge Port |
|---|---|---|---|---|---|---|---|
| **AHR424** | 250 (17.2) | 175 (79) | 150 | 7/16"-24 UNS (m) | 1/8" NPT(f) | 1/2" NPT(f) | — |
| **AHR426** | 300 (20.7) | 0–175 (-18–79) | — | — | — | 1/2" NPT(f) | 1/4" NPT(f) |
| **AHR428** | 250 (17.2) | 175 (79) | 3.5-100 | 7/16"-24 UNS | — | 1/2" NPT(f) | — |
| **AHR430** | 250 (17.2) | 0–175 (-18–79) | — | 7/16"-24 UNS | 1/8" NPT(f) | 1/2" NPT(f) | 1/4" NPT(f) |

*Blue-Point®


AHRB200

## Regulators, Filters and Valves

| Stock No. | Inlet/Outlet Port Size | Adjustable Pressure Range | Maximum Service Pressure | Oil Capacity | Operating Temperature Range |
|---|---|---|---|---|---|
| **AHRB200** | 1/2" NPT (F) | 5–120 psig (.5–8.5 kgf/cm²) | 140 psig (9.9 kgf/cm²) | 80 mL | 41–140 °F (5–60 °C) |

# WHEN YOUR SHOP IS CLEAN, YOU CLEAN UP.

A clean garage is an efficient garage. And an efficient garage is one that makes more money.

**Cleaning Equipment —** Snap-on has all the solutions to keep your tools and garage looking polished. Which means you – and your shop – will shine.

**Parts Washers —** Whether your shop requires solvent-based or aqueous units, Snap-on carries a full line to meet your cleaning needs.

**MORE GREEN.**

Minimize the service fees to have used solvent carried away. A Snap-on® parts washer saves you money – and, helps save the environment.

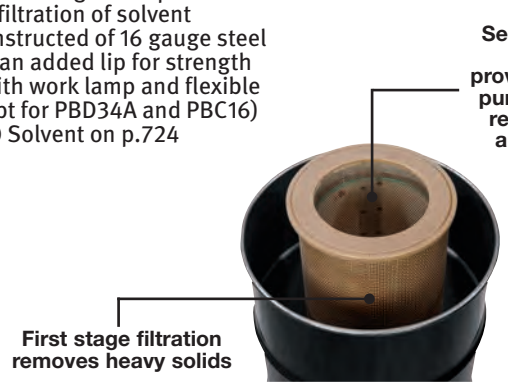


# PARTS WASHERS: SOLVENT BASED

Snap-on® dual filter parts washers provide a clean supply of solvent for washing parts. Filtration system virtually eliminates solvent changes.

## Parts Washers

- Composite dual stage filter provides continuous filtration of solvent
- Tubs are constructed of 16 gauge steel and feature an added lip for strength
- Complete with work lamp and flexible spout (except for PBD34A and PBC16)
- Use PBA760 Solvent on p.724



Dual Stage Filter



PBD3222A



PBC4828



PBD2622A



PBC16



PBD34A

| Specifications | PBD3222A | PBC3222A | PBC4828 | PBD2622A | PBC16 | PBD34A* |
|---|---|---|---|---|---|---|
| Filtration | Dual | Dual | Dual | Dual | — | — |
| Base | Drum | Square | Square | Drum | — | Drum |
| Inside Dimensions, inches | 10 H x 32 W x 22 D | 10 H x 32 W x 22 D | 14 H x 48 W x 28 D | 7 H x 26 W x 17 D | 6 H x 15 W x 16 D | 7 H x 28 W x 22 D |
| Fluid Requirements gal | 20 | 20 | 20 | 10 | 5 | 10 |
| Input, V AC (Hz) | 120V AC (60Hz) | 120V AC (60Hz) | 120V AC (60Hz) | 120V AC (60Hz) | 120V AC, 60Hz | 120V AC (60Hz) |
| Pump Volume, GPH | 325 | 325 | 325 | 210 | 210 | 210 |
| Output Pressure, PSI | 50 | 50 | 50 | 50 | 50 | 50 |
| Overall Dimensions, inches | 39 H x 36 W x 26 D | 39 H x 36 W x 26 D | 45 H x 52 W x 32 D | 34 H x 30 W x 21 D | 10 H x 1 W x 23 D | 35 H x 31 W x 23 D |
| Open Height, inches | 63 | 63 | 75 | 53 | 23 | 60 |
| Replacement Filter | PBD3209 | PBD3209 | PBD3209 | PBD3202 | — | — |
| European Models | PBDH3222AEUR | PBCH3222AEUR | PBCH4828EUR | PBDH2622AEUR | — | — |
| PBD1751 Parts Tray | Included | Included | Included | — | PBCH16-EUR | Optional |
| PBA720A Drain Table | Optional | Optional | Optional | — | — | Optional |

*Blue-Point®
European Model – (230V AC, 50Hz)
† CE

TECHNICAL SUPPORT 1-800-253-3661




PBC33B



PBC42B




PBC57A




PBC3022

## Electric Medium Duty PBC42B

### PBC33B Heated Aqueous Parts Washer

- Clean parts with a pressurized cleaning spout
- Heated for additional effectiveness
- Polysateen drain filter to remove solids
- Heavy wall polyethylene tub and solid base
- Integral oil skimmer removes oil and grease from the cleaning solution
- Includes five gallons of PBA733 cleaning solution and one gallon of PBA734 cleaning concentrate booster
- Low solution warning indicator

### PBC42B High-Pressure Parts Washer

- Fully enclosed aqueous parts washer
- Blast parts clean with a high-pressure wand
- Soap solution is heated for additional effectiveness
- Automatic soak cycle loosens up grime
- Screen and contaminant trap to separate oil and grease from soap solution
- Includes 25 lbs of YADW896B powdered soap



PBC55-1



PBC55-3

## Electric Heavy Duty

### PBC57A High-Pressure Automatic Parts Washer

- Automatically cleans engine blocks, cylinder heads, transmission cases and small parts
- Heated and pressurized soap solution
- 20 high-pressure nozzles
- Turntable rotates and pulls out for ease of part loading
- Integral oil skimmer removes oil and grease from the soap solution
- Includes 25 lb of YADW896B powdered soap

### PBC55-1 Parts Basket

- Perforated steel basket for holding small parts

### PBC55-3 Parts Tree

- Welded steel tube rack for hanging smaller parts

### PBC3022 Heated Aqueous Parts Washer

- Compact design is portable and can be moved to the job site easily
- Sealed lid prevents splashing when used on mobile service vehicles
- Heavy plastic body and lid constriction is made out of high density polyethylene
- Stainless-steel mesh work surface for durability and strength
- Heating element increases cleaning effectiveness and is thermostatically controlled
- Features a 5-micron filter to separate out dirt and debris
- On/off switch is lighted for greater visibility in low ambient light conditions
- Includes two gallons of PBA735 cleaning concentrate

| Specifications | PBC33B | PBC42B | PBC57A | PBC3022 |
|---|---|---|---|---|
| Depth, inches | 28 | 24 | 35 | 22 |
| Reservoir Capacity, gal | 20 | 12 | 60 | 6 |
| Electrical Requirements | 120V AC, 60Hz | 230V AC, 60Hz | 230V AC, 60Hz | 120V AC, 60Hz |
| Pump Motor, HP | — | 3/4 | 2 | — |
| Output Pressure, PSI | 50 | 500 | 45 | 50 |
| Volume, gal/h | 325 | 180 | 2,700 | 200 |
| Heater, watts | 1,500 | 1,500 | 9,000 | 1,500 |
| Open Height, inches | 65 | 69 | 69 | 32 |
| Inside Dimensions, inches | 10 H x 21 W x 31 1/2 D | 16–24 H x 40 W x 24 D | 41 H x 35 W x 35 D | 14 H x 17 W x 12 D |
| Overall Dimensions, inches | 42 H x 37 W x 28 D | 65 H x 44 W x 24 D | 69 H x 53 W x 43 D | 16 H x 30 W x 22 D |

European Models – PBCH33B-EUR† (230V AC, 50Hz), PBCH42B-EUR† (230V AC, 50Hz), PBCH57AEUR† (230V AC, 50Hz)
† CE

**⚠WARNING**

- Do not direct air or fluid stream at body
- Do not expose solvent to flames, sparks or other source of ignition
- Use in well ventilated area
- Do not use washer without fusible link or safety valve intact
- Read safety precautions on pages W1 to W4

# PARTS WASHERS: ACCESSORIES



YA452



GA501A



YADW896B




PBA760



PBA725



PBA720A



PBD1751

## Parts Cleaning Brushes/Solvent & Aqueous Based (Blue-Point®)

**YA452 Parts Cleaning Brush**
- Stiff bristles with contoured, nonslip plastic handle
- Attaches to most parts washers
- Flared hose end fits 1/4" spouts: 24" long hose has internal spring to prevent kinking
- 35 1/4" overall length

**GA501A Parts Cleaning Brush**
- Similar to YA452 without hose: 11 1/4" long

## Aqueous Based Cleaning Solution and Powder

**YADW896B Powdered Soap Cleaner**
- Low foaming powdered soap solution
- For use in PBC57, PBC57A, PBC42 and PBC42A parts washers
- Comes in a 25 lb container – makes 60– 20 gal solution

**PBA734 Cleaning Solution Additive**
- Used in both PBC3022 and PBC33B for an added boost of cleaning power

**PBA733 Certified Green Concentrate Solution**
- Specially formulated solution does not absorb oil and dirt
- For use in PBC33A and B parts washers
- Comes in a 5 gal container – makes 20 gallons of solution

**PBA735 Certified GreenConcentrate Solution**
- Same as PBA733 except 1 gallon container

## Petroleum Based Solvent Cleaners

**PBA760 Solvent Cleaner**
- Excellent for removing oil and grease
- Petroleum based cleaner with 140 flash point
- For solvent based parts washers only
- Comes in a 5 gallon container

## Solvent Based Parts Washer Accessories

**PBA725 Parts Basket**
- Hangs inside solvent based parts washers

**PBD1751 Parts Tray**
- Attaches to outside of parts washer
- Measures 12 1/2" W x 18 1/2" D

**PBA720A Drain Table**
- Attaches to outside of parts washer
- Measures 25 1/2" W x 18 1/2" D

# PARTS CLEANING



YA571



GA299



NOZZLEPG1



NOZZLESPRY1



YA297



NOZZLE360A

## Water Nozzles and Hoses

**YA571 Water Spray Nozzle**
- Sprays hot or cold water
- Clip locks spray at desired setting
- Nose bumper prevents scratches to auto paint
- Fits standard garden hose threads

**GA299 Air Solvent Gun**
- Used for degreasing or applying oils
- Quickly converts to long wanded air gun
- Includes 8' hose for siphoning chemicals into gun
- Operates on 35–175 PSI

**NOZZLEPG1 Pistol Grip Hose Nozzle**
- Precision flow port allows water to flow directly and not "up" and through the handle, increasing water flow, pressure and power by approximately 30%
- Multiple spray patterns from jet, fan, power and even low flow
- Works with any standard 5/8" or larger water hose

**NOZZLESPRY1 Hoze Nozzle**
- Multiple spray patterns from jet, fan, power and even low flow
- Extra long handle for better grip
- Works with any standard 5/8" or larger water hose

**YA297 Water Saving Hose Nozzle *(Blue-Point)***
- Provides concentrated pressure stream
- Features special rocker actuated check valve
- Fits standard garden hose threads
- 9" long

**NOZZLE360A Water Spray Nozzle *(Blue-Point)***
- Turns any standard 5/8" hose into a multifunction cleaning tool
- Five different spray patterns
- 360° jetted nozzle is engineered from rugged extruded aluminum, forged stainless-steel, high grade fiberglass and comfort grip santoprene
- Two-way shutoff



YA730D



YA729B

## Hose Reels

**YA730D Heavy Duty Air/Water Hose Reel**
- 50' of 3/8" ID low-pressure rubber hose
- Adjustable ball stop
- 24" connecting hose
- High carbon steel retraction spring
- Guide arm adjusts to four positions

**YA729B Hose Reel**
- 30' of 3/8" ID low-pressure rubber hose
- Adjustable ball stop
- 12" connecting hose
- Metal construction
- Max. pressure 300 PSI
- Max. water temperature 200 °F

# PRESSURE WASHERS: COLD WATER

Includes ceramic plunger pump with stainless-steel valves, trigger gun, chemical injection and adjustable pressure.



SEPW1500P



SEPW1000



SEPW1500SM



SEPW1500USA

## Electric Powered

Adjustable 0°–60° spray nozzle and GFCI protection with 35' power cord.

| Specifications | SEPW1500P | SEPW1500SM | SEPW1000 | SEPW1500USA |
|---|---|---|---|---|
| Style | Hand Carry | Wall Mounted | Cart Mounted | Cart Mounted |
| PSI (bar) | 1,450 (100) | 1,450 (100) | 1,000 (69) | 1,500 |
| GPM (lpm) | 2 (7.6) | 2 (7.6) | 2 (7.6) | 2 (7.6) |
| HP | 2 | 2 | 1.5 | 2 |
| Voltage | 120V/20A/single phase | 120V/20A/single phase | 120V/15A/single phase | 120V/17A |
| Chemical Tank Cap. | — | — | 1 gal | — |
| Pump Max. Temp. | 140 °F | 180 °F | 140 °F | 140 °F |
| Thermal | Mechanical | Mechanical | Mechanical | Mechanical |
| Hose Length (feet) | 26 | 40 | 50 | 25 |
| Dimensions (L x W x H) | 18" x 12" x 11" | 20" x 12" x 20" | 21" x 16" x 36" | 30" x 21 1/2" x 36" |
| Shipping Wt., lb | 68 | 98 | 65 | 150 |

**⚠WARNING**

- Do not direct air or fluid stream at body
- Read safety precautions on pages W1 to W4

# PRESSURE WASHERS

## Gas Engine

Interchangeable or adjustable 0–40° spray nozzle plus powder-coated tube frame cart with pneumatic tires.

| Specifications | SEPW1600G | SEPW2700G |
|---|---|---|
| Style | Cart Mounted | Cart Mounted |
| PSI (bar) | 1,600 (110.4) | 2,700 (183.3) |
| GPM (lpm) | 3 (11.4) | 3 (11.4) |
| HP | 5 | 6.5 |
| Engine | Honda® GC | *Honda* GX |
| Fuel Tank Cap. | 1.9 qt | 1 gal |
| Chemical Tank Cap. | 3 gal | 3 gal |
| Thermal | 165 °F | 165 °F |
| Hose Length (feet) | 50 | 50 |
| Dimensions (L x W x H) | 30" x 21.5" x 36" | 30" x 21.5" x 36" |
| Shipping Wt., lb | 87 | 108 |



SEPW1600G



SEPW2700G

# OIL FIRED HOT WATER

Heats water to 200 °F. Includes ceramic plunger pump with stainless-steel valves, trigger gun, interchangeable nozzles, chemical injection, adjustable pressure, stainless-steel cold wrap-around coil, poly fuel tanks and GFCI protection. Powder-coated tube-frame cart with pneumatic tires for extra durability.



SEPW30SHDE



SEPW3000QH

## Electric Power

| Specifications | SEPW14SHDE | SEPW15SHDE | SEPW20SHDE | SEPW30SHDE |
|---|---|---|---|---|
| PSI (bar) | 1,450 (100) | 1,500 (103.5) | 2,000 (138) | 3,000 (207) |
| GPM (lpm) | 2 (7.6) | 3 (11.4) | 3 | 4 (15.2) |
| HP | 2 | 3 | 5 | 7.5 |
| Voltage | 120V/20A/ single phase | 230V/20A/ single phase | 230V/25A/ single phase | 230V/34A/ single phase |
| Burner Fuel Capacity | 5 gal | 5 gal | 5 gal | 5 gal |
| Dimensions (L x W x H) | 34" x 27" x 47" | 34" x 27" x 47" | 34" x 27" x 47" | 34" x 27" x 47" |
| Shipping Wt., lb | 350 | 350 | 570 | 600 |

## Gas Engine

| Specifications | SEPW3000QH |
|---|---|
| PSI (bar) | 3,000 (207) |
| GPM (lpm) | 4 (15.2) |
| HP | 13 |
| Engine | *Honda* |
| Fuel Tank Capacity | 6.9 qts |
| Burner Fuel Capacity | 5 gal |
| Dimensions (L x W x H) | 54" x 32" x 49" |
| Shipping Wt., lb | 600 |

# VACUUMS/SHOP FANS: VACUUMS



**AV1000A Deluxe Air Vacuum Kit (Blue-Point®)**

- Ideal for vehicle media body shops or any applications in need of picking up dust, metal shavings or broken glass
- Includes 8.7" aluminum extension tube, pointed nozzle, flexible tube and crevice tool with brush
- Large collection bag includes a debris baffle and sliding bag clamp for emptying debris
- Lightweight ergonomic handle design

Industrial strength full wet and dry cleaning/drying machines combine the highest degree of suction/airflow with ruggedly durable motors. Highest quality materials ensure long life. Ball bearing motor designed for strong performance with less motor strain. Engineered for easy portability and long life.



YA1023A

YA1105A

YA1009SSA

BLPVAC5

| Specifications | YA1023A | YA1105A | YA1009SSA | BLPVAC5* |
|---|---|---|---|---|
| Tank | 23 gal Poly | Corrosion Resistant | Corrosion Resistant | 5 gal Polypro |
| Casters | Large Rear/Swivel Front | 4 Swivel | Large Rear/Swivel Front | 4 Metal Casters |
| Waterlift | 93" | 93" | 93" | 65" |
| Motor | 2-Stage | 2-Stage | 2-Stage | 1-Stage |
| CFM | 99 | 99 | 99 | 49 |
| Approvals | UL® and CUL® | *UL* and *CUL* | *UL* and *CUL* | *UL* and *CUL* |
| Operation | Full Wet and Dry | Full Wet and Dry | Full Wet and Dry | Full Wet and Dry |
| Filter Assembly | YAT90448 | YAT24519 | YAT90445 | (Washable Cartridge Filter) |
| Includes | 1.5" Wet/Dry Tool Set (hose w/ swivel end, crevice tool, upholstery tool, 2 straight extensions, floor tool housing with carpet face, brush face, squeegee face) | 1.5" Wet/Dry Tool Set (hose w/ swivel end, crevice tool, upholstery tool, 2 straight extensions, floor tool housing with carpet face, brush face, squeegee face) | 1.5" Wet/Dry Tool Set (hose w/ swivel end, crevice tool, upholstery tool, 2 straight extensions, floor tool housing with carpet face, brush face, squeegee face) | 7' hose (1 1/4" dia.), 3 extension wands, washable cartridge filter, reusable foam sleeve, 10" floor/squeegee nozzle, utility nozzle with brush and crevice tool |

*Blue-Point®



YA1102

## Portable Spotter

**YA1102 Portable Spotter**

- Use on carpeting, seat fabrics and other cleaning needs
- Durable molded tank
- Large 2 gallon capacity
- Powerful 55 PSI solution pump motor
- Strong recovery with 94 CFM vacuum rating
- Quick disconnect solution hose at body
- Includes hose and hand tool
- Use with CLEAN1A cleaner solution (32 oz) sold separately
- *UL* and CSA® listed
- ETL and ETL-c listed
- 84" waterlift
- Bypass 1.2 HP motor

## SHOP FANS



WIND100

**WIND100 Heavy Duty Air Mover**

- For heavy duty air circulation applications
- Use for drying carpets, upholstery or hard floors plus removing vapors from enclosed spaces
- Maximum 2,500 CFM output
- Three-position discharge adjustment
- Three-speed switch

| Specifications | WIND100 |
|---|---|
| Power | 120V AC/60Hz |
| Speeds | 3 |
| Air Delivery | 1,600 – 2,000 – 2,500 CFM |
| Air Flow Direction | 0°/30°/90° |
| High Output Fan Size | 10 3/4" D x 10 1/2" W |
| Motor | .5 HP |
| Motor Rating | Continuous Duty |
| Power Cord | 15' (18/3) |
| Size (H x W x D) | 18" x 14" x 20 1/2" |

**⚠WARNING**

- Do not direct air or fluid stream at body
- Read safety precautions on pages W1 to W4

# SAFETY FIRST AND FOREMOST.

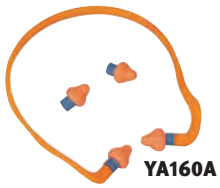
A safe shop means that everything is protected – you, your clients and your assets.

**Safety Equipment** — Do your job safely and comfortably with Snap-on® safety equipment: from basic safety glasses to cutting edge-designed face protectors, and more.




GA3000B


GA3200


YA160A


BLPEP1

## Ear Protection

| Specifications | GA3000B* | GA3200 | YA160A | BLPEP1 |
|---|---|---|---|---|
| Noise Reduction Rating, dB | 25 | 28 | 25 | 21 |
| Headband | Cushioned | Cushioned | Plastic | Plastic |
| Ear Piece | Cushioned | Cushioned | Foam | Foam |
| Adjustable Ear Piece | 21 | Plastic | Foam | N/A |
| Ear Piece Replacements | N/A | N/A | YA160A1 | BLPEP1-1 |
| Weight, lb | .49 | .77 | .06 | .05 |

*Blue-Point®


EFPBONEHEDB


EFPSTRIKERB


EFPHANNIBALB


EFPNSTLKRB


EFPJURASSIC


EFPOLEGLORY

## Face Protection

| Specifications | EFPBONEHEDB | EFPSTRIKERB | EFPHANNIBALB | EFPNSTLKRB | EFPJURASSIC | EFPOLEGLORY |
|---|---|---|---|---|---|---|
| Shield Style | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral | 180° Peripheral |
| Headband | Yes | Yes | Yes | Yes | Yes | Yes |
| Adjustable Headband | Yes | Yes | Yes | Yes | Yes | Yes |
| Impact Resistance | Yes | Yes | Yes | Yes | Yes | Yes |
| Shield Included | Clear and #10 Welding | Clear and #10 Welding | Clear and #10 Welding | Clear and #10 Welding | Clear and #10 Welding | Clear and #10 Welding |
| Replacement Shields | EFPCLLENSREP | EFPCLLENSREP (Clear)<br>EFP3WLDLENS (#3 Welding)<br>EFP5WLDLENS (#5 Welding)<br>EFP8WLDLENS (#8 Welding)<br>EFP10WLDLENS (#10 Welding)<br>EFP12WLDLENS (#12 Welding) | EFPCLLENSREP (Clear)<br>EFP10WLDLENS (#10 Welding) | EFPCLLENSREP (Clear)<br>EFP10WLDLENS (#10 Welding)<br>EFP3WLDLENS (#3 Welding)<br>EFP5WLDLENS (#5 Welding)<br>EFP8WLDLENS (#8 Welding)<br>EFP12WLDLENS (#12 Welding) | EFPADFLENSA | EFPADFLENSA |

## Face Shields

| Specifications | GA225 |
|---|---|
| Shield Style | Flat |
| Shield Size | 7 3/4" x 15 1/4" |
| Headband | Yes |
| Adjustable Headband | Yes |
| Impact Resistance | Yes |
| Shield Included | Clear |
| Replacement Shields | GA225-1 (with PETG) GA225-2 (with PC) |


GA225



## Safety Glasses/Glass 1 Series

| Specifications | GLASS1R | GLASS1BK |
|---|---|---|
| Lens | Clear | Clear |
| Frame | Red | Black |
| Anti-fog Lens Coating | Yes | Yes |
| Anti-scratch Lens Coating | Yes | Yes |
| Temple Length Adjustment | Yes | Yes |
| Tilt Adjustment | Yes | Yes |
| Design | Contemporary & Lightweight | Contemporary & Lightweight |
| Lens Replacement Available | Yes | Yes |
| Meets Requirements | ANSI® Z87.1, CSA® Z94.3-1992, EN166 | *ANSI* Z87.1, *CSA* Z94.3-1992, EN166 |


GLASS1R


GLASS1BK

**⚠WARNING**

• Read safety precautions on pages W1 to W4

# EYE PROTECTION

## Safety Glasses/Glass 9, 10 and 12 Series


GLASS9BK


GLASS10BK


GLASS12BKA

| Specifications | GLASS9BK | GLASS10BK | GLASS12BKA |
|---|---|---|---|
| Lens | Clear | Brown | Clear |
| Frame | Black | Black | Black Ear Pieces |
| Anti-fog Lens Coating | Yes | Yes | — |
| Anti-scratch Lens Coating | Yes | Yes | — |
| Temple Adjustment | Yes | Yes | 5 Position |
| Design | Contemporary, sporty wraparound | Contemporary, sporty wraparound | Frameless, Sleek, Comtemporary |
| Meets Requirements | ANSI® Z87.1 | *ANSI* Z87.1 | *ANSI* Z87.1 |

*ANSI* Z87.1, CSA® Z94.3 and MIL-STD-662.

## Safety Glasses/Glass 20 Series


GLASS20BKYA


GLASS20BLMA


GLASS20BKWA


GLASS20BLA

| Specifications | GLASS20BKYA | GLASS20BLMA | GLASS20BKWA | GLASS20BLA |
|---|---|---|---|---|
| Lens | Amber | Mirror | Dark Green (Shade #5) | Clear |
| Frame | Black | Blue | Black | Blue |
| Lens Replacement Available | — | — | GLASS20LENSW | — |
| Additional Info | White Snap-on® Logo on Temples | White *Snap-on* Logo on Temples | White *Snap-on* Logo on Temples | White *Snap-on* Logo on Temples |

*ANSI* Z87.1, *CSA* Z94.3 and MIL-STD-662


GLASS30R


GLASS30BK


GLASS31R


GLASS31BK

## Safety Glasses/Glass 30 and 31 Series

| Specifications | GLASS30R | GLASS30BK | GLASS31R | GLASS31BK |
|---|---|---|---|---|
| Lens | Clear | Clear | Clear | Clear |
| Frame | Red | Black | Red | Black |
| Anti-fog Lens Coating | Yes | Yes | Yes | Yes |
| Anti-scratch Lens Coating | Yes | Yes | Yes | Yes |
| Ventilation Channel | Yes | Yes | — | — |

*ANSI* Z87.1


GLASS50BK


GLASS50R


GLASS60BK


GLASS60R


GLASS60SAP

## Safety Glasses/Glass 50 and 60 Series

| Specifications | GLASS50BK | GLASS50R | GLASS60BK | GLASS60R | GLASS60SAP |
|---|---|---|---|---|---|
| Lens | Clear | Clear | Clear | Clear | Clear |
| Frame | Black | Red | Black | Red | Sapphire |
| Anti-fog Lens Coating | Yes | Yes | Yes | Yes | Yes |

*ANSI* Z87.1 and CE EN166


SOGKRDHF13


SOGKWHHF13


SOGKBFSM01


SOWIC08

## Safety Glasses/Gasket® Series

- Impact resistant polycarbonate lens
- Scratch resistant hard coated lens
- Lightweight adjustable frame
- Meets *ANSI* Z87.1-2010
- Polychromatic Hellfire® Lens (SOGKRDHF13 and SOGKWHHF13 only) darkens in UV sunlight to 17% dark and moves to 84% clear at night
- Black Smoke glasses have neutral gray lens tint suitable for all situations

**SOGKRDHF13 *Gasket* Red *Hellfire* Safety Glasses**
**SOGKWHHF13 *Gasket* White *Hellfire* Safety Glasses**
**SOGKBFSM01 Gasket® Black Smoke Safety Glasses**

**SOWIC08 Lens and Screen Cleaner, Wick it Clean®, 8-pack**
Lens cleaner kit for SOGK Series safety glasses. Available in 8-pack only.

## Safety Glasses with Ear Plugs (Blue-Point®)

- Lightweight
- Contemporary design with polycarbonate lens that absorb 99.9% UV
- Built-in ear protection
- Nylon slide allows for easy extension and retraction of tethered ear plugs
- Ear plugs extend over 4 1/2" for easy insertion into ear canals
- Soft plastic nose bridge provides added comfort and adjustablility
- ANSI® Z87.1

**GLASS40CEAR Clear Lens**
**GLASS40YEAR Amber Lens**
**GLASS40GEAR Gray Lens**
**GLASS40-1 Replacement Ear Plugs**



**GLASS40CEAR**

## Protective Eyeshields

**GLASSVIS Protective Eyeshields**

- Will fit over prescription glasses or can be worn alone
- Wraparound side shields, impact resistant and anti-glare guard
- Clear uncoated lens with black frames
- *ANSI* Z87.1, CSA® Z94.3 and MIL-STD-662



**GLASSVIS**

**GLASS1BOTG Protective Eyeshields**

- Single panoramic lens offers increased visibility
- Protective coating resists fogging, scratching, static and UV rays
- Frames adjust horizontally and vertically for comfort
- Side impact protection
- Universal nose bridge
- Snap-on® logo on ear piece
- *ANSI* Z87.1



**GLASS1BOTG**

## Safety Goggles

**GAC1580A Dust/Impact Goggles**

- Economic splash goggle with transparent clear body and indirect ventilation
- Fits over most prescription eyewear
- Fog-Ban® anti-fog coating
- Meets *ANSI* Z87.1-2010 and is certified to *CSA* Z94.3 standards



**GAC1580A**

**GOGGLE1 Protective Goggles**

- *ANSI* Z87.1-1989



**GOGGLE1**

**GOGGLE2ATOR Safety Goggles**

- Durable molded frame with soft and flexible elastomer that seals for a custom fit
- Quick adjust headband clips permit fast and easy fitting
- Indirect ventilation system channels and directs airflow over the lens, minimizing fogging and improving vision potential while providing superior splash and impact protection
- *Uvex 4C+* lens coating to protect against fogging, scratches and UV rays
- *ANSI* Z87.1



**GOGGLE2ATOR**



**YA127C**

## Respirators and Filters

- Respirators and Filters note: Do not exceed maximum use concentrations established by regulatory standards

**YA127C Half Mask Respirator**

- Includes organic vapor cartridges and N95 pre-filters
- Approved by NIOSH and meets OSHA regulations governing particulate respirators under 42 CFR 84
- Large sealing surface and advanced yoke design for excellent nonslip fit
- Helps protect against organic vapors, dusts and mists when used with YA1991 N95 pre-filter and YA1992 organic vapor cartridge



**YA127C9**

**YA127C9 Pre-filter/Filter Set**

- Includes plastic cover, YA1991 N95 pre-filter and YA1992 organic vapor cartridge



**YA199**

**YA199 Full Face Respirator**

- Includes two organic vapor cartridges and two N95 pre-filters
- Provides a comfortable fit with durable silicone face piece, standard nose cup to prevent fogging and exceptional wide view anti-scratch lens
- Helps protect against organic vapors, dusts and mists when used with YA1991 N95 pre-filter and YA1992 organic vapor cartridge



**YA1991**

**YA1991 N95 Pre-filter**

- 95 filter efficiency level
- Effective against particulate aerosols free of oil
- Includes six pairs



**YA1992**

**YA1992 Organic Vapor Cartridge**

- Protects against organic vapors
- Includes one pair
- Do not use with isocyanates

**⚠WARNING**

• Read safety precautions on pages W1 to W4

# GLOVES



GLOVE500BLB



GLOVE500RLB

## Technician SuperCuff® Gloves

- Patented *SuperCuff* design provides a super comfortable, snug and secure wrist closure design while not restricting wrist and hand movement
- Low-profile TPR (Thermal Plastic Rubber) logo treatments
- Heavy Lycra® panels between fingers allows for greater comfort and fit
- Hidden interior stitching enhances glove life
- Gloves are machine washable. Air dry only
- Reduced seam design for the index finger
- New streamline logo treatments



GLOVE501BLB



GLOVE501RLB

## Impact *SuperCuff* Gloves

- *SuperCuff* design provides a super comfortable, snug and secure fit without restricting wrist and hand movement
- New reduced seam design for the index finger
- New full finger dorsal TPR (Thermal Plastic Rubber) protection
- New two-layer fingertips for longer life
- New streamline logo treatments
- Enhanced dexterity

| Technician *SuperCuff* | Stock No. | Color | Size |
|---|---|---|---|
| | GLOVE500BSB† | Black | Small |
| | GLOVE500BMB† | Black | Medium |
| | GLOVE500BLB† | Black | Large |
| | GLOVE500BXLB† | Black | XL |
| | GLOVE500BXXB† | Black | XXL |
| | GLOVE500RSB† | Red/Black | Small |
| | GLOVE500RMB† | Red/Black | Medium |
| | GLOVE500RLB† | Red/Black | Large |
| | GLOVE500RXLB† | Red/Black | XL |
| | GLOVE500RXXB† | Red/Black | XXL |

| Impact *SuperCuff* | Stock No. | Color | Size |
|---|---|---|---|
| | GLOVE501BSB† | Black | Small |
| | GLOVE501BMB† | Black | Medium |
| | GLOVE501BLB† | Black | Large |
| | GLOVE501BXLB† | Black | XL |
| | GLOVE501BXXB† | Black | XXL |
| | GLOVE501RSB† | Red/Black | Small |
| | GLOVE501RMB† | Red/Black | Medium |
| | GLOVE501RLB† | Red/Black | Large |
| | GLOVE501RXLB† | Red/Black | XL |
| | GLOVE501RXXB† | Red/Black | XXL |

† CE



GLOVE502BLA



GLOVE502RLA

## Heavy Duty *SuperCuff* Gloves

- Dual fingertip layers for protection and control
- Thermal plastic rubber protection panels help eliminate cuts and scrapes
- Built-in tool rest provides extra support with pneumatic tools
- Gel padding in the palm reduces impact
- 5 mm EVA foam
- Accordion style knuckle protection

| Stock No. | Color | Size |
|---|---|---|
| GLOVE502BSA† | Black | Small |
| GLOVE502BMA† | Black | Medium |
| GLOVE502BLA† | Black | Large |
| GLOVE502BXLA† | Black | XL |
| GLOVE502BXXA† | Black | XXL |
| GLOVE502RSA† | Red/Black | Small |
| GLOVE502RMA† | Red/Black | Medium |
| GLOVE502RLA† | Red/Black | Large |
| GLOVE502RXLA† | Red/Black | XL |
| GLOVE502RXXA† | Red/Black | XXL |

† CE



GLOVELMOSS

## *SuperCuff* Cold Weather

- MOSSY OAK® poly spandex fleece top lined with Bremberg® for additional insulation
- Lined genuine leather palm and index finger which offers incredible dexterity and durability along with added insulation from cold weather



GLOVE503RCL

## *SuperCuff* Heavy Duty Carbon Knuckle

- Hard Carbon Knuckle helps protect from heavy impacts in knuckle and back of the hand area
- Two layer palm with nonslip panels on thumb, index and middle fingers allows the user to perform the most extreme tasks without losing control
- Gel palm padding reduces vibrations without compromising dexterity

| Stock No. | Color | Size |
|---|---|---|
| GLOVELMOSSM | *Mossy Oak* | Medium |
| GLOVELMOSSL | *Mossy Oak* | Large |
| GLOVELMOSSXL | *Mossy Oak* | XL |
| GLOVELMOSSXX | Mossy Oak | XXL |

| Stock No. | Color | Size |
|---|---|---|
| GLOVE503RCS† | Red | Small |
| GLOVE503RCM† | Red | Medium |
| GLOVE503RCL† | Red | Large |
| GLOVE503RCXL† | Red | XL |
| GLOVE503RCXX† | Red | XXL |

† CE

## Hi-Vis Technician SuperCuff® Gloves

- *SuperCuff* design provides a super comfortable, snug and secure fit without restricting wrist and hand movement
- Reduced seam design for the index finger
- New streamline logo treatments



GLOVE500HLB

## Hi-Vis Impact *SuperCuff* Gloves

- Extreme all-over protection
- Cut-resistant palm and thumb
- Reflective fingertips and cuff piping
- New streamline logo treatments
- Incredible dexterity
- Great for tow truck workers



GLOVE501HLB

## Hi-Vis Carbon Knuckle *SuperCuff* Gloves

- *SuperCuff* design provides a super comfortable, snug and secure fit without restricting wrist and hand movement
- New reduced seam design for the index finger
- New full finger dorsal TPR (Thermal Plastic Rubber) protection
- New two-layer fingertips for longer life
- New streamline logo treatments
- Enhanced dexterity



GLOVE503HCL

| | Stock No. | Size | | Stock No. | Size | | Stock No. | Size |
|---|---|---|---|---|---|---|---|---|
| **Hi-Vis Tehnician *SuperCuff*** | **GLOVE500HMB**† | Medium | **Hi-Vis Impact *SuperCuff*** | **GLOVE501HMB**† | Medium | **Hi-Vis Carbon Knuckle *SuperCuff*** | **GLOVE503HCM**† | Medium |
| | **GLOVE500HLB**† | Large | | **GLOVE501HLB**† | Large | | **GLOVE503HCL**† | Large |
| | **GLOVE500HXLB**† | XL | | **GLOVE501HXLB**† | XL | | **GLOVE503HCXL**† | XL |
| | **GLOVE500HXXB**† | XXL | | **GLOVE501HXXB**† | XXL | | **GLOVE503HCXX**† | XXL |

†CE

## Impact Gloves (M-Pact® I Series)

- Designed for extra protection
- Anti-vibration palm protection and reinforced fingers
- Molded TPR (Thermal Plastic Rubber) top helps prevent cuts, scrapes and bruises



GLOVE301ARL

## Impact Gloves (*M-Pact* II Series)

- Compression-molded thumb panel
- Additional panels protect fingertips
- Stretch neoprene cuff with molded TPR closure
- Molded TPR (Thermal Plastic Rubber) protection protects top of the hand and knuckles
- High-abrasion grip finger
- Durable abrasion-resistant synthetic palm
- 2 mm Poron® pad sandwiched between abrasion-resistant grip and molded TPR



GLOVE305L

## Impact Gloves (*M-Pact* III Series)

- 2pc 3D compression-molded knuckles protected with ballistic laminate
- Stretch neoprene cuff with molded TPR closure
- Molded TPR (Thermal Plastic Rubber) protection protects top of the hand and knuckles
- High-abrasion grip finger
- Durable abrasion-resistant synthetic palm
- 2 mm *Poron* pad sandwiched between abrasion-resistant grip and molded TPR



GLOVE306L

| | Stock No. | Size | | Stock No. | Size | | Stock No. | Size |
|---|---|---|---|---|---|---|---|---|
| **Impact Gloves (*M-Pact* I Series)** | **GLOVE301ARS**† | Small | **Impact Gloves (*M-Pact* II Series)** | **GLOVE305S** | Small | **Impact Gloves (*M-Pact* III Series)** | **GLOVE306S** | Small |
| | **GLOVE301ARM**† | Medium | | **GLOVE305M** | Medium | | **GLOVE306M** | Medium |
| | **GLOVE301ARL**† | Large | | **GLOVE305L** | Large | | **GLOVE306L** | Large |
| | **GLOVE301ARXL**† | XL | | **GLOVE305XL** | XL | | **GLOVE306XL** | XL |
| | **GLOVE301ARXX**† | XXL | | **GLOVE305XX** | XXL | | **GLOVE306XX** | XXL |

†CE

## Wrecker Gloves

- Extreme all-over protection
- Cut-resistant palm and thumb
- Reflective fingertips and cuff piping
- New streamline logo treatments
- Incredible dexterity
- Great for tow truck workers



GLOVE504HXL



GLOVE504BXL

| Stock No. | Color | Size | Stock No. | Color | Size |
|---|---|---|---|---|---|
| **GLOVE504HL** | Hi-Vis Yellow/Black | Large | **GLOVE504BL** | Black | Large |
| **GLOVE504HXL** | Hi-Vis Yellow/Black | XL | **GLOVE504BXL** | Black | XL |
| **GLOVE504HXX** | Hi-Vis Yellow/Black | XXL | **GLOVE504BXX** | Black | XXL |

# GLOVES



GLOVE600L



GLOVE600LG



GLOVE600LO

## Original Mechanic's Gloves

- Form-fitting stretch spandex top
- Long-lasting two-layer thumb panel
- Additional panels of synthetic protection surround the fingertips
- Machine washable – will not shrink or fade
- Flexible TPR wrist closure
- Moisture-wicking trek dry material
- Durable abrasion-resistant synthetic palm

| Stock No. | Color | Size |
|---|---|---|
| GLOVE600S | Red | Small |
| GLOVE600M | Red | Medium |
| GLOVE600L | Red | Large |
| GLOVE600XL | Red | XL |
| GLOVE600XX | Red | XXL |
| GLOVE600MG | Green | Medium |
| GLOVE600LG | Green | Large |
| GLOVE600XLG | Green | XL |
| GLOVE600MO | Orange | Medium |
| GLOVE600LO | Orange | Large |
| GLOVE600XLO | Orange | XL |



GLOVE601L

## Mossy Oak® Mechanic's Gloves

- Form-fitting stretch spandex top
- Long-lasting two-layer thumb panel
- Additional panels of synthetic protection surround the fingertips
- Machine washable – will not shrink or fade
- Flexible TPR wrist closure
- *Mossy Oak* gloves' infinity design sublimated on moisture-wicking trek dry material
- Durable abrasion-resistant synthetic palm

| Stock No. | Size |
|---|---|
| GLOVE601S | Small |
| GLOVE601M | Medium |
| GLOVE601L | Large |
| GLOVE601XL | XL |
| GLOVE601XX | XXL |



GLOVE300L

## Fast Fit Technician Gloves

- Easy on/off for ultimate in convenience
- Great fit and feel, excellent value
- Performance plus economy
- Synthetic leather palm, stretch panels between the fingers
- Two-way stretch spandex padded back

| Stock No. | Size |
|---|---|
| GLOVE300S† | Small |
| GLOVE300M† | Medium |
| GLOVE300L† | Large |
| GLOVE300XL† | XL |
| GLOVE300XXL† | XXL |

† CE



GLOVE100L

## Unlined Leather Work Gloves

- Use for heavy duty work and wear
- Comfort fit thumbs for dexterity and flexibility
- Embossed Snap-on® logo on reverse

| Stock No. | Size |
|---|---|
| GLOVE100M | Medium |
| GLOVE100L | Large |
| GLOVE100XL | XL |



GLOVE101L

## Lined Leather Work Gloves

- For heavy duty work and wear
- Lined for protection and warmth
- Embossed *Snap-on* logo on reverse

| Stock No. | Size |
|---|---|
| GLOVE101L | Large |
| GLOVE101XL | XL |



GLOVE505RXL

## Deep Freeze Gloves

- Extreme weather all-over protection
- Windproof with waterproof barrier
- Rubberized palm and thumb for great grip
- Reflective fingertips and cuff piping
- New streamline logo treatments
- Incredible dexterity

| Stock No. | Color | Size |
|---|---|---|
| GLOVE505RM | Red/Black | Medium |
| GLOVE505RL | Red/Black | Large |
| GLOVE505RXL | Red/Black | XL |
| GLOVE505XX | Red/Black | XXL |



GLOVE304CGL

## Cold Weather Gloves

- Heavyweight fleece outer
- Windproof insert with inner Nylex® lining
- Grip thumb and palm panel
- Nylon finger gussets stay flexible in all weather conditions
- Synthetic leather protects outer edge of thumb
- Gauntlet cuff with Velcro® closure
- Water resistant grip with 2pc palm

| Stock No. | Size |
|---|---|
| GLOVE304CGS | Small |
| GLOVE304CGM | Medium |
| GLOVE304CGL | Large |
| GLOVE304CGXL | XL |
| GLOVE304CGXX | XXL |

## Cut-Resistant Gloves

- Abrasion-, blade- and tear-resistant
- Great for tear-down work, salvage yards, sheet metal work
- Provides excellent protection while maintaining great dexterity
- Level 4 abrasion resistance
- Level 3 blade cut resistance
- Level 4 tear resistance
- Level 4 puncture resistance



GLOVE410L

| Stock No. | Size |
|---|---|
| GLOVE410M | Medium |
| GLOVE410L | Large |
| GLOVE410XL | XL |

## Abrasion Resistant Nitrile Gloves (Blue-Point®)

- Nitrile dipped coating for protection on dirty jobs
- Ergonomically pre-curved design for comfort
- High abrasion resistance protects hand on sharp edges
- Incredible grip and dexterity on wet and dry surfaces



GLOVE400L

| Stock No. | Quantity | Size |
|---|---|---|
| GLOVE400S | 3 Pack | Small |
| GLOVE400M | 3 Pack | Medium |
| GLOVE400L | 3 Pack | Large |
| GLOVE400XL | 3 Pack | XL |
| GLOVE400XXL | 3 Pack | XXL |

## Black Nitrile (Glove 8 Series)

- Powder-free plus excellent tear resistance
- Use for mechanical repairs, spray painting and refinishing applications
- Resists auto detailing chemicals

## Nitrile (Glove 5 Series)

- Gloves resist nicks, cuts and abrasions and protect against chemical splashes
- Three times the puncture resistance of natural latex or vinyl gloves
- Light powdering facilitates removal with minimal residue
- Micro textured for better gripping

## Heavy Duty Nitrile (Glove 7 Series)

- Use for paint mixing, parts cleaning, transmission rebuilds and more
- Superior puncture resistance to that of natural latex or vinyl gloves
- Resists nicks, cuts and abrasions, and protects against chemical splashes
- Thick 8 mil nitrile construction
- Extra long "sleeve" for additional protection
- Powder-free. Textured for better gripping

## Heavy Duty Latex (Glove 6 Series)

- 14 mil thickness for heavy duty usage
- Textured fingers and palm for maximum grip
- Lightly powdered for easy on/off
- Will resist most shop chemicals
- Long cuff

## Extra Thick Latex (Glove 9 Series)

- Twice as thick as standard latex gloves for tear resistance
- Microtexture improves gripping power
- Powder-free, as powder promotes allergies
- Box of 100 makes it economical



GLOVE8LA



GLOVE5MB



GLOVE7LB



GLOVE6LB



GLOVE9L

| | Stock No. | Quantity | Size |
|---|---|---|---|
| Black Nitrile Technician's Gloves | GLOVE8MA | Box of 100 | Medium |
| | GLOVE8LA | Box of 100 | Large |
| | GLOVE8XLA | Box of 100 | XL |
| Nitrile Technician's Gloves | GLOVE5MB | Box of 100 | Medium |
| | GLOVE5LB | Box of 100 | Large |
| | GLOVE5XLB | Box of 100 | XL |
| Heavy Duty Nitrile Technician's Gloves | GLOVE7MB | Box of 50 | Medium |
| | GLOVE7LB | Box of 50 | Large |
| | GLOVE7XLB | Box of 50 | XL |
| Heavy Duty Latex Technician's Gloves | GLOVE6MB | Box of 50 | Medium |
| | GLOVE6LB | Box of 50 | Large |
| | GLOVE6XLB | Box of 50 | XL |
| Extra Thick Latex Technician's Gloves | GLOVE9M | Box of 100 | Medium |
| | GLOVE9L | Box of 100 | Large |
| | GLOVE9XL | Box of 100 | XL |

## Glove Dispenser

**GLOVEHOLDERB Latex Glove Dispensing Rack**

- Holds GLOVE5, GLOVE6, GLOVE7, GLOVE8 and GLOVE9 series gloves
- Metal construction prevents damage
- Magnetic base allows attachment to tool storage unit or other ferrous metal surface
- Three "springs" secure box firmly in holder
- Mounting holes for attachment to non-ferrous surfaces
- 10" x 5 5/8" x 3 7/8"
- Black



GLOVEHOLDERB



WARNING • Read safety precautions on pages W1 to W4

# SHOP SUPPLIES: LUBRICATION




ULUBE1




AS8




AS16

## Synthetic Lubricant

**ULUBE1 Synthetic Lubricant**
- Easy to apply spray extends tool life
- Specially formulated for use with bearings and other rotating devices
- Case of (12) 5.5 oz cans

## Antiseize Lubricant

- Premium general purpose copper/graphite blend antiseize compound
- Formulated to prevent seizing and galling at high temperatures (resistant to 1,800 °F)
- Lubricates and protects against corrosion
- Eases assembly and disassembly of metal parts while reducing friciton and wear

**AS8 Antiseize Lubricant**
8 oz bottle with applicator brush attached to cap.

**AS16 Antiseize Lubricant**
16 oz bottle with applicator brush attached to cap.

# AUTO CARE/DETAILING




CLEAN1A

BUFF3KIT

## Cleaners, Polishes and Sealants

**CLEAN1A Cleaning Solution**
- Fresh scent
- Multisurface cleaner for tires, aluminum and alloy wheels, carpets, seats and other interior fabrics
- Recommended for easy removal of UV dyes from air conditioning units
- Designed to work alone or with Snap-on® YA1102 dirt and stain extractor
- Case of (12) 32 oz spray bottles

## Buffing Kits (Blue-Point®)

**BUFF3KIT Miniature Buffing Kit**
- Ideal for buffing and polishing autos, boats, motorcycles, aircraft
- Use on all painted surfaces, metal, chrome and wood
- Varied pad selection from ultra fine to very aggressive
- Wavy edge allows user to reach tight places
- Hook and loop retention system for quick, easy and secure pad/driver connection
- Includes one 1/4" shaft, 3" diameter Shur-Grip pad holder and one each of the following: blue wavy foam pad (fine polishing), black lambswool pad (ultra fine polishing), twisted wool pad (aggressive buffing) and fiberal wavy pad (ultra coarse buffing)
- EU – GB

**BUFF3KIT1 Foam Pad**
- 3" diameter wavy foam pads for fine polishing applications
- Five pads in storage tube EU – GB

**BUFF3KIT2 Lambswool Pad**
- 3" diameter lambswool pads for ultra fine polishing applications
- Five pads in storage tube EU – GB

**BUFF3KIT3 Twisted Wool Pad**
- 3" diameter twisted wool pads for aggressive buffing applications
- Five pads in storage tube EU – GB

**BUFF3KIT4 Fibreral Wavy Pad**
- 3" diameter fibreral wavy pads for ultra coarse buffing applications
- Five pads in storage tube EU – GB

**BUFF3KIT5 Shur-Grip Pad Holder (3" diameter)**
- Use with buffing/polishing pads in the BUFF3KIT series
- 1/4" shaft
- 3" diameter
- EU – GB

# HAND CLEANERS




WOD303CSA




WOD503CSA

## Medicated Hand Cleaners

- Quickly dissolves and removes stubborn dirt and stains while antiseptic properties protect the skin

**WOD303CSA Medicated Hand Cleaner**
- Fresh orange scent
- Case of four 4 1/2 lb cans

**WOD503CSA Medicated Hand Cleaner**
- Case of four 4 1/2 lb cans




WOD423CSA




WOD623CSA




WOD1050CSA

## Pumice Hand Cleaners

- Extra strength pumice hand cleaner with antiseptic ingredient

**WOD423CSA Pumice Hand Cleaner**
- Fresh orange scent
- Case of four 4 1/2 lb cans

**WOD623CSA Pumice Hand Cleaner**
- Case of four 4 1/2 lb cans

**WOD1050CSA Pumice Hand Cleaner**
- Fresh orange scent
- Case of four 1 gal bottles

## Water Activated Hand Cleaners

- Soybean-based, water-activated and concentrated formula with fibril scrubbers
- Contains antiseptic ingredient and conditioners for maximum skin protection
- Redline hand cleaner offers the highest performance skin cleaning with fibril/pumice double scrubbing action

**WOD2025ACSA Water Activated Hand Cleaner**
- Case of four 84 oz bottles
- Requires WOD1027 pump dispenser

**WOD2325ACSA Redline Hand Cleaner**
- Case of four 84 oz bottles
- Requires WOD1027HT pump dispenser

**WOD2018ACSA Water Activated Hand Cleaner**
- Portable size is perfect for a toolbox, cart or at home
- Squeeze bottle with no-drip nozzle
- Case of (12) 18 oz bottles

**WOD2115ACSA Nitro-Gold Hand Cleaner**
- For use in WOD8207 auto dispenser or WOD8307 manual dispenser
- Case of four




WOD2025ACSA



WOD2325ACSA




WOD2018ACSA



WOD2115ACSA



WOD507



WOD1027



WOD1027HT




WOD8207




WOD8307

## Hand Cleaner Dispensers

**WOD507 Heavy Duty Hand Cleaner Dispenser**
- Convenient for wall mounting
- 4 1/2 lb cans of hand cleaner

**WOD1027 Pump Style Hand Cleaner Dispenser**
- Wall-mounted, pump-style dispenser for WOD2025ACSA or WOD2325ACSA hand cleaners in 84 oz bottles

**WOD1027HT Pump Style Hand Cleaner Dispenser**
- Wall-mounted, pump-style dispenser for WOD2025ACSA or WOD2325ACSA hand cleaners in 84 oz bottles

**WOD8207 Automatic Hand Cleaner Dispenser**
- Auto dispensing portion control, no waste, dripping or cross contamination
- Over 900 washes per refill bottle
- Auto dispenser eliminates grease and grime accumulating on dispenser
- Four D batteries will last 30,000 cycles, over 30 refills, or over 18 months' battery life
- Sleek ergonomic and attractive design, less than 4" wide, meeting the fire marshal code for hallways

**WOD8307 Manual Hand Cleaner Dispenser**

Proprietary unit, refills only from your authorized Snap-on® franchisee (Refill: WOD2115ACSA)
- 2 mL dispenses with each activation and 750 hand washes per refill
- Sleek ergonomic and attractive design, less than 4" wide, meeting the fire marshal code for hallways
- Tamper-resistant and keyless locking cover
- Dispense from bottom, eliminating unused hand cleaner in refill

## Hand and Shop Towels

**WOD5020 Hand and Tool Cleaning Towels**
- Convenient hand towels for cleaning tools or hands of oil and grease
- Towels contain lanolin and rust preventatives




WOD5020

## Fingernail/Hand Brush

**WOD1000 Fingernail Brush**
- Use with any "WOD" series hand cleaner



WOD1000



**⚠WARNING**

- Do not ingest or use on face
- Read safety precautions on pages W1 to W4

# SHOP SUPPLIES: WIRE BRUSHES


WBBS2


WBSS2


WBSS3


WBSS5


WBSS2BKT


WBBS2BKT


WBSS8


WBSS9


WBSS14


WBSS5CAL

## Wire Brushes

- Ergonomic cushion grip handle designed for maximum comfort and control
- Use with both hands to maximize pressure
- Heavy 28 gauge stainless-steel gives units maximum strength and durability
- Choice of brush width and length allows you to cover a wide range of applications

**Applications:**
Ideal for cleaning rusted threads, battery terminals and gaskets. Removes body rust prior to welding on various metal parts. Cleans off caulk and interpanel grinding welds.

| Stock No. | Description | WBSET | WBSSET | WBMSSET | WBSS2BK | WBBS2BKT |
|---|---|---|---|---|---|---|
| WBBS2 | 2" miniature brass wire brush | 2 | 1 | 1 | 25 | |
| WBSS2 | 2" miniature stainless-steel wire brush | 1 | 1 | 1 | | 25 |
| WBSS3 | 3" stainless-steel wire brush | | 1 | 1 | | |
| WBSS5 | 5" stainless-steel wire brush | | | | | |
| WBSS8 | 7 3/4" stainless-steel wire brush | | 1 | 2 | | |
| WBSS9 | 8 3/4" stainless-steel wire brush | | | 1 | | |
| WBSS14 | 6 3/4" stainless-steel wire brush | | 1 | 2 | | |
| WBSS5CAL | 5" stainless-steel wire caliper brush | | | | | |


AC5C


AC58E


AC64B


AC59C

## Specialty Brushes (Blue-Point®)

**AC5C Hand Scratch Brush**
Stainless wire bristles for use where corrosive materials are found. 7 7/8" long.

**AC58E Wire Brush**
Curved scratch brush. Carbon steel bristles. 13 3/4" long.

**AC64B Shoe Handle Scratch Brush**
Carbon steel bristles. 10" x 1 1/16". 5" long.

**AC59C Stainless-Steel Wire Brush**
Curved scratch brush. Stainless-steel bristles. 13 3/4" long

## Crimped Industrial (Tempered, High Density Wire)

| Stock No. | Brush Diameter, inches | Width, inches | Arbor Hole, inches | Maximum Safe Free Speed, RPM |
|---|---|---|---|---|
| AC48A | 8 | 1 | 5/8 | 4,500 |



AC48A

**AC48ADAPT1 Wire Wheel Shaft Adaptor**
- Adapts the AC48A to a 1" shaft



AC48ADAPT1

**AC48ADAPT3/4 Wire Wheel Shaft Adaptor**
- Adapts the AC48A to a 3/4" shaft



AC48ADAPT3/4

## Crimped Heavy Duty (Non-tempered Wire)

| Stock No. | Brush Diameter, inches | Width, inches | Arbor Hole, inches | Maximum Safe Free Speed, RPM |
|---|---|---|---|---|
| AC26E | 6 | 29/32 | 5/8, 3/4, 1 | 6,000 |
| AC28E | 8 | 1 1/8 | 5/8, 3/4, 1 | 4,500 |



AC26E

## Twisted Tuft

Tufts are 1 1/4" long and are twisted about 2/3 of the way.

| Stock No. | Wheel Diameter, inches | Wheel Width, inches | Wire Size, inches | Arbor Hole, inches | Maximum Safe Free Speed, RPM |
|---|---|---|---|---|---|
| AC614B | 6 | 1/2 | .016 | 1/2, 5/8 | 9,000 |



AC614B

## Encapsulated

- Individual wire tips are encased in synthetic elastomer material (gradually wears away to expose only wire tips) for consistent stiff brushing action
- Ideal for auto body and surface applications

| Stock No. | Wheel Diameter, inches | Wheel Width, inches | Wire Size, inches | Arbor Hole, inches | Maximum Safe Free Speed, RPM |
|---|---|---|---|---|---|
| AC207A | 2 | 1/4 | .014 | 3/8, 1/2 | 18,000 |
| AC217A | 3 | 1/4 | .014 | 3/8, 1/2 | 18,000 |



AC207A

**WARNING**

- Do not use wire wheels above their maximum rated RPM
- Read safety precautions on pages W1 to W4

## SHOP SUPPLIES: GRINDING ACCESSORIES



WD13

### Grinder Accessory (Blue-Point®)

**WD13 Grinder Wheel Dresser**
- Helps true up grinding wheels
- Hardened and serrated steel disks
- 11" long, 1.5" diameter wheels

## KNEE PADS/BACK SUPPORT



KNEEPAD2



KNEEPAD3

### Kneepads

**KNEEPAD2 Kneepads**
- Polypropylene cap protects against floor debris
- Outer cap is securely attached to padded nylon inner pad for maximum comfort
- Extra wide Velcro® straps for easy on/off
- Lightweight

**KNEEPAD3 Gel Cushioned Kneepads**
- Wide neoprene rear lower flap reduces chafing
- Gel cushioned for maximum comfort
- *Velcro* straps for easy on/off, secure fit and comfort
- Hinged pad extensions for a comfortable fit




BACK1XL



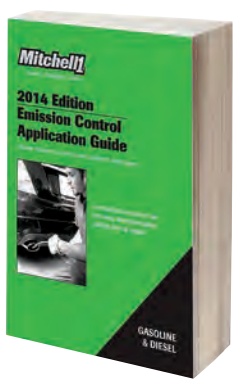

BACK1LBK

### Back Supports

- Curved, firm support pads help reduce back fatigue
- Unique patented lumbar pad design to firmly support the lower back
- Not a replacement for proper workplace design and proper training in lifting, twisting and bending movements

| Stock No. | Size | Color |
|---|---|---|
| BACK1M | Medium, 31"–36" waist | Red |
| BACK1L | Large, 35"–40" waist | Red |
| BACK1XL | XL, 39"–44" waist | Red |
| BACK1XXL | XXL, 43"–48" waist | Red |
| BACK1SBK | Small, 27"–32" waist | Black |
| BACK1MBK | Medium, 31"–36" waist | Black |
| BACK1LBK | Large, 35"–40" waist | Black |
| BACK1XLBK | XL, 39"–44" waist | Black |

## MITCHELL® SERVICE PROGRAMS




SKECAG14

### *Mitchell*1 Service

**SKECAG14 Emission Control Application Guide *Mitchell*1 Manual**
**Coverage:**
1966–2014 US Cars, Light Trucks and Vans (Gasoline Engines)
1966–2014 Imported Cars, Light Trucks and Vans (Gasoline Engines)
1966–2014 US Medium and Heavy Duty (Gasoline Engines)
Class "A" Motor Homes (Gasoline Engines)
1984–2014 US and Import Cars, Light Trucks and Vans (Diesel Engines)
- Diesel Applications
- Traction Control Disable Procedures
- Comprehensive US and Import Coverage
- Emission Control Systems and Devices
- Timing Specifications
- EGR Function Testing
- EPA Emission Recalls
- Service Reminder Indicator Procedures

# DIAGNOSTICS


Overview.....742

ETHOS® +.....744

VANTAGE® Ultra.....745

SOLUS™ Edge.....746

MODIS™ Ultra.....747

VERDICT®.....748

VERUS® PRO.....749

Accessories.....751

Gas Analyzer.....762

Software.....764

Heavy Duty
PRO-LINK® Ultra.....767




# SOLVE COMPLEX PROBLEMS. IN A SNAP.

Who do you turn to when you need help solving complex problems? That's simple: Snap-on. Our diagnostic tools will help you quickly get to the heart of the problem, troubleshoot, and get the issue fixed correctly. Plus, they'll save you time – and money. For diagnostics that are fantastic, we offer this simple solution: call on Snap-on.



## PLATFORMS

When you need help managing the repair – and, your business – Snap-on® diagnostic tools come to the rescue. With scan tools, oscilloscopes, internet-capable multifunction tools, and more.

**SCAN TOOLS —** ETHOS®+ offers OEM-specific coverage for dozens of systems on over 40 makes; SOLUS™ Edge also offers access to exclusive expert tips and timesavers.

**OSCILLOSCOPE —** VANTAGE® Ultra puts exclusive Fast-Track® Guided Component Tests in your hands - plus the accuracy of 8 million data samples per second.

**MULTIFUNCTION TOOLS —** MODIS™ Ultra offers scan, scope and expert information resources in one place. VERUS® PRO adds a big 10-inch display, Windows multitasking, and the freedom of Wi-Fi and wireless scanning.

**"ETHOS+ is so much more than an OBD-II code tool. When I saw how much it could do, I was sold. I started using it right away and quickly diagnosed a fuel injector problem. That made good money for me."**

Tom Dubinsky
Milwaukee, WI



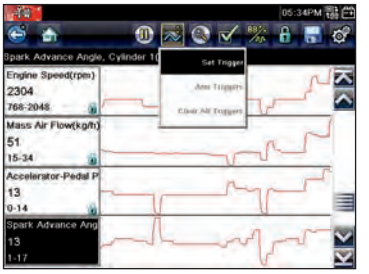

Tom has:
EESC319: ETHOS®+

# ETHOS® + SCAN TOOL

ETHOS+®



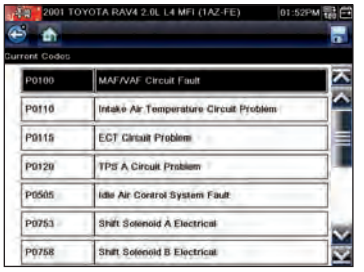

**EESC319**




Graph up to four live data parameters at once. Set triggers to catch intermittent faults.




OEM-specific codes and live data graphing for critical vehicle systems.




Read and clear OEM proprietary and global codes in just seconds with clear code definitions on screen.




Fast touch-screen operation for vehicle ID and navigation. Saves previous vehicles and data for review.

**EESC319 *ETHOS* + Scan Tool**

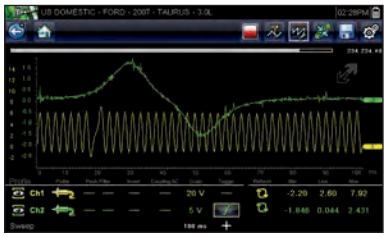
- OEM-specific coverage for over 40 US, Asian and (optional) European vehicles
- Effortless access to codes and data for dozens of systems
- Quick navigation with a touch of your finger, or use the four-way keypad
- Big 5 1/2" color touch screen for clear, detailed results
- Keyless data connector for all OBD-II vehicles
- Compare seven live data parameters on screen at once, or graph up to four side-by-side to isolate the root cause of vehicle problems
- Perfect for new users, service writers and as a shared tool for the entire shop
- Powers from vehicle so you can keep moving all day long. Simply connect to vehicle for automatic boot-up in 10 seconds
- Vehicle-specific code descriptions in plain English
- Covers newer technologies like TPMS, Hybrid power systems, Body controls, Suspension and Steering angle sensor
- Diagnose vehicles dating back to 1980, with optional OBD-I adapters
- Pause, record, save and play back live data
- Set min/max triggers to catch data that falls outside normal range
- Zoom in on graphs to see more detail, find glitches, nail down intermittent problems
- User-programmable shortcut key to perform frequent tasks with just one touch
- Also covers all ten modes of OBD-II. Read and clear codes, reset the MIL, view current data, determine emissions readiness, onboard monitors, ECU info, pending codes, permanent codes and more
- Internal AA battery power to review results off-vehicle
- UL® and ULC Listed

**Includes:**

*ETHOS* + scan tool, 5' data cable with keyless OBD-II connector, USB cable, padded nylon carry case, six AA batteries, AC power adaptor and Quick Start Guide

**Optional Accessories**

- **EESP319E European Software Activation**
- **EAK0301B07B European Vehicle Adaptor Kit**
- **EAK0301B10A OBD-I Complete Adaptor Kit**
- **EAX0068L10A Extended length 9' OBD-II Data Cable**
- **EAK0313B02A Hand Strap and Folding Stand**
- **EAC0110L35A3 Screen Protector (3-pack)**



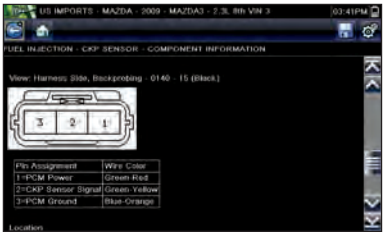
Precision high-resolution display makes it easy to see vehicle faults and component failures.



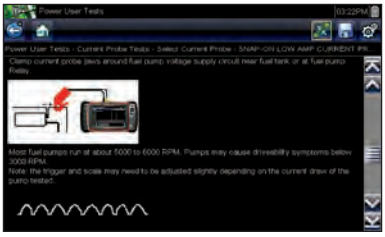

**EETM309**




Vehicle-specific tests for millions of component applications automatically preconfigure meter settings to save time and eliminate guesswork.




Component locator and connector diagrams show the best test locations.




Exclusive Fast-Track® Guided Component Tests show where to test, how to connect and what to look for.

**EETM309 *VANTAGE* Ultra Component Test System**

- The perfect companion to any scan tool; adds confidence to any diagnosis
- High-speed lab scope, digital and graphing meter, plus expert information makes it easy to verify component faults
- Exclusive *Fast-Track* guided component tests verify component failures; with test procedures, automatic meter setup, connector diagrams, component locator and waveform library
- Test components before replacing for accurate first-time repairs
- Our fastest operating system with superfast boot-up in only 5 seconds; diagnostic results in only 30 seconds
- Easy one-touch navigation using big 8" color touch screen or keypad operation
- Vehicle-specific component tests for over 40 US, Asian and European makes, 1981–current
- PC connectivity via USB port; save, share, view, print files via ShopStream Connect™ application available at no charge
- Coverage for thousands of components on all major vehicle systems – engine, fuel, transmission, emissions, ignition, ABS, lighting, solenoids, valve train, cooling, climate, anti-theft, oxygen sensor and many more
- Save your diagnostic results and screen images on internal microSD card
- 6 million samples/sec
- 3MHz bandwidth
- Preset and custom meter settings
- Peak detect, cursors and glitch capture to help find problems other scopes miss

**Includes:**

- *VANTAGE* Ultra Component Test Meter
- Two shielded scope leads, probes, clips
- 110V AC power adaptor
- High energy Lithium-ion battery pack
- Soft-sided nylon carry case

**Optional Accessories:**

- **EETA308D Precision low-amp probe**
- **EEPV302AL Low-pressure transducer**
- **EEPV302AT Medium-pressure transducer**
- **EEPV302AH High-pressure transducer**
- **EAC0111L76A3 Screen protectors**
- **EEMS324PSA Pressure adaptor (required for pressure transducer use)**
- **SOLVANUFOAM3 Organizers for 3-series carts**
- **SOLVANUFOAM4 Organizers for 4-series carts**
- **Plus a wide range of ignition adaptors**

**⚠WARNING**

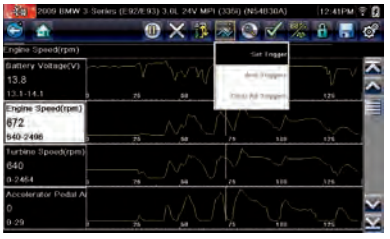
- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# SOLUS™ EDGE SCAN TOOL

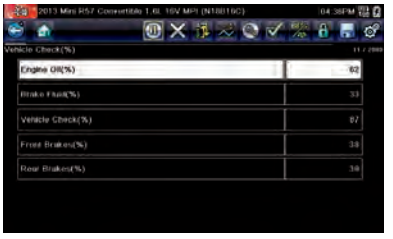
## SOLUS™ Edge



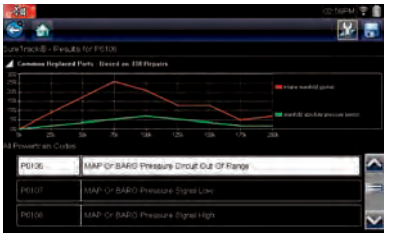

**EESC320**



Graph up to four live data parameters at once. Catch hard-to-find faults with trigger, record, playback and scaling zoom functions.



Easily identify service items and view status. Reset service indicators after repair or service.



SureTrack® Expert Information System with millions of Real Fixes and verified parts replacement records harvested from successful repair orders.

**EESC320 *SOLUS* Edge Full Function Scan Tool**

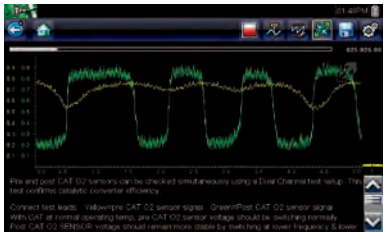
- Wifi access to SureTrack® expert information and verified parts replacement records for a confident diagnosis
- Super-fast boot-up. Ready to use in just 5 seconds. Results in as little as 30 seconds
- Detailed trouble code definitions and live data. Plus powerful functional tests, relearns, and adaptations to control vehicle systems and validate repairs
- Large 8" touch screen display for great readability and ease of use
- Custom data lists, freeze-frame, PID sorting, pause, zoom, PID trigger and cursor functions
- Embedded SMX® Operating System dedicated to diagnostic functions for fast, reliable operation
- Fast-Track® Troubleshooter database includes vehicle-specific tips, tests, and time-savers
- Fast and easy icon navigation operates completely by touch screen, or use the four-way keypad
- Enhanced coverage for over 40 makes without the cost and complexity of factory scan tools (European coverage optional)
- OEM-specific coverage for more than 70 vehicle systems, including the new systems techs need, like hybrids, TPMS, steering, body controls, EVAP, clean diesels and more
- Print/save/share/view results on PC via ShopStream® Connect software
- Never stop to recharge – Unique steady-charge battery technology charges from vehicle power
- Includes: *SOLUS* Edge scan tool, upgradable software on microSD card, data cable for OBD-II vehicle applications, Lithium-ion battery pack, 110V AC power adaptor, USB cable for PC connection, nylon carry case, safety instructions; user manual on CD

**Optional Accessories:**

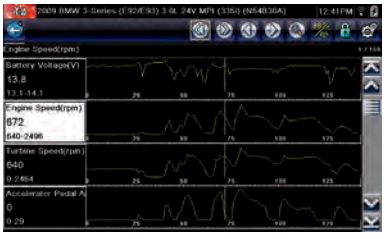
**EESP320E European software activation**
**EAK0301B07B European vehicle adaptor kit**
**EAK0301B10A OBD-I Complete adaptor kit**
**EAX0068L10A Extended length 9' OBD-II data cable**
**EAC0111L76A3 Screen protector (3-pack)**
**EAZ0083L08A 8' x 2' *SOLUS* Edge shop banner**



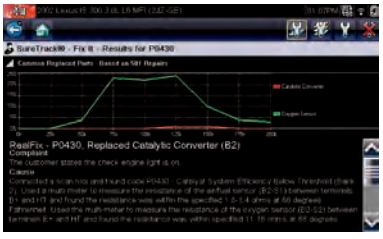

**EEMS328**



High-speed 2-channel scope with exclusive Guided Component Tests show where to connect, how to test and what results to look for.



Graph up to four live data parameters at once. Customize the tool to work the way you do, with customer data lists, PID trigger and scaling zoom functions.



SureTrack® Expert Information System with millions of Real Fixes and verified parts replacement records harvested from successful repair orders.

**EEMS328 *MODIS* Ultra Modular Diagnostic and Information System**

- Integrated software suite with scan tool, lab scope, graphing meter, and expert information makes it easy to verify faults
- Super-fast boot-up in only 5 seconds; get diagnostic results in only 30 seconds
- Easy one-touch navigation using big 8" color touch screen or keypad operation
- OEM-specific scanner coverage for more than 40 domestic, Asian and (optional) European makes
- Exclusive Fast-Track® Troubleshooter tips save time and avoid comebacks
- Exclusive *Fast-Track* Guided Component Tests verify component failures with test procedures, automatic meter setup, connector diagrams and a waveform library
- Exclusive steady-charge battery technology automatically charges from vehicle connector
- A single keyless data cable for OBD-II applications saves connection time
- Unique "cause and effect" diagnostics – use powerful functional tests while viewing live data parameters on-screen
- Full scanner capabilities include coverage for vehicle-specific codes, live data, functional tests, relearns, adaptations
- Save your diagnostic results, codes, data, screen images on internal micro SD card
- PC connectivity via USB port. Save, share, view, print files via ShopStream® Connect application available at no charge
- Exclusive data graphing with glitch capture to find elusive intermittent faults
- OEM-specific coverage for 1980 and later US vehicles, 1983 and later Asian vehicles, and optional 1992 and later European vehicles
- Coverage for dozens of the most popular systems – engine, transmission, airbag, ABS, body, steering, suspension, TPMS, hybrid power, lighting, instrument, park assist, climate and many more
- Digital/graphing meter and high-speed two-channel lab scope, features:
  - 6 million samples/sec
  - 3MHz bandwidth
  - Preset and custom meter settings
  - Peak detect, cursors and glitch capture
  - Helps find problems other scopes miss
- Includes keyless universal OBD-II adaptor, two shielded scope leads with probes and clips, 110V AC power adaptor, high energy lithiumion battery pack and two custom fit organizer trays

**Optional Accessories:**

**EESP328E European vehicle software**
**EAK0301B07B European vehicle adaptors**
**EAK0301B10A Complete OBD-I adaptor kit (17 adaptors plus jumper lead set)**
**EETA308D Precision low amp probe**
**EEPV302AL Low pressure transducers**
**EEPV302AT Medium pressure transducers**
**EEPV302AH High pressure transducers**
**EEMS324PSA Pressure adaptor (required for pressure transducers)**
**EAC0111L76A3 Screen protectors**
**EAK0313L05A Soft-sided nylon carry case**
**EAX0068L10A 9' Extended OBD-II data cable**
**MODISUFOAM3 Organizers for 3-series carts**
**MODISUFOAM4 Organizers for 4-series carts**
**EAZ0079L11A 8' x 2' *MODIS* Ultra shop banner**

WARNING

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# WIRELESS MODULAR DIAGNOSTIC AND INFORMATION SYSTEMS

VERDICT™



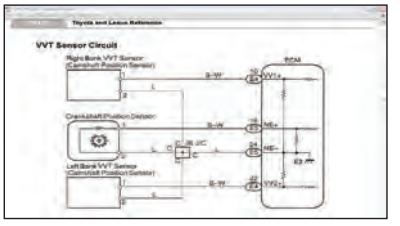
**EEMS324**



High-resolution display shows detailed graphing of up to 12 data parameters for precise results.



Wireless Component Test Meter features automatic presets, guided test procedures and known good values and waveforms.



Hotlinks to Fast-Track® reference material including valuable TSBs, component locator and wiring diagrams.

**EEMS324 VERDICT® Modular Diagnostic and Information System Features:**

- Wireless display, scanner and meter lets technicians be in more places at once
- Real world answers in your hands from anywhere in the shop: codes, live data, bi-directional controls, *Fast-Track* guided component tests, Internet, Troubleshooter
- Integrated SureTrack® Expert Information System provides Real Fixes and verified parts replacement records harvested from successful repair orders
- OEM-specific scanner coverage for 1980–newer vehicles
- High-speed two-channel scope and graphing meter
- Keyless scanner module for quick, simple connection
- Wi-Fi and Internet browser to access web resources
- Windows® operating system
- Internal hard drive
- Touch screen operation

***VERDICT* D7 Display Tablet Features:**

- Big, bright 7" color touch screen
- *Windows* multitasking
- Internet browser and Wi-Fi
- Bluetooth® wireless communication
- One-touch navigation shortcuts
- 60GB internal hard drive
- Built-in two megapixel camera
- Lithium-Ion battery pack for up to 4 hours of continuous operation

***VERDICT* Scanner Module Features:**

- Wireless remote control from the *VERDICT* D7 Display Tablet
- Keyless adapter for OBD-II applications
- OEM-specific coverage for 40 makes (European optional)
- *Fast-Track* Troubleshooter code tips, symptom tips and repair time-savers
- *Fast-Track* database of reference values, TSBs, wiring diagrams and more
- View up to 12 live data graphs at once

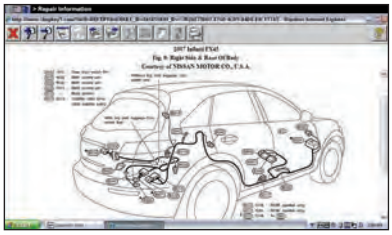
**VERDICT EAK0301B14A Scope/Meter Module Features:**

- Standalone operation or Bluetooth connection for remote control from *VERDICT* platform
- Two-channel high-speed lab scope and digital graphing meter
- Tests V DC, V AC, ohms, continuity, capacitance, frequency, duty cycle, pulse-width and diodes
- Full-color, backlit high-resolution display for clear, precise results
- Selectable scales from 0–100 millivolt to 0–1,000V DC
- CAT III and CAT IV certification; hybrid-ready
- Scope sweep rates from 25 microseconds to 10 seconds (up to 60 minutes in DMM mode) for a wide range of applications
- High energy rechargeable NiMH battery for 8–12 hours of continuous use
- High input impedance – 10 megohm avoids risk to electronic components
- 20 megasamples per second per channel and 290 data points per screen makes it easy to catch component faults and glitches
- Bright, backlit full-color display. High-resolution 240 x 320 pixels. Graphing and digital results. Oversized digits for easy viewing at a distance
- Color-coded waveforms; two channels to compare readings from multiple components side-by-side in real time

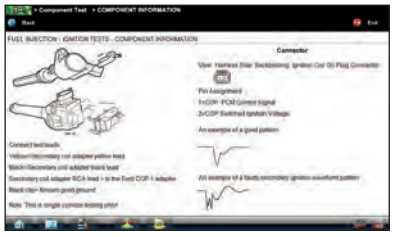
VERUS PRO



**EEMS327**



Hotlinks directly to the optional ShopKey® Repair Information system.



Exclusive Guided Component Tests show where to connect, how to test and what results to look for.



Compare from one to sixteen live data parameters on-screen at once to see root cause of vehicle faults.

## EEMS327 VERUS® PRO Integrated Diagnostic and Information System Specifications

### DISPLAY TABLET

- Thin profile tablet with 10" high-resolution 1024 x 600 screen
- Built-in camera to save and share photos for records
- Bluetooth® and Wi-Fi to access your web resources
- High energy Lithium-Ion battery pack for hours of continuous operation
- USB, audio and auxiliary ports make it easy to add accessories
- Big hard drive to save data and install your own applications

### SOFTWARE

- Exclusive *ShopStream* integrated diagnostic suite with scanner, scope, guided component tests, optional online expert forum, vehicle records, optional *ShopKey* Repair Information
- Integrated SureTrack® Expert Information System provides Real Fixes and verified parts replacement records harvested from successful repair orders
- Genuine Windows® multitasking to view multiple applications side-by-side
- Powerful data manager saves vehicle records, photos, technician notes, screen images, scanner and scope data

### SCANNER MODULE

- A single keyless adapter for OBD-II vehicle applications
- Connects wirelessly to the display tablet with *Bluetooth* for remote operation
- OEM-specific coverage for over 40 manufacturers, as far back as 1980 (European optional)
- Codes, live data, functional tests, relearns and adaptations for dozens of vehicle systems
- Exclusive Fast-Track® Troubleshooter with millions of validated code tips, symptom tips and time-savers

### SCOPE MODULE

- Hot-dockable USB scope module
- High-speed four-channel lab/ignition scope and digital/graphing meter
- Six megasamples/second sample rate and glitch capture detects faults other scopes miss
- Scale range: 0–100mV to 0–400V, 50kV secondary ignition
- Sweep rate: 50 microseconds to 20 seconds (5 min in GMM mode) so you don't miss a thing
- Exclusive *Fast-Track* guided component tests for 40 US, Asian and European manufacturers
- V DC, V AC, ohms, frequency, duty cycle, pulse width, diode test and more

**Includes:**
*VERUS* PRO Display Tablet, four-channel scope module, wireless scan module, upgradable software on hard drive, keyless OBD-II data cable, OBD-I adaptor kit 1, Lithium–Ion battery pack, USB cable, 110V AC power adaptor and custom-fit organizer trays

**Optional Accessories for *VERUS* PRO:**

**3-06206A01 Nylon stylus (3-pack)**
**EESP327E European vehicle software**
**EAA0365L04A Docking station**
**EAK0301B07B European vehicle adaptors**
**EETA308D Precision low-amp probe**
**EEPV302AL Low-pressure transducer**
**EEPV302AT Medium-pressure transducer**
**EEPV302AH High-pressure transducer**
**EEMS324PSA Pressure adaptor (required for pressure transducers)**
**EAC0107L17A3 Screen protectors**
**EAX0068L10A 9' Extended OBD-II data cable**
**VERUSPFOAM3 Organizers for 3-series carts**
**VERUSPFOAM4 Organizers for 4-series carts**
**EAZ0077L07A 8' x 2' *VERUS* PRO shop banner**
**Plus a wide range of ignition adaptors**

WARNING
• Do not use in atmosphere with explosive vapor
• Read safety precautions on pages W1 to W4

# DIAGNOSTICS QUICK REFERENCE GUIDE

| |  |  |  |  |  |  |
|---|---|---|---|---|---|---|
| | **ETHOS®+** | **VANTAGE® Ultra** | **SOLUS™ Edge** | **MODIS™ Ultra** | **VERDICT®** | **VERUS® PRO** |
| **Display screen** | 5.6" | 8" | 8" | 8" | 7" | 10" |
| **Choice of touch screen or keypad operation** | • | • | • | • | • | • |
| **< 10 second boot-up** | • | • | • | • | | |
| **Live data graphing** | 4 graph | | 4 graph | 4 graph | 12 graph | 16 graph |
| **Keyless scanner adaptor** | • | | • | • | • | • |
| **Wireless scanner** | | | | | • | • |
| **Battery charges from car** | | | • | • | | |
| **WiFi access to SureTrack® Expert Information** | | | • | • | • | • |
| **Exclusive Fast-Track® Troubleshooter Tips** | | | • | • | • | • |
| **1980–newer US scanner coverage** | • | | • | • | • | • |
| **1983–newer Asian scanner coverage** | • | | • | • | • | • |
| **2002–newer European scanner coverage (optional)** | • | | • | • | • | • |
| **Functional tests/ bidirectional controls** | | | • | • | • | • |
| **One-touch full-vehicle code scan and code clear** | • | | • | • | • | • |
| **User-programmable function key** | • | • | • | • | • | • |
| **Save/Print/Store w/ ShopStream®-Connect PC interface** | • | • | • | • | | |
| **Save/Print/Store via internal hard drive** | | | | | • | • |
| **Audio in/out, speakers, microphone** | | | | | • | • |
| **Records all PIDs – while on or off screen** | • | | • | • | • | • |
| **Exclusive PID trigger** | • | | • | • | • | • |
| **Adjustable PID graph scale** | • | | • | • | • | • |
| **Hotkey for instant screen snapshots** | • | • | • | • | • | • |
| **Windows multitasking** | | | | | • | • |
| **Data Manager application for vehicle records** | | | | | • | • |
| **Built-in camera** | | | | | • | • |
| **WiFi-enabled** | | | • | • | • | • |
| **Open browser – Internet Explorer** | | | | | • | • |
| **Optional ShopKey® Repair Information System** | | | | | • | • |
| **Optional *ShopKey* Management RO Viewer** | | | | | • | • |
| **2-Channel high-speed lab scope** | | | | • | • | |
| **4-Channel high-speed lab scope** | | | | | | • |
| **Ignition scope capabilities** | | | | | | • |
| **Exclusive Fast-Track® Guided Component Tests** | | • | | • | • | • |
| **Waveform library and known good test values** | | • | | • | • | • |

Notes:
Some functions require Internet access
Some functions not available for all vehicle makes



EAA0365L04A



EAK0301B07B




EAC0107L17A3



3-06206A01

## VERUS® PRO Accessories

**EAA0365L04A *VERUS* PRO Docking Station**
- Convenient and secure charging station for *VERUS* PRO
- Keep your tool powered and charged up all day long – uses standard power adaptor included with *VERUS* PRO
- 15-pin video connector – to connect to your external big-screen monitor to display *VERUS* PRO results
- Built-in USB hub to connect up to four USB devices
- Multiposition stand: vertical, angle or fold to lay flat in tool storage drawer
- Simple and secure drop-in docking makes for fast grab-and-go portability

**EAK0301B07B European Vehicle Adaptor Kit**
- Includes data cable, VW1 adaptor, MB1 adaptor, MB2A adaptor, BM1B adaptor and keys
- Kit requires European Vehicle Software Activation

**EAC0107L17A3 *VERUS* PRO Screen Protector Sheets**
- Includes three screen protector sheets
- Custom-fit for *VERUS* PRO
- Easy peel-and-stick application
- Easy to replace – simply peel off old protector sheet and press on a new one
- Keeps screen clean and protected from scratches, solvents and dirt
- Helps maintain touch screen sensitivity
- Crystal-clear protection for optimum viewing in the shop or in the sun

**EESP327E *VERUS* PRO European Vehicle Software Activation**
- Comprehensive OEM specific coverage for servicing European makes
- Covers fault codes, live data parameters, functional tests, relearns and adaptations for dozens of vehicle systems
- Coverage for Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, Mercedes®, MINI®, Porsche®, SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- Also requires: EAK0301B07B European Adaptor Kit

**3-06206A01 Nylon Stylus**
- High polished chrome stylus or durable black nylon stylus
- Soft tip to protect touchscreen

**Optional Accessories:**

**3-06206A01 Nylon stylus (3-pack)**
**EAK0301B07B European vehicle adaptors**
**EETA308D Precision low-amp probe**
**EEPV302AL Low-pressure transducer**
**EEPV302AT Medium-pressure transducer**
**EEPV302AH High-pressure transducer**
**EEMS324PSA Pressure adapter (required for pressure transducers)**
**EAX0068L10A 9' Extended OBD-II data cable**
**VERUSPFOAM3 Organizers for 3-series carts**
**VERUSPFOAM4 Organizers for 4-series carts**
**EAZ0077L07A 8' x 2' *VERUS* PRO shop banner**
**Plus a wide range of ignition adaptors**



WARNING
• Do not use in atmosphere with explosive vapor
• Read safety precautions on pages W1 to W4

# VERUS® ACCESSORIES

VERUS®



EAK0294B21A



EAA0354L40A



EAK0294B02A



EAE0059L07A



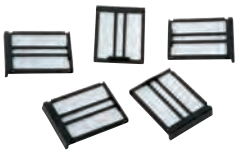
EAA0354L12A



2-02539A



6-06321A



EAK0253B02A



EAK0294B08A



EAC0101L69A1

## *VERUS* Accessories

**EAK0294B21A *VERUS* Wireless Conversion Kit**
Wireless Scan Module adds wireless freedom and keyless simplicity to EEMS323 Diagnostic and Information System
- Simplicity, no more searching for keys. Keyless scan module covers OBD-II applications with a single adaptor
- Scan wirelessly with remote control of the Scan Module; get codes, live data, functional tests, relearns and adaptations while moving freely around the vehicle
- Includes: Wireless scan module, OBD-II data cable, data cable for adaptors, USB cable and instructions
- Note: Requires *VERUS* diagnostic unit with Software Bundle 10.4 or higher

**EAA0354L40A Velcro® Handgrip**
- Secure, adjustable *Velcro* strap makes it easy to hold *VERUS* diagnostic unit with one hand

**EAK0294B02A Charging Station with USB Hub**
- Secure benchtop WorkStation for *VERUS* diagnostic unit
- Charges *VERUS* battery when used with standard *VERUS* power adaptor
- Internal USB hub joins up to four USB devices when connected to *VERUS* diagnostic unit with standard USB cable (included)

**EAE0059L07A External Battery Charger**
Smart charger for up to two *VERUS* battery packs
- Automatic fast charge and trickle mode
- Includes 110V AC power supply

**EAA0354L12A *VERUS* Battery Pack**
- Keep a diagnostic tool on duty all day long with a spare high energy Li-ion battery
- Built-in LEDs show charge status

**2-02539A 110 V AC Power Supply**
- Powers *VERUS* diagnostic unit and quick charges battery pack
- Requires 6-06321A power cord

**6-06321A AC Cord for 110 V Power Supply**
- Line cord for AC power adaptor

**EAK0253B02A Replacement Air Filters (5-pack)**
- Help to keep *VERUS* electronic components cool and clean

**EAK0294B08A Maintenance Kit**
- Includes three screen protectors, three nylon touch screen styluses and five air filters

**EAC0101L69A1 Screen Protector (3-pack)**
- Crystal clear sheets protect screen from scratches, solvents and dirt
- Easy peel-and-stick application

**EESP323E VERUS European Vehicle Software Activation**
(Also requires: EAK0301B07B European Adaptor Kit)

**EAK0301B07B European Vehicle Adaptor Kit**

**EAK0301B10A OBD–I Adaptor Master Kit**



EAA0365L01A



EAA0365L06A



2-02839A



EAK0301L03A



EAK0301L01A1



EEMS324PSA

## *VERDICT* Accessories

**EAA0365L01A *VERDICT* Docking Station**
- Convenient and secure charging station for the *VERDICT* Diagnostic System
- Keep the *VERDICT* Diagnostic System powered up and charged all day long
- Uses standard power adapter included with *VERDICT* Diagnostic System
- USB hub to connect up to four USB devices
- 15-pin video connector displays *VERDICT* results on external big screen monitors
- Multiposition stand, as an angled folding stand, laid flat to fit in tool storage drawer or in a vertical orientation

**EAC0107L03A5 *VERDICT* Screen Protector**
- Includes three removable screen protector sheets
- Easy peel-and-stick application
- Simply peel off old protector sheet and press on a new one
- Help to keep *VERDICT* touch screen clean and protected
- Helps maintain touch screen sensitivity
- Protects screen from scratches, solvents and dirt
- Crystal clear protection for optimum viewing inside the shop or outside in the sun

**EAA0365L06A *VERDICT* Battery Pack**
- Extended charge life battery pack
- Work longer without a recharge; six-cell battery offers twice the charge life of standard three-cell *VERDICT* battery
- Up to eight hours of non-stop use with *VERDICT* D7 Display
- No extra bulk, fits in the standard *VERDICT* battery slot
- Keep *VERDICT* Diagnostic System on duty all day long with a spare battery
- Li-ion battery cells for long charge life, long cycle life and quick recharge

**2-02839A AC Power Supply with Cord**
- For *VERDICT* D7 display (standard with *VERDICT* diagnostic unit)

**EAK0301L03A Replacement Scope/Meter Test Leads**
- With alligator clip set

**EAK0301L01A1 AC Replacement Power Supply with Cord**
- For *VERDICT* M2 meter

**EEMS324PSA Pressure Transducer Adaptor *(VERDICT)***
- Adapts *VERDICT* M2 meter to EEPV302AL, EEPV302AT and EEPV302AH pressure transducers (not included)

**EESP324E *VERDICT* European Vehicle Software Activation**
- Comprehensive OEM specific coverage for servicing European makes
- Covers fault codes, live data parameters, functional tests, relearns and adaptations for dozens of vehicle systems
- Coverage for Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, Mercedes®, MINI®, Porsche®, SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- Also requires: EAK0301B07B European Adaptor Kit

**EAK0301B07B European Vehicle Adaptors**

**EAK0301B10A OBD-I Adaptor Master Kit**

# SOLUS ULTRA®/SOLUS™ EDGE ACCESSORIES

SOLUS Ultra®

SOLUS™ Edge




EAC0111L40A3



EAX0068L10A



EAC0111L50A1



2-04650A



2-35466A



6-06321A

## *SOLUS ULTRA* Accessories

**EESP318E Software Activation**
- Comprehensive OEM-specific coverage for servicing European makes
- Covers fault codes, live data parameters, functional tests, relearns and adaptations for dozens of vehicle systems
- Coverage for Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, Mercedes®, MINI®, Porsche®, SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- Also requires: EAK0301B07B European Adaptor Kit

**EAC0111L40A3 Screen Protectors**
- Includes three removable screen protector sheets
- Simply peel off old protector sheet and press on a new one
- Helps maintain touch screen sensitivity
- Protects screen from scratches, solvents and dirt for a clear view

**EAX0068L10A Extended Length Data Cable**
- Extend your diagnostic range and mobility with 9' OBD-II data cable

**EAC0111L50A1 Protective Skin**
- Soft, sturdy and flexible thermoplastic rubber
- Protects *SOLUS Ultra* diagnostic unit from dirt, grease and other automotive fluids; keep your tool looking like new
- Give *SOLUS Ultra* diagnostic unit a personal touch with your choice of colors
- Forms a nonslip grip over outside of your *SOLUS Ultra* platform
- Designed with access openings for screen, connectors and cooling vents for unimpeded operation

**2-04650A *SOLUS Ultra* Spare Battery**

**2-35466A 110 V AC Power Supply**
- Quick charges battery pack (power cord sold separately)

**6-06321A AC Cord for 110V Power Supply**
- Line cord for AC power adaptor

**EAK0301B07B European vehicle adaptors**

**EAK0301B10A OBD-I Adaptor Kit**

**EAK0313L05A Soft-sided nylon carry case**

## *SOLUS* EDGE Accessories

**EESP320E European Software Activation** (Also requires EAK0301B07B Adaptor Kit)

**EAC0111L76A3 Screen Protectors**

**EAX0068L10A Extended Length Data Cable**

**2-05450A Spare Battery Pack**

**EAK0301B07B European Vehicle Adaptors**

**EAK0301B10A OBD-I Master Adaptor Master Kit**

**EAZ0083L08A 8' x 2' *SOLUS* Edge Shop Banner**



EAK0301B07B




EAC0110L35A3



EAK0313B02A

## *ETHOS+* Accessories

**EESP319E European Vehicle Software Activation**
- Comprehensive OEM-specific coverage for servicing European makes
- Covers fault codes and live data parameters for dozens of vehicle systems
- Coverage for Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, Mercedes®, MINI®, Porsche®, SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- Also requires: EAK0301B07B European Adaptor Kit

**EAC0110L35A3 Screen Guards**
- Includes three screen protector sheets
- Custom-fit for the screen on *ETHOS+*
- Easy peel-and-stick application
- Simple to replace – peel off old sheet, press on a new one
- Keep your screen clean and protected from scratches, solvents and dirt for a clear view
- Helps maintain touchscreen sensitivity
- Crystal-clear protection for optimum viewing in the shop

**EAK0313B02A Hand Grip and Stand Kit**
- Comfortable hand strap for *ETHOS+* Scan Tool
- Makes it easy to hold and carry *ETHOS+* with one hand
- Comfortable nylon pad for all-day use
- Adjustable hook and loop strap gives secure fit on large and small hands
- Secure mounting directly to back of *ETHOS+* Scan Tool
- Works equally well for left- or right-hand users
- Includes folding stand

**EAK0301B07B European Vehicle Adaptor Kit**
- Includes data cable, VW1 adaptor, MB1 adaptor, MB2A adaptor, BM1B adaptor and keys
- Kit requires European Vehicle Software Activation

**EAK0301B10A OBD-I Vehicle Adaptor Master Kit**
- OBD-I Scan Adaptor Master Kit for pre-1996 US and Asian vehicles
- Complete adaptor set of all available Snap-on® OBD-I adapters for 1980–newer US and 1983–newer Asian vehicles
- Take advantage of the OBD-I scanner coverage built into your diagnostic tool
- Kit includes custom-molded organizer tray and data cable convertor, jumper lead set, ground lead, 12VDC adaptor plus 17 OBD-I adapters: Multi1, Multi2, Kia®2, Ford®1B, *Ford4*, GM®1, Toyota®1, *Toyota2*, Nissan®1, *Nissan2*, Mazda®1, Honda®1, Mitsubishi®1, Chrysler®1, *Chrysler2*, Jeep®1 and Hyundai®2
- UL® and ULC listed

# HANDHELD DIAGNOSTIC ACCESSORIES

MODIS™ Ultra




**EAC0111L76A3**




**EAC0111L51A**



**EAK0301B07B**

## MODIS™ Ultra Accessories

**EAC0111L76A3 *MODIS* Ultra Screen Protectors**
- Includes three screen protector sheets
- Custom-fit for the *MODIS* Ultra screen
- Easy peel-and-stick application
- Simple to replace – peel off old sheet and press on a new one
- Keep your screen clean and protected
- Helps maintain touch screen sensitivity
- Protect screen from scratches, solvents and dirt for a clear view
- Crystal-clear protection for optimum viewing in the shop or in the sun

**EAC0111L51A Protective Skin**
- Custom-molded to precisely fit *MODIS* Ultra
- Soft, sturdy, flexible thermoplastic rubber
- Protects tool from dirt, grease and automotive fluids – keep your tool looking like new
- Personalize your *MODIS* Ultra with a custom all-black look
- Forms a nonslip grip over outside of your *MODIS* Ultra platform
- One-piece construction – stretches for a tight fit over *MODIS* Ultra
- *MODIS* Ultra Diagnostic Tool is not included

**EESP328E *MODIS* Ultra European Vehicle Software Activation**
- Comprehensive OEM-specific coverage for servicing European makes
- Covers fault codes and live data parameters for dozens of vehicle systems
- Coverage for Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, Mercedes®, MINI®, Porsche®, SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- Also requires: EAK0301B07B European Adaptor Kit

**Optional Accessories:**

**2-04650A Spare Battery Pack**
**EETA308D Precision low-amp probe**
**EEPV302AL Low-pressure transducers**
**EEPV302AT Medium-pressure transducers**
**EEPV302AH High-pressure transducers**
**EMS324PSA Pressure adaptor**
**(required for pressure transducers)**
**EAC0111L76A3 Screen protectors**
**EAK0313L05A Soft-sided nylon carry case**
**EAX0068L10A 9' Extended OBD-II data cable**
**MODISUFOAM3 Organizers for 3-series carts**
**MODISUFOAM4 Organizers for 4-series carts**
**EAK0301B07B European vehicle adaptors**
**EAK0301B10A OBD-I Complete Adaptor Master Kit**
**EAZ0079L11A 8' x 2' *MODIS* Ultra shop banner**

## Service Banners

- Shows customers your shop is equipped with the latest diagnostic and information technology to do the job right the first time
- Big, bright, full-color 8' L x 2' H shop banner
- Durable, heavy 15 oz ultra-flex vinyl with reinforced grommets for easy hanging

**EAZ0042B17A SHOPKEY® Service Banner**
**EAZ0063L28A VERDICT® Service Banner**
**EAZ00075L22A SOLUS Ultra® Service Banner**
**EAZ0077L07A VERUS® PRO Service Banner**
**EAZ0079L11A MODIS™ Ultra Service Banner**
**EAZ0083L08A SOLUS™ Edge Banner**




**EAZ0042B17A**




**EAZ0063L28A**




**EAZ0075L22A**




**EAZ0077L07A**




**EAZ0079L11A**




**EAZ0083L08A**



WARNING

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# SCAN TOOL ACCESSORIES



EAK0301B10A



EAA0355L46C



EAX0066L30A



EAA0355L68A



EAK0267B01H



EAX0068L00B

## Scan Tool Accessories

**EAK0301B10A OBD-I Vehicle Adaptor Kit**
- OBD-I Scan Adaptor Master Kit for pre-1996 US and Asian vehicles
- Complete adaptor set of all available Snap-on® OBD-I adapters for 1980–newer US and 1983–newer Asian vehicles
- Take advantage of the OBD-I scanner coverage built into your diagnostic tool
- Kit includes custom-molded organizer tray and data cable convertor, jumper lead set, ground lead, 12VDC adaptor plus 17 OBD-I adapters: Multi1, Multi2, Kia®2, Ford®1B, *Ford*4, GM®1, Toyota®1, *Toyota*2, Nissan®1, *Nissan*2, Mazda®1, Honda®1, Mitsubishi®1, Chrysler®1, *Chrysler*2, Jeep®1 and Hyundai®2
- UL® and ULC listed

**EAA0355L46C Replacement OBD-II Key Adaptor**
- For US and Asian vehicle applications
- Accepts "K" personality keys
- Fits VERUS®, MODIS® and SOLUS PRO™ diagnostic units

**EAX0066L50A Replacement Data Cable**
- For connection between scan tool and vehicle adaptors
- For *VERUS*, *MODIS*, *SOLUS PRO* and SOLUS Ultra® diagnostic units only

**EAX0066L30A OBD Data Cable Extension**
- Extend scan tool reach by 6'
- Fits *VERUS*, *MODIS*, *SOLUS PRO* and ETHOS® diagnostic units

**EAA0355L68A DL-16 Key Adaptor-European Vehicles**
- Replacement adaptor for European vehicle applications
- Accepts "S" personality keys
- Fits *VERUS*, *MODIS*, *SOLUS PRO*, SOLUS® and *ETHOS* diagnostic units

**EAK0301B07B European Vehicle Adaptor Kit**
- Includes data cable, VW1 adaptor, MB1 adaptor, MB2A adaptor, BM1B adaptor and keys
- Kit requires European Vehicle Software Activation

**EAK0267B01H European Vehicle Keys/Adaptors Kit**
- Fits *VERUS, MODIS, SOLUS, SOLUS Pro* and *ETHOS*
- European vehicle adaptor kit
- Includes VW1, MB1, MB2A, BM1B adaptors (includes keys where applicable)
- Requires European Vehicle Software Activation
- Covers the most popular 1992–newer European vehicles

**EAK0294B34A Key Kit for Land Rover® vehicles**
- Set of personality keys required for complete *Land Rover* coverage with *VERUS*, *MODIS*, *SOLUS PRO* and *ETHOS* diagnostic units

**EAX0068L01A Replacement Data Cable for OBD-I and European Adaptor Applications**
- Fits, *VERUS* PRO, *VERUS* Wireless, *VERDICT, MODIS* Ultra *SOLUS Ultra* and *SOLUS* Edge

**EAX0068L00B Replacement OBD-II Data Cable**
- Fits, *VERUS* PRO, *VERUS* Wireless, *VERDICT*, *MODIS* Ultra *SOLUS Ultra* and *SOLUS* Edge

**EAK0253B01J Domestic/Asian Key Set**
- OBD-II personality keys. Complete replacement set for US and Asian vehicle applications for *ETHOS, MODIS, SOLUS, SOLUS PRO* and *VERUS* only

# SCOPE AND METER ACCESSORIES:
## VERUS®/*VERUS* Wireless/VERDICT®/MODIS™/*MODIS* Ultra/Vantage® PRO™/*Vantage* Ultra



**EEPV302AT**



**EAX0024B40A**



**EAX0024B30A**



**EEMS324PSA**

## Pressure Transducer Kits

- Record, plot and monitor pressure in real time
- Typical applications include ABS, PS, transmissions, hydraulics and fuel systems
- *VERUS, Vantage PRO* and MODIS™ require EEMS301A05
- *VERUS* PRO, *VERDICT, MODIS* Ultra and M2 Meter require EEMS324PSA adaptor

**EEPV302AL Transducer Kit (0–100 PSI)**

**EEPV302AT Transducer Kit (0–500 PSI)**

**EEPV302AH Transducer Kit (0–5,000 PSI)**

**EAX0024B40A Transducer "Y" Adaptor Cable**

- Enables simultaneous use of two pressure transducers for multiple point comparison testing

**EAX0024B30A 6' Transducer Cable Extension**

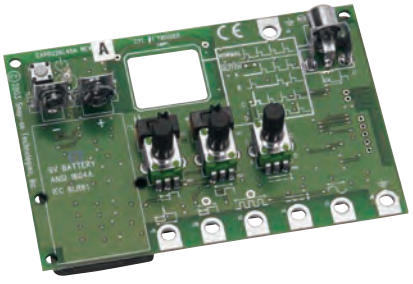
- Extends the reach of EEPV302AL/AT/AH pressure transducers by 6'

**EEMS324PSA Pressure Transducer Adaptor *(VERDICT)***

- Adapts standard meter jacks to EEPV302AL, EEPV302AT and EEPV302AH pressure transducers (not included)
- Provides connection of transducer plug to standard meter jacks, and provides power to the pressure transducers
- Use up to two transducers simultaneously
- View results on *VERUS* PRO, *VERDICT*, *MODIS* Ultra or M2 Meter



**EETA108B**



**EESX306A**

## Scope Leads

**EETA108B Extra Long Scope Lead Set (2-pack)**

- 10" leads extend the reach of scope/meter leads for testing hard-to-reach components

## Waveform Demonstration Tool

**EESX306A Waveform Demonstration Tool**

- Versatile scope training/demo tool
- Use with any scope
- Simulates good waveforms, bad waveforms and glitches
- Square wave, variable duty, FI pattern, AC signal, secondary ignition pattern
- Adjustable frequency, voltage, RPM and amplitude

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# SCOPE AND METER ACCESSORIES



EETA308D

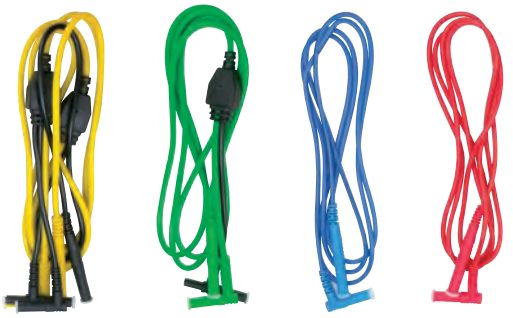


EEMS301A05

## Probes and Adaptors

**EETA308D Low AMP Probe**
- Hall effect technology gives accurate non-intrusive circuit testing
- Perform precision testing of parasitic draw, injectors, pumps, relays and more
- Spring clamp operation can test wires up to 1/2" diameter
- Scale ranges: 20 amp and 60 amp
- Resolution: +/- 1 milliamp
- Internally powered by 9V battery

**EEMS301A05 Split Lead Adaptor**
- Enables simultaneous use of two pressure transducers and RPM pick-up
- Fits *VERUS*, *VERUS* Wireless, *Vantage* PRO and *MODIS*



## Test Leads

- Shielded, soft, flexible leads for meter and scope measurement
- Stackable, right angle ground plug attached

**6-03022A Test Lead**
Channel-1 (Yellow)

**6-03122A Test Lead**
Channel-2 (Green)

**6-03222A Test Lead**
Channel-3 (Blue)

**6-03322A Test Lead**
Channel-4 (Red)



## Alligator Clips

- Spring-loaded clips provide secure, insulated connection for meter and scope measurements

**2-06433A1 Alligator Clip**
Black

**2-06433A2 Alligator Clip**
Red

**2-06433A3 Alligator Clip**
Blue

**2-06433A4 Alligator Clip**
Yellow

**2-06433A5 Alligator Clip**
Green



MTTL430

## Adaptors and Pick-ups

**MTTL430 Backprobe Adaptors (3-pack)**
- Bendable stainless-steel tips for easy insertion into terminal connectors
- Three ID boot colors for quick circuit identification
- Premium component construction – stainless-steel tips, high temp composite and boot materials for long, reliable life
- Textured composite body for good grip
- Recessed loop ends for fast and reliable connection using alligator clips, grabbers or hook connections
- Removable boots enable custom color selections or restoring color to tired and dirty used boots with the MTTLBOOTS multi pack of boots
- Portable storage strip holds all three probes

Accessories shown on this page can be used on these Snap-on® Diagnostic Platforms: VERUS® / *VERUS* Wireless / *VERUS* PRO / VERDICT® / MODIS™ / *MODIS* Ultra / VANTAGE® PRO / VANTAGE® Ultra.

## Multi-cylinder Secondary Ignition Scope Adaptors

Exclusive kV ignition adaptors make for easy connection and testing of secondary ignition on coil-on-plug (COP) and coil-in-cap (CIC) systems. Custom fit to vehicle ignition systems. Requires EAK0294B09A ignition scope lead kit.



EAC0056L00A



EAC0056L02A



EAC0056L03A

**EAC0056L00A General-purpose COP/CIC Single-Flag Pick-up**
Single-cylinder pick-up. Use with three-flag pick-up for V8 engines.

**EAC0056L02A General-purpose COP/CIC Three-Flag Pick-up**
Three-cylinder pick-up. Use two for V6 engines or use two with single-cylinder pick-up for V8 engines.

**EAC0056L03A General-purpose COP/CIC Stick Pick-up**
For inline four-cylinder engine.

## Coil-on-Plug COP Ignition Coil Adaptors

**EETM306A03 COP-1 Ignition Pick-up for Ford® Vehicles**
**EETM306A04 COP-2 Ignition Pick-up for Chrysler® Vehicles**
**EETM306A07 COP-3 Ignition Pick-up for VW®/Audi® Vehicles**
**EETM306A08 COP-4 Ignition Pick-up for Acura®/Honda®/Isuzu® Vehicles**
**EETM306A09 COP-5 Ignition Pick-up for Volvo®/BMW® Vehicles**
**EETM306A10 COP-6 Ignition Pick-up for Mercedes® Vehicles**
**EETM306A11 COP-7 Ignition Pick-up for *Mercedes* Vehicles**
**EETM306A12 COP-8 Ignition Pick-up for *BMW* Vehicles**
**EETM306A13 COP-9 Ignition Pick-up for Lexus® Vehicles**
**EETM306A14 COP-11 Ignition Pick-up for *Chrysler*/Jeep®/*Lexus*/Toyota® Vehicles**




EETM306A08




EETM306A06



EETA309A15



EAK0294B09A

## Coil-in-Cap CIC Ignition Coil Adaptors

**EETM306A05 CIC-2 CIC Pick-up for *Toyota*/*Honda* Vehicles**
**EETM306A06 CIC-1 HEI CIC Pick-up for GM® Vehicles**

## Secondary Ignition Adaptors

**EETA309A15 Sun® SIA2000 Multi-Ignition Adaptor**
- Ideal for waste spark ignition systems up to eight cylinders
- Simply clamps directly to plug wires
- Also for COP/CIC systems (COP/CIC adaptors sold separately)

**EAK0294B09A Ignition Scope Lead Kit**
- For multi-cylinder secondary ignition testing
- Includes inductive RPM pick-up trigger, coil adaptor lead and secondary kV clip-on probe
- Ideal for distributor systems and for COP/CIC systems

Accessories shown on this page can be used on these Snap-on® Diagnostic Platforms: VERUS® / *VERUS* Wireless / *VERUS* PRO / VERDICT® / MODIS™ / *MODIS* Ultra / VANTAGE® PRO / VANTAGE Ultra.

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# GAS ANALYZERS



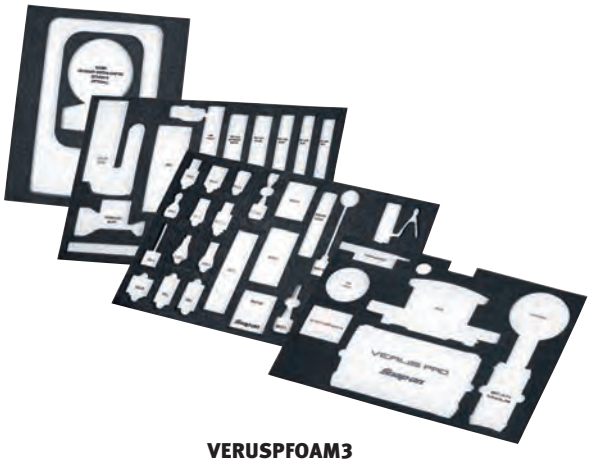
**HHGA5BP**

## Handheld Gas Analyzer

**HHGA5BP Handheld Gas Analyzer Kit (5 Gas)**
Independent Handheld 5 Gas Analyzer or use with MODIS™ Link, VERDICT® and VERUS® Bluetooth® link.

- Fully Portable 5 Gas Analyzer, go anywhere, use anywhere
- 110V AC and 12V powered
- Internal rechargeable battery, up to one hour of use
- Ideal for road testing and mobile use
- Measures exhaust emissions for CO, $CO_2$, HC, $O_2$, NOx and AFR/Lambda
- Provides an instant assessment of an engine vehicle exhaust and catalytic converter
- Add a 5 Gas Analyzer function to *MODIS*, *VERDICT* and *VERUS*-family platforms
- Setup required with included software on USB stick
- Gather all the evidence required for effective and accurate vehicle diagnostics on one screen in real time
- View, graph, save and recall data
- Monitor and reduce vehicle emissions, improve driveability and fuel efficiency
- Snap-on® HHGA5BP is truly handheld, about the size and weight of a DMM offering true portability
- Links to *MODIS*, *VERUS*, *VERDICT* and other suitable *Bluetooth* devices
- There are 255 memory locations in the analyzer to track and print data for the same or many different vehicles
- HHGA5BP is compatible with gasoline, CNG, propane and diesel fuel types
- HHGA5BP is very sensitive and pulls only 1/14 the exhaust volume of competing analyzers. This means no problems with water ingress and pumps last longer
- Annual Cal and sensor replacement. Meets required industry standard
- Diagnose a variety of driveability problems
  - Problems in ignition system (spark plugs, wires)
  - Engine compression problems
  - Temperature sensor malfunction
  - EGR Valve problems
  - Dirty air filter
  - Obstructed intake valve ports
  - Lambda Sensor failure
  - Excessive fuel consumption
  - Misfire
  - Rusted exhaust (internal or external rust)
  - Non-homologated exhaust (wrong back pressure)
  - Melted catalytic converter
  - Worn out catalytic converter
  - Obstructed exhaust or catalytic converter
- HHGA5B is the same as HHGA5BP but does not include the printer and hard shell case

TECHNICAL SUPPORT 1-888-717-1333



VERUSPFOAM3



SOLVANUFOAM4

## Custom-Fit Foam Organizers

- Custom-4pc set of rigid foam inserts provides total organization for your tools and accessories so you always know where to find them
- Turn your tool cart into a high-end mobile diagnostic WorkStation
- Keep your diagnostic power locked, loaded and always at the ready
- Keep your valuable diagnostic investment clean, organized, secure and protected
- Dedicated locations for standard accessories, plus optional accessories like scan adaptors, scope accessories, ignition adaptors, amp probe and more

| Foam Set | Diagnostic Platform Used On | Roll Carts Used On |
|---|---|---|
| **VERUSPFOAM3** | VERUS® PRO | KRSC30/31/32/33 Series |
| **VERDICTFOAM3** | VERDICT® | KRSC30/31/33 Series |
| **MODISUFOAM3** | MODUS™ Ultra | KRSC30/31/32/33 Series |
| **SOLVANUFOAM3** | SOLUS™ Ultra®/ VANTAGE™ Ultra | KRSC30/31/32/33 Series |
| **VERUSPFOAM4** | *VERUS* PRO | KRSC40/46 Series |
| **VERDICTFOAM4** | *VERDICT* | KRSC40/46 Series |
| **MODISUFOAM4** | *MODUS* Ultra | KRSC40/46 Series |
| **SOLVANUFOAM4** | *SOLUS Ultra*/ *VANTAGE* Ultra | KRSC40/46 Series |
| **SOLVANEFOAM3** | SOLUS™ Edge/ *VANTAGE* Ultra | KRSC30/31/32 Series |
| **SOLVANEFOAM4** | *SOLUS* Edge/ *VANTAGE* Ultra | KRSC40/46 Series |




EAK0312L19A




EAK0313L05A

### EAK0312L19A Padded Carry Case

- Provides protection and portability in the shop or on the road
- Reinforced semi-rigid nylon case with padded sides for protection of valuable diagnostic tools
- Three padded compartments for your Snap-on® diagnostic tools. Plus two elastic net compartments for accessories
- Zippered on three sides so case opens flat for easy access
- Generous 14" x 19" x 4" size holds diagnostic tool and many accessories
- Sturdy sewn-in handle and embroidered *Snap-on* logo
- Accommodates *VERUS* PRO, *VERDICT*, *MODIS* Ultra, *SOLUS* series, ETHOS® series, *VANTAGE* series tools

### EAK0313L05A Compact Tote Case

- Provides protection and portability in the shop or on the road
- Compact 14" x 11" x 3" size holds diagnostic tool and some accessories
- Reinforced semi-rigid case with padded sides for protection of valuable diagnostic tools
- Tough polyester fabric with hook-and-loop straps inside to secure your tools and accessories
- Bold embroidered *Snap-on* logo shows you work with *Snap-on* quality tools
- Elastic net compartment for small accessories
- Zippered on three sides so case opens flat for easy access
- Sturdy sewn-in handle with molded comfort grip
- Accommodates *MODIS* Ultra, *SOLUS* series, *VANTAGE* series, *ETHOS* series

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# SOFTWARE UPGRADES

## Diagnostic Software Upgrades – for VERUS®-series, VERDICT®-series, VANTAGE®-series, MODIS™-series, SOLUS™-series and ETHOS®-series tools

- Continue to improve your productivity with regularly scheduled software upgrades from Snap-on® featuring updated coverage for new vehicles, expanded coverage for earlier models and the latest enhancements that add capabilities to your tool
- You will access thousands of new vehicle systems, trouble codes and live data parameters, as well as thousands of new experience-based troubleshooter tips, functional tests, adaptations and component tests for platforms with those functions
- For details on the latest software upgrade, see your *Snap-on* representative

## European Vehicle Scan Tool Software Activation for *VERUS*-series, *VERDICT*-series, *MODIS*-series, *SOLUS*-series, and *ETHOS*-series tools

- Comprehensive OEM-specific coverage is critical for servicing European makes, from fault codes and data for dozens of vehicle systems, to functional tests, relearns and adaptations for vehicles with those features
- Coverage for vehicles Audi®, BMW®, FIAT®, Jaguar®, Land Rover®, MINI®, Mercedes®, Porsche®, SMART®, Volvo®, Volkswagen® as far back as 1992
- See your *Snap-on* representative




EETA113B

**EETA113B Pass Thru Pro II J2534 Reprogramming Device**

- Reprogram vehicle control modules like the OEMs
- Updates software/firmware in vehicle electronic control units (ECU)
- For J2534 compliant 2004–later vehicles
- Includes OEM-approved programming interface, cables and software
- Requires Internet access, OEM data subscription and a PC
- Reprogramming requires a constant voltage supply to vehicle such as the EEBC500 Battery Charger or EECS306C D-TAC Elite (sold separately)

# SHOPKEY PRO

## Repair Information System
## Medium Truck Repair Information
## Tractor-Trailer and REPAIR>CONNECT
## Service Writer/Shop Management

- The most trusted source of automotive repair information available, ShopKey® is loaded with features to make you more efficient and your repair job easier
- Access tools such as *ShopKey* live tips, enhanced TSBs, the industry's only scalable vector graphic color wiring diagrams and vintage information dating back to 1960
- Powerful 1Search™ technology delivers complete OEM and experience-based information together in a single lookup
- The new SureTrack® expert information combines exclusive diagnostic experience, parts replacement records and an interactive forum, to improve diagnostic accuracy and reduce repair time
- With *ShopKey*Pro online access you're always up to date on the latest vehicle coverage and industry changes
- Whether it's repair and estimating for Light Duty vehicles, Medium Truck, Tractor-Trailer, Service Writer or Shop Management software you're looking for, *ShopKey*Pro has you covered
- Access *ShopKey*Pro on your Snap-on® VERDICT® -or VERUS®-series tool and have the information you need to get the job done, right at your fingertips
- For details on how to make *ShopKey*Pro a part of your daily diagnostic and repair routine, see your *Snap-on* representative or visit diagnostics.snapon.com/shopkeypro



Full-color wiring diagrams with circuit highlights and zoom feature clarify even the most complex circuits.



With a single lookup you get access to illustrated repair procedures, diagnostic information, expert tips, maintenance schedules, TSBs, wiring diagrams and component locators.

## OBD-II SCAN TOOLS




**EESC720**



**EAK0302L03A**

## MICROSCAN® III OBD-II Scanner

**EESC720 *MICROSCAN* III OBD-II Scanner**

- Read and clear OBD-II codes and display live data parameters on all makes of 1996–newer vehicles in under 30 seconds
- Covers enhanced engine codes for diagnostic depth on most GM®, Ford® and Chrysler® vehicles
- Read and clear ABS codes on select *GM*, *Ford* and *Chrysler* vehicles
- Graphing display compares three live-data parameters on screen at once to see cause-and-effect of vehicle faults
- Big 4" touch screen for fast navigation; shows detailed results with clarity
- Exclusive built-in code tip database shows possible causes of engine fault codes
- Covers all ten modes of OBD-II: read codes, clear codes, reset the MIL, view current data, emissions readiness, on-board monitors, ECU information, pending codes and more
- No batteries required – powers from vehicle; simply connect *MICROSCAN* III to a vehicle for automatic boot-up
- Create custom data lists. Record, save, play back data and screen images for reference

**EAK0302L03A *MICROSCAN* III OBD-1 Adaptor Kit**

- Read engine codes on select pre-1996 *GM*, *Ford*, *Chrysler* and Toyota® vehicles
- OBD-I adaptors are compatible with vehicles as far back as 1983
- *Chrysler*1, *GM*1, *Toyota*1 and *Toyota*2 adaptors
- Note: For *MICROSCAN* III only. Not compatible with *Snap-on* brand scan tools

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# OBD-II SCAN TOOLS



EECR1



EECR2

## Car Reader Scan Tools

| | Description | EECR1 | EECR2 |
|---|---|---|---|
| **Application** | Diagnostic Check Engine Lights on 1996 and Newer Vehicles | • | • |
| | Turns off Check Engine Light | • | • |
| | Works on Late Model Vehicles with C.A.N. Protocol | • | • |
| **Unique Features** | Plug-and-Play Diagnostics with All-in-One Display | • | • |
| | Vehicle Health Status LED Display OBD Emissions Readiness | • | • |
| | Hot Keys for Intuitive Navigation and Fewer Menus | • | • |
| | Complete Drive Cycles with Emissions Readiness Advisor | • | • |
| | Automatic Vehicle Idenification | • | • |
| | Backlit | • | • |
| | Diagnose & Clear ABS Light on popular 1996+ GM®, Ford®, Chrysler®, Toyota®, Honda® | | • |
| | Battery Backup for off Vehicle Review | | • |
| | Displays in English, Spanish and French | | • |
| **On-Board Diagnostic Features** | Retrieves Manufacturer and Generic Codes | | • |
| | Displays Enhanced Freeze Frame Data | | • |
| | On-Screen Code Definitions in English, Spanish and French | | • |
| | Updateable via the Web, USB Cable included | | • |

TECHNICAL SUPPORT: 1-877-447-6276

**EECR1 CarScan-Reader**
- Diagnose and turn off check engine light – works on all 1996 and newer OBD-II vehicles
- Plug-and-play diagnostics – simply plug in, tool automatically links to vehicle, then diagnostics start in seconds
- I/M readiness advisor – perform OBD-II drive and trip cycle tests to validate for accurate repairs with on-screen I/M status indicators
- Vehicle health status LEDs – know in advance if the vehicle is emission test ready (Red=Fail, Green=Pass)
- Backlit screen
- Includes EECR1-1 quick reference guide (English, Spanish, French)

**EECR2 CarScan-Diagnostics**
- Diagnose and turn off check engine light – works on all 1996 and newer OBD-II vehicles
- Plug-and-play diagnostics – simply plug in, tool automatically links to vehicle, then diagnostics start in seconds
- I/M readiness advisor – perform OBD-II drive and trip cycle tests to validate for accurate repairs with on-screen I/M status indicators
- Vehicle health status LEDs – know in advance if the vehicle is emission test ready (Red=Fail, Green=Pass)
- Backlit screen
- Service, diagnose engine and ABS system – read and clear anti-lock brake DTCs on 1996 and newer US, *Toyota* and *Honda*
- View freeze frame data – review a snapshot of the conditions present when the failure occurred to duplicate for advanced diagnostics. Built-in memory for off-car review
- DTC definitions displayed in English, Spanish and French
- Internet updatable via USB
- Includes EECR2-2 OBD-II cable (16-pin), EECR2-3 USB Micro Cable (48") and EECR2-4 quick reference guide (English, Spanish, French)




**EEHD704004**

## *Pro-Link* Ultra Elite Diagnostic Kit

**EEHD704004 *Pro-Link* Ultra Elite Diagnostic Kit**

- The *PRO-LINK* Ultra Scan Tool Elite Kit is perfect for truck shops, general repair, fleet maintenance, mobile service and municipalities
- Provides OEM-proprietary diagnostics for commercial heavy duty trucks
- Tested and licensed OEM coverage for all major systems, including engines, transmissions, ABS, instrument cluster, emissions, SCR, body systems and more
- Essential maintenance functions include read and clear fault codes, access trip data to monitor vehicle and driver performance, create health reports and view live data to verify performance
- Powerful repair functions include graph live data to find tough problems, special tests to verify component failures and validate system operation, program replacement components, expanded component diagnostics and custom ECU programming configuration

TECHNICAL SUPPORT: 1-800-639-6774

**KEY FUNCTIONS AND FEATURES**

- Large, sharp color graphics
- Information clearly displayed
- Fast data downloads
- Portable and powerful

**VIEW DIAGNOSTIC DATA**

- Features 8.5" Full Color Class LED Sun Light Readable Display

**PRINT**

- Print vehicle reports and information gathered from your diagnostic session to a printer

**EEHD704004 includes:**

- *PRO-LINK* Ultra Heavy Duty Diagnostic System
- 8' data cable, 16-Pin J1962 OBDII adaptor, 9-pin Deutsch® adapter, 6-pin *Deutsch* adaptor, GM® 12-pin adaptor, PLC adaptor
- Hard shell carrying case with cushioned foam organizer
- Complete guide book of fault code descriptions
- High-energy Lithium-ion battery pack
- 120V AC power adaptor
- Please see chart on the next page for included software

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# PRO-LINK® ULTRA HEAVY DUTY VEHICLE DIAGNOSTICS




**EEHD184040**

## *Pro-Link* Ultra Kit Components

**EEHD184040 *Pro-Link* Ultra Starter Diagnostic Kit**

- Smarter. Easier. Essential. The recognized standard in diagnostic scan tools
- The *PRO-LINK* Ultra Scan Tool Starter Kit is perfect for truck shops, general repair, fleet maintenance, mobile service and municipalities
- Provides OEM-proprietary diagnostics for commercial heavy duty trucks
- Tested and licensed OEM coverage for all major systems, including engines, transmissions, ABS, instrument cluster, emissions, SCR, body systems and more

TECHNICAL SUPPORT: 1-800-639-6774

**KEY FUNCTIONS AND FEATURES**

- Large, sharp color graphics
- Information clearly displayed
- Fast data downloads
- Portable and powerful

**EEHD184040 includes:**

- *PRO-LINK* Ultra Heavy Duty Diagnostic System
- 8' data cable, 16-pin J1962 OBDII adaptor, 9-pin Deutsch® adaptor, 6-pin *Deutsch* adaptor
- Semi-hard shell carrying case with cushioned foam organizer
- Complete guide book of fault code descriptions
- High-energy Lithium-ion battery pack
- 120V AC power adapter

| | Stock No. | Description | EEHD704004 *PRO-LINK* Ultra Elite Kit | EEHD *PRO-LINK* Ultra Starter Kit |
|---|---|---|---|---|
| **Software** | **EEHD864007** | Heavy Duty Standard J1939 Medium and Heavy Duty Trucks with EPA '10 2004–2014 | • | • |
| | **EEHD864008** | Heavy Duty Standard J1708 Medium and Heavy Duty Trucks 1987–2012 | • | • |
| | **EEHD864076** | OBD-II / EOBD–Light and Medium Duty Trucks 1996–2014 | • | • |
| | **EEHD864024** | CAT® ACERT™ v2.0 2003–2009 | • | |
| | **EEHD864027** | Caterpillar® Electronic Engines 1990–2003 | • | |
| | **EEHD864010** | International® Engines 1,2,3 Box 1994–2006 | • | |
| | **EEHD864009** | Navistar® MaxxForce® v2.0 2007–2012 | • | |
| | **EEHD864015** | DDEC II, III, IV, V v2.0 1987–2006 | • | |
| | **EEHD864018** | DDEC 6, 10, 13, MBE 2007–2013 | • | |
| | **EEHD864031** | DDEC MBE 2001–2006 | • | |
| | **EEHD864005** | Allison® Transmission Suite GEN IV, 1K/2K, WTEC,CEC1 | • | |
| | **EEHD864013** | Bendix® Air ABS | • | |
| | **EEHD864014** | Meritor® WABCO Air and Hydraulic ABS | • | |
| | **EEHD864021** | Trailer ABS Suite Wabash®, Haldex® and Eaton® | • | |
| | **EEHD864048** | Enhanced Ford®, GM® and Isuzu® engines | • | |
| **Adaptors** | **EEHD493013** | J1962 Adaptor (16-pin) | • | • |
| | **EEHD493024** | 6-pin Deutsch® adaptor | • | • |
| | **EEHD493028** | 9-pin *Deutsch* adaptor (Non-Locking) | • | • |
| | **EEHD493003** | *GM* 12-pin adaptor | • | |
| | **EEHD602020** | PLC Converter (required for newer trailers) | • | |
| **Optional Scan Tool** | **EEHD183030S** | Pocket iQ™ with EOBD-II and HDS update | | |
| | **EEHD181030S** | *Pocket iQ* with OBD-II | | |

*PRO-LINK* Ultra software listed above is not backwards compatible to older *PRO-LINK* iQ® platforms

## *PRO-LINK* Ultra Software/Engine Applications

| Stock No. | Description |
|---|---|
| **EEHD864009** | *Navistar MaxxForce* v2.0 2007–2012 |
| **EEHD864010** | *International* Engines 1,2,3 Box 1994–2006 |
| **EEHD864015** | DDEC II,III,IV,V v2.0 1987–2006 |
| **EEHD864024** | *CAT ACERT* v2.0 2003–2009 |
| **EEHD864027** | *Caterpillar* Electronic Engines 1990–2003 |
| **EEHD864018** | DDEC 6,10,13, MBE 2007–2013 |
| **EEHD864031** | DDEC MBE 2001–2006 |

## *PRO-LINK* Ultra Software/Brake Applications

- Heavy Duty ABS applications provide diagnostic ABS information for both tractors and trailers
- They allow viewing of proprietary information and running of special tests

| Stock No. | Description |
|---|---|
| **EEHD864013** | Bendix® Air ABS |
| **EEHD864014** | *Meritor* WABCO Air and Hydraulic ABS |
| **EEHD864021** | Trailer ABS Suite *Wabash*, *Haldex* and *Eaton* |

## *PRO-LINK* Ultra Software/LMT Applications

| Stock No. | Description |
|---|---|
| **EEHD864048** | Enhanced *Ford*, *GM*, and *Isuzu* engines |

### EEHD864048 *PRO-LINK* Ultra Software for Light/Medium Duty Trucks (LMT) 2012

- Features enhanced coverage for gas and diesel engines, including *Ford* 7.3, 6.4 and 6.0 Liter Powerstroke®; *GM* and *Isuzu* 8.1 Liter, 6.6 Liter Duramax®, 7.8 Liter Diesel and 5.2 Liter Diesel
- Plus Transmissions and ABS coverage for *GM* C1500–C7500, T4500–T7500, P chassis and Workhorse; *Ford* F250–F750, E250–E450; *Isuzu* (NPR/NF3, NQR/NRR) truck

## *PRO-LINK* Ultra Software/ Transmission Applications

- Heavy Duty Transmission applications allow viewing of proprietary information and the running of special tests

| Stock No. | Description |
|---|---|
| **EEHD864005** | *Allison* Transmission Suite GEN IV, 1K/2K, WTEC,CEC1 |

## *PRO-LINK* Ultra Software/HDS Applications

- Snap-on® offers Heavy Duty Standard (HDS) generic applications covering engines, transmissions, and brakes that provide access to limited, non-proprietary diagnostic information
- HDS Capabilities:
  - –Read active fault codes
  - –Read and clear inactive fault codes
  - –View non-proprietary parameters
  - –Read trip information
- Heavy duty standard software listed below is included with the *PRO-LINK* Ultra Scan Tool

| Stock No. | Description |
|---|---|
| **EEHD864007** | Heavy Duty Standard J1939 Medium and Heavy Duty Trucks with EPA '10 2004–2014 |
| **EEHD864076** | OBD-II / EOBD–Light and Medium Duty Trucks 1996–2014 |
| **EEHD864008** | Heavy Duty Standard J1708 Medium and Heavy Duty Trucks 1987–2012 |

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# PRO-LINK® ULTRA HEAVY DUTY VEHICLE DIAGNOSTICS


EEHD493001


EEHD493003


EEHD493013


EEHD493015


EEHD493024


EEHD493026


EEHD493028


EEHD493014


EEHD493033


EEHD494099


EEHD424001


EEHD602020


EEHD494094


EEHD403098



EEHD903008


EEHD213011


EEHD214006


EEHDULTRAFOAM


EEHD1402813


EEHD4001-022


EEHD4001-023

## *PRO-LINK* Ultra Adaptors, Cables and Accessories

| Stock No. | Description |
|---|---|
| EEHD493001 | 9-pin Deutsch® adaptor (Locking) |
| EEHD493003 | GM® 12-pin adaptor |
| EEHD493013 | J1962 Adaptor (16-pin) |
| EEHD493015 | Caterpillar® 9-pin Adaptor |
| EEHD493024 | 6-pin *Deutsch* adaptor |
| EEHD493026 | Data cable |
| EEHD493028 | 9-pin *Deutsch* adaptor (Non-Locking) |
| EEHD493014 | Adaptor for *Caterpillar* T 9-pin |
| EEHD493033 | Adaptor for 3-pin *Deutsch*, 2-pin Cummins® |
| EEHD494099 | AC adaptor |
| EEHD424001 | J560 PLC cable set |
| EEHD602020 | PLC Converter (required for newer trailers) |
| EEHD494094 | HDMI® Cable |
| EEHD403098 | USB Cable |
| EEHD903008 | Fault Code Guide |
| EEHD213011 | Carrying case |
| EEHD214006 | Rugged Ultra Case |
| EEHDULTRAFOAM | Extreme Carrying Case Foam Insert |
| EEHD1402813 | Stylus pens (3-pack) |
| EEHD2450801A | 1 Screen protector |
| EEHD4001-022 | 2,400mAH Battery |
| EEHD4001-023 | 4,800mAH Battery |




**EEHD183030S**

## *Pocket iQ* Heavy Duty Scan Tool

| Stock No. | Description |
|---|---|
| **EEHD181030S** | *Pocket iQ* with OBDII |
| **EEHD183030S** | *Pocket iQ* with EOBDII and HDS update |

**EEHD181030S *Pocket iQ* Heavy Duty Scan Tool**

- The *Pocket iQ* – A generic scan tool for all commercial vehicles from light duty to Class 8 trucks. The *Pocket iQ* provides the following support for:
  – Medium and Heavy Duty Trucks J1708 and J1939
  – Light Duty Trucks OBD-II
- Medium and Heavy Duty Truck – The *Pocket iQ* reads active fault codes, reads and clears inactive fault codes, and monitors J1708 and J1939 engine, brake and transmission data
- Light Duty Truck – Reads active fault codes, reads and clears inactive fault codes and monitors OBD-II engine data
- Reporting Tools – Enables technicians to save vehicle diagnostic and fleet performance information on the device in a PDF or text format. Once saved, the reports can be printed from the *Pocket iQ* to a standard PCL3 printer or transferred to a memory stick (stick sold separately)
- Upgradeable – The *Pocket iQ* USB port allows for future updates/upgrades, and provides the ability to download reports to your memory stick

TECHNICAL SUPPORT: 1-800-639-6774

**EEHD181030S/EEHD181030S Includes:**

- **Stylus Pen**
- **EEHD181030PB Soft Case for *Pocket iQ***
- **EEHD501002 Power and Data Cable**
- **EEHD488024 6-pin Deutsch® Adaptor**
- **EEHD488028 9-pin *Deutsch* Adaptor**
- **EEHD481013 OBD-II Adaptor**
- **EEHD403098 USB Cable**
- **EAK0276B02A AC/DC Adaptor, 1.5 amp 12V**
- **EEHD181030-2 Battery Pack**
- **SS3241 Instructional DVD**

**⚠WARNING**

- Do not use in atmosphere with explosive vapor
- Read safety precautions on pages W1 to W4

# POCKET IQ™ HEAVY DUTY VEHICLE DIAGNOSTICS





EEHD692020



EEHD692021

## *Pocket iQ* Software

**EEHD693010 *Pocket iQ* Lite Application for International®/Navistar® Engines**
- Read proprietary data and fault codes on *International* 1,2,3 box engines as well as *Navistar* MaxxForce® engines
- Program idle shutdown time
- Enable and Disable idle shutdown timer
- Program Max Vehicle Road speed limits
- Run Cylinder Cutout Test
- Program Min and Max cruise control
- DPF Regen for cleaning of the diesel particulate filter on *MaxxForce* engines
- Read, save and clear fault codes
- Read and save vehicle trip information
- Read live vehicle data
- Create vehicle "health" reports
- Includes the *Pocket iQ* Scan Tool

**Applications**
*International* 1,2,3 Box (1994–2006)
*Navistar MaxxForce* (2007–2013)

**EEHD693010SO *Pocket iQ* Lite Application for *International/Navistar* Engines**
- Same as EEHD693010 but does not include the *Pocket iQ* Scan Tool
- Software only

**EEHD693015 *Pocket iQ* Lite Application for DDEC Engines**
- Read proprietary data and fault codes on Detroit Diesel® EC engines
- Program idle shutdown time
- Enable and Disable idle shutdown timer
- Program Max Vehicle Road speed limits
- Program Min and Max cruise control
- Run Cylinder Cutout Test
- DPF Regen for cleaning of the diesel particulate filter
- *Detroit Diesel*/MBE (900, 4000) DDEC. II, III, IV and V engines 6, 10, 13
- Read, save and clear fault codes
- Read and save vehicle trip information
- Read live vehicle data
- Create vehicle "health" reports
- Includes the *Pocket iQ* Scan Tool

**Applications**
- DDEC II, III, IV, V, 6, 10, 13 (1989–2013)
- DDEC MBE (2001–2006)

**EEHD693015SO *Pocket iQ* Lite Application for DDEC Engines**
- Same as EEHD693013 but does not include the *Pocket iQ* Scan Tool
- Software only

**EEHD693024 *Pocket iQ* Lite Application for Caterpillar® Engines**
- Read proprietary data and fault codes on *Caterpillar* Electronic and CAT® ACERT™ engines
- Program idle shutdown time
- Enable and disable idle shutdown timer
- Program max vehicle road speed limits
- Program min and max cruise control
- Run cylinder cutout test
- Read, save and clear fault codes
- Read and save vehicle trip information
- Read live vehicle data
- Create vehicle "health" reports
- Includes the *Pocket iQ* Scan Tool

**Applications**
- *Caterpillar* Electronic Engines (1990–2002)
- *CAT ACERT* (2002–2009)

**EEHD693024SO *Pocket iQ* Lite Application for *Caterpillar* Engines**
- Same as EEHD693024 but does not include the *Pocket iQ* Scan Tool
- Software only

**EEHD693004 *Pocket iQ* All Engines Software Suite**
- Includes the *Pocket iQ* Scan Tool, EEHD639010SO *International*/*Navistar* Engine Software, EEHD693015SO DDEC Engine Software and EEHD693024SO *Caterpillar* Engine Software

**EEHD693004SO *Pocket iQ* All Engines Software Suite**
- Includes the EEHD639010SO *International/Navistar* Engine Software, EEHD693015SO DDEC Engine Software and EEHD693024SO *Caterpillar* Engine Software
- Does not include the *Pocket iQ* Scan Tool
- Software only

**EEHD893000U HDS OBD II/EOBD Software Update**
- Heavy Duty Standard suite upgrade provides the functions necessary to diagnose J1708 AND J1939, EPA '07, EPA '10 and newer electronic controlled engines

**EEHD892021 Tractor-Trailer ABS Software**
- EEHD892021 ABS Suite Coverage
  - Bendix®
  - Meritor WABCO® Air and Hydraulic
  - Wabash National® MBS-1P and MBS-2
  - Eaton® GEN4 & GEN5;
  - Haldex® PLC, PLC Plus, PLC Select
- Required Item
  - This brake software is for the: *Pocket iQ* EEHD181030S or EEHD183030S (sold separately)

**EEHD692020 Tractor-Trailer ABS Software Kit**
- Includes EEHD892021 ABS Software Suite and EEHD602020 J560 PLC Adaptor

**EEHD692021 Tractor-Trailer ABS Software Kit**
- Includes *Pocket iQ* Scan Tool, EEHD892021 ABS Software Suite and EEHD602020 J560 PLC Adaptor

TECHNICAL SUPPORT: 1-800-639-6774

## *Pro-Link* iQ Software/Engine Applications

| Stock No. | Description |
|---|---|
| **EEHD883018** | DDEC IV, 10, 13 / MBE 2007–2013 |
| **EEHD883018U** | DDEC VI,10,13 V2.0 Upgrade 2007–2013* |
| **EEHD883015** | DDEC Suite II, III, IV, V 1987–2006 |
| **EEHD883015U** | DDEC Suite II, III, IV, V 1987–2006 Upgrade* |
| **EEHD889031** | DDEC MBE 2001–2006 |
| **EEHD880024** | CAT ACERT™ v2.0 2003–2009 |
| **EEHD880024U** | *CAT ACERT* v2.0 Upgrade* 2003–2009 |
| **EEHD889024** | Caterpillar® EE 1990–2003 |
| **EEHD883009** | Navistar® MaxxForce® v2.0 2007–2012 |
| **EEHD883009U** | *Navistar MaxxForce* v2.0 Upgrade* 2007–2012 |
| **EEHD880010** | International® Engines v2.0 1994–2006 |
| **EEHD880010U** | *International* Engines v2.0 Upgrade 1994–2006* |

This *Pro Link iQ* software is not forward compatible to the *Pro-Link* Ultra.
*Owners of previous version of software can purchase upgrade.

## iQ™ Software/Heavy Duty ABS Applications

- Software allows user to interface with the tractor ABS, trailer ABS and the PLC
- Reads current and historic fault codes
- Reads current brake data
- Clears current and historic fault codes
- Tests the Tractor-Trailer interface
- Automatically detects and reads the OEM's ECU brake system configuration
- Actuates modulators and valves
- Cycles brake retarder relays
- Tests wheel sensors and traction disabling
- Reads the trailer ECU data (odometer, trip odometer)
- Tests the trailer "ABS Warning" lamp
- Checks battery voltage to the trailer

| Stock No. | Description |
|---|---|
| **EEHD888014** | Meritor Wabco® Air and Hydraulic |
| **EEHD889013** | Bendix® Air ABS |
| **EEHD882021** | Trailer ABS Suite Wabash®, Haldex®, Eaton® |

## *iQ* Software/Transmission Applications

| Stock No. | Description |
|---|---|
| **EEHD883005** | Allison® Transmission® Suite GEN IV, 1K/2 WTEC, CEC1 |
| **EEHD883005U** | *Allison Transmission* Suite Update* |

## Heavy Duty Standard Applications

Snap-on® offers Heavy Duty Standard (HDS) generic applications covering engines, transmissions and brakes that provide access to limited, non-proprietary diagnostic information.

**HDS capabilities:**
- Read active fault codes
- Read and clear inactive fault codes
- View non-proprietary parameters
- Read trip information

| Stock No. | Description |
|---|---|
| **Included** | Heavy Duty Standard J1708 Medium and Heavy Duty Trucks 1989–2012 |
| **EEHD883007 (included)** | Heavy Duty Standard J1939 Medium and Heavy Duty Trucks with EPA '10 2004–2013 |
| **EEHD883007U** | Heavy Duty Standard J1939 Medium and Heavy Duty Trucks with EPA '10 Update* |

## Light and Medium Truck (LMT) Applications

- Features enhanced coverage for gas and diesel engines, including Ford® 7.3, 6.4 and 6.0 Liter Powerstroke®; GM® and Isuzu® 8.1 Liter, 6.6 Liter Duramax®, 7.8 Liter Diesel and 5.2 Liter diesel engines
- Plus Transmissions and ABS coverage for *GM* C1500–C7500, T4500–T7500, P chassis and Workhorse; *Ford* F250®–F750®, E250®–E450®; *Isuzu* (NPR/NF3, NQR/NRR) trucks

| Stock No. | Description |
|---|---|
| **EEHD883048** | Light and Medium Truck (LMT) Enhanced *Ford*, *GM* and *Isuzu* trucks 2001–2012 |
| **EEHD883048U** | Light and Medium Truck (LMT) Enhanced *Ford*, *GM* and *Isuzu* trucks 2001–2012 Update* |
| **EEHD883076 (included)** | OBD-II / EOBD Light and Medium Duty Trucks 1996–2013 |



WARNING • Read and follow all safety precautions in instructions and on pages W1 to W4 when using diagnostic equipment

# PRO-LINK® iQ SCAN TOOL SOFTWARE AND ACCESSORIES


EEHD488024


EEHD482028


EEHD481009


EEHD481013


EEHD488099


EEHD481003


EEHD483023


EEHD401013


EEHD401014


EEHD401015


EEHD401012


EEHD421001


EEHD501002


EEHD501003


EEHD501004


EEHD602020


EEHD210007


EEHD219006


EEHD219006-1


EEHD1402813


EEHD2450801A


EEHD4001018


EEHD4001019

## *Pro-Link* iQ Adaptors, Cables and Accessories

The cables included with the *PRO-LINK* iQ scan tool kits meet the needs of most customers. Please contact Snap-on® technical support, 1-800-639-6774, for information and assistance regarding the need for any additional cables.

| Stock No. | Description | Stock No. | Description |
|---|---|---|---|
| EEHD488024 | 6-pin Deutsch® adaptor | EEHD501002 | Power and data cable |
| EEHD482028 | 9-pin *Deutsch* adaptor | EEHD501003 | Data cable |
| EEHD481009 | HD/J1962 adaptor | EEHD501004 | Power cable |
| EEHD481013 | OBD II 1962 adaptor | EEHD602020 | PLC Converter (required for newer trailers) |
| EEHD488099 | AC adaptor | EEHD210007 | Carrying case |
| EEHD481003 | 12-pin adaptor | EEHD219006 | Extreme carrying case |
| EEHD483023 | Atari® 15P to Volvo® 16-pin cable | EEHD219006-1 | 2pc Protective Foam-1 |
| EEHD401013 | Adaptor for 2-pin Cummins® | EEHD1402813 | Stylus pens (3-pack) |
| EEHD401014 | Adaptor for Caterpillar® T 9-pin | EEHD2450801A | 1 Screen protector |
| EEHD401015 | Adaptor for 9-pin *Deutsch* (CAT) | EEHD4001018 | 2-cell battery pack |
| EEHD401012 | Adaptor for 8-pin AMP | EEHD4001019 | 4-cell battery pack |
| EEHD421001 | J560 PLC cable | | |

## Personality Keys

Use this chart to identify and order keys when upgrading your customers from their current software version to the newest one.

| Upgrade | Domestic and Asian | Most common make supported | Part number | European | Most common make supported | Part number |
|---|---|---|---|---|---|---|
| 14.2 | | | | S-26 | Porsche® | EAP0283L40A |
| 13.4 | | | | S-53 | FIAT® | EAP0268L50A |
| 13.2 | K-30 | Subaru® | EAP0283L30A | | | |
| 12.4 | K-29 | GM® Extended CAN | EAP0283L20A | | | |
| 12.2 | | | | | | |
| 11.4 | | | | | | |
| 11.2 | K-28 | Nissan® Altima® Hybrid | EAP0283L10A | S-69 | Volvo® Dual CAN | EAP0283L05A |
| | | | | S-25<br>S-40<br>S-43<br>S-44<br>S-45<br>S-62 | Land Rover®<br>*Land Rover*<br>*Land Rover*<br>*Land Rover*<br>*Land Rover*<br>*Land Rover* | MT2500S25A<br>EAP0234E20A<br>EAP0234E40A<br>EAP0234E50A<br>EAP0234E55A<br>EAP0268L55A |
| 10.2 | | | | | | |
| 9.4 | | | | | | |
| 9.2 | K-7A<br>K-27 | Chrysler®/Mitsubishi®<br>*Chrysler/Mitsubishi* | EAP0268L65A<br>EAP0268L75A | S-64 | Mercedes-Benz® | EAP0268L70A |
| 8.4 | | | | | | |
| 8.2 | | | | | | |
| 7.4 | | | | S-51 | *Mercedes-Benz* | EAP0268L35A |
| 7.2 | K-20<br>K-25 | Global OBD-II CAN<br>*Chrysler* | EAP0234E45A<br>EAP0268L15A | S-44 | Volkswagen® | EAP0234E50A |
| 6.4 | K-24 | Honda® | EAP0268L05A | | | |
| 6.2 | K-21<br>K-22 | *General Motors*<br>*Chrysler* | EAP0234E80A<br>EAP0234E90A | | | |
| 5.4 | | | | | | |
| 5.2 | K-19 | CAN Protocol Vehicles | EAP0234E35A | | | |
| 4.4 | K-17 | Ford®/*GM*/Toyota®/<br>*Nissan*/Mazda®/Hyundai®/<br>Kia®/*Mitsubishi* | EAP0234E25A | | | |
| 4.2 | K-16 | *Ford* | EAP0257B00A | | | |
| 4.1 and earlier | K-2A*<br>K-5A<br>K-7*<br>K-9<br>K-12A<br>K-13<br>K-14<br>K-15 | OBD-II<br>*Hyundai*<br>*Mitsubishi*<br>*General Motors*<br>*General Motors*<br>*Chrysler*<br>*Nissan*<br>*Mitsubishi* | MT50780202<br>MT50780507<br>MT50780701<br>MT50780901<br>MT50781202<br>MT50781301<br>MT50781401<br>MT50781501 | S-4<br>S-7<br>S-17<br>S-20<br>S-21<br>S-27<br>S-28<br>S-33<br>S-34 | *Mercedes-Benz*<br>*Volkswagen/*<br>BMW®/*Land Rover*<br>*Mercedes-Benz*<br>*Mercedes-Benz*<br>*Mercedes-Benz*<br>*Mercedes-Benz*<br>*BMW/Land Rover*<br>*Mercedes-Benz*<br>*Mercedes-Benz* | MT2500S4<br>MT2500S7<br>MT2500S17<br>MT2500S20<br>MT2500S21<br>MT2500S27<br>MT2500S28<br>MT2500S33<br>MT2500S34 |

* Some Personality Keys may work with manufacturers other than shown in the chart. Always refer to the scan tool for the correct Personality Key. The scan tool will always prompt for the correct Personality Key after the VIN has been entered and the system selected.



WARNING
• Do not use in atmosphere with explosive vapor
• Read safety precautions on pages W1 to W4

*Important Words*
*About Safety*
*for Users and Bystanders*

**Following these basic safety rules is a good start toward protecting yourself — and others in the vicinity — from injury while using tools.**

**Wear safety goggles**
**Use the right tool**
**Use the tool properly**
**Maintain the tool regularly**
**Keep tools away from children**
**Do not use tools on live electrical circuits unless specifically designed for such use**
**Read and follow instructions**

* **THIS SYMBOL INDICATES PROHIBITED ACTION**


**DO NOT OVER-TORQUE NO PIPES OR LEVER EXTENSIONS**


**NO HAMMERING**


**NO PRYING**


**DO NOT STRIKE HARD OBJECTS**


**NO IMPACT/POWER DRIVE**


**DO NOT STEP IN OR ON DRAWERS**


**DO NOT OPEN MULTIPLE DRAWERS**


**DO NOT PULL TO MOVE**


**KEEP CHILDREN AWAY**

* **THIS SYMBOL INDICATES MANDATORY ACTION**

* **MUST READ INSTRUCTIONS BEFORE USE**

* **MANDATORY EAR PROTECTION**

* **MANDATORY EYE PROTECTION**

* **MANDATORY PROTECTIVE GLOVES**

* **MANDATORY PROTECTIVE CLOTHING**

* **MANDATORY FACE SHIELD**

* **MANDATORY HEAD PROTECTION**

* **MANDATORY MASK**

* **MANDATORY RESPIRATOR**

* **WARNING**

**THIS SYMBOL INDICATES A HAZARD ALERT, GENERAL WARNING SIGN**

* **RISK OF EXPLOSION**

* **RISK OF ELECTRIC SHOCK**

* **RISK OF FIRE**

**RISK OF ENTANGLEMENT**

**VIBRATION HAZARD**

**OVERHEAD/OVERLOAD HAZARD**

*These symbols are excerpted from ISO 7010: 2011 with the permission of ANSI on behalf of ISO.
© ISO 2014–All rights reserved

Safety messages in this catalog use the guidelines of the American National Standard ANSI Z535.4 for Product Safety Signs and Labels and ANSI Z535.3 Criteria for Safety Symbols. Messages associated with specific products use a triangular hazard alert symbol, signal word (CAUTION, WARNING, DANGER) and how to avoid the hazard. Each message refers to pages (W1 to W4) which provide additional safety symbols and three-part messages advising of:

- The hazard

**How to avoid the hazard**
*The probable consequence of not avoiding the hazard*

**PLEASE READ AND FOLLOW** these messages to avoid injury to yourself and bystanders.

## Adaptors

**⚠WARNING**



• Adaptors can break from over-torque
**Do not use with impact drivers.**
**Do not exceed the torque stamped on adaptor.**
*Broken adaptor can cause injury.*

## AVR Battery Testers

**⚠WARNING**



• Batteries produce explosive gases and can explode and ignite
**Wear safety goggles (user and bystanders).**
**Keep flames and sparks away from batteries.**
*Battery explosion and Ignited gases can cause injury.*

## Battery Chargers, Testers (AVR), Portable Booster Packs

**⚠WARNING**



• Batteries produce explosive gases and can explode
**Wear safety shield (user and bystanders).**
**Do not overcharge battery.**
**Keep flames and sparks away from batteries.**
• Sparks occur when connecting or disconnecting leads while charger is ON
**Charger must be OFF when connecting or disconnecting leads.**
**Do not allow leads on Booster Packs to contact each other.**
*Battery explosion or ignited gases can cause injury.*

## Blow Guns

**⚠WARNING**



• Blow guns create flying particles, noise and high velocity air
**Wear safety shield or goggles (user and bystanders).**
**Wear mask if air is dusty (user and bystanders).**
**Wear hearing protection (user and bystanders).**
**Do not direct air at yourself or bystanders.**
**Keep out of reach of children.**
**VENTED: Do not use if air supply is above 135 psig. Do not obstruct vents.**
**NON-VENTED: Do not use if air supply is above 30 psig.**
*Flying particles, noise and high velocity air can cause injury.*

## Brake Tools

**⚠WARNING**



• Brake cylinder hones can fly apart if used outside cylinder
**Wear safety goggles (user and bystanders).**
**Operate only while hone is within cylinder.**
*Flying parts can cause injury.*

## Butane Mini-Torches

**⚠WARNING**



• Butane can explode
**Store at a temperature below 120 °F.**
**Dispose of butane in accordance with regulations.**
*Explosion or flames can cause injury.*

## Compressors

**⚠WARNING**



• Air compressors have electrical parts, moving parts and contain high pressure air that may be impure
**Read and follow all instructions.**
**Do not use as an air supply for breathing.**
*Improper use or maintenance can cause shocks, entanglement or injury.*
• Compressor systems contain air under pressure which can create a high pressure stream or ruptured vessel
**Wear safety goggles (user and bystanders).**
**Relieve pressure before servicing.**
**Do not modify/repair/rework pressure vessel or change safety relief pressure setting.**
*A pressurized air stream or rupturing pressure vessel can cause injury.*
• Moving components inside
**Do not use without all guards in place.**
*Moving components can cause injury.*
• High voltage will create an electrical shock
**Disconnect all power before servicing.**
*High voltage can cause injury.*

## Cordless Tools

**⚠WARNING**



• Battery packs present a risk of fire, explosion and electric shock
**Charge battery pack only with charger provided.**
**Do not store battery packs at temperatures above 120 °F (49 °C).**
**Do not discard used batteries; return them to a Snap-on® repair center for recycling.**
**Follow all safety messages in user's manual.**
*Fire or explosion or electric shock can cause injury.*
• Sparks from electric motor can ignite an atmosphere containing flammable vapor
**Do not use cordless tools in a volatile atmosphere**
*Fire and/or explosion can cause serious injury.*

## Diagnostic Equipment

**⚠WARNING**



• Use of diagnostic equipment on rotating engine poses risk of flying particles and entanglement
**Wear safety goggles.**
**Use caution in routing cables.**
*Flying particles can cause injury.*
*Poorly routed cables and test leads can cause entanglement and injury.*
• Use of diagnostic equipment can cause electrical shock, fire and explosion.
**Use caution and proper procedures when connecting and disconnecting leads.**
**Diagnostic equipment must be located 18" or more above floor level.**
**Avoid sparks and other sources of ignition.**
*Electrical shock, flames and explosion can cause serious injury.*
• Improper use can cause hazardous conditions
**Read and follow all safety precautions accompanying the product.**
*Unexpected electrical, thermal or mechanical occurrences can cause injury.*

## Fuel System Tools

**⚠WARNING**



• Flammable liquid and fumes can ignite
**Wear safety shield (user and bystanders).**
**Use only in well-ventilated areas.**
*Flames or explosion can cause injury.*

## Geared Head Torque Multipliers

**⚠WARNING**

• Use of gear head torque multipliers for torque control may result in inaccurate torque application
**For accurate control of torque use an Electrotork®, a Torqometer® or other measuring device located directly on the fastener.**
*Limited accuracy of the torque ratio of a geared head torque multiplier may cause improper preload of the fastener if it is used for torque control.*

## Grinders, Grinding Wheels, Power Tool Accessories

(drill bits, wire brushes, grinding burrs, abrasive wheels, grinding wheels, valve grinders, valve grinding wheels)

**⚠WARNING**



• Grinding causes flying particles
• Power tool accessories can break
**Wear safety goggles (user and bystanders).**
**Do not operate without eyeshields, guards and holders in place.**
**Do not use power tool accessories at speeds faster than their maximum rated RPM.**
**Do not use any accessory not specifically intended for use with a die grinder, with a die grinder.**
*Flying particles and broken tools can cause injury.*
• Wire bristles can break and fly off
**Wear safety goggles (user and bystanders).**
*Flying particles can cause injury.*
• Force on the side of grinding wheels or discs can break them
**Do not grind on the side of a grinding wheel or disc.**
*Broken grinding wheel or disc can cause injury.*

## Hammers
## (See Striking and Struck Tools)

## Hand Tools
## Handles

**⚠WARNING**



• Handles can break if overloaded
**Do not use "cheater bars" on handles.**
**Pull, do not push, on handles.**
*Broken handle or a fall can cause injury.*

## Sockets, Accessories

**⚠WARNING**

• Sockets and accessories can break if used with an impact wrench
**Do not use chrome or industrial finish hand tools with impact drivers.**
*Broken sockets or accessories can cause injury.*

## Impact Wrenches

**⚠WARNING**



• Impact wrenches produce noise and vibration
**Wear appropriate ear protection and gloves.**
*Extended exposure to noise and vibration can cause injury or impairment*
• Impact wrenches can cause breakage of sockets or accessories
**Wear safety goggles (user and bystanders).**
*Flying particles can cause injury.*

## Knives

**⚠WARNING**

- Blades are sharp and can cut
- Blades can break causing flying objects

**Wear safety goggles (user and bystanders).**
**Do not pry or bend blade.**
**Keep away from children.**
*Sharp edges and flying objects can cause injury.*

## Leak Detectors

**⚠WARNING**

- Gases, fluids or accumulated fumes may explode or ignite

**Do not expose fluids or fumes to flames, sparks or other sources of ignition.**
**Wear safety goggles or safety shield.**
**Use only in well-ventilated areas.**
*Explosion or flames can cause injury.*
*Fumes can cause breathing difficulty.*

## Lift Equipment Jacks, Jack Stands

**⚠WARNING**

- Vehicles supported by jacks or jack stands may fall if used improperly

**Do not exceed rated capacity of jack or jack stand.**
**Do not work on vehicle supported by jack, use jack stands; use jack stands in pairs.**
**Use jack and jack stands only on hard level surface.**
**Lift and support vehicle only on its designated lift points.**
*Failure of jack or jack stand or falling of vehicle can cause serious injury or death.*

## Lifts, Hoists

**⚠WARNING**

- Vehicles supported on lifts or hoists may fall if lifts are improperly installed, used or maintained

**Do not exceed rated capacity of the lift.**
**Lift must support vehicle only on its designated lift points.**
**Lifts must be installed by qualified installer.**
**Lifts must be inspected and maintained in accordance with user's manual.**
**Follow all instructions for proper use and all safety messages in user's manual.**
*Failure of the lift or vehicle falling off of lift due to use of improper lift points can cause serious injury or death.*

## Lighting

**⚠WARNING**

- Electrical shock can result from absence of grounding prong

**Do not remove or bypass the grounding prong in any electrical plug.**
**Disconnect power before servicing.**
*Electrical shock can cause injury.*

## Pliers/Cutters

**⚠WARNING**

- Broken tips or cut material can fly

**Wear safety goggles (user and bystanders).**
*Flying material can cause injury.*

## Power Tools

(impact wrenches, ratchets, hammers, sanders, grinders, cut-off tools)

**⚠WARNING**

- Power tools can cause flying particles

**Wear safety goggles (user and bystanders).**
*Flying particles can cause injury.*

- Power tools generate noise

**Wear hearing protection (user and bystanders).**
*Prolonged exposure to noise can cause hearing loss.*

- Power tools vibrate

**Avoid prolonged exposure to vibration.**
*Prolonged exposure to vibration can cause injury.*

- Improper use of power tools and accessories can cause broken tools

**Do not use without all guards in place.**
**Use accessories rated at tool RPM or higher.**
**Read and follow instructions before using power tools.**
*Broken tools can cause injury.*

## Pressure Equipment and Pressure Gauges

(all equipment using pressurized air or hydraulic fluid such as tanks, spray guns and blow guns)

**⚠WARNING**

- Pressurized equipment, systems or tanks can break or leak

**Do not exceed the maximum pressure rating of equipment. Wear safety goggles or shield and protective clothing appropriate to the fluid.**
*Pressurized fluid striking the body can cause personal injury. Flammable fluids such as gasoline, propane, etc. can ignite or explode and cause injury.*

- Fluids can leak or escape

**Use only in well-ventilated areas.**
*Breathing vapors or fluids from leaks can cause illness or injury.*

- Pressurized air or fluid stream can propel dust or particles

**Do not direct air or fluid stream at your body or at others.**
*Flying particles, air or fluid entering body can cause injury.*

- **Improper use or maintenance of pressurized equipment can cause leaks or rupture**

**Read and follow instructions.**
*Leaking of pressurized equipment can cause injury.*

## Prybars

**⚠WARNING**

- Prying can cause flying chips. Chipped or cracked prybars can cause flying chips
- Prybars can chip if struck

**Wear safety goggles (user and bystanders).**
**Do not use pipe or lever extension.**
**Do not use a prybar if chipped or cracked.**
**Do not use a prybar as a punch or hammer.**
*Flying chips can cause injury.*

## Pullers, Presses

**⚠WARNING**

- Puller or press parts under stress can break

**Wear safety goggles (user and bystanders).**
**Use the proper type and size puller or press.**
**Inspect the puller, do not use puller with worn or broken parts.**
**Screen the puller or press operation.**
*Broken parts can cause injury.*

## Punches/Chisels (See Striking and Struck Tools)

## Ratchets

**⚠WARNING**

- Ratchet mechanism may slip or break if dirty or worn
- Mismatched or partially worn parts can cause ratchet to slip or break

**Frequently inspect, clean and lubricate all non-sealed ratchet mechanisms with light oil.**
**Do not immerse sealed ratchet in fluids.**
**Do not replace worn parts individually, use entire contents of the service kit.**
*Ratchets that slip or break can cause injury.*

## Sanders

**⚠WARNING**

- Sanding disc or accessories can break if used above maximum rated RPM.

**Do not use sanding discs or accessories above their maximum rated RPM.**
*Broken sanding disc or accessories can cause injury.*

- Sanding produces particles and dust

**Wear safety goggle or a safety shield.**
**Wear a dust mask or respirator.**
*Some dust created by sanding may contain chemicals known to produce cancer or other health conerns.*

- Misuse of grinding wheels on sanders may result in wheel breakage.

**Do not use grinding wheels on sanders.**
*Broken grinding wheels can cause serious injury.*

## Scrapers

**⚠WARNING**

- Scrapers and putty knives can break if used for prying or chiseling

**Wear safety goggles (user and bystanders).**
**Do not use a scraper or putty knife as a prybar or chisel.**
*Broken tools can cause injury.*

## Screwdrivers

**⚠WARNING**

- Screwdrivers can break if used as prybar, chisel or punch

**Wear safety goggles (user and bystanders).**
**Do not use a screwdriver as a prybar, chisel or punch.**
*Broken screwdriver can cause injury.*

- Plastic screwdriver handles do not provide electrical insulation

**Do not use on or near live electrical circuits.**
*Electrical shock can cause injury.*

## Socket Usage

**Select the proper type of socket for the application.**

- **Hand Sockets** – All chrome-plated sockets and black finished sockets identified as hand sockets are for hand use only
- **Power Sockets** – Sockets designed and intended for use with power nut runners; do not use with impact drivers
- **Impact Sockets** – Sockets designed for durability when used with impact drivers; use only impact sockets with impact drivers
- Flexible sockets can cause injury when used with impact or power drivers.

**Do not hold flexible sockets or swivel joint tools during use.**
*Rotating socket can cause hand injury.*

## Sockets, Power

**⚠WARNING**



- Power sockets or accessories can break if used on impact drivers

**Wear safety goggles (user and bystanders).**
**Do not use power sockets or accessories with impact drivers.**
*Broken tools can cause injury.*
**Wear safety goggles (user and bystanders).**
**Do not hold power sockets during use.**
*Rotating power tools can cause injury.*

## Striking and Struck Tools, Punches/Chisels

**⚠WARNING**



- Striking and struck tools can break or chip
- Chipped or mushroomed punch and chisel ends or metal weakened by improper grinding can fragment
- Oversized hammer can chip the punch or chisel

**Wear safety goggles (user and bystanders).**
**Do not use punch or chisel having mushroomed ends; dress edges or mushroomed ends to original shape with a hand file.**
**Do not misuse a chisel as a punch.**
**Hammer head diameter should be approximately 3/8" larger than head of punch or chisel.**
*Flying objects can cause injury.*



- Steel punches and chisels can cause sparks during use

**Do not use near flammable substance.**
*Flammable substances can ignite causing injury.*

## Hammers

**⚠WARNING**



- Hammers can cause flying chips. Chipped, mushroomed or cracked hammers can cause flying chips
- Glancing blows can cause flying chips



- Striking hard surface can cause flying chips
- Body hammers can chip or break if struck against hard surfaces

**Wear safety goggles (user and bystanders).**
**Do not use chipped, mushroomed or cracked hammers.**
**Strike squarely and avoid glancing blows.**
**Do not strike other hammers or similar hard surfaces.**
**Use body hammers only for striking automotive-type sheet metal; do not strike hard surfaces.**
*Flying chips can cause injury.*



- Steel hammers can cause sparks during use

**Do not use near flammable substance.**
*Flammable substances can ignite causing injury.*

- COMPOTHANE® or urethane hammers can rupture or ignite if exposed to liquid oxygen

**Do not use *COMPOTHANE* or urethane hammers near liquid oxygen.**
*Ruptured and/or ignited* COMPOTHANE *or urethane can cause injury.*

## Tire Changers

**⚠WARNING**



- Tires can explode

**Wear safety goggles.**
**Do not over-pressurize tire.**



**Read and follow all safety precautions in user's manual**
*Exploding tire can cause serious injury.*



## Tool Storage Units

**⚠WARNING**



- Storage units can tip or strike you

**Do not open more than one loaded drawer at a time.**
**Keep children away.**



**Close lid and lock drawers and doors before moving.**
**Apply brakes on locking casters when not moving unit.**



**Do not step in or on drawers.**
**Secure units together with fasteners.**
**Read and follow instruction manual**
*Tipping of storage unit or unit striking you can cause injury.*



- Units edges can cut or pinch

**Do not pull; push to move.**
**Wear gloves when lifting by edges.**



**Keep feet and fingers clear of edges when stacking, hanging or moving units.**
*Unit edges can cause injury.*

## Torque Sticks

**⚠WARNING**



- The actual torque delivered to a fastener by a torque stick or torque extension depends on proper usage.

**Read and follow all instructions.**



**Check final torque with a torque wrench**
*Improper torque can cause fastener loosening or breakage resulting in injury.*

## Torque Testers

**⚠WARNING**



- Calibration weights can cause tester and its base to tip

**Wear safety goggles (user and bystanders).**



**Counterbalance or anchor mounting base.**
*Tipping base can cause injury.*

## Torque Wrenches

**⚠WARNING**



- Overtorquing can cause breakage
- Wrench can break while breaking fasteners loose



- Force against flex stops on flex head torque wrenches can cause head breakage
- An out-of-calibration torque wrench can cause part or tool breakage



**Wear safety goggles (user and bystanders).**
**Do not exceed rated torque.**
**Do not use a torque wrench to break fasteners loose.**
**Do not force head of flex head torque-wrenches against stops.**
**Periodic recalibration is necessary to maintain accuracy.**
*Broken tools can cause injury.*

## Welders, Cutters Electric, Plasma

**⚠DANGER**

- Electric welding or plasma cutting causes ultraviolet rays, localized magnetic fields, sparks, weld spatter and hazardous vapors and may cause electrical shock
- Bystanders will be exposed



**Wear welding helmet with appropriate shade lens while welding or cutting.**
**Wear gloves and protective clothing.**
**Use only in well-ventilated area.**



**Do not allow bystanders in area while welding or cutting.**
**Do not operate this equipment if you have an implanted electromechanical device.**
**Never coil electrode/torch lead around your body.**



**Read and follow all safety precautions in instructions.**
*Ultraviolet rays will burn eyes, magnetic field may affect operation of medical devices. Weld spatter, electrical shock or sparks can cause burns or other injuries.*

## Gas, Welding and Plasma Cutting

**⚠WARNING**



- Welding and cutting produce heat, weld spatter and hazardous vapors

**Wear gloves, face shield and protective clothing.**
**Use only in well-ventilated area.**
**Do not allow bystanders in immediate area.**
**Read and follow all safety precautions in instructions.**
*Byproducts of welding or cutting can cause burns or other bodily injuries.*

## Wheel Alignment Tools

**⚠WARNING**



- Suspension springs can slip out of engagement with spring compressors

**Follow instruction and assure that spring is properly engaged with the compressor.**
**Wear safety goggles (user and bystanders).**



- WA92 can break or disengage from spring if torqued over 30 lb ft

**Do not torque WA92 over 30 lb-ft**
*Broken compressor or disengaged spring can cause injury.*

## Wrenches

**⚠WARNING**



- Excess force can cause crowfoot or flare nut wrench slippage

**Do not over-torque; no pipes or "cheater bars."**



**Use only moderate force on crowfoot and flare nut wrenches.**
*Broken or slipping wrenches can cause injury.*

- Slimline wrenches can break if overloaded

**Wear safety goggles (user and bystanders).**
**Broken wrench jaw can cause injury.**
- User can slip or fall if wrench breaks or fastener breaks loose

**Pull, do not push, on wrench handle.**
*Injury can occur if user loses balance.*

INDEX

# 1/8"


1/8" Square Drive Tools
General Service Sets.....124


# 1/4"


1/4" Square Drive Tools
Adaptors.....106, 109, 123, 128, 144
Bit Socket Sets..... 117–120, 131–135, 155–159, 180–181, 212
Bit Sockets..... 117–121, 131–135, 155–159, 180–181, 212
Breaker Bars .....106, 127
Crowfoot Wrenches..... 258
Chrome, Sockets, Flank Drive® ..... 110–115
Extensions ..... 108–109, 121, 128
FOD Ratchets.....105
General Service Sets..... 124–126, 135–136
Handles ..... 106–107
Hi-Lok® Ratchet .....105
Impact Accessories..... 121
Impact Sockets, Flank Drive® .....122
Impact Wrench, Air ..... 470
Impact Wrench, Cordless..... 453
Power Accessories.....123
Power Sockets.....123–124
Ratchet Adaptors.....106
Ratchet Spinners .....106, 127
Ratchets .....103–105, 112, 127
Ratchets, Air ..... 471–472
Ratchets, Cordless..... 454
Sockets, Blue-Point® .....129–130
Sockets, Flip ..... 117
Sockets, Low Profile .....112–113, 115
Sockets, Special Application..... 116–117, 120, 123
Sockets, Spline® ..... 116
Sockets, TORX® ....114–115, 117–119, 130–131, 628
Torque Wrenches.....276–283
Torque, Drivers..... 285
Torque, Square Drive Heads ..... 287
Universal Joints ..... 109, 128, 145


# 3/8"


3/8" Square Drive Tools
Adaptors.....109, 142, 144–145, 154, 162, 168, 177
Bit Socket Sets, Blue-Point®..... 134–135, 180–181
Bit Sockets..... 117–120, 134–135, 155–160, 168, 179–181, 212
Breaker Bars .....142, 178
Chrome, Sockets, Flank Drive® ..... 146–150, 153
Crowfoot Wrenches..... 258–261
Extensions .....143–144, 154, 162, 168, 176–177
FOD Ratchets..... 141
General Service Sets.....136, 170–175, 182–183
Handles .....143, 176
Hi-Lok® Ratchet .....142
Impact Accessories.....162
Impact Drivers and Sets ..... 161
Impact Sockets, Flank Drive®..... 163–166
Impact Sockets, Swivel .....165–166
Impact Wrench, Air ..... 466–467, 469–470
Impact Wrench, Cordless..... 448–449, 453
Magnetic, Surface Drive Sockets..... 169
Power Accessories.....168
Ratchet Adaptors.....142
Ratchet Spinners .....142, 176
Ratchets ..... 138–142, 148–149, 175, 182
Ratchets, Air .....464, 471–472
Ratchets, Cordless.....446, 454
Socket Inserts, Non-marring.....145
Sockets, Blue-Point® .....178–183
Sockets, Flip ..... 414, 645
Sockets, Low Profile .....148–150
Sockets, Special Application..... 153–154, 156, 166–167
Sockets, Spline ..... 152
Sockets, Surface Drive .....169
Sockets, Swivel Ball.....154
Sockets, TORX® ... 150–151, 155–156
Sockets, Universal.....149–152
Torque Adaptors..... 154–155
Torque Wrenches.....276–283
Torque, Square Drive Heads ..... 287
Universal Joints .....109, 144–145, 162, 168, 177


# 1/2"


1/2" Square Drive Tools
Adaptors..... 109, 144, 187, 190, 195, 199
Bit Socket Sets, Blue-Point®..... 180–181, 211–212
Bit Sockets..... 134,–135,180–181, 195–198, 211–212
Breaker Bars ..... 187–188, 210
Chrome, Sockets, Flank Drive® ..... 191–194
Crowfoot Wrenches..... 261–262
Drive Handles..... 188
Extensions .. 189–190, 199, 205, 210
FOD Ratchets.....186
General Service Sets..208–209, 212
Impact Accessories.....199
Impact Drivers and Sets .....198
Impact Sockets, Flank Drive®..... 200–204
Impact Wrench, Air ..... 466–469
Impact Wrench, Cordless.. 447–449
Impact Wrench, Electric.....460
Power Accessories..... 205
Power Sockets..... 206–207
Ratchet Adaptors.....187
Ratchet Spinners .....187
Ratchets ..... 185–187, 210
Ratchets, Air ..... 472
Sockets, Blue-Point® ..... 211–212
Sockets, Flip ..... 581–582
Sockets, Special Application ... 194, 204–205
Sockets, Spline ..... 194, 407
Sockets, TORX® ..... 193, 195, 206, 211–212
Surface Drive Sockets ..... 207
Torque Adaptors.....195
Torque Wrenches..... 276–283, 583
Torque, Square Drive Heads ..... 287
Universal Joints ... 109, 145, 190, 210


# 3/4"


3/4" Square Drive Tools
Adaptors..... 215, 217
Bit Sockets.....216–217
Chrome, Sockets, Flank Drive®... 215
Extensions ..... 214, 217
General Service Sets.....221
Handles .....214
Impact Accessories.....217
Impact Sockets, Flank Drive®..... 218–220
Impact Wrench, Air ..... 466–467
Locking Rings and Pins .....217
Ratchet Adaptors.....215
Ratchet Heads.....214
Sockets, Special Application .....216
Sockets, Spline .....216
Sockets, TORX® ..... 220
Torque Adaptors.....419
Torque Wrenches.....276–283, 301
Torque, Square Drive Heads ..... 287
Universal Joints ..... 215, 217


# 1"


1" Square Drive Tools
Adaptors.....223–224
Breaker Bars ..... 223
Drive Handles..... 223
Extensions .....223–224
Handles ..... 223
Impact Accessories..... 224
Impact Sockets, Flank Drive®..... 225–227

Impact Sockets, Oil and Gas ..... 427
Impact Sockets, Railroad..... 428
Impact Wrench, Air ..... 466–467
Locking Rings and Pins ..... 224
Ratchet Heads ..... 223
Sockets, Special Application .... 227
Sockets, Spline ..... 223
Torque Wrench ...279, 281–283, 301
Universal Joints ..... 224


# 1 1/2"


1 1/2" Square Drive Tools
Adaptors..... 228
Drive Handles..... 227
Extensions ..... 228
Impact Sockets, Flank Drive®..... 228–230
Locking Rings and Pins .....228, 230
Torque Wrenches..... 281–283, 301
Universal Joints ..... 228


# 2 1/2"


2 1/2" Square Drive Tools
Impact Sockets, Flank Drive®..... 231–232
Locking Rings and Pins .....230, 232


# A


**A**brasive Blast Cabinet .....712–713
**A**brasive Wheels ..... 497–498
**A**brasives .....714
**A**ccelerator Pedal Jack .....591, 695
**A**ccessories
Adaptor, Air Line..... 506
Adhesive Sticks ..... 452
Air Hammer, Bits .....500–502
Air Hammer, Chucks .....475, 501
Air Hoses, Swivels ..... 505
Air Ratchet ..... 488
Air Saw .....502–503
Couplers, Air ..... 506
Diagnostic Smoke Machine..... 524–526
Diagnostic Storage ...763, 770–771, 774
Diesel Fuel Service..... 407, 416
Drill ..... 488–496
ETHOS®..... 758, 763
ETHOS®+..... 744, 755, 763
Grinder ..... 497–499
Impact Wrench, Vinyl Boots..... 488
Leak Detector ....524–526, 622–623
MICROSCAN® III..... 765
MicroVAT™, D-TAC™ .....610–611
MODIS™..... 758–761
MODIS™ Ultra .... 747, 756, 758–761, 763
Personality Keys.....775
Pocket iQ™ ..... 771
Pro-Link® iQ™ .....774
Pro-Link® Ultra .....769–770
Sander ..... 496
Scan Tool ..... 758
Scope and Meter .....513–514, 759–761
Screwdriver..... 323
Socket, Ratchet, 1/4" Drive..... 109, 127–128
Socket, Ratchet, 3/8" Drive..... 144–145, 176–177
Socket, Ratchet, 1/2" Drive..... 190, 210
Socket, Ratchet, 3/4" Drive ..... 214–215
Socket, Ratchet, 1" Drive ..... 223
Socket, Ratchet, 1 1/2" Drive .... 230
Socket, Ratchet, Spline..... 228
SOLUS™..... 758, 763
SOLUS™ Edge .....746, 754, 758, 763
SOLUS PRO™ ..... 758, 763
SOLUS Ultra® ..... 754, 758, 763
Tire Changer..... 570, 573
Tool Storage...57, 59, 61–62, 68–98
Vantage PRO™ ..... 759–761, 763
VANTAGE™ Ultra.. 745, 759–761, 763
VERDICT® .....753, 758–761, 763
VERUS®..... 752, 758–761
VERUS® PRO..... 749, 751, 759–761, 763
Welding ..... 554–556, 558
Wheel Balancer .....569, 571
WorkStation ..... 93–95
**A**ccessory Box ..... 95
**A**CR® Bits
Phillips® ..... 315–317, 319, 321–322, 324, 326
Pozidriv®.....319, 324
**A**daptor
1/4" Drive ....106, 109, 123, 128, 144
3/8" Drive...109, 142, 144–145, 154, 162, 168, 177
1/2" Drive.... 109, 144, 187, 190, 195, 199
3/4" Drive ..... 215, 217
1" Drive .....223–224
1 1/2" Drive ..... 228
#5 Spline Drive to Square ..... 228
A/C..... 628
Air Line ..... 506
Amp ..... 513
Arbor ..... 495, 497
Backprobe ..... 515
Ball Joint ..... 589
Banana Plug..... 514–516, 518, 521–522
Battery ..... 517
Bearing, CJ Series..... 391–392
Bed of Nails ..... 514, 517
Cable..... 759
Cap ..... 524–525, 632–633
Compression ..... 407–408, 412, 540
Cooling System ..... 630–634
Data Cable ..... 744, 746–747, 749, 751, 754, 756, 758, 770–771, 774
Diesel..... 407–408, 412, 540
Diesel Compression..... 540
ETHOS®..... 758
ETHOS®+..... 744, 755, 758
European Vehicle..... 744, 746–747, 749, 751–753, 755–756, 758
Extension.....162, 190, 199
Hand Wheel .....401
Hex to Square..... 109, 117, 123, 145, 168, 321–323
Hydraulic Gauge Mounting .....401
Ignition..... 745, 749, 751, 761
Internal Square ..... 348
Intrusive Circuit Testing Adaptor..... 513, 517
Joint Rate Simulator.....294, 299
Locking.....162, 190, 199
Magnetic ..... 109, 145, 322–323
MODIS™ Ultra .....747
Multi-Ignition .....761
Neck.....526, 630, 632–634
Nonconductive ..... 348
OBD-I..... 744, 746–747, 749, 752–756, 758, 765
OBD-II.....758, 771
Oil Injector ..... 628
Pneumatic..... 630
Power ..... 123, 168, 205
Pressure .....513, 542
Puller..... 391–393, 400–401, 403–406
Radiator..... 630, 632–633
Ratchet ..... 106, 142, 187, 215
RPM..... 513
Scope and Meter .....513–515, 517, 744–745, 747, 749, 751–756, 758–761, 765, 769–770
Set .....109, 123, 144
SOLUS™ Edge ..... 746
Split Lead ..... 760
Square Drive ..... 109, 144, 228
Temperature..... 514
Tire Changer.....571, 573
Torque ..... 154–155, 195, 419
Trailer..... 523
Transducer..... 753, 759
Vacuum ..... 524
VANTAGE™ Ultra.....745
VERUS® PRO..... 749
Voltage ..... 513
Wheel Hub Removal.....595
Wrench, Ratcheting ..... 238
**A**daptor Sets
Cooling System ..... 633–634
Extension.....109, 123, 144

Fuel Injection ..... 416, 542–543
Torque ..... 154, 195
Adhesive Gun ..... 446, 452
Adjustable
Joint Pliers ..... 334, 337, 345–346
Pin Spanner ..... 274, 628
Pliers ..... 334, 337, 345–346
Spanner Wrenches ..... 274
Tap Socket ..... 379, 381
Torque Driver ..... 285
Torque Screwdriver ..... 285
Torque Wrenches ..... 276–286
Wrench ..... 261, 272–274
Wrench, Crowfoot ..... 261
Wrench, External Pipe ..... 272
Wrench, Valve Persuader ..... 427
Adjusting Wrenches, Carburetor ... 549
Advance Timing Lights ..... 422, 535
A-Frame ..... 400
Air Conditioning
Adaptor ..... 628
Connectors ..... 628
Hoses, R134a, R12 ..... 625
Leak Detectors ..... 620–623
Manifold Gauges ..... 624
Pulley Pullers .... 390, 394, 396, 413
Recycling, Recharging System, Hybrid ..... 617
Recycling, Recharging System, R134a ..... 617–618
Replacement Hose ..... 625
Sales, Training Materials ..... 619
Service Kits ..... 624
Service Tools ..... 627–628
Ultraviolet Flashlights ..... 623
Valve ..... 626–628
Air Movers ..... 727
Air
Accessories ..... 488–506
Adaptors, Couplers ..... 506
Auxiliary Handle ..... 473–474, 489
Blow Guns ..... 504–505
Brush Kits ..... 710
Brushing ..... 710
Chisels, Punches ..... 500–502
Chuck, Retainer ..... 475, 501
Chucks, Tire ..... 422, 578–579
Closed Chuck ..... 578
Compressor ..... 710, 718–719
Control Units ..... 720
Crud Thug® ..... 486
Cut Off Tool ..... 478–479
Die Grinder ..... 476–478
Drill ..... 473–474
Filter ..... 645, 709, 752
Finishing Tool ..... 482–486
Grinder ..... 480
Hammer ..... 464, 475
Hammer Bits ..... 500–502
Hose ..... 505
Hose, Swivels ..... 505
Impact Wrench ..... 466–470
Impact Wrench Accessories ..... 488, 502
Line Coupler, Adaptor ..... 506
Lubricators, Air Line ..... 301, 720
Micro Tools ..... 485
Motor Oil ..... 506
Motor, Torque Multiplier ..... 293
Nibbler ..... 481
Open Chuck ..... 579
Polishers ..... 484–485
Pressure Gauge ..... 576–578
Processing Equipment ..... 720
Ratchet ..... 471–472
Ratchet Accessories ..... 488, 502
Reciprocating Saw ..... 480–481
Sander ..... 482–484
Sander Accessories ..... 496
Saw ..... 465, 480–481
Saw Accessories ..... 502–503
Shears ..... 481
Solvent Gun ..... 724
Swivel Connector ..... 505
Tool Accessories ..... 488–506
Tool Boots ..... 488
Tool, Oil ..... 506
Tools, Reference Charts ..... 464–465
Vacuum ..... 726
Valve ..... 506, 709
Valves, Regulators ..... 709
Alignment
Bar, Body ..... 696
Headlamp ..... 707
Wheel ..... 589–593
Alligator Clip ..... 514–517
Alternator Pulley Installer, Puller ..... 394, 657
Aluminum
Screw Starter ..... 317
Wrench ..... 256, 272–273, 277
Amp
Adaptor ..... 513, 760
Probe ..... 513, 611, 745, 747, 749, 751, 756, 760
Analyzer
Carbon Monoxide ..... 526
Gas ..... 526–527
Timing Light ..... 422, 535
Angle
Air Drill ..... 474
Drill Kit ..... 494
Gauge, Torque ..... 284, 422
Grinder, Air ..... 476–478, 480
Head Wrench ..... 256
Locator ..... 600, 678
Polisher ..... 485
Antenna
Socket ..... 706
Wrench ..... 706
Anti-Camout Bits ..... 315–317, 319, 321–322, 324–325
Anti-Fatigue Mats ..... 96
Anti-Freeze Testers ..... 631
Anti-Seize Compound ..... 736
Anti-Vibration Gloves ..... 733
Applications, OEM ..... I26–I30
Apprentice Set ..... 431–432
Arbor Adaptor, Hole Saw ..... 495
Arbor Press ..... 717
Arm Protectors ..... 558
Auto Care
Buffing, Cleaning ..... 95, 736
Automatic Center Punch ..... 353
Automotive
Diesel Service Tools ..... 284, 414–415, 422
Multimeters ..... 511–512
Seat Covers ..... 670
Tool Set Building ..... 431–440
Auxiliary Handle ..... 473, 489
Aviation/Aircraft
Drill Bits ..... 494
Dzus® Screwdriver ..... 311
Mastic Removal Tools ..... 424–425, 705
Oil Can Opener ..... 425
Ratchets, FOD ..... 105, 141, 186
Ratchets, Hi-Lok® ..... 105, 142, 427
Safety Wiring ..... 423–424
Service Tools ..... 113, 312, 315, 425–427
Snips ..... 698
Socket Wrench ..... 426
Sockets ..... 118, 152, 194, 216, 223
Specialty Tools ..... 154–155, 195, 424–427
AVR Testers ..... 610–611
Awl ..... 328–329
Axle
Nut Socket ..... 584–585, 596
Puller ..... 392–393, 594–595


# B


Back Supports ..... 740
Bag
Collapsible ..... 71, 506
Tote ..... 71, 506
Balancing, Wheel ..... 569–571
Ball Bearing Drawer Slides ..... 97
Ball Hex
Bit ..... 320
Bit Socket ..... 119–120, 157–159, 196
Wrench ..... 266–267, 269–270
Ball Joint
Pickle Fork ..... 590
Press ..... 589
Press, Adaptors ..... 589
Separators ..... 590
Sockets ..... 590
Ball Peen Hammer ..... 354, 356
Band Dollies, Oil Container ..... 652

**B**anners .....619, 746–747, 749, 751, 754, 756, 757
**B**arring Socket, Engine ..... 662
**B**ar-Type Pullers.....400, 403–405
**B**attery
- Adaptor ..... 517
- Booster Cable.....613
- Booster Packs .....612–613
- Cable Clamp Puller .....614
- Carrier .....615
- Charger..... 459, 462, 524, 530, 607–609
- Charger Cover..... 607
- Charger, Diagnostics .....752
- Charger, Mobile..... 459, 462
- Clamp Puller .....614
- Diagnostics.....752–754, 756, 770–771, 774
- D-TAC™.....610–611
- Fillers .....615
- Hydrometer, Thermometer .....615
- Lift, Hybrid..... 605
- Lithium .....459, 461–462
- Maintainers ..... 609
- MicroVAT™.....610–611
- MODIS™ Ultra ..... 756
- Ni-Cad .....459, 461–462
- Packs, Diagnostic Tools....752–754, 756, 771, 774
- Pliers.....614
- Pocket iQ™ ..... 771
- Power Inverters ..... 609, 612
- Pro-Link® iQ™ .....774
- Pro-Link® Ultra ..... 770
- Remote Solenoid Switch .....614
- Service Kit .....614
- SOLUS™ Edge ..... 754
- SOLUS Ultra® ..... 754
- System Tester..... 607–611
- Terminal Cleaners.....615
- Terminal Wrench.....614–615
- Testers.....610–611
- Tools .....605, 607–615
- VERDICT® .....753
- VERUS®.....752

**B**ead Breakers, Tire ..... 572–573, 587
**B**earing
- Driver Sets ..... 668–669
- Packers.....651
- Press .....600
- Race Drivers, Removers.... 668–669

**B**elt Sanders..... 484
**B**elt Tensioning Tools ....412, 658–659
**B**ench
- Grinder Accessory ..... 740
- Work.....717

**B**endable Light ..... 643
**B**ending Tools..... 368
**B**it Sockets
- Ball Hex .....119–120, 157–159, 196
- Clutch..... 121, 160
- Double Hex .....158
- Flat Tip.....120, 133–134, 160, 198
- Hex, 1/4" Drive .... 119–120, 132–135
- Hex, 3/8" Drive... 157–159, 168, 179, 181
- Hex, 1/2" Drive .... 196, 207, 211–212
- Hex, 3/4" Drive.....216–217
- Hex, 1" Drive..... 224
- Holder .....112–113, 315–316, 320–323, 325, 347
- Metric Hex.... 119, 132, 134–135, 157, 168, 179, 181, 196, 211–212, 216
- Mortorq® .....120, 160
- Phillips® ..... 121, 133–134, 160, 198
- Polydrive® Head Bolt.....198
- Pozidriv®..... 160, 180
- Screwdriver..... 120–121, 133–134, 160, 198
- Special Purpose, Application... 120, 156, 160, 198
- Stubby, 1/4" Drive .....117, 119–120, 131–134
- Stubby, 3/8" Drive..... 157–158
- Stubby, 1/2" Drive .....197
- TORX® Tamper-Resistant ... 118–119, 131, 134, 156, 179–180, 211–212
- TORX®, TORX Plus® .....117–119, 123, 131, 135, 155–156, 168, 179, 181, 195, 206, 211–212, 216
- Triple Square..... 133, 159, 180, 197
- Universal ..... 117, 119

**B**its
- Drill ..... 490–496
- Drill, Left Hand ..... 493
- Holster ..... 460
- Set, Power ..... 321–322
- Set, Quick Change ..... 460, 488

**B**lade
- Air Saw .....502–503
- Demolition..... 503
- General Purpose..... 503
- Hacksaw ..... 359
- Handsaw..... 359
- Holder ..... 425
- Interchangeable Screwdriver..... 311
- Knife ..... 360–362
- Metal Cutting .....320, 359
- NYROC® .....424–425
- Reciprocating.....502–503
- Reversible Screwdriver..... 311
- Sharpener, Pneumatic ..... 425
- Sharpening..... 362
- Utility Knife..... 360–362
- Wood Cutting ..... 359, 503

**B**last
- Cabinets .....712–713
- Gun .....713–714

**B**last Systems
- Abrasives.....714
- Accessories.....714
- Cabinet-Type Abrasive.....712–713
- Helmet, Hood.....714
- Portable Pressure ..... 711
- Vacuum .....713

**B**lind Hole Bearing Pullers ... 400, 406
**B**lind Rivet Kit..... 700
**B**low Gun
- Non-vented ..... 504
- Vented..... 505

**B**ody
- Bumper Cover Painting Stand ... 705
- Dent Puller..... 452, 566–567, 696
- Dollies..... 698–699
- Door Tools..... 700–702
- Files ..... 699
- Guard .....38, 40, 78
- Hammers ..... 697–698
- Jack Sets.....696
- Panel Alignment Bar .....696
- Pull Rods ..... 702
- Repair.....566–567, 696–707
- Rivet Kits ..... 699–700
- Sanding Blocks, Pads ..... 705
- Shears, Snips.....698
- Spoon..... 698–699
- Spot Weld Cutter ..... 707
- Suction Cups..... 702
- Tools .....566–567, 696–707
- Window Tools.....704–705

**B**olt
- Covers, Caster .....98
- Cutter ..... 343–344, 346
- Extractor ..... 383–386
- Socket .....656, 662
- Thread Gauges .....381–382, 681

**B**olt-Grip Pullers ..... 393
**B**onnet Cleaning Tool ..... 496
**B**ooster
- Cables, Clamps .....613
- Packs.....612–613

**B**oot Banding Tool..... 596
**B**oot, Air Tool.....488
**B**orescopes, Video .....528–530
**B**ottle Jacks ..... 602
**B**ottoming Tap Sets.....381
**B**ox
- Aviation/“Dog Box” ..... 63
- End Torque Wrench..... 287–289
- Metal Storage..... 70
- Plastic Storage ..... 68–69
- Wrench Heads, Interchangeable Torque ..... 287–289
- Wrench, Combination ..... 234–238, 241–249
- Wrench, Heavy Duty, Striking, Slugging..... 263–264
- Wrench, High Performance, Spline..... 238, 249, 251–253
- Wrench, Offset ..... 236–237, 240, 249–253, 264
- Wrench, Ratcheting ..234–241, 287, 615, 628, 658, 661, 703, 707

Wrench, Specialty.... 253–254, 536, 615, 628, 658, 661, 703, 707
Brake
Adjusting Tools .....691
Bleeder Kits .....542, 686–688
Bleeder Wrenches ..... 694
Caliper Press..... 692–693
Cylinder Hones..... 695
Drum Gauge..... 690
General Service Sets..... 690
Lathes and Accessories..... 687
Parking Brake Tools ..... 695
Pedal Jack..... 695
Pump Kits ..... 542
Resetting Gauge..... 695
Service Tools..... 689–695
Slack Adjusters .....419, 691
Socket .....694
Software .....769, 772–773
Spring Tools.....689, 693
Truck ..... 693
Brake Bleeder Kits
Bleeder Adaptors.....688
Master Cylinder Pressure Cap ...688
Non-Diaphragm Type Brake Bleeder..... 688
Vacuum Type.....542, 686–687
Brake Lathes Accessories
Carbide Insert Bit Kits..... 687
Silencers ..... 687
Brass Hammers ..... 355–356
Breaker Bar
1/4" Drive .....106, 127
3/8" Drive.....142, 178
1/2" Drive..... 187–188, 210
1" Drive..... 223
Nonconductive ..... 348
British Standard Wrenches ..... 248
Bronze Punches..... 352
Brush
Air .....710
Battery .....615
Battery Terminal .....614–615
Diesel Injector.....408, 411, 413
Distributor Cleaning..... 551
Electrical..... 523
Fingernail .....737
Injector.....408, 411, 413
Paint Gun Cleaning ..... 711
Parts Cleaning..... 724
Specialty ..... 738
Taillight Socket..... 523
Valve Guide..... 663
Wire .....551, 615, 738
Budd Wheel Tools ..... 587
Buffing Pads..... 736
Bumper Cover Paint Stand ..... 705
Burr, Grinding..... 499
Bushing
Cutter .....353
Driver Sets ..... 668–669
Inserter, Remover Set ..... 667
Puller.....392–393
Tools ..... 500, 600, 667–669
Butane
Fuel Cans .....561
Soldering..... 558–559
Soldering Torch .....561
Butcher Block Tops..... 72


# C


Cabinet
End.....20, 32–34, 48, 55
Flammables ..... 711
Overhead.....20, 32
Prybar .....93–94, 332
Roll, Classic Series ..... 44–46
Roll, EPIQ Series..... 10–17
Roll, Heritage Series .....50–52
Roll, Masters Series..... 24–29
Wall.....69
Wheel Weight.....571
Cable
Adaptor ..... 759
Booster.....613
Clamp Pliers, Puller .....614
Cutter .....335, 344, 429
Cutter, Hydraulic ..... 429
Data ... 744, 746–747, 749, 751, 754, 756, 758, 770–771, 774
Extension..... 754, 756, 758
Calibration Wheels, Arms ..... 299
Calibrator, Torque .....295–299
Caliper
Dial ..... 676
Electronic Digital ..... 676
US, Metric Dial Type..... 676
Vernier ..... 676
Cam Belt Wrenches .....661
Camber Adjusting Tools.....591
Camshaft
Bearing Remover, Inserter..... 663
Belt Tool .....661
Holding Tool..... 654
Pulley Tool ..... 653
Seal Installer.....598, 661, 663
Seal Puller .....661–662
Cannon Plug Pliers..... 344
Cape Chisel .....351–352
Car Starting Units ..... 607–608, 609, 612–613
Carbide Burrs ..... 499
Carbon Monoxide Analyzer..... 526
Carburetor
Adjusting Tools ..... 549
Double “D” Tools..... 549
Idle Adjusting Tools ..... 549
Screwdriver..... 549
Tools ..... 549
Carts..... 57–60, 64–66, 564
Caster-Camber Tools .....591
Casters.....98
C-Clamp
High Visibility.....565
Locking.....565
Medium Duty.....716
Pliers.....565
Valve Lifters .....664
Welding ..... 564
Center Punches.....353
Chain
Saw Files ..... 364
Wrench .....274
Charger
Battery ..... 607–609, 751–754
Cordless Tools.. 459, 461–462, 524, 530
Diagnostics.....751–754
Pocket iQ™ .....771
Pro-Link® iQ™ .....774
Pro-Link® Ultra ..... 770
SOLUS™ Edge ..... 754
SOLUS Ultra® ..... 754
VERDICT® .....753
VERUS®.....752
VERUS® PRO..... 751
Charging
Manifolds, A/C ..... 624
Service Center, A/C..... 617–618
Starting, Tester, Battery ... 607–609
System Analyzers, Battery..... 607–609
Chasers
Circuit..... 523
Thread ..... 375–376
Chests
Mobile ..... 62–63
Road.....61–62
Top.....18, 30–31, 47, 52–54
Chipping Hammer..... 564
Chisel
Punch Holder, and ..... 351
Punch Set, and .....351–353
Punch, Air Hammer, and....500–502
Demolition .....331
Gauge..... 351
Soft Grip .....353
Chuck
Air .....422, 578–579
Air Drill ..... 489
Air Hammer.....475, 501
Impact Wrench, Quick Change..... 447–449, 453, 456
Keyless..... 474
Quick Change .... 447–449, 453, 456
Tire.....422, 578–579
Circuit
Chaser..... 523
Test Lights .....518–523, 628
Tester .....518–523, 628
Testing Adaptor.....515, 517
Clamping Pliers .....565

Classic Series
Accessories, “Add-ons”..... 47–48
End Cabinet ..... 48
Locker ..... 48
Reference Chart..... 6, 44
Roll Cab ..... 44–46
Top Chest..... 47
WorkStation Riser..... 48
Claw Hammer .....355
Cleaner
Auto ..... 736
Diagnostic ..... 95
Diesel..... 416, 644
Dirt, Stain ..... 727
Engine ..... 644
File ..... 364
Fuel .....543, 644
Hand .....736–737
Parts .....722–725
Plastics..... 95
Pressure .....725–726
Supplies ..... 95, 724, 736–737
Tool Storage..... 95
Click-Type Torque Wrenches
QC Series..... 286
QD Series.....279–280, 286
TQ Series .....280–281
Clip, Alligator .....514–517
Close Quarter Bars..... 332
Clutch
Aligner Sets .....600
Bit Socket ..... 121, 160
Driver ..... 121, 160
Hex Shank Bits ..... 324
Remover ..... 626
Service Tool Sets, A/C..... 626
Tools ..... 600, 626
Wrench ..... 409, 411, 415
Code Readers, OBD-II ...744, 746–749, 752, 765, 771
Coil-on-Plug Probe ..... 534
Coil Spring Compressor ..... 593
Collision Repair ....566–567, 696–698
Combination
Lock ..... 95
Pliers.....337, 345
Storage Units ..... 10–55
Wrench ..... 234–237, 241–249
Wrench, Flex Head ..... 237, 248
Wrench, Open End, Ratcheting Box..... 234–237
Wrench, T and L-Shape..... 266–267
Combustible Gas Detectors..... 526
Come-Along Lifting Tool..... 605
Compact Meters.....511–512
Comparator, Torque .....300
Composite Tools, Nonconductive ..... 347–349
Compound Leverage
Cutters.....335
Pliers..... 335, 337
Snips.....698
Compression
Adaptor .....407–408, 412, 540, 653
Gauge Set.....538–539
Gauge, Diesel..... 539
Gauge, Motorcycle.....422, 538
Glow Plug Adaptors ..... 412, 540
Computer
Memory Savers ..... 536
Torque Testers..... 294, 296–297
Connector
A/C..... 627
Extension.....109, 144
Pliers.....343–344, 426
Swivel..... 505
Constant Velocity Tools..... 596–597
Continuity Tester.....518–523, 628
Coolant
System Tools..... 630–636
Testers.....631–634
Corbin Hose Clamp Pliers ..... 635
Cordless
Adhesive Gun ..... 452
Batteries, Snap-on® ..... 459
Chargers, Snap-on® ..... 459
Cut-Off Tool..... 452
Dent Pulling Kit ..... 452
Drill, 14.4V ..... 445, 455
Drill, 18V.....445, 450
Driver ..... 453, 456
Lighting ..... 457, 638–639
Grease Gun .....451
Grinder.....446, 452
Impact Wrench, 9.6V..... 456
Impact Wrench, 14.4V ..... 453
Impact Wrench, 18V ..... 447–449
International Product.....461–462
Kits, 14.4V.....455
Memory Saver/Power Inverter .. 458
Power Bit Kits..... 488–489
Power Inverter/Memory Saver .. 458
Ratchet..... 454
Reciprocating Saw.....451, 454
Reference Chart..... 445–446
Screwdriver..... 453, 456
Screwdriver, Accessories ..... 460
Soldering..... 558–559
Tool Kits..... 450
USB Power Units..... 458
Utility Lights ..... 641
Work Light ..... 457
Cotter Pin Puller.....588, 636
Coupler
Air Line ..... 506
Quick Change.....321–323, 488
Removal Tool..... 634
Spring Lock.....546, 628
Cover
A/C Service Center.....619
Battery Charger ..... 607–608
Fender ..... 670
Motorcycle Gas Tank ..... 421, 670
Seat, Automotive..... 670
Smoke Machine..... 524
Tool Storage Unit, Combinations .... 74–75
Tool Storage Unit, Road Chests.. 61, 75
Tool Storage Unit, Roll Carts ..... 75
Tool Storage Unit, TUV .....37–40
Crankshaft Pulley Tool ..... 390, 408
Creepers
Accessories..... 673
Hanger .....94, 673
Heavy Duty..... 672
Seat ..... 673
Specialty ..... 671–672
Standard.....671
Crimping Tools..... 343–344, 625
Cross Peen Hammers .....356, 697
Crowfoot Wrench
1/4" Drive ..... 258
3/8" Drive..... 258–261
1/2" Drive..... 261–262
Holder .....261
Ratcheting .....261
Crud Removal Tool .....486
Crud Thug® .....486
Cummins®, Diesel Tools for
Bit Socket, TORX® .....119, 156
Compression..... 540
Diagnostics..... 770, 774
Feeler Gauges ..... 679
Service Tools..... 218–220, 390, 407–409, 414, 416, 417–418, 648
Tool Sets..... 407–409, 645
Cut Off
Tool, Air .....478–479
Wheels .....452, 478–479, 498
Cutter
Air..... 465, 478–481
Bolt ..... 343–344, 346
Bushing.....353
Bushing, Air Hammer..... 500
Cable.....335, 344, 429
Cable, Hydraulic ..... 429
Chain Pipe .....367, 591
Diagonal..... 334–335, 345–346
Electronic Service..... 342
High Leverage ..... 335, 588
Miniature.....345–346
Multi-Purpose ..... 360
Pliers.....334–337, 342, 345–346
Pruner, Hand..... 360
Ratcheting ..... 368
Set ..... 334, 345–346
Sheet Metal ..... 698
Special Purpose, Application.....335
Tail Pipe.....367, 591
Tube ..... 368
Wheels .....452, 478–479, 498
Wire ..... 343–344, 423

Cylinder
Bore Gauges ..... 665
Compression Gauges .....538–539
Head Tools ..... 656, 663–665
Hones..... 695
Leakage Tester .....541
Ridge Reamers ..... 665
Service Tools..... 656, 663–665


# D


Dana®, Axle Nut Sockets for ..584–585
Dead Blow
Hammers ..... 354, 356, 666
Hammers, Piston.....354, 666
De-Burring Tools ..... 496
Decal, Tool Storage ..... 84
Decimal Conversion Chart..... 680, G5
Deep Well Thread Chasers ..... 376
Degreasers..... 724
Dent Pullers
Body..... 452, 566–567, 696
Stud Gun ..... 566
Detail Gun ..... 708
Detailing
Buffing, Cleaning..... 95, 484, 496, 735–736
Detector
Gas..... 524–525
Leak .....620–622, 631, 656, 705
Detroit Diesel®, for
Hand Tools..... 169, 197, 218, 220, 410–412, 417–418, 635, 658
Impact Sockets.....169, 218, 220, 417–418
iQ™ Software, Diagnostics..... 772
Diagnostic Equipment
Cleaning Supplies ..... 95
Data Bus Fault Finder .....521
Docking Station.....749, 751, 753
ETHOS®, Accessories ..... 758, 763
ETHOS®, Storage ..... 763
ETHOS®+, Accessories744, 755, 763
ETHOS®+, Scan Tool..... 744, 750
ETHOS®+, Storage ..... 763
Foam Organizers .....745, 747, 749, 751, 756, 763, 770, 774
Keys, Personality.....775
MICROSCAN® III, Accessories ... 765
MicroVAT™, D-TAC™, Accessories ... 610–611
MODIS™, Accessories..... 758–761
MODIS™ Ultra, Accessories.....747, 756, 758–761, 763
MODIS™ Ultra, Scan Tool ....747, 750
MODIS™ Ultra, Storage..... 763
OBD-II Scan Tools .....744, 746–749, 765–766, 771
PASS THRU PRO II ..... 764
Personality Keys.....775
Pocket iQ™ .....771
Pocket iQ™, Accessories .....771
Pocket iQ™, Storage .....771
Pro-Link® iQ™, Accessories .....774
Pro-Link® iQ™, Storage .....774
Pro-Link® Ultra, Accessories..... 769–770
Pro-Link® Ultra, Scan Tool..767–768
Pro-Link® Ultra, Storage ..... 770
Reference Chart..... 750
Screen Guards, Protectors, Skins ... 754–756
Software ..... 764, 769, 772–773
SOLUS™, Accessories..... 758, 763
SOLUS™ Edge, Accessories..... 746, 754, 758, 763
SOLUS™ Edge, Scan Tool ... 746, 750
SOLUS™ Edge, Storage..... 763
SOLUS PRO®, Accessories ..... 758, 763
SOLUS PRO®, Storage ..... 763
SOLUS Ultra®, Accessories ..... 754, 758, 763
SOLUS Ultra®, Storage ..... 763
Storage..... 763, 770–771, 774
Training, Service Banners..... 619, 746–747, 749, 751, 754, 756, 757
Vantage PRO™, Accessories..... 759–761, 763
Vantage PRO™, Storage ..... 763
VANTAGE™ Ultra, Accessories... 745, 759–761, 763
VANTAGE™ Ultra, Scan Tool 745, 750
VANTAGE™ Ultra, Storage..... 763
VERDICT®, Accessories..... 753, 758–761, 763
VERDICT®, Scan Tool ..... 748, 750
VERDICT®, Storage..... 763
VERUS®, Accessories .....752, 758–761
VERUS® PRO, Accessories .....749, 751, 759–761, 763
VERUS® PRO, Scan Tool..... 749–750
VERUS® PRO, Storage ..... 763
Diagonal Cutter..... 334–335, 345–346
Dial Gauges, Diesel..... 407
Dial Test Indicators..... 677
Diamond Point Chisels ..... 351
Diamond Tip
Bits ..... 320, 325
Screwdrivers ..... 306
Die
Grinders, Air ..... 465, 476–478
Sets..... 377–379
Setter Bars..... 332
Dies and Taps
Self Aligning ..... 380
Thread Restoring ..... 374–376
Threading ..... 377–379
Diesel
Audi®..... 414–416
Automotive .....414–415
BMW®.....414, 416
Caterpillar®..... 218, 220, 412, 417–418
Cleaning Tools.....416
Compression Adaptors....407–408, 412, 539–540
Compression Gauge..... 539
Cummins®, for....119, 156, 218–220, 390, 407–409, 414, 416–418
Detroit®, for ..... 169, 197, 218, 220, 410–412, 417–418
Duramax®, for .....200, 414–416
Engine Detergent.....416
Ford®, Navistar®, for ..... 409, 412–414, 418
Fuel Service .....407, 416, 644
Injector Tools ..... 119, 158, 407–411, 414–416, 418, 422
International®, for ....203, 220, 411, 417–418, 540, 586, 590, 632, 635, 693, 769, 772–773
Isuzu®, for..... 416, 769, 773
Mack®, for.....418
Mercedes®, for ... 415–416, 418–419
Navistar®, for ....409, 412–414, 418, 769, 772–773
Pinion Nut Sockets ..... 596
Pulse Adaptor ..... 413, 534
Pump Adjusting Tools ..... 119, 156, 409
Service Tools.....405–416
Software, Diagnostics..... 769, 772–773
Timing Gauge..... 407
Timing Meter..... 413, 534
Tools .....405–416
Turbo Tools, for .....413
Volkswagen®, for.....414
Volvo®, for .... 117, 154, 156, 414, 418
Differential Side Bearing Puller .... 390
Differential Wrench .....595–596
Digital
Battery Charger ..... 607–608
Battery System Tester .....610
Booster Packs .....612
Borescope .....528–530
Caliper..... 676
Circuit Tester..... 519–520
Drum Gauge..... 690
Gas Analyzer .....526–527, 762
Imager, Dual View.....528–530
Leak Detector ..... 620
Manifold Gauge..... 624
Meter..... 511–512, 744–750, 765, 767–768, 771
Micrometer ..... 674
Multimeter..... 511–512, 610

Multimeter, Accessories.....513–514
Multimeter, Test Leads.....514–517
Rotor Gauge.....690
Smoke Machine.....524–525
Tachometer.....407, 534–535
Test Light.....519–520
Thermometer.....627
Timing Light.....535
Tire Pressure Gauge.....576
Videoscope.....528–529
Volt-Ohm Meter.....748–749
Dirt, Stain Extractor.....727
Disc Brake
Caliper.....690
Gauges.....677, 690
Lathe, Accessories.....687
Micrometers.....690
Runout Gauges.....677
Tools.....692–693
Disconnect Tools
Cooling Systems.....628, 630
Driveline.....598, 600
Electrical.....536–537
Fuel Systems.....544–547
Discs, Grinding.....452, 480, 496–498
Distributor Tools.....550–551
Dividers, Drawer.....91–93
Dollies
Body.....698–699
Hydraulic Wheel.....603
Door Tools.....700–703
Double End
Drill Bits.....494
Pick.....329
Wrench.....257
Double Hex
Bit Socket.....158, 196
Driver.....158, 196
Double Square
Bit.....324
Socket, 3/8" Drive.....153
Socket, 1/2" Drive.....194, 206
Socket, 1" Drive.....227
Double “D” Tools, Carburetor.....549
Dowel Pin Puller.....388
Drag Link Sockets
Socket, 3/8" Drive.....153
Socket, 1/2" Drive.....194
Socket, 3/4" Drive.....216
Drain
Plug Sockets.....599, 630
Tables, Transmission.....652
Valve, Regulators.....720
Drawer
Ball Bearing Slides.....97
Detent Kits.....97
Divider, Insert.....91–93
EPIQ Series Sections.....19
Front.....78–79, 81
Guard.....76–79, 81
Heritage Series Sections.....54
Latches/Slides.....97
Liner.....88
Parts Trays.....93
Storage, Cabinet.....68–70
Drift Pin Punches.....500–502
Drill
Accessories.....489–496
Air.....464, 473–474
Angle.....474, 494
Bit, 90° Angle.....494
Bit, Aircraft Length.....494
Bit, Double Ended.....494
Bit, Reduced Shank.....494
Bit, Set.....490–495
Bit, Set, Extractors.....385
Bit, Set, Left Hand.....493
Bit, Set, Specialized.....493–495
Bit, Set, Step.....495
Bit, Set, Tap and Die.....377
Boot.....488
Chuck.....489
Cordless, 14.4V.....445, 455
Cordless, 18V.....445, 450
Cordless, Kits, 14.4V.....455
Guides.....383, 385
Hammer.....450
Index.....490–493
Micro, Air.....474
Micro, Utility.....496
Pilot.....495
Reversible.....473–474
Right Angle.....474, 494
Spotweld.....473
Step, Bit.....495
Drive Line Tools.....595–600
Drive Shaft
Magnetic Angle Locator.....600, 678
Universal Joint Tools.....600
Driver
Adjusting Head.....549
Bushing.....667–669
Clutch.....121, 160
Double Hex.....158, 196
Flexible, 1/4" Drive.....107
Flexible, Carburetor.....549
Handled, 1/4" Drive.....106–107, 128
Handled, 3/8" Drive.....143, 176
Hex, Bit.....132–133
Hex, Front Wheel Drive Service.....597
Impact.....161, 198
Limiting.....284–285
Nut.....107, 311, 318, 323, 349
Nut, Trim.....702
Ratcheting.....107
Seal.....669
Set, Bushing and Seal.....669
Set, Impact.....161, 198
Socket.....120, 155–156, 458–159, 196, 198, 408, 420
Square Drive 106–107, 128, 143, 176
Torque.....285
Tray.....85–87
Triple Square, Bit Sockets.....133, 159,180, 197
Triple Square, Bits.....133, 180
Drop Cords.....643
Drum Plug Socket.....205, 652
D-TAC™ Battery System
Diagnostic Tester.....610
Tester Accessories.....611
Dual
Action Sander.....483
Dual 80® Ratchets.....103–105, 138–142, 185–186,
Face Hammer.....355
Duck Bill Pliers.....336
Dust Cap Tool.....588, 591
Dzus®, Screwdriver for.....311


# E


Ear Protection.....729, 731
Electric Tools
Engraver.....460
Impact Wrench.....460
Polishers.....460
Electronic
Battery Tester.....610–611
Stethoscopes.....530–531
Terminal Tools.....537
Torque Meter.....295
Torque Tester.....294–299
Torque Wrenches.....293
Electronic Service
Cutter.....342
Pliers.....341
Screwdriver, Miniature, Mini-Tip.....308–309
Screwdriver, Nonconductive, Composite.....347
Soldering.....558–561
Tools, E-Series Pliers/Cutters.....341–342
Tools, Nonconductive, Composite.....347–349
Tweezers.....561
Emergency Brake Tools.....695
End Cabinet
Classic Series.....48
EPIQ Series.....20
Heritage Series.....55
Masters Series.....32–34
End Cutters.....345
Engine
Alternator Tools.....657
Belt Tensioning.....658–659
Brake Tools, for Jacobs®.....408

Calibration and Setup Kit ..... 653
Cam Tools ..598, 653–654, 661, 663
Cleaners ..... 644
Cooling System ..... 630–636
Cylinder Head..... 656, 663–665
Cylinder Service Tools..... 665
Drain Plugs ..... 645, 655
Fuel System.....542–551
Hanger ..... 605
Harmonic Balancer ..... 660
Hood Prop.....661
Lift Plate ..... 605
Oil Pressure, Oil Pump .....655
Piston Service Tools..... 665–666
Power Steering, Alternator, Water Pump..... 657
Service Tools..... 653–666
Sling ..... 605
Socket .....408, 427
Specialty Tools .....661
Thermal Vacuum Switch ..... 662
Timing ..... 422, 535, 653–654,
Turning Tool .....407, 409
Valve Service Tools ..... 662–665
Engineer Style Hammers ..... 356
Engraver.....460, 506
Engraving Pen, Tip .....460, 506
EPIQ Series
Accessories, “Add-ons”.....18–20
Drawer Sections .....19
End Cabinet .....19
Locker ..... 20
Overhead Cabinet..... 20
PowerBank™ Unit..... 12–14
Reference Chart..... 6, 10–11
Roll Cab ..... 10–17
Roll Cart..... 57
Top Chest..... 18
WorkCenter ..... 20
Etching, Engraving Tools.....460, 506
ETHOS® ..... 758, 763
ETHOS®+ .....744, 750, 755, 763
EVAP ..... 524–525
Exhaust
Pipe Cutters .....367, 591
Probe.....527
Tailpipe Stretcher ..... 367
Tools, Air Hammer Bits.....500–502
Tools, Cutters, Expanders, Specialty ..... 367, 591
Expander..... 367
Extension
1/4" Drive ..... 108–109, 121, 128
3/8" Drive.. 143–144, 154, 162, 168, 176–177
3/8" Drive, Nonconductive ..... 348
1/2" Drive.... 189–190, 199, 205, 210
1/2" Drive, Nonconductive..... 348
3/4" Drive ..... 214, 217
1" Drive .....223–224
1 1/2" Drive ..... 228
Adaptor, 1/4" Drive ..... 109, 123, 128
Adaptor, 3/8" Drive .. 109, 144–145, 162, 168, 177
Adaptor, 1/2" Drive ... 109, 144, 190, 199, 205
Adaptor, 3/4" Drive ..... 215, 217
Adaptor, 1" Drive .....223–224
Adaptor, 1 1/2–2 1/2" Drive ..... 228
Adaptor, Spline to Square ..... 228
Connectors, 1/4" Drive .....109
Connectors, 3/8" Drive .....144
Cords..... 643
Data Cable .....758–759
Flexible, 1/4" Drive .....108, 128
Flexible, 3/8" Drive.....177
Impact, 1/4" Drive ..... 121
Impact, 3/8" Drive .....162
Impact, 1/2" Drive.....199
Impact, 3/4" Drive .....217
Impact, 1" Drive ..... 224
Impact, 1 1/2" Drive ..... 228
Knurled, 1/4" Drive ..... 108, 121, 128
Knurled, 3/8" Drive... 143–144, 162, 176
Knurled, 1/2" Drive ... 189–190, 199, 210
Locking, 1/4" Drive ..... 108, 121, 128
Locking, 3/8" Drive... 143–144, 162, 168, 177
Locking, 1/2" Drive ... 189–190, 199, 210
Nonconductive ..... 348
Power, 3/8" Drive .....168
Power, 1/2" Drive..... 205
Probe.....514
Quick Release .....143, 189
Repair Kit.....143, 189
Set, 1/4" Drive..... 108, 121, 128
Set, 3/8" Drive ....143–144, 162, 177
Set, 1/2" Drive.... 189–190, 199, 210
Sockets, Flexible ..... 154, 371
Sockets, Swivel Ball.....154
Swivel.....154, 162
Wobble, Wobble Plus, 1/4" Dr. ..... 108
Wobble, Wobble Plus, 3/8" Dr. ..144
Wobble, Wobble Plus, 1/2" Dr. ..... 189
Extra-Long Screwdrivers
Flat.....303, 305
Phillips® .....303, 306
Set ..... 303
Extractor
Fastener, Power..... 384
Pipe Plug ..... 386
Porcelain ..... 370
Repair Kit, Porcelain ..... 370
Set ..... 383–386
Spark Plug ..... 370
Tools ..... 383–386
Eye Protection
Face Protectors.....721
Goggles, Glasses..... 621, 628, 731
Shield Replacement..... 729
Welding, Helmets .....562–563
Welding, Lenses ..... 564


# F


Face Protector.....721
Fan
Clutch Wrench .....634–635
Clutch Wrench, Diesel ..... 409, 411, 415
Shop ..... 727
Wrench ..... 409, 411, 415
Feeler Gauges
Bent and Step Blades .....407, 411, 679–681
Blades and Holder .....681
Diesel.....407, 411, 679
General Use ..... 679
Ignition..... 679
Non-Magnetic .....680
Specialty .....680
Fender Covers..... 670
File
Body..... 699
Comfort Handle ..... 363
Flexible Curved Tooth..... 699
General..... 364
Handles .....364, 699
Instinct® ..... 363
Miniature ..... 363
Nib ..... 699
Spark Plug .....371
Swiss Needle ..... 364
Thread Restorer.....375
Fillers
Battery .....615
Oil ..... 648–649
Filter
A/C.....619
Air Processing ..... 720
Air, Paint Spray ..... 709
Air, VERUS® Diagnostics.....752
Blast System .....714
Crusher..... 645
Dryer .....619
Fuel ..... 544
Gas Analyzer ..... 762
Parts Washer..... 722
Pneumatic Tool.....301
Respirator.....731
Socket ..... 412, 414, 645
Vacuum ..... 727
VERUS®.....752
Wrench .....425, 647
Fingers, Mechanical ..... 683
Fingertip Ratchets..... 104, 106, 127, 142, 176, 187

Fin Straightener, Cleaner ..... 628
Firing Indicator, Spark Plug..... 371
Flammables, Storage Cabinet ..... 711
Flank Drive®, Flank Drive® Plus
  Nut Driver ..... 349
  Socket, 1/4" Drive.....110–115, 122
  Socket, 3/8" Drive ..... 146–150, 163–166
  Socket, 1/2" Drive.....191–194, 200–204
  Socket, 3/4" Drive ..... 215, 218–220
  Socket, 1" Drive ..... 225–227
  Socket, 1 1/2" Drive ..... 228–230
  Socket, 2 1/2" Drive ..... 231–232
  Socket, Axle Nut..... 584–585, 596
  Socket, Fuel Pressure Sensor .. 412, 544
  Socket, High Performance..... 115
  Socket, Spark Plug ..... 371–373
  Wrench, Adjustable ..... 272
  Wrench, Brake Bleeder ..... 694
  Wrench, Combination ..... 234–235, 241–248
  Wrench, Combination Ratcheting Box.....234–235
  Wrench, Flare Nut .....257
  Wrench, Flare Nut, Crowfoot, 1/4" Drive ..... 258
  Wrench, Flare Nut, Crowfoot, 3/8" Drive ..... 258–261
  Wrench, Flare Nut, Crowfoot, 1/2" Drive .....261–262
  Wrench, Flex Head ..... 248
  Wrench, Heavy Duty..... 263–264
  Wrench, High Performance.....238, 251–252
  Wrench, Offset Box.....249–252
  Wrench, Oxygen Sensor ..... 548
  Wrench, Pan Plug ..... 645
  Wrench, Specialty Box ..... 253–254
Flap Wheels and Discs..... 496–498
Flare Nut
  Socket.....153
  Torque Wrench ..... 291–292
  Wrench .....257–258, 260, 262, 291–292
  Wrench, Flare Nut, Crowfoot, 1/4" Drive .....258
  Wrench, Flare Nut, Crowfoot, 3/8" Drive .....260
  Wrench, Flare Nut, Crowfoot, 1/2" Drive .....262
  Wrench, Fuel Line .....409
Flaring Tools, Tubing ..... 368–369
Flashlights
  Cordless ..... 457
  High-Output LED..... 638
  Holders..... 638–639
  Non-Rechargeable ..... 638–639
  Penlight LED..... 638–639
  Rechargeable ..... 638–639
  Rotating..... 639
  UV Leak Detection..... 623
Flat Chisels..... 351
Flat Tip
  Bit .....120, 133–134, 160, 198
  Screwdriver, Electronic Service ..... 308–309
  Screwdriver, Hard Handle..304–305
  Screwdriver, Nonconductive..... 347
  Screwdriver, Pocket, Spark Test ..... 306
  Screwdriver, Ratcheting .....314–317
  Screwdriver, Soft Handle..303, 305, 307–308
  Screwdriver, Special Application .... 311–313
Flex Head
  Ratchet, 1/4" Drive .....103–105
  Ratchet, 3/8" Drive..... 138–140
  Ratchet, 1/2" Drive ..... 185–186
  Ratchet, Pass Thru.....182
  Ratchet, Quick Release .... 104, 140, 186
  Speeder..... 188
  Torque Wrench ..... 278, 280–281
  Wrench, Combination ..... 237, 248
  Wrench, Ratcheting Box..... 237, 241
Flexible
  Carburetor Tools..... 549
  Claws ..... 683
  Distributor Tools.....550–551
  Drivers, 1/4" Drive .....107, 551
  Drivers, Carburetor Adjust. ..... 549
  Extensions, 1/4" Drive.....108
  Extensions, 3/8" Drive .....177
  File Holder ..... 699
  Files ..... 699
  Fingers ..... 683
  Lights .....83, 643
  Neck MIG Torch .....554
  Pick-up Tools..... 683–684
  Shank (Screwdriver)..... 315
Flip Socket
  1/4" Drive ..... 117
  3/8" Drive..... 414, 645
  1/2" Drive..... 581–582
  Filter..... 414, 645
  Lug Nut..... 581–582
  Thinwall.....581
Floor Jacks.....601–602
Floor Mats ..... 96
Fluid Maintenance
  Fluid Evacuators ..... 644
  Fuel System Maintenance...542–551
  Transfer Pumps ..... 644
Flush Gun..... 628
Flywheel Tools
  Locking Tool.....415
  Turning Tool .....600
Foam, Diagnostic Storage.....745, 747, 749, 751, 756, 763, 770, 774
FOD Ratchets
  1/4" Drive .....105
  3/8" Drive..... 141
  1/2" Drive.....186
Folding
  Saw, Pruning..... 360
  Scissors..... 358
  Shelf .....59, 94
  Wrench Sets..... 268–269
Ford® Navistar®, Diesel for
  Service Kits..... 407
  Tools ..... 409, 412–414, 418
Fork, Pickle..... 590
Four-Way Angle Head, Wrenches .. 256
Freeze Plug Tools ..... 630
Front
  End Tools .....589–597
  Wheel Drive Tools .....596–597
Front Wheel Drive
  Boot and Joint .....596–597
  Half Shaft Removal ..... 597
  Service Tools.....596–597
Fuel
  Adaptor Sets .....542–543
  Filter Socket.....414
  Filter Wrench ..... 414, 544
  Injection Gauge Holder ..... 407
  Injection Pressure Gauge ..... 542
  Injection System Cleaner... 416, 543
  Injector Puller..... 409, 415
  Injector Timing Gauges ..... 407
  Injector Tools ..... 119, 156, 407–411, 413–418, 422, 425
  Line Disconnect Tool.....546–547
  Line Plug.....407, 409
  Line Stopper ..... 547
  Pump Wrench.....409, 425
  Service, Diesel .. 407, 409–416, 418
  Socket, Pressure Sensor .. 412, 414, 417
  Tank Ring Tool .....420, 544
  Tank Stand.....604
  Tube Remover .....409
Funnels..... 648–649
Fuse
  Pliers..... 536
  Pullers..... 536
  Savers, Fuse Buddy™ ..... 522
  Tongs ..... 536


# G


Gappers, Spark Plug .....680
Gas Analyzers..... 526–527
Gas Welders ..... 558
Gasket Punches .....353
Gauge
  Air Pressure .....541, 577
  Belt Tensioning .....630, 658
  Brake Drum, Rotor .....690
  Chisel .....351

Compression ..... 538–540
Cooling System ..... 630–631
Cylinder Bore ..... 665
Cylinder Leakage ..... 541
Diesel Compression ..... 539
Drill Bits, Wire ..... 492
Feeler, Gap..... 407, 411, 679–681
Fuel Injection ..... 542–543
Fuel Pressure ..... 542–543
Holder ..... 407
Hole ..... 675
Hydraulic Pressure..... 401, 404
Injector Height ..... 410
Magnetic Base Holders ..... 678
Manifold ..... 624
Pressure, Compression ..... 538–540
Pressure, Cylinder ..... 538
Pressure, Fuel ..... 542–543
Pressure, Oil ..... 541, 655
Pressure, Tire ..... 576–578
Pressure, Vacuum ..... 541–542, 686
Spark Plug ..... 679–680
Test, Micrometer ..... 675
Thread ..... 381–382, 681
Timing ..... 407
Tire Pressure ..... 576–578
Torque Angle ..... 284, 422
Transmission ..... 541
Tread Depth ..... 579
Gear Oil Pumps ..... 652
Geared Head Multiplier ..... 292–293
General Service Sets
1/8" Drive ..... 124
1/4" Drive ..... 124–126, 135–136
3/8" Drive ..... 136, 170–175, 182–183
1/2" Drive..... 208–209, 212
3/4" Drive ..... 221
Glasses, Goggles
Glasses, Safety ..... 729–731
Goggles ..... 629, 731
Leak Detection .. 524–525, 621–623
Gloves
Anti-Vibration..... 733
Blast, Abrasive ..... 714
Carbon Knuckle ..... 732–733
Cold Weather..... 732, 734
Cut Resistant..... 733, 735
Dispenser ..... 735
Hi-Vis..... 733
Impact ..... 733
Latex ..... 735
Leather ..... 558, 732, 734
Mechanic's ..... 734
Nitrile ..... 735
SuperCuff® ..... 732–733
Washable..... 732, 734
Welding ..... 558
Work..... 734
Wrecker ..... 733
Glow Plug Compression Adaptors..... 412, 540
GM®, TORX® Driver for ..... 117–118, 155–156
Goggles/Glasses ..... 524–525, 621–623, 629, 729–731
Governor Gap Tools..... 410–411
Graphing Meter ..... 745, 747–749
Graphing Scanners ..... 744, 746, 765, 767–768, 771
Grease
Bearing Packer ..... 651
Control Valve ..... 650, 652
Dispenser ..... 502, 649–650
Dispensing Systems ..... 652
Gun ..... 446, 451, 502, 649
Gun, Cordless..... 446, 451
Guns and Accessories ..... 446, 451, 502, 649–650
Pumps ..... 652
Service Tools.... 588–589, 591, 600, 648–653
Grinder
Abrasive Wheels..... 496–498
Accessories..... 498, 739–740
Air ..... 476–478, 480
Burrs ..... 499
Die ..... 476–478
Die, Kits..... 477
Discs ..... 480, 496–498
Tools ..... 446, 452
Wheel..... 480, 496–498
Wheel Dresser..... 740
Groove Cleaners, Piston Ring ..... 666
Gun
Adhesive..... 452
Air Solvent ..... 724
Blast..... 713–714
Blow, Non-Vented ..... 504
Blow, Vented ..... 505
Flush ..... 628
Grease..... 451, 502, 649
Heat ..... 707
Injection ..... 621–622
Oil Spray..... 651
Paint..... 708
Sandblasting ..... 713–714
Soldering..... 560
Spool..... 554
Spray..... 708
Stud ..... 566
Suction..... 651
Vibro ..... 424


# H


Hacksaw ..... 358
Half Moon Box Wrenches ..... 253
Hammers
Air ..... 475
Air Accessories..... 475, 500–502
Ball Peen ..... 354, 356
Body..... 697–698
Brass..... 355–356
Bronze Tip..... 355
Claw ..... 355
Combination ..... 355
Cross Peen..... 356, 697
Dead Blow ..... 354, 356, 666
Dual Face ..... 355
Engineer ..... 356
Hand Drilling..... 356
Heavy Duty..... 356
Heavy Duty, Air..... 475
Interchangeable ..... 355
Piston..... 354, 666
Plastic Tip ..... 355
Rubber Mallet..... 355, 588
Set ..... 354–356
Sledge..... 354, 356
Sledge, Hammer Striking Wrench ... 263–264
Slide ..... 388, 392–393, 395, 398–400, 407, 409, 566–567, 595, 600, 696
Soft Face..... 355, 588
Tire..... 355, 571, 588
Wheel Weight..... 571
Hand Cleaner..... 736–737
Hand File..... 363–364, 699
Hand Saw..... 358
Handles
1/4" Drive ..... 106–107
3/8" Drive..... 143, 176
1/2" Drive..... 188
3/4" Drive..... 214
1" Drive ..... 223
Air Drill ..... 473–474, 489
Auxiliary ..... 473, 489
File ..... 364, 699
Screwdrivers ..... 314
Tool Storage..... 82
Torqometer®..... 283
Hang-on
Creeper Rack..... 94
Diagnostic Storage Rack ..... 94
Prybar Rack..... 93–94, 332
Trays ..... 94
Hardwood Tops..... 72
Harmonic Balancer Tools ..... 660
Head Bolt Tools 158–159, 196–197, 218, 220, 408, 417, 419, 545
Headlamp
Adjuster..... 707
Spring Tool ..... 707
Wrench ..... 707
Hearing Protection ..... 729, 731
Heat Gun ..... 707
Heated Leak Detectors..... 620
Heavy Duty
Cutter, Bolt ..... 346
Cutter, Diagonal ..... 335
Die Grinder ..... 476
Gloves ..... 732, 735

Hammer ..... 356
Hammer, Air ..... 475
Housing with Collet ..... 388
Pliers ..... 337
Polisher ..... 485
Prybar ..... 330–332
Puller ..... 395–396, 399
Punch ..... 353
Replacement Locks, Tool Storage ..... 98
Scraper ..... 365
Soldering ..... 560
Truck Tools ..... 417–419, 767–774
Wrench ..... 263–265
Wrench, Impact ..... 467
Helmets, Welding ..... 562–563
Heritage Series
Accessories, "Add-ons" ..... 52–55
Drawer Section ..... 54
End Cabinet ..... 55
Locker ..... 55
Reference Chart ..... 6, 50
Roll Cab ..... 50–52
Top Chest ..... 52–54
Hex
Adaptors, Hex-to-Square, Power ..... 109, 117, 123, 145, 168, 321–323
Bit Socket, 1/4" Drive ..... 119–120, 132–135
Bit Socket, 3/8" Drive ..... 157–159, 168, 179, 181
Bit Socket, 1/2" Drive ..... 196, 207, 211–212
Bit Socket, 3/4" Drive ..... 216–217
Bit Socket, 1" Drive ..... 224
Driver ..... 549, 597, 690
Holder ..... 112–113, 315–316, 320–323, 325, 347
Key Sets ..... 266–271
Low Profile Socket ..... 599
Screwdriver ..... 308
Shank, Power ..... 123, 205
Wrench ..... 266–271
High Leverage Pliers, Cutters ..... 335, 337, 588
High Performance
Sockets ..... 115
Wrenches ..... 238, 251–252
High Range Seal Tools ..... 599
Hi-Lok® Fastener Ratchets
1/4" Drive ..... 105
3/8" Drive ..... 142
Hinged Head Pick-up Tools ..... 683–684
Hobby Knife ..... 362
Holders, Tool ..... 84–94
Hole
Gauges ..... 675
Reconditioners ..... 376
Saws ..... 495
Hones ..... 695
Hood Prop ..... 661
Hook ..... 328–329
Hook Type Spanner Wrenches ..... 274
Hose
Air ..... 505, 708
Air, Anti-Static ..... 425
Clamp Pliers ..... 635–636
Cutters, Slitters ..... 634
Nozzles ..... 724
Pinchers ..... 547
Pinching Pliers ..... 545
Reels ..... 725
Removal Tools, Screwdriver Style ..... 328
Hoses, A/C ..... 625
Hub Cap Tools ..... 588, 591
HVLP Spray Guns ..... 708
Hybrid Battery Lift ..... 605
Hydraulic
Bottle Jacks ..... 602
Cable Cutter ..... 429
Hoists ..... 605
Jacks, Bottle ..... 602
Jacks, Service ..... 601–602
Jacks, Transmission ..... 604
King Pin Presses ..... 594
Lift, Battery ..... 605
Nut Splitter ..... 429
Power Kits ..... 401
Pressure Gauge ..... 401
Puller ..... 396, 400–404
Rams, Pumps ..... 401
Tailpipe Expander ..... 367
Transmission Jacks ..... 604
Wet Sleeve Puller ..... 408
Wheel Dollies ..... 603
Hydrometer ..... 615, 631


## I


Idle Lock Nut Wrench ..... 409
Ignition
Adaptor ..... 745, 749, 751, 761
Spark Plug Gauge ..... 680
Tools and Testers ..... 551, 661, 680
Wrenches, Ford® Modulator for ..... 551, 661
Wrenches, Open End ..... 255
Imager, Digital Dual View ..... 528–530
Immersion Cleaners ..... 722–723
Impact, 1/4" Drive
Extensions ..... 121
Sockets ..... 122–123
Swivel, Universal Joint ..... 121
Impact, 3/8" Drive
Adaptors ..... 162
Extensions ..... 162
Sockets ..... 163–167
Sockets, Twist ..... 167
Swivel, Universal Joint ..... 162
Impact, 1/2" Drive
Adaptors ..... 199
Extensions ..... 199
Sockets ..... 200–205
Sockets, Twist ..... 204
Swivel, Universal Joint ..... 199
Impact, 3/4" Drive
Adaptors ..... 217
Extensions ..... 217
Locking Rings and Pins ..... 217, 232
Sockets ..... 218–220
Swivel, Universal Joint ..... 217
Impact, 1" Drive
Adaptors ..... 224
Extensions ..... 224
Locking Rings and Pins ..... 224, 228, 232
Sockets ..... 225–227
Swivel, Universal Joint ..... 224
Impact, 1 1/2" Drive
Adaptors ..... 228
Extensions ..... 228
Locking Rings and Pins ..... 228, 230, 232
Sliding T-Handle ..... 227
Sockets ..... 228–230
Swivel, Universal Joint ..... 228
Impact, 2 1/2" Drive
Locking Rings and Pins ..... 230, 232
Sockets ..... 231–232
Impact, #5 Spline Drive
Adaptors ..... 228
Locking Rings and Pins ..... 228
Sockets ..... 152
Impact
Driver ..... 161, 198
Drivers, Sets ..... 161, 198
Gloves ..... 733
Locking Ring and Pin Reference Chart ..... 217, 224, 228, 230, 232
Wrench, Air ..... 464, 466–470
Wrench, Cordless, 9.6V ..... 456
Wrench, Cordless, 14.4V ..... 445, 453
Wrench, Cordless, 18V ..... 445, 447–450
Wrench, Cordless, Reference Chart ..... 445
Wrench, Electric ..... 460
Industrial Finish Hand Tools
Adaptors, 1/4" Drive ..... 109, 123, 144, 323
Adaptors, 3/8" Drive ..... 109, 144–145, 162, 168
Adaptors, 1/2" Drive ..... 109, 144, 190, 199, 205
Adaptors, 3/4" Drive ..... 215, 217
Adaptors, 1" Drive ..... 223–224
Adaptors, 1 1/2" Drive ..... 228
Adaptors, High Performance, Spline ..... 228
Bit Sockets, 1/4" Drive ..... 117, 120–121, 131–133

Bit Sockets, 3/8" Drive.....155–156, 158, 160, 168, 179–180
Bit Sockets, 1/2" Drive ..... 195–198, 207, 211
Bit Sockets, 3/4" Drive.....216–217
Bit Sockets, 1" Drive..... 224
Breaker Bars, 1/2" Drive .....187
Extensions, 1/4" Drive.....108
Extensions, 3/8" Drive ..... 143, 154, 162, 168,
Extensions, 1/2" Drive.....190, 199, 205
Extensions, 3/4" Drive ..... 214, 217
Extensions, 1" Drive ..... 224
Extensions, 1 1/2" Drive ..... 228
Hex Keys ..... 269–271
Ratchets, 1/4" Drive.....103, 105
Ratchets, 3/8" Drive ..... 138, 141
Ratchets, 1/2" Drive.....185, 187
Ratchets, 3/4" Drive .....214
Ratchets, 1" Drive ..... 233
Sockets, 1/4" Drive..... 110–111, 114, 117, 122–124, 130
Sockets, 3/8" Drive ..... 146, 148, 151–154, 163–169
Sockets, 1/2" Drive ..... 192–194, 200–207
Sockets, 3/4" Drive ... 216, 218–220
Sockets, 1" Drive ..... 225–227
Sockets, 1 1/2" Drive..... 228–230
Sockets, 2 1/2" Drive ..... 231–232
Sockets, Ball Joint ..... 590
Sockets, High Performance, Spline 3/8" Drive..... 152, 407
Universal Joints, 1/4" Drive..... 121
Universal Joints, 3/8" Drive ..... 162, 168
Universal Joints, 1/2" Drive..... 190, 199
Universal Joints, 3/4" Drive .....217
Universal Joints, 1" Drive ..... 224
Universal Joints, 1 1/2" Drive..... 228
Wrenches, Adjustable ..... 273–274
Wrenches, Box ..... 252
Wrenches, Combination ....245–247
Wrenches, Four-Way Angle Head Open End..... 256
Wrenches, Heavy Duty .....263–265
Wrenches, Open End Crowfoot 3/8" Drive..... 259
Industrial Puller Sets..... 400
Industrial Torque Wrench 277, 279, 281
Information
System Repair .....764–765
System, ShopKey®..... 765
Infrared
Curing Light ..... 707
Printer ..... 527, 611
Thermometer ..... 532–533
Injection Gun..... 621–622
Injection Pump Tools..... 119, 156, 407, 409
Injector
Brush ..... 407,–408, 411, 413
Fuel, Carburetor Tools..... 549
Fuel, Diesel ..... 119, 158, 407–411, 414–416, 418, 422
Fuel, Disconnect Tools .....544, 546–547
Fuel, Micro Drill ..... 496
Fuel, System Cleaner ..... 416, 543
Fuel, System Tools ..... 119, 158, 407–411, 414–416, 418, 422, 453–456, 542, 545–547
Fuel, Testing and Electronics ...542, 545
Gauge.....410
Harness Testers.....545
Height Gauge .....410
Puller..... 409, 415
Pump Wrench.....409, 425
Socket .....414–415
Timing Gauges ..... 407
Wrench .....409, 425
In-Line Sanders ..... 483
Inserts, Socket .....145
Inspection Mirrors ..... 685–686
Installer Sets, Bushing .600, 667–669
Instinct®
Awls, Hooks and Picks ..... 328
Circuit Testers .....518–520, 628
Remote Start Switch .....614
Screwdrivers .....303–307, 309–311, 313
Test Lights .....518–520, 628
Interchangeable
Hammer.....355
Heads, Torque ..... 286–292
Pliers Tip..... 340
Puller, General Purpose ....395–396
Puller, Industrial Sets ..... 400
Pullers, Bar Type.....400, 403–405
Torque Wrench .....277–287, 286
Torque Wrench, Heads .....287–292
Isuzu®, Diesel for ..... 416, 540


# J


Jack
Air ..... 602
Aluminum .....601
Automotive .....601–602
Body..... 696
Bottle ..... 602
Hydraulic .....601–603
Long Chassis..... 602
Manifold ..... 367
Motorcycle ..... 604
Push-Pull ..... 696
Short Chassis.....601
Stands..... 603
Transmission..... 604
Wheel Dolly..... 603
Jacobs® Engine, Brake Tools for....408
Joint Rate Simulator Adaptor..... 294, 299
Jumper Cables .....613


# K


Key Chain..... 95
Keys, Personality .....775
King Pin Presses ..... 594
Knee Pads ..... 740
Knife
Hobby..... 362
Lock Back.....359–360
Pocket .....359–360
Putty..... 366
Sharpening..... 362
Utility ..... 360–362


# L


Landscape Tools ..... 360
Latch-on® Wrenches..... 240
Latex Gloves .....735
Lathes, Brake Accessories ..... 687
Leak Detector
A/C..... 621–623
Combustible Gas ..... 526
Fluid..... 631, 656
Refrigerant..... 620
Smoke ..... 524–525
Ultraviolet..... 621–623
Leather
Shears..... 698
Shot Dolly..... 699
Welding Gloves ..... 558
Work Gloves ..... 732, 734
Left Hand Drill Bits ..... 383, 385, 493
Letter Drill Bit Set.....491
Levels ..... 678, 681
Lifting
Battery, Hybrid ..... 605
Come-Along Tool ..... 605
Engine ..... 605
Fuel Tank..... 604
Jacks .....601–602
Lifting, Pulling Tool..... 605
Stands..... 603–604
Transmission..... 604
Wheel Dolly..... 603
Lighted Mirrors..... 685–686
Lights
Flashlight..... 638–639
Flexible.....83, 643
Flood ..... 643
Leak Detection ..... 623
LED..... 638–641, 643

Magnetic ..... 639
Shop ..... 640–642
Timing ..... 422, 535
Tool Storage ..... 59, 82–83, 93
Fluorescent ..... 642
Utility ..... 641
UV, LED Flex ..... 621
Lineman's Pliers ....334, 337, 345, 349
Lithium Battery .....459, 461–462
Lock
Pick Sets .....328–329
Ring Pliers ..... 339–340, 599
Lock Bars ..... 95
Lock-Back Knives .....359–360
Locker
Classic Series ..... 48
Docker ..... 36
EPIQ Series ..... 20
Heritage Series ..... 55
Masters Series .....35–36
Locking
Adaptor, 1/4" Drive .....123
Adaptor, 3/8" Drive .....162
Adaptor, 1/2" Drive .....190
Bar ..... 95
Extensions, 1/4" Drive..... 108, 121, 128
Extensions, 3/8" Drive ..... 143–144, 162, 168, 177
Extensions, 1/2" Drive..... 189–190, 199, 210
Knives .....359–360
Lug Nut Remover Kit ..... 582
Nut Driver .....318
Pliers, Clamps ..... 338, 565
Rings and Pins, 3/4" Drive ..... 217, 232
Rings and Pins, 1" Drive .. 224, 228, 232
Rings and Pins, 1 1/2" Drive.....228, 230, 232
Rings and Pins, 2 1/2" Drive ....230, 232
Rings and Pins, #5 Spline Drive ..... 228, 232
Speeder..... 188
Locking Rings and Pins, Impact
Reference Chart.. 217, 224, 228, 232
3/4" Drive ..... 217, 232
1" Drive ..... 224, 228, 232
1 1/2" Drive ..... 228, 230, 232
2 1/2" Drive ..... 230, 232
#5 Spline Drive ..... 228, 232
Lock-out Tools ..... 703
Locks
Padlocks ..... 95
Tubular Assemblies ..... 98
Long Reach Pliers ..... 334, 336, 346
Looped Tool Holders..... 93
Low Profile
Ratchet..... 105, 141, 148–149, 182
Screwdrivers ..... 312
Socket, 1/4" Drive..... 105
Socket, 3/8" Drive ..... 141, 148–149
Socket, External Drive ..... 384
Low Torque Slimline Wrenches..... 255
L-Shaped
Hex Wrenches .....266, 269–271
Multi-Spline Wrenches ..... 271
TORX® Wrenches ..... 267, 271
Wrench ..... 266–267, 269–271
Lubricants, Synthetic ..... 736
Lubrication Kits ..... 650
Lubrication Tools .....645–653
Lubricator, Air Line..... 720
Lug Nut Tools.....580–583


# M


MacPherson Strut Tools..... 593
Magnetic
Accessories, Tool Storage.... 59, 78, 82–83, 85–87, 89–91, 93–94
Adaptor ..... 109, 145
Base Holders..... 678
Bit Holder, Nonconductive..... 347
Bit Holder, Screwdriver .....113, 315, 347
Bit Holder, Tool Storage Accessories.....86
Bit Socket .....112–113
Can, Bottle Holder ..... 89
Holders and Trays..... 85–91, 93–94
Insert Bit Holder ..... 112–113, 323
Light..... 59, 82–83, 639
Nut Driver ..... 322
Nut Holder .....88, 323
Paint Gun Hook .....710
Panels ..... 89
Parts Tray..... 90
Pick-up Tools..... 683–684
Power Nut Drivers ..... 488
Ratchet and Bit Sets ..... 317
Screw Starters..... 317, 347
Screwdrivers .....314–316
Socket, 1/4" Drive.....123–124
Socket, 3/8" Drive .....169
Socket, 1/2" Drive..... 206
Socket Clips, Rails, Holders and Trays ..... 85–87
Spark Plug Sockets..... 372
Tool Holders.....85–91
Tool Silhouettes ..... 89
Tool Storage Accessories..... 59, 78, 82–83, 85–87, 89–91, 93–94
Trays ..... 90
WorkStation Light..... 82–83
Wrench Organizer..... 87
Mallet, Rubber..... 355, 588
Mandrel Mounted Abrasives ..... 499
Manifold
Gauge Set ..... 624
Jack Set..... 367
Repair Kit..... 624
Marine Plug Screwdriver.....313
Marking Set, Welder's ..... 564
Master Bit Kit.....319
Masters Series
Accessories, "Add-ons"..... 30–36
End Cabinet ..... 32–34
Locker .....35–36
Overhead Cabinet..... 32
Reference Chart.....6, 24–25
Roll Cab ..... 24–29
Tool Utility Vehicles, "TUV" .. 37–40
Top Chest.....30–31
WorkCenter .....31
Mastic Removal Tools... 424–425, 705
Mats, Rubber
Floor and Kneeling..... 96
TUV (Tool Utility Vehicle) ..... 40
Work Surface..... 73
Measuring
Angle..... 600, 678
Caliper..... 676, 690
Contact Points and Extensions.. 677
Dial Test Indicator Sets ..... 677
Feeler Gauges .... 407, 411, 679–681
Levels..... 678, 681
Magnetic Base ..... 678
Micrometers and Sets ..... 674–675
Pinion Depth Gauge..... 677
Precision Straight Edges ..... 682
Sets.....681
Small Hole Gauge Set ..... 675
Spark Plug Gauges, Gappers ....680
Steel Rules..... 682
Tape Rules ..... 682
Telescoping Gauge Set..... 675
Thread Gauge.... 378–379, 381, 681
Mechanic's Stethoscope ..... 531
Mechanical Fingers ..... 683
Memory Saver/Power Inverter..... 458
Mercedes®, Diesel for..... 415–416, 418–419
Metal Boxes.....70, 95
Metal Cutting Shears
Air .....481
Shears, Snips..... 698
Meter
AVR Testers .....610–611
Digital .....511–512
Duty Cycle.....511–512
Graphing ..... 745, 747–749
Multimeters ..... 511–512, 610
Specialty ..... 413, 534
Torque ..... 295
Volt-Amp..... 511–512, 520
Volt-Ohm .....748–749

**M**etric Tools
Alignment Tools....589–593
Bolt Thread Gauge .....381–382, 681
Brake Tools ..... 689–695
Bushing Driver Set..... 668–669
Carburetor Tools ..... 549
Caster-Camber Tools .....591
Chasers, Thread .....375
Compression Gauges .....538–539
Conversion Chart ..... 680, G5
Crowfoot Wrenches, 1/4" Drive ..... 258
Crowfoot Wrenches, 3/8" Drive ..... 260–261
Crowfoot Wrenches, 1/2" Drive ..261
Diesel Injector Socket .....414–415
Distributor Tools..... 550
Drain Plug Sockets ... 422, 599, 630
Drill Bits..... 491, 495
Feeler Gauges .....679–681
File, Thread Restorer .....375
Flaring Tools..... 369
Folding Hex Wrenches..... 268–269
Fuel Injector Sockets.....414–415
Fuel, Pressure Sensor .....412, 414, 417
Head Bolt Tools ..158–159, 196–197, 218, 220, 408, 417, 419, 593, 656,662
Hex Wrenches ..... 266–271
L-Shape Hex Wrenches.....266, 269–271
Lug Nut Socket ..... 581–583
Pressure Gauges, Tire .....576–578
Ratcheting Box Wrenches, Combination ..... 234–237
Ratcheting Box Wrenches, Crowfoot..... 261
Ratcheting Box Wrenches, Double Box.....238–241
Ratcheting Box Wrenches, High Performance.....238
Ratcheting Box Wrenches, Spline ... 238
Ratcheting Box Wrenches, T-Handle .....239
Rethreading Tools.....374–376
Screwdrivers ..... 285
Spark Plug Hole Rethreaders .... 376
Spindle Rethreader.....375
T-Shape Hex Wrenches..... 128–129
Taps and Dies..... 378–381
Thread Chasers .....375
Thread Pitch Gauge ..378–379, 381, 681
Threading Tools.....378–382
Tire, Wheel Tools .....576–578, 580–587, 589–593
TORQOMETER® Wrenches..282–284
Torque Adaptors .....154, 419
Torque Wrenches..... 280–285
Transmission Drain Plug Socket..... 197, 422, 599
Tube Cutting, Flaring Tools ..... 368–369
Valve Cover Bolt Socket.....656, 662
Valve Tools..... 662–664
**M**etric, Tool Sets
Automotive Tool Sets ..... 437–440
Set Building Program..... 437–440
**M**icro Air Tools
Drill, 1/4" ..... 474
Finishing Tools, Kits..... 485
Reference Chart..... 465
Tool Accessory Kits ..... 496
**M**icrometers
Digital ..... 674
Outside..... 674
RM130 Rotor..... 690
Test Gauges ..... 675
**M**icroVAT™.....610–611
**M**idget Chisels..... 352
**M**idget Punches..... 352
**M**IG Torch..... 554–555
**M**IG Wire Feed Welders..... 553–554
**M**ini Tip Screwdriver..... 303–307, 310
**M**iniature
Air Ratchet ..... 471–472
Awls, Hooks and Picks .....311, 328
Cutter .....345–346
Die Grinder, Air.....477–478
File ..... 363
Flex Light .....621
Hacksaw ..... 358
Pliers.....345–346, 561
Screwdriver, Electronic Service ..... 308–309
Screwdriver, Flat Tip ..... 303–305, 308–309, 311
Screwdriver, Phillips® Tip ..... 303–304, 306–309
Screwdriver, Sets .....303–304, 308–309
Screwdriver, Special Application .... 311
Screwdriver, Tamper Resistant...310
Soldering Torch, Butane.....561
Utility Knife ..... 360
**M**irrors
Hinged..... 685–686
Inspection..... 684–686
LED Telescoping ..... 686
Lighted ..... 685–686
Pocket ..... 685
Telescoping..... 685–686
**M**itchell1® Service Programs ..... 740
**M**obea Hose Clamp Pliers ..... 635
**M**obile
Battery Charger, Cordless Tools ..... 459, 462
Industrial Puller Set ..... 400
Tool Storage, Cart ..... 57–60, 64–66, 564
WorkStation ..... 57
**M**ODIS™ Accessories..... 758–761
**M**ODIS™ Ultra
Accessories.....747, 756, 758–761, 763
Software .....747
**M**odular Connectors, Crimping Tools . 343–344
**M**odulator Wrench ..... 551
**M**otor Oil, Air..... 506
**M**otorcycle
Air Chuck ..... 422
Compression Gauge..... 538
Exhaust Probe .....527
Gas Tank Cover .....421
Jack ..... 422
Lift/Jack..... 604
Oil Fillers ..... 421, 648
Service Tools..... 420–422
Spark Plug Socket .... 372–373, 420
Special Purpose, Application.... 423
Tire Changer..... 422, 570
Voltage Tester ..... 423
Wheel Balancer ..... 422, 570
**M**uffler Tools .....367, 591
**M**ulti-
Cut Flat File ..... 364
Cylinder Secondary Ignition Adaptor ..... 761
Function Switch Tool..... 536
Position Prybar.....331
Purpose Cutter, Scraper ....360, 366
Spline.....271, 383–384
Spline Extractors ..... 383–384
Spline Wrenches .....271
**M**ultimeters..... 511–512, 610
**M**ultiplier Geared Head .....292–293
**M**ultiplier Wrenches.....292–293


# N


**N**eedle
Files ..... 364
Nose Pliers.....334, 336, 345–346, 349
Scaler.....484, 500
**N**ibbler.....481
**N**i-Cad Battery ..... 459
**N**oise and Vibration Diagnostic Unit .. 531
**N**onconductive
Adaptor ..... 348
Breaker Bar..... 348
Driver ..... 349
Extension..... 348
Pliers..... 349
Ratchet..... 348
Screw Starter ..... 347

Screwdriver ..... 347
Socket ..... 348
Wrench, Ratcheting Box ..... 349
Non-Magnetic Feeler Gauge ..... 680
Non-Marring
Prybar ..... 331
Scraper ..... 364–366
Nozzles, Water ..... 724
Nut
Axle, Socket ..... 584–585
Driver ..... 318, 349
Driver, Magnetic Power ..... 488
Driver, Nonconductive ..... 349
Holder, Magnetic ..... 88, 323, 321–322
Setting ..... 699
Splitter ..... 429
Starters ..... 317
Wrench ..... 409
Nylon Tool Chest Covers
Road Chests ..... 61, 75
Roll Carts ..... 75
Tool Storage Combinations ..... 74–75
TUV (Tool Utility Vehicle) ..... 37–40


# O


OBD-II Break Out Box ..... 521
OBD-II Code Readers ..... 766
OEM Applications ..... I26–I30
Offset Screwdrivers ..... 311, 317
Oil
Air Motor ..... 506
Crusher ..... 645
Drains ..... 652
Drum Plug Sockets ..... 205, 652
Filler, Motorcycle ..... 421, 648
Fillers, Funnels, Spouts ..... 421, 648–649
Filter, Aviation Wrench ..... 425
Filter, Crusher ..... 645
Filter, Pliers, Sockets ..... 412, 414, 645–646
Filter, Wrenches ..... 274, 425, 646–647
Oilers ..... 653
Opener, Can ..... 425
Pliers ..... 645
Pressure Gauge ..... 541, 655
Pressure Sender Switch Socket ..... 655
Pump Removal Tool ..... 655
Pumps ..... 652
Spray Gun ..... 651
Wrenches ..... 274, 425, 646–647
Oil Filler ..... 421, 648–649
Oil Filter
Crushers ..... 645
Pliers ..... 645
Socket ..... 412, 414, 645–646
Wrench ..... 274, 425, 646–647
Oil and Gas Tools ..... 427
Oilers ..... 653
Open End
Torque Wrench ..... 290–291
Wrench, AN Fitting ..... 256, 273
Wrench, Combination Box ..... 234–237, 241–249
Wrench, Combination Flare Nut ..... 257
Wrench, Combination Ratcheting Box ..... 234–237
Wrench, Combination Spline ..... 249
Wrench, Crowfoot 1/4" Drive ..... 258
Wrench, Crowfoot 3/8" Drive ..... 258–261
Wrench, Crowfoot 1/2" Drive ..... 261–262
Wrench, Double End Flare Nut ..... 257
Wrench, Double End Open ..... 254–256
Wrench, Flex-Combination ..... 237, 248
Wrench, Torque Interchangeable Head ..... 277–278, 286
Wrench, Tubular ..... 265
Orbital Sanders ..... 482–483
Oval Punches ..... 353
Oxygen Sensor Tools ..... 548


# P


Pad, Knee ..... 740
Padlocks ..... 95
Paint
Airbrushing ..... 710
Gun ..... 708
Gun Cleaning ..... 711
Gun Hook ..... 710
Spray Equipment ..... 708–710
Spray Guns ..... 708
Tool Storage Unit Touch-up ..... 97
Panel Tools, Door ..... 700–703
Parking Brake Removal Tool ..... 695
Parts Cleaning Brushes ..... 724, 738
Parts Storage Cases ..... 68, 71
Parts Trays ..... 90, 93–94
Parts Washers
Aqueous Based ..... 723
Solvent Based ..... 722
Washer Accessories ..... 723–724
PASS THRU PRO II ..... 764
Pencil Die Grinders ..... 478
Pentagon Socket ..... 153, 194
Personality Keys ..... 775
Persuader Wrench, Valve ..... 274, 427
Phillips®
ACR® Bits ..... 315–317, 319, 321–322, 324, 326
Bit ..... 319–322
Bit Sockets ..... 121, 133–134, 160, 198
Composite, Nonconductive ..... 347
Mini-Tip Screwdrivers ..... 303–304, 306–309
Pocket Screwdriver ..... 307
Power Bits ..... 326
Screwdriver ..... 303–304, 306–309
Stubby Screwdrivers ..... 303–304, 314
Wobble Bits ..... 324
Pick Sets ..... 328–329
Pickle Fork ..... 590
Picks, Body ..... 702
Picks, Lighted ..... 329
Pick-up Tools
Claws ..... 683
Lighted Magnetic ..... 683
Magnetic ..... 683–684
Pilot Bearing Pullers ..... 393, 406
Pilot Drills ..... 495
Pin
Gripping Pliers ..... 336
Punches ..... 351–352
Spanner Adjustable ..... 274, 628
Pin-Type Spanner Wrenches ..... 274
Pinch Bars ..... 332
Pinching Pliers ..... 545
Pinion Depth Gauge ..... 677
Pinion Nut Sockets ..... 596
Pipe
Nipple Remover ..... 130, 388
Plug Extractor ..... 383, 386
Plug Sockets ..... 116, 153, 194
Wrenches ..... 272, 287, 427
Pistol Grip Screwdrivers ..... 314
Piston Service Tools ..... 354, 665–666
Pitman Arm Pullers ..... 390, 392, 395
Plasma Cutters ..... 557
Plastic
Boxes ..... 68–69
Cleaning Solution ..... 95
Cutter ..... 335
Drawer Dividers ..... 91, 93
Tip Hammers ..... 355
Pliers
Adjustable Joint ..... 334, 337, 345–346
Battery ..... 614
Boot Clamp ..... 596
Brake Spring ..... 689
Cable Clamp ..... 614
Clamping ..... 565
Combination, Slip-Joint ..... 334, 337
Composite, Nonconductive ..... 349
Connector ..... 343–344, 426
Cotter Pin ..... 588
Crimping ..... 343–344
Duck Bill ..... 336
Electrical Service ..... 341–342
Exhaust Hanger Removal ..... 367
Fuse ..... 536
Heater Hose Clamp ..... 635–636
Heavy Duty ..... 337
High Leverage ..... 335, 337, 588

Hose Pinching ..... 545, 547
Hose Pulling.....635–636
Interchangeable Tip ..... 340
Lineman's .....334, 337, 345, 349
Locking..... 338, 565
Long Nose..... 338, 345–346
Long Reach ..... 334, 336, 346
Miniature .....345–346, 561
Needle Nose.....334, 336, 345–346, 349
Nonconductive Composite..... 349
Oil Filter..... 645
Pin Gripping..... 336
Pinching ..... 545, 547
Radiator Hose Clamp .....635–636
Retaining Ring..... 339–340, 599
Set ..... 334, 337–340, 345–346
Snap Ring ..... 339–340, 599
Spark Plug Boot ..... 370
Special Purpose, Application ..... 335–337
Talon Grip™..... 334, 336–337
Valve Stem Seal..... 663
Wheel Weight.....569, 571
Wire Twisting ..... 423
Wrench ..... 273
**P**neumatic Torque
Filter, Regulator, Lubricator .....301
Reaction Arms .....301
Torque Wrenches .....301
**P**ocket
Blow Guns ..... 504
Knives .....359–360
Magnifier..... 643
Mirrors ..... 685
Rule..... 682
Screwdriver..... 306–307
Sharpener..... 362
Thermometer ..... 627
**P**ocket iQ™
Accessories.....771
Scan Tool .....771
Software ..... 772
**P**olisher
Air ..... 485
Electric .....460
**P**olishing and Sanding Kits..... 485
**P**olishing, Supplies.....95, 736
**P**ortable Pressure Blast Systems... 711
**P**otentiometer Adjuster ..... 308
**P**ower
Adaptors, 1/4" Drive .....123
Adaptors, 3/8" Drive.....168
Adaptors, 1/2" Drive ..... 205
Antenna Socket .....706
Bits ....123, 168, 206–207, 326–327
Bit Kits.....321–322, 488, 489
Bit Sockets, Hex ..... 168, 207
Bit Sockets, TORX® .... 123, 168, 206
Bits, Square ..... 327
Cords..... 643
Drivers.....123, 168, 206
Hex Drivers .....188, 207
Hex Shanks, 1/4" Drive .....123
Hex Shanks, 3/8" Drive.....168
Hex Shanks, 1/2" Drive..... 205
Inverters .....458, 609, 612
Magnetic Sockets, 1/4" Drive ..... 123–124
Magnetic Sockets, 3/8" Drive....169
Magnetic Sockets, 1/2" Drive.... 206
Shears.....481
Sockets, 1/4" Drive.....123–124
Sockets, 3/8" Drive ..... 168–169
Sockets, 1/2" Drive ..... 206–207
Steering, Alternator, Pullers ....390, 394–395, 657
Steering, Alternator, Service Tools.. 657
Universal Joint, 3/8" Drive.....168
**P**ower Tools
Accessories.....460, 488–506
Air ..... 464–486
Cordless .....445–462
Electric, Corded ..... 460
International Product.....461–462
**P**owerCab™
End Cabinet, Masters Series..... 34
**P**ozidriv®
Bit .....160, 180, 324, 327
Bit Socket ..... 160, 180
Driver .....160, 180, 313, 317
Hex Shank Bits ..... 319, 324, 327
Screwdriver..... 313, 317
**P**recision Straight Edges..... 682
**P**reset Torque Wrenches ..... 285–286
**P**resses
Arbor .....717
Ball Joint ..... 589
Ball Joint Adaptors..... 589
Brake Caliper/Piston ..... 692–693
King Pin ..... 594
Step Plate .....717
**P**ressure
Blast Systems ..... 711–713
Gauge, Compression.....538–540
Gauge, Fuel Injection .....542–543
Gauge, Hydraulic .....401, 404
Gauge, Oil.....541, 655
Gauge, Tire .....576–578
Gauge, Transmission .....541
Gauge, Vacuum .....541–542, 686
Screw ..... 390–395, 397–404, 406, 408
Washers .....725–726
**P**rinter
Infrared ..... 527, 611
Paper..... 527, 611
Wireless..... 527, 611
**P**robe
Amp .....513, 745, 747, 749, 751, 756, 760
Exhaust .....527
Extension.....514
Ignition Quick ..... 534
Temperature.....514
**P**ro-Link® iQ™
Accessories.....774
Software .....773
**P**ro-Link® Ultra
Accessories.....769–770
Scan Tool .....767–768
Software ..... 769
**P**runer, Hand ..... 360
**P**runing Saw ..... 360
**P**rybar
Fiberglass ..... 330
Heavy Duty.....330–332
Multiposition .....331
Non-Marring .....331
Rack .....93–94, 332
Set .....330–332
Striking ..... 330–331
**P**ull Rods..... 702
**P**uller
Adaptor .....391–393, 400–401, 403–406
Alternator Pulley.....394, 657
Automotive .....393–395
Axle.....392–393, 594–595
Bar Type.....400, 403–405
Battery Cable Clamp .....614
Bearing Separator .... 392, 400, 405
Blind Hole Bearing..... 400, 406
Body Dent ..... 566–567, 696
Bolt Grip ..... 393
Bushing.....392–393
Cable Clamp.....614
Cotter Pin.....588, 636
Dent ..... 566–567, 696
Diesel Injector..... 409, 415
Diesel Turbo Vane Actuator.....413
Differential Side Bearing ..... 390
Dowel Pin.....388
Features..... 389
Freeze Plug ..... 630
Fuel Injector ..... 409, 415
Gear ..... 390, 392, 407–408
Harmonic Damper..... 394
Heavy Duty..... 395–396, 399
Hydraulic .....396, 400–404
Industrial.....400
Injector..... 409, 415
Interchangeable ..... 390–392, 395–396
Jaw Type ..... 393–400, 402, 404
King Pin ..... 594
Light Duty .....395, 400
Medium Duty..... 395
Pilot Bearing .....393, 406
Pitman® Arm ..... 390, 392, 395
Power Steering Pulley .....390, 394–395, 657
Pulley ..... 390, 394, 396, 413
Pumps and Rams..... 401, 404
Push, Pull ..... 400, 403, 405–406

Quarter Panel ..... 696
Rear Axle ..... 392–393
Selection Guide ..... 389
Side Bearing ..... 390, 392
Slide Hammer ..... 388, 392–393, 395, 398–400, 407, 409, 566–567, 595, 600, 696
Special Purpose ..... 393
Specifications ..... 399, 404
Steering Pivot Pin ..... 393
Steering Wheel ..... 393
Steering Wheel Lock Plate Depressor ..... 393
Stud ..... 386–387
Tapped Hole ..... 393, 400, 403
Universal Wheel ..... 595
Wet Sleeve ..... 408
Wheel Hub ..... 595
Pulse Adaptor, Diesel ..... 413, 534
Pump Adjusting Tools, Diesel ..... 409
Punch
Chisel Holder, and ..... 351
Chisel Set, and ..... 351–353
Chisel, Air Hammer ..... 500–501
Heavy Duty ..... 353
Soft Grip ..... 353
Push Rod Tools ..... 411
Putty Knives ..... 364, 366


# Q


Quick Change
Anvil, 9.6V ..... 456
Anvil, 14.4V ..... 453
Anvil, 18V ..... 447–449
Anvil, Reference Chart ..... 464
Bit Set ..... 460, 488
Chuck, Air Hammer ..... 475, 501
Chuck, Drill ..... 453, 456
Coupler, Air ..... 506
Coupler, Diesel ..... 413
Coupler, Screwdriver Bit ..... 323
Extension Set ..... 460
Tip, Blow Gun ..... 504
Quick Connect, Disconnect Tools
Air Conditioning Service ..... 628
Carburetor ..... 546
Fuel ..... 546–547
Jiffy-Tite®, Low Profile ..... 547
Radiator ..... 630
Transmission ..... 598
Quick Release Ratchets ..... 104, 127, 140, 175, 186, 210


# R


Race Drivers, Bearing ..... 669
Radiator Tools ..... 630–636
Radio Trim Nut Socket ..... 706
Railroad Tools ..... 301, 428–429
Rails and Clips, Socket ..... 84–86
Ratchet
1/4" Drive ..... 103–105, 112, 127
3/8" Drive ..... 138–142, 148–149, 175, 182
1/2" Drive ..... 185–187, 210
Accessories, Air ..... 502
Adaptor ..... 106, 142, 187
Air ..... 471–472
Compact Head ..... 140
Cordless ..... 446, 454
Dual 80™ Technology ..... 103–105, 138–142, 185–186
Fingertip ..... 104, 127
Flex Head, 1/4" Drive ..... 103–105
Flex Head, 3/8" Drive ..... 138–140
Flex Head, 1/2" Drive ..... 185–186
Flex Head, Pass Thru ..... 182
FOD. ..... 105, 141, 186
Heads, Handles ..... 214, 223
Heads, Ratchet, 3/4" Drive ..... 214
Heads, Ratchet, 1" Drive ..... 223
Heads, Torque Wrench ..... 287, 291
Hi-Lok® ..... 105, 142, 427
Insulating, Composite ..... 348
Low Profile ... 105, 141, 148–149, 182
Nonconductive ..... 348
Palm ..... 142
Quick Release .... 104, 127, 140, 175, 186, 210
Repair Kit ..... 103–106, 138–142, 185–187, 214, 223
Round Head ..... 104, 141
Sets ..... 127, 175, 210
Special Purpose, Application ... 142, 187
Spinners ..... 106, 127, 142, 176, 187
Spud ..... 187
Swivel ..... 104, 141
Ratchet and Bit Sets ..... 316–317
Ratcheting
Adaptor ..... 106, 142, 187, 215
Bit Sets ..... 319–322
Box Wrenches, Combination ..... 234–237
Box Wrenches, Crowfoot ..... 261
Box Wrenches, Double Box ..... 238–240
Box Wrenches, High Performance ... 238
Box Wrenches, Nonconductive .. 349
Box Wrenches, Spline ..... 238
Box Wrenches, T-Handle ..... 239
Box Wrenches, Torque Interchangeable Head ..... 287
Crimpers ..... 343
Cutter ..... 368
Driver ..... 107, 313–317
Flare Nut, Torque Interchangeable Head ..... 291
Pip Wrenches, Torque Interchangeable Head ..... 287
Screwdriver ..... 314–317
Tap Wrenches ..... 382
T-Handle Driver ..... 107, 315
Torque Wrench ..... 276–281
Reamer, Tapered ..... 496
Rear Axle Puller ..... 392–393
Rechargeable Utility Lights ..... 641
Reciprocating Saw
Air ..... 480–481
Cordless, 18V ..... 446, 451
Refrigerant
Leak Detector ..... 620–623
Recovery Recycling Center ..... 617–628
Scale, Charging ..... 621
Regulators, Air Line ..... 709, 720
Remote Control
Mirror Tools ..... 706
Starter Switch ..... 614
Repair
Body ..... 566–567, 696–707
Collision ..... 566–567, 696
Extension ..... 108, 143, 189
Extractor, Porcelain ..... 370
Information System, ShopKey® ..... 765
Manifold ..... 367, 624
Ratchet ..... 103–106, 138–142, 185–187, 214, 223
Respirator Filters ..... 731
Retaining Ring Pliers .... 339–340, 599
Rethreading Tools ..... 374–376
Reversible
Cut Off Tool, Air ..... 479
Disc Sander ..... 483
Drill, Air ..... 473–474
Screwdriver Blade ..... 311
Ridge Reamer, Cylinder ..... 665
Right Angle Drill ..... 474, 494
Rim Tools, Wheel ..... 569–573, 588
Riveters and Rivet Kits .. 501, 699–700
Road Chest ..... 61–62
Roll Cab
Classic Series ..... 44–46
Cover ..... 74–75
Customization ..... 78–82
EPIQ Series ..... 10–17
Heritage Series ..... 50–52
Masters Series ..... 24–29
Reference Chart ..... 6
Roll Carts ..... 57–60, 64–66, 564
Roll Pin Punches ..... 352, 500–502
Rotor Thickness Gauge ..... 690
Round Head Ratchets ..... 104, 141
Rubber
Hammer ..... 355, 588
Mat, Tool Storage ..... 73
Runout Gauges ..... 690

# S


Safety
- Arm Protectors ..... 558
- Back Supports..... 740
- Ear Protection .....729, 731
- Face Protection..... 729
- Glasses..... 729–731
- Gloves .....558, 732–735
- Goggles .....629, 731
- Hearing Protection.....729, 731
- Knee Pads..... 740
- Respirators and Filters .....731
- Welding Helmets .....562–563, 729
- Wiring..... 423–424

Sandblaster.....713

Sander
- Accessories.....496
- Air ..... 482–485
- Belt .....484
- Disc, Reversible..... 483
- Dual Action ..... 483
- Orbital and Geared ..... 482–483

Sanding
- Blocks ..... 705
- Kits ..... 485

Saw
- Air .....480–481
- Blade..... 358, 502–503
- Cordless .....451, 454
- Folding, Pruning.....360
- Hack..... 358
- Hand ..... 358
- Hole ..... 495
- Micro.....481
- Mini..... 358
- Pruning.....360
- Quick Cutter ..... 358
- Reciprocating, Air .....481
- Reciprocating, Cordless .....451, 454

Scaffold Ratchet .....187

Scanner and Accessories..... 744–775

Scissor Lifts.....604

Scissors .....358, 604

Scopes
- Electronic Stethoscopes.... 530–531
- Video Borescopes.....528–530

Scraper
- Carbon.....365–366
- Multipurpose ..... 364–366
- Non-Marring .....364–365
- Set .....365–366
- Striking ..... 365
- Window .....704

Screw
- Extractors ..... 383–386
- Pitch Gauge ..... 381–382
- Starters .....317, 347

Screwdriver
- Bits and Accessories..... 323
- Clutch..... 324
- Cordless .....453, 456
- Diamond Tip..... 306
- Dzus®, Fastener for..... 310,311
- Electronic Service ..... 308–309
- Flat Tip..... 303–312
- Hex..... 308
- Instinct® ..... 303–307, 309–313
- Insulated ..... 347
- Low Profile.....312
- Marine Plug .....313
- Mini Tip .....303–307, 310
- Miniature ..... 308
- Nonconductive ..... 347
- Offset .....311, 317
- Phillips® .... 303–304, 306–309, 311
- Pocket ..... 306–307
- Pop Up.....312
- Potentiometer Adjusting ..... 308
- Pozidriv®.....313
- Rack ..... 57, 93
- Ratcheting .....313–317
- Reversible Blade..... 311
- Set .....303–304, 306, 308–313, 316–317
- Spark Test..... 306
- Special Purpose, Application ..... 311–313
- Square Tip .....312
- Square Tip, Bits..... 327
- Tamper-Resistant .....310
- T-Handle, T-Shape .....315
- Torque ..... 285
- TORX®, TORX Plus® .....309–311

Scribe ..... 329

Scrulox® ..... 319, 321

Seal
- Drivers..... 668–669
- Installers .....599, 663
- Puller..... 588, 599, 662
- Removal Tools, Cam Seal...661–662
- Removal Tools, Pliers Style..... 370
- Removal Tools, Screwdriver Style ... 328, 422
- Removal Tools, Sets.....661–662
- Removal Tools, Transmission...422, 599

Sealing Cap Sets..... 598

Seat
- Covers, Automotive..... 670
- Creeper..... 673

Sensor
- Socket, Diesel .....412, 414, 417
- Socket, Oxygen ..... 548
- Versatorq® ..... 295
- Voltage ..... 523

Serpentine Belt Tools ....412, 658–659

Service Banner, Diagnostic..... 619, 746–747, 749, 751, 754, 756–757

Set Building Programs
- US Set Building Program ... 431–436
- Metric Set Building Program ..... 437–440

Sets, US and Metric-General Service
- 1/8" Drive .....126
- 1/4" Drive .....124–126, 135–136
- 3/8" Drive ...136, 170–175, 182–183
- 1/2" Drive.....208–209, 212
- 3/4" Drive .....221

Shackle Pin Sockets..... 586

Shanks, Power Hex
- 1/4" Drive .....123
- 3/8" Drive.....168
- 1/2" Drive..... 205
- Sets..... 322

Shears
- Metal Cutting .....698
- Powered .....481
- Shop .....698
- Vinyl.....698

Shelf, Folding .....94

Shock Absorber Tools.....591

Shop Fans ..... 727

Shop Presses.....717

Shop Supplies .....736–740

Shop Vacuums.....726–727

ShopKey®..... 765

Short Circuit Locator ..... 522

Shot Dolly .....699

Side Bearing Pullers.....390, 392

Side Cutters...334–337, 342, 345–346

Single Square Sockets ..... 227, 427

Siphon Gun, Oil .....651

Slatebar..... 332

Sledge Hammer ..... 354, 356

Sledge Hammer Wrenches... 263–264

Slide Hammer Pullers
- 2 Jaw ..... 398
- 3 Jaw ..... 398
- Bearing, Blind Hole..... 406
- Body, Dent ..... 566–567, 696
- Dowel Pin.....388
- Injector..... 409, 415
- Interchangeable, Bar Type..... 392
- Interchangeable, General Purpose.. 395–396
- Pipe Nipple .....388
- Reference Chart..... 399
- Sets, Industrial.....400
- Special Purpose .....393, 566–567, 595, 600, 696

Sliding T-Handles
- 1/4" Drive .....107
- 3/8" Drive.....143
- 1/2" Drive..... 188
- 3/4" Drive.....214
- 1" Drive..... 223
- 1 1/2" Drive ..... 227

Sliding Trays.....94

Slimline Wrenches ..... 255, 272

Sling, Engine ..... 605

Slip-Joint Pliers..... 334, 337, 345–346

**S**litting Chisels .....501
**S**mall Hole Gauge Set..... 675
**S**mall Metal Boxes .....70, 95
**S**moke Machine .....524–526
**S**nap Ring Pliers ..... 339–340, 599
**S**nap Ring Retention Device ...162, 199
**S**nips
Aviation ..... 698
Light Duty and All Purpose ..... 698
Tin..... 698
**S**ocket
1/4" Drive .....110–124, 129–136
3/8" Drive.....146–160, 163–169, 178–183
1/2" Drive.....191–198, 200–207, 211–212
3/4" Drive .....215–221
1" Drive ..... 223–227, 586–587
1 1/2" Drive ..... 228–230
2 1/2" Drive..... 231–232
Axle Nut.....584–585
Ball Joint..... 590
Bit, 1/4" Drive .....117–121, 123, 131–135, 180–181, 212
Bit, 3/8" Drive ....134–135, 155–160, 168, 179–181, 212
Bit, 1/2" Drive.....134–135, 180–181, 195–198, 206–207, 211–212
Bit, 3/4" Drive .....216–217
Bit, 1" Drive ..... 224
Budd Wheel ..... 587
Clips, Rails, Holders and Trays ..... 84–87
Composite, Nonconductive..... 348
Crank Shaft Bolt, 1/2" Drive..... 205
Double Square, 1/4" Drive..... 116, 130, 324
Double Square, 3/8" Drive ..... 153
Double Square, 1/2" Drive.....194, 206
Double Square, 1" Drive ..... 227
Drag Link, 3/8" Drive .....153, 422
Drag Link, 1/2" Drive..... 194, 422
Drag Link, 3/4" Drive .....216
Drain Plug, Engine, Oil.....155, 197, 316, 408, 417, 422, 655
Drain Plug, Radiator..... 630
Driver Tray.....86
Drum Plug..... 205, 652
Engine .....408, 427
Engine Barring ..... 662
Filter..... 412, 414, 645
Flank Drive®, Flank Drive® Plus, 1/4" Drive ..... 110–115,122
Flank Drive®, Flank Drive® Plus, 3/8" Drive..... 146–150, 153, 163–166
Flank Drive®, Flank Drive® Plus, 1/2" Drive ..... 191–194, 200–204
Flank Drive®, Flank Drive® Plus, 3/4" Drive.....215, 218–220
Flank Drive®, Flank Drive® Plus, 1" Drive.....225–227
Flank Drive®, Flank Drive® Plus, 1 1/2" Drive ..... 228–230
Flank Drive®, Flank Drive® Plus, 2 1/2" Drive.....231–232
Flare Nut.....153, 407, 414
Flip, 1/4" Drive ..... 117
Flip, Lug Nut, Retaining..... 581–583
Flip, Oil Filter..... 414, 645
Fuel Pressure Sensor .. 412, 414, 417
Hand .....417, 420
Head Bolt.....198, 417, 656
High Performance..... 115
Holders..... 84–87
Hose Clamp..... 419, 426
Impact, 1/4" Drive .....122–123, 130
Impact, 3/8" Drive.....163–167
Impact, 1/2" Drive..... 200–205
Impact, 3/4" Drive.....218–220
Impact, 1" Drive .....225–227
Impact, 1 1/2" Drive ..... 228–230
Impact, 2 1/2" Drive..... 231–232
Impact, Heavy Duty Truck ...417–419
Injector, Diesel.....414–415
Inserts, Non-Marring .....145
Lock ..... 583
Long.....111, 132, 157–159, 179, 196, 583, 701
Low Profile, 1/4" Drive ..112–113, 115
Low Profile, 3/8" Drive.....148–150
Lug Nut..... 581–583
Magnetic, 1/4" Drive.....123–124
Magnetic, 3/8" Drive .....169
Magnetic, 1/2" Drive ..... 206
Magnetic, Surface Drive, 3/8" Drive..... 169
Metric Injector.....415
Mirror ..... 706
Nonconductive ..... 348
Oil Filter..... 414, 645
Oil Pressure Sender Switch .....655
Organizers ..... 84–87
Pipe Plug .....116, 153, 194
Power, 1/4" Drive.....123–124
Power, 3/8" Drive .....168
Power, 1/2" Drive..... 206–207
Railroad..... 428
Retaining ..... 581–583
Sensor, ICP .....412
Sensor, Oxygen ..... 548
Sensor, Water .....414
Set, 1/4" Drive....110–120, 122–123, 130–136
Set, 3/8" Drive ...146–159, 163–167, 180–183
Set, 1/2" Drive....191–193, 196–197, 200–204, 212
Set, 3/4" Drive ..... 218–219
Set, 1" Drive .....225–226
Set, 1 1/2" Drive..... 229
Set, 2 1/2" Drive ..... 231–232
Set, Combination..... 112, 114, 116–120, 134–136, 147, 151–152, 155–159, 180–183, 193, 212
Set, General Service 1/8" Drive..124
Set, General Service 1/4" Drive ..... 124–126, 135–136
Set, General Service 3/8" Drive ..... 136, 170–175, 182–183
Set, General Service 1/2" Drive..... 208–209, 212
Set, General Service 3/4" Drive ..... 221
Set, Hex Bit .....119–120, 132–135, 157–159, 181, 196, 212
Set, Impact Drivers ..... 161, 198
Set, Nonconductive/Composite ..... 348
Set, Spline..... 116, 152
Set, TORX® Bit .... 117–119, 134–136, 155–156, 180–181, 212
Set, Triple Square Bit .. 159, 180, 197
Shock Absorber.....591
Spanner..... 411
Spark Plug ..... 371–373, 420
Special Purpose/Application, 1/4" Drive .....116–117, 120, 123
Special Purpose/Application, 3/8" Drive.....153–154, 156, 160, 166–167, 373
Special Purpose/Application, 1/2" Drive ..... 194, 198, 204–205
Special Purpose/Application, 3/4" Drive..... 216
Special Purpose/Application, 1" Drive.....227
Special Purpose/Application, Diesel.....411
Special Purpose/Application, Heavy Duty Truck..... 417–419
Special Purpose/Application, Railroad.....428
Special Purpose/Application, Spark Plug .....371–373, 420
Spline, 1/4" Drive ..... 116
Spline, 3/8" Drive.....152
Spline, 1/2" Drive ..... 194, 407
Spline, 3/4" Drive.....216
Spline, 1" Drive..... 223
Surface Drive, 3/8" Drive.....169
Surface Drive, 1/2" Drive ..... 207
Switch ..... 655, 662
Swivel, 1/4" Drive .....122
Swivel, 3/8" Drive ..... 165–166, 371–372
Swivel, 1/2" Drive ..... 204, 418
Tap .....381–382
Thermal Vacuum Switch ..... 662
Thin Wall.....203, 220, 227, 418
Tie Rod ..... 593

TORX®, TORX Plus®, 1/4" Drive ..... 114–115, 117–119, 130–131, 628
TORX®, TORX Plus®, 3/8" Drive ..... 150–151, 155–156, 168, 178–179
TORX®, TORX Plus®, 1/2" Drive ..... 193, 195, 204, 206, 211
TORX®, TORX Plus®, 3/4" Drive ..216
Trays ..... 85–87
Twist, 1/4" Drive .....130
Twist, 3/8" Drive.....167
Twist, 1/2" Drive ..... 204
Twist, External Drive Hex Head.. 384
Universal, 1/4" Drive.....113–117, 119
Universal, 3/8" Drive .....149–152
Wrench, Aviation ..... 426
**S**ocket Drivers
Ball Hex, 1/4" Drive..... 119–120
Ball Hex, 3/8" Drive ..... 157–159
Ball Hex, 1/2" Drive.....196
Clutch, 1/4" Drive ..... 121
Clutch, 3/8" Drive.....160
Double Hex, 1/4" Drive..... 117
Double Hex, 3/8" Drive ..... 154, 158
Double Hex, 1/2" Drive.....196
Flat Tip, 1/4" Drive .....120, 133–134
Flat Tip, 3/8" Drive.....160
Flat Tip, 1/2" Drive .....198
Hex, 1/4" Drive .... 119–120, 132–135
Hex, 3/8" Drive... 157–159, 168, 179, 181
Hex, 1/2" Drive .... 196, 207, 211–212
Hex, 3/4" Drive.....216–217
Hex, 1" Drive..... 224
Holder ..... 113
Metric Hex, 1/4" Drive ..... 119, 132, 134–135
Metric Hex, 3/8" Drive ..... 157, 168, 179, 181
Metric Hex, 1/2" Drive .....196, 211–212
Metric Hex, 3/4" Drive.....216
Mortorq®, 1/4" Drive .....120
Mortorq®, 3/8" Drive .....160
Phillips®, 1/4" Drive.... 121, 133–134
Phillips®, 3/8" Drive .....160
Phillips®, 1/2" Drive .....198
Polydrive Head Bolt, 1/2" Drive ..198
Pozidriv®, 3/8" Drive..... 160, 180
Screwdriver..... 120–121, 133–134, 160, 198
Set ..... 117–120, 131–135, 155–159, 180–181, 196–197, 212
Special Purpose, Application... 120, 156, 160, 198
Stubby, 1/4" Drive .....117, 119–120, 131–134
Stubby, 3/8" Drive.....157–158
Stubby, 1/2" Drive .....197
TORX®, TORX Plus®, 1/4" Drive ..... 117–119, 123, 131, 135
TORX®, TORX Plus®, 3/8" Drive ..... 155–156, 168, 179, 181
TORX®, TORX Plus®, 1/2" Drive ..... 195, 206, 211–212
TORX®, TORX Plus®, 3/4" Drive ..216
TORX® Tamper-Resistant, 1/4" Drive ..... 118–119, 131, 134
TORX® Tamper-Resistant, 3/8" Drive..... 156, 179–180
TORX® Tamper-Resistant, 1/2" Drive ..... 211–212
Triple Square, 1/4" Drive .....133
Triple Square, 3/8" Drive.... 159, 180
Triple Square, 1/2" Drive .....197
Universal, Hex 1/4" Drive..... 119
Universal, TORX® 1/4" Drive..... 117
**S**oft Face Hammers ..... 355, 588
**S**oftware
A/C Service Center Update .....619
Brake.....769, 772–773
Engine .....769, 772–773
European Vehicle.....744–749, 751–758, 764
Heavy Duty Truck .....769, 772–773
TPMS.....574–575
Tractor-Trailer.....765, 772–773
Transmission..... 769, 773
**S**oldering
Accessories.....561
Tips ..... 560
Tools ..... 558–561
**S**OLUS™
Accessories..... 758, 763
**S**OLUS™ Edge
Accessories.....746, 754, 758, 763
Scan Tool ..... 746, 750
Storage..... 763
**S**OLUS PRO®
Accessories..... 758, 763
Storage..... 763
**S**OLUS Ultra®
Accessories.....754, 758, 763
Storage..... 763
**S**panner Wrenches.....274, 628
**S**park Plug
Boot Puller, Pliers..... 370
Extractor..... 370
File.....371
Firing Indicator.....371
Flexible Extensions.....371
Gap Gauges .....680
Hole Rethreaders..... 376
Hole Tap ..... 376
Pliers..... 370
Repair Kits .....371
Socket .....371–373, 420
Tools .....370–373
**S**park Test Screwdrivers..... 306
**S**pecial Purpose/Application
Bit Socket .....120, 156, 160, 198
Cutter .....335, 429
Drill Bits.....493–495
Motorcycle Tools ..... 420–422
Pliers..... 335–337, 599
Ratchet.....142, 187
Screwdriver..... 311–313
Socket, 1/4" Drive..... 116–117, 120, 123
Socket, 3/8" Drive .....153–154, 156, 166–167
Socket, 1/2" Drive.....194, 204–205
Socket, 3/4" Drive .....216
Socket, 1" Drive ..... 227
Socket, Aviation ..... 426
Socket, Axle Nut .....584–585
Socket, Ball Joint ..... 590
Socket, Diesel .... 407–409, 411–415
Socket, Diesel Injector .....414
Socket, Fuel Pressure Sensor .. 412, 414, 417, 544
Socket, Heavy Duty Truck ...417–419
Socket, Spark Plug .... 371–373, 420
Wrench, Chain.....274
Wrench, High Performance, Spline . 238, 249, 251–253
Wrench, L-Shape TORX® .....267, 271
Wrench, Spanners ..... 274, 628
Wrench, Specialty Box ..... 253–254
Wrench, Strap ..... 274, 646–647
Wrench, Valve Persuader... 274, 427
**S**pecialty
Aviation Tools.....423–427
Circuit Tester ..... 520
Meter..... 534
Ratchet.....142, 18
Test Light ..... 520
Tire and Wheel .....580–587
Wrench ..... 253–254, 425–427, 429
**S**peeder
1/4" Drive .....107
3/8" Drive .....143
1/2" Drive..... 188
Locking..... 188
Shank.....315
Spicer Clutch Adjusting Tool .....600
Spindle Rethreaders ..... 375–376
Spinner Ratchet..... 106, 127, 142, 176, 187
**S**pline
Box Wrenches ..... 238, 253
Combination Wrenches ..... 249
Drive, #5 ..... 224, 228, 232
Multi- .....271
Ratcheting Box Wrenches..... 238
Socket, 1/4" Drive..... 116
Socket, 3/8" Drive .....152
Socket, 1/2" Drive..... 194, 407
Socket, 3/4" Drive .....216
Socket, 1" Drive ..... 223
Torque Adaptor ..... 154–155, 195
Wrench .....238, 249, 253
**S**pool Gun .....554

Spoons ..... 699
Spot Weld
Air Hammer Bits ..... 501
Cutter ..... 707
Drill ..... 473
Drill Bits..... 473, 707
Welders ..... 566
Spray Gun
Accessories..... 708–710
Detail ..... 708
Full Size, Conventional..... 708
Full Size, HVLP..... 708
Spring Compressor
MacPherson..... 593
Valve Spring..... 664
Spring Tools .....313, 689–690, 693
Spud Ratchet..... 187
Square Drive
Adaptor, 1/4" Drive..... 109, 123, 144
Adaptor, 3/8" Drive ....109, 144, 168
Adaptor, 1/2" Drive .....109, 144, 190
Adaptor, 3/4" Drive ..... 215, 217
Adaptor, 1" Drive .....223–224
Adaptor, 1 1/2" Drive..... 228
Adaptor, Nonconductive, Composite ..... 348
Adaptor, Spline Drive..154–155, 228
Heads, Torque Wrench ..... 287
Squares ..... 681
S-Shaped Box Wrenches..... 254
Stainless Steel Tops ..... 72
Stand
Jack ..... 601, 603–604
Shop Manual..... 93
Starter
Current Ammeter ..... 513
Punches..... 351–353
Remote Control..... 614
Steel Rules ..... 682
Steel Stamping Sets..... 353
Steering Wheel
Lock Plate Depressor ..... 393
Pivot Pin Puller..... 393
Pullers ..... 393
Step
Drills ..... 495
Plates ..... 717
Stools..... 95
Stethoscopes
Electronic..... 530–531
Mechanic's ..... 531
Stones, Brake ..... 576
Stools, Work..... 95
Storage
Box, Metal ..... 70, 95
Box, Plastic..... 68–69
Cabinet, End, Classic Series ..... 48
Cabinet, End, EPIQ Series..... 20
Cabinet, End, Heritage Series..... 55
Cabinet, End, Masters Series..... 32–34
Cabinet, Wall..... 69
Cabinets, Flammables..... 711
Case, Parts..... 68
Combinations..... 10–55
Diagnostic Tools . 763, 770–771, 774
Drawer..... 68–70
Drawer Sections, EPIQ Series .....19
Drawer Sections, Heritage Series 54
Lockers, Classic Series..... 48
Lockers, EPIQ Series ..... 20
Lockers, Heritage Series ..... 55
Lockers, Masters Series .....35–36
Lockers, TUVs..... 37–39
Overhead Cabinet, EPIQ Series ... 20
Overhead Cabinet, Masters Series.. 32
Roll Cabs, Classic Series ..... 44–46
Roll Cabs, EPIQ Series..... 10–17
Roll Cabs, Heritage Series .....50–52
Roll Cabs, Masters Series..... 24–29
Top Chests, Classic Series..... 47
Top Chests, EPIQ Series ..... 18
Top Chests, Heritage Series...52–54
Top Chests, Masters Series ...30–31
Strap Wrench..... 274, 646–647
Striking
Prybar ..... 330–331
Scraper..... 365
Strut ..... 593
Stubby Bit Sockets
Hex..... 119–120, 132–133, 157–158
Phillips® .....133
TORX®..... 117, 131
Triple Square..... 133, 197
Stud
Gun ..... 566
Remover ..... 386–387
Suction Cups, Body.....702, 704
Suction Cups, Valve ..... 663
Suction Gun, Oil..... 651
Supplies, Cleaning..... 95
Surface Drive Sockets, 3/8" Drive..169
Surface Drive Sockets, 1/2" Drive . 207
Suspension Strut Tools..... 593
Swiss Needle Files ..... 364
Swivel
Ball Extension .....154
Ball Universal Joint .... 121, 162, 199, 217, 224, 228
Connector, Air ..... 505
Extension.....162
Socket, 1/4" Drive.....122
Socket, 3/8" Drive..... 165–166, 371–372
Socket, 1/2" Drive..... 204, 417
Swivel Head Ratchets..... 104, 141
Swivel Sockets
1/4" Drive .....122
3/8" Drive..... 165–166, 371–372
1/2" Drive..... 204, 417
System Analyzers, A/C ..... 617–618


# T


TPMS Tools.....574–575
T-Shape, L-Shape Wrenches..... 266–268, 270–271
Tables, Transmission ..... 652
Tach, Advance Timing Light .....535
Tachometers ..... 534
Tailpipe Tools .....367, 591
Talon Grip™ Pliers ..... 334, 336–337
Tamper-Resistant
Bit..... 327
Bit Socket .... 118–119, 131, 134, 156, 179–180, 211–212
Screwdriver.....310
Wrench .....267, 271
Tap Socket .....381–382
Tap Wrench ..... 382
Tape Measures ..... 682
Tape Rules ..... 682
Tapered Reamer..... 496
Taps and Dies
Rethreading .....374–376
Self Aligning .....380–381
Threading .....378–382
Techwrench..... 278
Telescoping Gauge Set..... 675
Telescoping Mirrors ..... 685–686
Telescoping Pick-up Tools.... 683–684
Temperature
Adaptor .....514
Probe.....514
Terminal
Brush .....614
Cleaner.....614–615
Crimpers.....343–344
Tool, Battery .....614–615
Tool, Computer, Wiring..... 536–537
Tool, Soft Grip .....537
Tool, Wire..... 536–537
Test Equipment
Battery System..... 607–611
Circuit.....519–523, 628
Force Testing.....294, 298
Fuel System..... 544
Fuse ..... 522
Ignition..... 551
Injector Harness.....545
Test Lights .....519–520, 628
Torque ..... 294–300
Test Gauges, Micrometer..... 675
Test Leads..... 514–517, 521, 753, 760
Test Lights .....519–520, 628
Tester
Automotive Relay..... 534
Battery Systems .....610–611

Circuit..... 518–520, 523, 628
Cooling..... 631–634
Injection Harness .....545
Oxygen Sensor .....527, 762
Lights, Test .....518–520, 628
TPMS.....574–575
Trailer Harness..... 523
T-Handle, T-Shape
Screwdriver..... 315
Sliding, 1/4" Drive .....107
Sliding, 3/8" Drive.....143
Sliding, 1/2" Drive ..... 188
Sliding, 3/4" Drive.....214
Sliding, 1" Drive..... 223
Sliding, 1 1/2" Drive ..... 227
Speed Drivers, 1/4" Drive ...128, 176
Speed Drivers, 3/8" Drive...128, 176
Speed Drivers, 1/2" Drive .....210
Torque Wrench ..... 283
Wrench ..... 266–268
Wrench, Ratcheting Box ..... 239
Wrench, Threading ..... 382
Thermal Vacuum Switch Sockets .. 662
Thermometer
Digital ..... 627
Hydrometer.....615
Infrared ..... 532–533
Pocket ..... 627
Thin Wall Impact Sockets
1/2" Drive..... 203, 418
3/4" Drive ..... 220, 418
1" Drive ..... 227
Thread
Chasers ..... 375–376
Files .....375
Gauge..... 376
Pitch Gauge .....378–379, 381–382, 681
Restoring .....374–376
THUNDERBIT® ..... 490
Tie Rod
Adjusting Tools ..... 592
Separators..... 590
Socket ..... 593
Timing
Gauge, Diesel..... 407
Lights ..... 422, 535
Tools ..... 653–654, 658, 661
Tin Snips..... 698
Tip Drill ..... 496
Tire, Wheel Tools.....576–588
Tire
Balancer, Plates ..... 571
Bead Breakers..... 573, 587
Changer.....422, 570,572
Changer, Accessories..... 570, 573
Depth Gauge ..... 422, 579
Hammer, Mallet..... 571
Inflator ..... 576
Pressure Gauges .....576–578
Pressure Monitoring ..... 574–578
Spreader, Motorcycle.....421
TPMS Tools .....574–575
Tread Depth Gauge ..... 422, 579
Valve and Stem Tools .....575, 579
Tire Changers .....422, 570,572
Tongs, Fuse ..... 536
Tool Control Board ..... 396
Tool Control Kits .....88
Tool Holders .....84–88
Tool Storage
Accessories..... 38–40, 68–98
Accessories, TUV ..... 38–40
All Weather, Tool Box ..... 62
Aviation “Dog Boxes” ..... 63
Bags, Soft Sided..... 71, 506
Boxes, Small ..... 68–70
Cabinet Locks.....95, 98
Carts ..... 57–60, 64–66, 564
Casters .....98
Classic Series..... 44–48
Cleaning Supplies ..... 95
Combinations.....10–55
Covers 37–40, 59, 61, 64–65, 74–75
Customization ..... 78–82
Detent Kits..... 97
Drawer Dividers.....91–93
Drawer Latches..... 97
Drawer Section, EPIQ Series .....19
Drawer Section, Heritage Series . 54
Drawer Slides..... 97
End Cabs, Classic Series .....48
End Cabs, EPIQ Series..... 20
End Cabs, Heritage Series ..... 55
End Cabs, Masters Series..... 32–34
EPIQ Series .....10–20
Foam Organizers, Diagnostics ..... 745, 747, 749, 751, 756, 763, 770, 774
Heritage Series.....50–55
Lights ..... 59, 82–83, 93
Lock Assemblies.....98
Lockers, Classic Series.....48
Lockers, EPIQ Series ..... 20
Lockers, Heritage Series ..... 55
Lockers, Masters Series .....35–36
Maintenance .....95, 97–98
Masters Series ..... 24–36
Mats.....40, 73, 96
Metal Boxes .....70, 95
Mobile Solutions ..... 57–66
Overhead Cabinets, EPIQ Series..20
Overhead Cabinets, Masters Series.....32
Parts Trays ..... 90, 93–94
Plastic Boxes.....68–69
PowerCab™ End Cabinet ..... 34
Road Chest.....61–62
Roll Cabs, Classic Series ..... 44–46
Roll Cabs, EPIQ Series..... 10–17
Roll Cabs, Heritage Series .....50–52
Roll Cabs, Masters Series..... 24–29
Roll Cabs, Reference Chart .....6
Roll Carts ..... 57–60, 64–66, 564
Silhouettes, Magnetic.....89
Top Chests, Classic Series..... 47
Top Chests, EPIQ Series ..... 18
Top Chests, Heritage Series...52–54
Top Chests, Masters Series ...30–31
TUV (Tool Utility Vehicle) ..... 37–40
Work Surfaces .....72–73
WorkCenters, EPIQ Series..... 20
WorkCenters, Masters Series.....31
WorkStation Accessories..... 37–40
WorkStation Risers, Classic Series.....48
Tool Utility Vehicles (TUV)..... 37–40
Top Chest
Classic Series..... 47
EPIQ Series ..... 18
Heritage Series.....52–54
Masters Series .....30–31
Torches
Butane Soldering.....561
Welding ..... 554–556
TORQOMETER® Wrenches .....281–284
Torque
Acquisition Meter ..... 295
Adaptor ..... 154–155, 195, 419
Adjustable Bodies ..... 277, 286
Angle Gauges.....284, 422
Calibrator..... 296–299
Comparator..... 300
Controltech ..... 277
Driver ..... 284–285
Electronic..... 293
Electronic Calibrator ..... 296–299
Electronic Testers .....294, 296–299
Electronic Wrenches ..... 293
Filter, Regulator, Lubricator .....301
Joint Rate Simulator Adaptors... 299
Multiplier Motor ..... 293
Multipliers .....292–293
QC Series .....286
QD Series .....279–280, 286
Reaction Arms .....301
Screwdrivers ..... 285
Sticks ..... 580
TechAngle® ..... 276
Techwrench®..... 278
Tester ..... 294–299
Torqometer®.....281–284
TQ Series .....280–281
TTC Series..... 297
Versatest™ ..... 296
Versatorq® ..... 295
Versatorq1®..... 295
Weights and Trays ..... 299
Wrenches...276–283, 286, 293, 301
Wrenches, Pneumatic .....301
TORX®, TORX Plus®
Bits ..... 319–322, 324–327
Bits, Ratcheting, Screwdriver Sets.. 316–317
Bits, Sets .....113, 319–322

Bit Socket, 1/4" Drive.....117–119, 123, 131, 135
Bit Socket, 3/8" Drive ..... 155–156, 168, 179, 181
Bit Socket, 1/2" Drive.....195, 206, 211–212
Bit Socket, 3/4" Drive .....216
Driver .....168, 408
Impact Sockets, 3/8" Drive.....166
Impact Sockets, 1/2" Drive ..... 204
Miniature..... 308, 310
Mini-Tip Screwdrivers ..... 308, 310
Screwdriver..... 308–311
Socket, 1/4" Drive 114–115, 117–119, 130–131, 628
Socket, 3/8" Drive ..... 150–151, 155–156
Socket, 1/2" Drive..... 193, 195, 206, 211–212
Socket, 3/4" Drive ..... 220
Tamper Resistant, Bit..... 327
Tamper Resistant, Bit Socket ..... 118–119, 131, 134, 156, 179–180, 211–212
Tamper Resistant, L-Shape Wrench ..... 267, 271
Tamper Resistant, Screwdriver...310
Universal, 1/4" Drive..... 115
Universal, 3/8" Drive ..... 151
Wrenches, Box ..... 253, 598
Wrenches, Folding Sets..... 269
Wrenches, L-Shape .....271
Wrenches, T-Shape ..... 267
Tote Bags ..... 71, 506
Tote Trays.....69
Touch-up Paint ..... 97
Trailer Testers, Lights and Brakes. 523
Training Manuals..... 740
Transducer .... 298, 745, 747, 749, 751, 753, 756, 759
Transducers
Diagnostic ..... 298, 745, 747, 749, 751, 753, 756, 759
Torque ..... 298
Transfer Punches .....353
Transmission
Bushing, Oil Seal Pullers and Driver 599
Drain Plug Socket ..... 599
Filler..... 649
Jacks ..... 604
Oil Cooler Line Disconnect Tool. 598
Oil Pressure Gauge Set ..... 598
Pump Puller ..... 600
Seal, Bushing Installers and Removers.....599
Service Set..... 598–600
Snap Ring Pliers ..... 599
Software ..... 769, 773
Tables..... 652
Tools ..... 598–600
Trays
Service, Under Hood..... 66
Sliding..... 94
Socket ..... 85–87
Torque ..... 299
Tote ..... 69
Tread Depth Gauges..... 422, 579
Trim Pad Removers ..... 700–702
Triple Square Bit Sockets..... 133–134, 159, 197, 583
Trouble Lights ..... 640–643
Truck Brake Tools..... 417, 691–695
Truck, Heavy Duty .....417–419
T-Shape Hex Wrenches ..... 266–268
T-Shape Wrenches ..... 266–268
Tube
Bender ..... 368
Cutter ..... 368
Flaring ..... 368
Tune-up Tools .....550–551
Tweezers.....561
Twist Sockets
1/4" Drive .....130
3/8" Drive.....167
1/2" Drive..... 204, 581
External Drive Hex Head ..... 384


# U


US Set Building Program ..... 431–435
Ultra-Violet Leak Detectors ... 621–623
Universal
Bit Socket .....323, 348
Joint, 1/4" Drive..... 109, 128, 145
Joint, 3/8" Drive .....109, 144–145, 162, 168, 177
Joint, 1/2" Drive... 109, 145, 190, 210
Joint, 3/4" Drive ..... 215, 217
Joint, 1" Drive ..... 224
Joint Press.....589, 600
Joint Set.....109, 145, 190, 199
Joint Tools..... 585, 589, 596, 600, 650, 656
Socket, 1/4" Drive.....113–117, 119
Socket, 3/8" Drive .....149–152
Socket, 1/2" Drive.....193
Valve Core Service Tool ..... 628
Utility
Knife ..... 360–362
Lights .....641–642
Stands..... 603
Vehicle, Tool Utility (TUV) ..... 37–40
USB Power Unit..... 458


# V


Vacuum
Adaptor ..... 496
Handheld..... 726
Portable Spotter ..... 727
Pressure Gauge .....541
Pumps .....542, 619, 625, 686
Sandblaster .....713
Wet, Dry..... 727
Valve
A/C..... 626, 628
Adjuster Socket .....419
Adjuster Wrench .....419
Adjusting Tools .....662, 679
Air .....506, 709
Brushes ..... 663
Camshaft, Crankshaft Tools..... 663
Compressors..... 664
Core .....575, 579, 626, 628
Cover Bolt Socket ..... 662
General Service ..... 662–665
Guide Service Tools ..... 501, 663
Holders..... 663
Keeper Tools ..... 663
Lifters..... 664
Persuader ..... 274, 427
Removers..... 321, 663
Service Tools..... 662–665
Spring Depressors..... 664
Spring Replacement ..... 665
Stem Seal Pliers ..... 663
Vantage PRO™
Accessories..... 759–761, 763
Storage..... 763
VANTAGE® Ultra Accessories .....745, 759–761, 763
Scan Tool ..... 745, 750
Storage..... 763
VERDICT™
Accessories..... 753, 758–761, 763
Scan Tool ..... 748, 750
Storage..... 763
VersaTest™ ..... 296
VersaTorq® ..... 295
VersaTorq1®..... 295
VERUS®, Accessories..... 752, 758–761
VERUS® PRO
Accessories.....749, 751, 759–761, 763
Scan Tool .....749–750
Storage..... 763
Vibro Gun ..... 424
Video Scopes.....528–530
Vinyl Covers
Air Tool, Boots..... 488
Equipment, A/C Recycling, Recharging ..... 619
Equipment, Battery Charger ..... 607–608, 610
Equipment, Smoke Machine..... 524
Equipment, Welding Cable .....556
Motorcycle Gas Tank..... 421, 670
Seat and Fender ..... 670
Tool Storage, Combinations... 74–75
Tool Storage, Road Chests..... 61, 75
Tool Storage, Roll Carts ..... 75
Tool Storage, TUV (Tool Utility Vehicle) ..... 37–40
Vise
Bench .....715–716
Forged .....716
High Visibility..... 715

Jaw Caps ..... 716
Machinist's ..... 715
Mechanic's ..... 715
Pipe and Bench ..... 715
Utility ..... 715
Voltage Adaptor ..... 513
Voltage Sensor ..... 523
Volt-Ohm Meter ..... 748–749


# W


Wall Cabinets ..... 69
Waste Oil Drains ..... 652
Water Pump Socket ..... 657
Water Spray Nozzle ..... 724
Waveform Demonstration Tool ..... 759
Wax ..... 95
Weatherhead Sockets ..... 154, 194
Weight
  Hangers, Trays ..... 299
  Sets ..... 299
Welding
  Cart ..... 60, 564
  Clamps ..... 564–565
  Creeper ..... 671
  Dent Pullers ..... 452, 566–567
  Gas Welding Kits ..... 558
  Gloves, Sleeves ..... 558
  Goggles ..... 558
  Helmets ..... 562–563, 729
  MIG ..... 553–555
  MIG Welder Consumables ..... 555
  Muscle MIG, MIG Welder Accessories ..... 554–555
  Plasma Cutter ..... 557
  Spot ..... 555, 566
  Stud Gun Dent Puller ..... 566
  TIG, TIG Accessories ..... 555–556
  Torches, Flexible Neck ..... 554
Wet Sleeve Puller ..... 408
Wet, Dry Vacuums ..... 727
Wheel
  Alignment Tools ..... 589–593
  Axle Nut Socket ..... 584–585
  Balancer ..... 422, 569–570
  Balancer Pin Plates ..... 571
  Balancing Accessories ..... 569, 571
  Balancing Equipment 422, 569–570
  Bead Breakers ..... 573, 587
  Bearing Packers ..... 651
  Budd Wheel Tools ..... 587
  Calibration ..... 298–299
  Chock ..... 588
  Cut Off ..... 452, 478–479, 498
  Cutter, Piston Service ..... 666
  Cutter, Power Tool Accessories ..... 498
  Cutter, Tubing ..... 368
  Dollies ..... 603
  Dresser ..... 740
  Flap ..... 497–498
  Flip Socket ..... 581–582
  General Service Tools ..... 588
  Grinding ..... 496–499
  Hangers ..... 583
  Hub Lock Tool ..... 585
  Hub Puller ..... 595
  Hub Removal Adaptor ..... 595
  Lock Socket ..... 583
  Lug Nut Sockets ..... 226–227, 417–418, 581–583
  Pan ..... 588
  Pin Plate Sets ..... 571
  Puller ..... 393
  Rim Tools ..... 588
  Seal Driver ..... 667–669
  Shackle Pin ..... 586
  Socket ..... 420, 581–587
  Spanner Socket ..... 584
  Stud Kit ..... 587
  Tools ..... 576–588
  Torque Tools ..... 580, 583
  Weight Cabinet ..... 571
  Weight Hammer ..... 571
  Weight Pliers ..... 571
  Wire ..... 497, 739
Window
  Holder ..... 704
  Removal Tools ..... 704
  Sash Tool ..... 704
  Scrapers ..... 704
Windshield
  Removal Tools ..... 704
  Tools ..... 704
  Wiper Remover ..... 704
Wire
  Brush ..... 497, 551, 615, 738
  Crimper ..... 343–344
  Cutter ..... 343–344, 423, 588
  Feed Welders ..... 553–554
  Feed Welders, Accessories ..... 554–555, 564
  Gauge Drill Bits ..... 492
  Looper Pliers ..... 341
  Safety ..... 424
  Stripper ..... 343–344
  Terminal Kit ..... 537
  Terminal Tool ..... 537
  Twisters, Cutters ..... 423
  Wheel ..... 497, 739
Wire Gauge Drill Bits ..... 492
Wireless Printer ..... 527, 611
Wobble
  Bit ..... 324
  Extensions, 1/4" Drive ..... 108
  Extensions, 3/8" Drive ..... 144
  Extensions, 1/2" Drive ..... 189
Wood Tops ..... 72
Work
  Bench ..... 652, 717
  Centers, EPIQ Series ..... 20
  Centers, Masters Series ..... 31
  Gloves ..... 558, 732–735
  Stations, Classic Series ..... 48
  Stools ..... 95, 673
  Surface, Tool Storage ..... 72–73
Workbenches ..... 652, 717
WorkCenter
  Accessories ..... 93–95
  EPIQ Series ..... 20
  Masters Series ..... 31
WorkStation
  Accessories ..... 93–95
  Mobile ..... 57
  Riser, Classic Series ..... 48
Wrecking Bar ..... 332
Wrench
  Adaptors, Ratcheting ..... 237
  Adjustable ..... 272–274
  Adjustable, Crowfoot ..... 261
  Adjustable, Oil Filter ..... 646–647
  Adjustable, Spanners ..... 274, 628
  Adjustable, Strap ..... 274, 646–647
  Adjustable, Valve Persuader ..... 427
  Air Compressor ..... 409
  Aluminum .. 256, 272–273, 277, 285
  Angle Head ..... 256, 410
  Antenna ..... 706
  Aviation, Socket ..... 426
  Ball Hex ..... 266–267, 269–270
  Battery Terminal ..... 614–615
  Box, Combination ..... 234–237, 241–249
  Box, Double ..... 238–240, 249–254
  Box, High Performance ..... 251–252
  Box, Nonconductive Ratcheting ..... 349
  Box, Ratcheting ..... 238–240, 261
  Box, Ratcheting Combination ..... 234–237
  Box, Ratcheting Crowfoot ..... 261
  Box, Ratcheting Double ..... 238–240
  Box, Ratcheting Flex Head ..... 236–237, 241
  Box, Ratcheting High Performance ..... 238
  Box, Ratcheting Spline ..... 238
  Box, Ratcheting T-Handle ..... 239
  Box, Specialty ..... 253–254
  Box, Spline ..... 238, 253
  Box, Striking ..... 263–264
  Box, Torque Interchangeable Head ..... 287–289
  Box, Tubular ..... 265
  British Standard ..... 248
  Caster Camber ..... 591
  Chain, Strap ..... 274
  Combination ..... 234–237, 241–249
  Combination, Flare Nut ..... 257
  Combination, Flex-Combination ..... 237, 248
  Combination, Hex, TORX® ..... 269

Combination, Ratcheting Box ..... 234–237
Combination, Spline ..... 249
Combination, T-Shape, L-Shape..... 266–267
Crowfoot –1/4" Drive ..... 258
Crowfoot –3/8" Drive..... 258–261
Crowfoot –1/2" Drive ..... 261–262
Distributor ..... 550
Double End ..... 254, 257
Fan ..... 409, 411, 415
Fan Clutch, Cooling.....634–635
Fan Clutch, Diesel..... 409, 411, 415
Flank Drive®, Flank Drive® Plus, Adjustable ..... 272
Flank Drive®, Flank Drive® Plus, Combination ..234–235, 241–248
Flank Drive®, Flank Drive® Plus, Flare Nut..... 257
Flank Drive®, Flank Drive® Plus, Flare Nut, Crowfoot, 1/4" Drive ... 258
Flank Drive®, Flank Drive® Plus, Flare Nut, Crowfoot, 3/8" Drive ... 258–261
Flank Drive®, Flank Drive® Plus, Flare Nut, Crowfoot, 1/2" Drive .... 261–262
Flank Drive®, Flank Drive® Plus, Flex Head.....248
Flank Drive®, Flank Drive® Plus, High Performance...238, 251–252
Flank Drive®, Flank Drive® Plus, Offset Box..... 249–252
Flank Drive®, Flank Drive® Plus, Open End Crowfoot..... 258, 260, 262
Flank Drive®, Flank Drive® Plus, Ratcheting Box..... 234–235, 238
Flank Drive®, Flank Drive® Plus, Specialty Box .....253–254
Flank Drive®, Flank Drive® Plus, Striking/Slugging..... 263–264
Flare Nut ..... 257, 258, 260, 262
Flare Nut, Crowfoot... 258, 260, 262
Flare Nut, Torque Interchangeable Head ..... 291–292
Flat..... 634
Flex Head, Combination .... 237, 248
Flex Head, Ratcheting Box..237, 241
Four Way..... 256
Fuel Filter..... 412, 544
Fuel Pump..... 409, 425
Governor Gap.....410–411
Half Moon ..... 253
Headlight..... 707
Heavy Duty.....263–265
Heavy Duty, Impact..... 467–468
Hex, Combination T and L-Shape .... 266–267
Hex, Ratcheting..... 420
High Performance..... 238, 251–252
Ignition.....255
Impact, Air .....464, 466–470
Impact, Cordless .....445, 447–449, 453, 456
Impact, Electric ..... 460
Injector..... 409
L-Shape ..... 266–267, 269–271
Latch-on®..... 240
Midget.....237, 248, 250
Multi-Spline ..... 271
Nonconductive ..... 349
Oil Filter..... 412, 425, 646–647
Open End..... 254–257
Open End, Combination ...234–237, 241–249
Open End, Crowfoot.....258–262
Open End, Flare Nut Combination ... 257
Open End, Flex Combination.... 237, 248
Open End, Ratcheting Box..... 234–237
Open End, Spline..... 249
Open End, Torque Interchangeable Head .....290–291
Open End, Tubular..... 265
Organizer..... 87–88
Persuaders, Valve..... 274, 427
Pipe..... 272, 427
Pliers..... 273
Push Rod ..... 411
Radiator Cap ..... 630
Railroad..... 301, 429
Ratcheting, Open End .....234–237
Ratcheting Box, A/C Service ..... 628
Ratcheting Box, Battery Terminal.... 615
Ratcheting Box, Combination ..... 234–237
Ratcheting Box, Crowfoot.....261
Ratcheting Box, Double Box..... 238–240
Ratcheting Box, High Performance . 238
Ratcheting Box, Nonconductive 349
Ratcheting Box, Spline..... 238
Ratcheting Box, T-Handle ..... 239
Ratcheting Box, Torque Interchangeable Head.....287
Refrigeration..... 628
S-Shape..... 254
Serpentine Belt ..... 412, 658
Set ..... 234–264
Slimline..... 255, 272
Spanners..... 274, 628
Special Purpose, Application.....274
Specialty ..... 253–254
Spline.....238, 249, 253
Stands..... 268
Strap ..... 274, 646–647
Striking ..... 263–264
Swivel..... 647
Tamper-Resistant .....267, 271
Tap..... 382
T-Handle, T-Shape .... 239, 266–268
T-Shape, Hex..... 266–268
T-Shape, TORX® ..... 267
Torque ..... 276–286, 293, 301
Torque, Pneumatic.....301
TORX®, TORX Plus®, Box .... 253, 598
TORX®, TORX Plus®, Folding Sets.....269
TORX®, TORX Plus®, L-Shape.... 267, 271
TORX®, TORX Plus®, T-Shape..... 267
Tubular..... 265
Turbo, Diesel.....413
Vacuum Pump ..... 425
Valve Adjuster .....419

# XYZ

**X**4, Multipliers..... 293

# OEM
## Application List

### BMW®/Mercedes Benz®

#### Body

102STMML.....1/4 2PC BU..... 111, 701
106FLIPSET .....1/4DR 6PC ME..... 117
AWSGTRP20 .....MER MIR .....267
FLCE120 .....3/8DR E12..... 151, 701
RRT105.....CAR STER R .....706
S6810.....10MM FLIP SCK ..... 117

#### Brake

BBW1270 .....3PC 11MM BRK B ....694
FSE200 .....E20 UNVRSAL..... 151
S6111 .....BRK WR 11M .....694

#### Cooling System

HCP10.....PLIERS .....635
RCR1.....RAD CP REM.....630
SVT275 .....COOL SYST.....633
TA245A .....RAD TES.....632
TA246A.....RAD TES.....632
TA32A.....RAD TES.....632
TA33A.....RAD TES.....632
TA345A .....RAD TES.....632
TA346A.....RAD TES.....632
TA44 .....RAD TES.....632
TA445 .....RAD ADAP BMW .....632
TA446.....RAD CP ADAP .....632
TA45 .....RAD CP .....632
TAB10044 .....RAD ADAP MER .....633
TAB10345.....RAD ADAP BMW .....633
YA6210 .....BMW FAN CLUT .....634

#### Diagnostics

EETM306A09 .....COIL ON PLUG ..... 761
EETM306A10.....COIL ON PLUG ..... 761
EETM306A11 .....COIL ON PLUG ..... 761
EETM306A12.....COIL ON PLUG ..... 761

### Diesel
EEDF400-8.....EGR/IND CLNSYS.... 416
S6104B.....FUEL INJ SOC .....415

### Engine Service
ADT30KT.....ALT PULLEY KIT ..... 657
FSE180 .....E18 UNIVERSA..... 151
IMSLE240 .....E24 TORX IMP .....204
MCH1280.....MER CAM HOL.....654
SBIT2.....STRETCH BELT .....659
SBT60.....SERP BELT WRN.....659
STLE80 .....1/4DR DEE.....114
TSE80.....UNIV INTRNL ..... 115
TSS7KIT .....TRIPLE SQU.....159, 197

### Fuel & Engine Systems
IPK1180.....FUEL INJ PULLER .....544
LDTJT5.....JIFFY-TITE SET ..... 547

### Lubrication
106FLIPSET .....1/4DR 6PC ME..... 117
A127 .....27MM OIL FIL .....645
S3624 .....36/24MM .....414, 645
S6810.....10MM FLIP SOCK..... 117

### Miscellaneous Tools
305STSMSE .....1/2 5PC ST..... 197
FABLM4E .....LONG BALL HE..... 158
FAM11E .....HEX DRIVER.....157
STLE70 .....E8 TORX SOCKET.....114

### Spark Plug Tools
S9714MK .....14MM SPARK P.....373
S9714MKFUA .....6PT 3/8DR .....372
S9714MKL.....14MM SPARK P.....373
S9714MKMAG....14MM SPARK P.....372
SBP3 .....PLIERS .....370

### Testing & Electronics
SGTT110.....10PC TERMINA..... 537
SGTT5A.....TERMINAL TOO ..... 537
SGTT6A.....TERMINAL TOO ..... 537

### Tire & Wheel
GAW1290.....ALIGN WRENCH .....591
IMDM270.....27MM SOCKET.....200
IMDM320.....32MM 1/2 ..... 200, 585
IMDM410.....1/2 12PT..... 200, 590
SIMDM300 .....1/2DR 30M..... 202, 585
WHB1.....14MM X 1.25 WH.....583

### Transmission/Drive Line
FHRM14 .....14MM 3/8DR.....599
FHRM7.....7MM 3/8DR .....599
FHRM8.....8MM 3/8DR.....599
FLEPL100 .....10EPL TORX P ..... 151
IMDM360 .....36MM 1/2D.... 200, 596
M3587 .....3/4DR PI .....596

## Chrysler®/Dodge®

### Body
B1359B .....BRAKE RETAIN .....693
B1467A.....BR WRENCH ...690, 694
BB300B39GC.....GM/CHRY ADAP .... 688
BB300B47G.....CHRY ADAPTOR ..... 688
BT1360 .....BRAKE RETAIN .....693
S6111 .....BRAKE WR 11M .....694
YA8610B.....7PC BRAKE CA.....692

### Brake
B1359B .....BR RET .....693
B1467A.....BR WRENCH ...690, 694
BB300B39GC.....GM/CHR ADP ..... 688
BB300B47G.....CHR ADP ..... 688
BT1360 .....BR RET .....693
S6111 .....BR WR 11M .....694
YA8610B.....7PC BR CA.....692

### Cooling System
HCP20 .....PLIERS .....635
SVT262-28A.....COOL SYS .....632
SVT262-29.....RAD CAP ADP .....632
TA38C .....CAP ADP .....632
TA39A.....44MM CAP ADP.....632
TA58 .....DODG SPRNT .....632
TA59 .....DODG SPRNT .....632
TAB10044 .....RAD ADP MER.....633
YA6160 .....FAN CLU W .....634
YA9980.....PULLEY TOOL .....634

### Diagnostics
EETM306A04 .....COIL ON PLG ..... 761
EETM306A14.....COP11 ADP ..... 761

### Diesel
A129 .....29MM FU FI..... 414
CJ140 .....DIES PUL.....409

### Engine Service
A119B .....OIL PRES..... 655
A121A.....SOCKET ..... 655
CGH1236.....CAM GR HLDR .....654
CJ124A .....P/S PULL..... 394, 657
YA6490A .....HARM PUL.....394, 660
YA9350B.....SERP B.....658
YA9350B1 .....SERP B.....658

### Fuel & Engine Systems
EEPV313C.....COMP ADPT ... 407, 540
FID8329.....NOID LIGHT..... 545
LDTJT5.....JIFFY-TITE SET ..... 457

### Lubrication
OFHON33.....HONDA OIL FI ..... 648
OFKIT.....OIL FILTER KIT.....649

### Miscellaneous Tools
STLE40 .....E4DEEPTORX.....114
STLE50 .....E5DEEPTORX.....114

### Motorcycle Service Tools
S9704RHS .....13/16 RETE..... 373, 420
S9724RHS .....5/8 RETENT.... 373, 420

### Pullers
CJ131P.....PULLER SET.....393
CJ134 .....PULLER .....393

### Spark Plug Tools
YA6845.....SPARK PLUG B.....371

### Testing & Electronics
SGTT110.....10PC TERMINA..... 537
YA961 .....120V MEMORY .....536

### Tire & Wheel
BJP1.....BALL JNT P..... 589, 600
BJP1-18A .....BALL JNT ADPT.....589
BJP1-26A.....BALL JNT ADPT.....589
DHP1.....DODGE HUB PU..... 595
ITRS22.....22MM INNER T .....593
LSR1000A .....WHEEL LOCK K .....583
LSR1560 .....THINWALL FLI ..... 581
LSR1570.....THNWALL FLP ..... 581
LSRM2000.....MET LUGNU..... 581
S6109A.....SOCKET .....584
S6146.....SOCKET .....584
S9365B .....SOCKET .....590
S9479A .....SOCKET .....590
SIM540A.....DODGE AXLE ..... 585
SIMDM300 .....1/2DR 30..... 202, 585
SNS2467 .....4 LUG 4WD SPIND .. 585
SNS2770 .....6 LUG 4WD SPIND .. 585
YA1005C .....LUGNUT RMVR .....582
YA2218 .....18MM TIE ROD.....592
YA2223.....15.5MM TIE R.....592

### Transmission/Drive Line
CJ193-1-1 .....TRS PUL ADPT ..... 600
FHRM10 .....10MM 3/8DR .....599
FHRM7.....7MM 3/8DR .....599
IMDM360 .....36MM 1/2..... 200, 596
M3586.....3/4 DR.....596
M3587 .....3/4 DR PI .....596
PRT600A.....TRANSMISSION.....599

### Valve Service
YA188LR .....INSTALL HARM ..... 660
YA188LR-3.....M14X1.5 SCREW .... 660
YA188LR-5.....M12X1.75 SCREW... 660
YA6490A .....HARM PULL....394, 660
YA9140B .....VALVE SPRING .....664

## Ford®

### Body
102STMML.....1/4 2PC BU..... 111, 701
A161B .....DOOR TOOL .....702
ASG185BR.....INSTINCT TRI ..... 701
ASGD102BR .....2PC DISHED T..... 701
RRT105.....CAR STEREO R .....706
S8703.....SOCKET .....706
YA1201.....DR PL REM .....700
YA7575.....FRD REMOVAL .....706

### Brake
B1359B .....BR RETAIN.....693
B1467A.....BR WRENCH ...690, 694
BT1360 .....BR RETAIN.....693
IMSLE180.....1/2DR E18 .....204
S6111 .....BR WR 11M .....694
YA8610B.....7PC BRAKE CA.....692

### Cooling System
HCP10.....PLIERS .....635
HCP20 .....PLIERS .....635
TA246A.....RAD TES.....632
TA32A.....RAD TES.....632
TA33A.....RAD TES.....632
TA34A.....RAD TES.....632
TA46.....RAD TES.....632
TA47 .....RAD CAP .....632
TAB10034 .....RAD ADAP FOR .....633
TAB10046 .....RAD ADAP FOR .....633
YA6180 .....FAN CLUTCH.... 415, 635
YA9526 .....FAN WRENCH .....634

### Diesel
EEDF400-1 .....EGR ADP ..... 416
EEDF400-2.....EGR ADP ..... 416
EEDF400-11.....EGR ADP ..... 416
FFW2 .....DUAL FUEL OI ..... 412
FGPT.....FORD GLOW PL..... 412
K1820A.....T70 TORX SOC.....195
MB5D .....BRI BR .....407, 408, 413
MB73A.....BRUSH..... 413
PSWT10K .....10MM POWERST .... 413
S6196KR.....FORD ICP SEN..... 412
S6210 .....3/8 DRIVE ..... 413
S6340E.....T40 TORX SOC..... 414
TAP1225 .....TURB VANE PLR ..... 413
YA1140 .....CRWFT SOC SET..... 414

### Engine Service
A119B .....OIL PRESS..... 655
A121A.....SOCKET ..... 655
ADT30KT.....ALT PULLEY KIT..... 657
CJ124A .....P/S PULLER.... 394, 657
FRT12 .....THREE VALVE ... 371, 656
FTXEL40E.....XTR LNG TORX..... 156
S6160 .....12MM 8IN L..... 417, 656
S6193 .....10MM SOCKET .....656
S6194 .....12MM SOCK .... 417, 656
YA7200 .....MDULE WRNCH ..... 661
YA9350B.....SERPENTINE B.....658

### Fuel & Engine Systems
EEDF502 .....FUEL PRESS TEST....543
EEPV314C.....DIES COMP ADPT....540
EEPV317C.....DIES COMP ADPT....540
EEPV5G16T.....M16x1.5 TRIT ..... 539
S8564B .....DIST WR..... 550
S9707.....DIST WR..... 550
SWR1.....OXYGEN SENSO .....548
YA6465.....IGN WRENCH.....551

### Heavy Duty Truck Tools
S6190A.....FORD IPR SOC ..... 417
SRD35.....FORD DIESEL ..... 419
SRDM624 .....LONG 24MM TO ..... 419

### Heavy Duty Vehicle Diagnostics
EEHD883048U...LT MED TRUCK..... 773
EEHD883048 .....LT MED TRUCK..... 773
EEHD883076 .....OBDII LIGHT ..... 773

### Lubrication
OFGMFORD.....GM AND FORD ..... 648
OFHON33.....HONDA OIL FI ..... 648
S3624 .....36/24 MM .....414, 645
OFKIT.....OIL FILTER KIT.....649

### Miscellaneous Tools
FTXR40TPE.....3/8DR T40 ..... 156

### Motorcycle Service Tools
S9704RHS .....13/16 RETE..... 373, 420
S9724RHS .....5/8 RETE..... 373, 420

### Pullers
CJ131P.....PULLER SET.....393
CJ132-8 .....INST 4.6L.....395
CJ134 .....PULLER.....393
CJ138 .....PULLEY INSTL.....394

### Spark Plug Tools
FRT10 .....FORD SPK P.....371
FSPK.....FORD SPK P.....370
FSPPRK.....FORD PORC.....370
S9714MKL.....14MM SPK P.....373
S9714MKMAG....14MM SPK P.....372
S9716KA.....9/16 SPK.....373
S9716KL .....3/8DR 9/16.....372
S9716KLMAG .....9/16 SPK P.....372
S9716KR.....SPK PLUG S.....372
YA6845.....SPK PLUG B.....371

### Testing & Electronics
SGTT110.....10PC TERM..... 537
YA500F .....FORD TERM..... 537

### Tire & Wheel
ANS7269A .....AXLENUT SOCK .....584
BJP1.....BALL JNT P..... 589, 600
BJP1-25A .....BALL JNT ADPT.....589
BJP1-27A .....BALL JNT ADPT.....589
FHP1 .....FORD HUB PUL..... 595
IMFMS21.....SEMI DEEP SK ..... 163
IPFM21C.....3/8 21MM 6 ..... 165
IPLFM21A .....3/8DR DEE..... 166
IPSFM21A.....21MM SEMI DE..... 165
IPSM18 .....1/2DR 18MM S .....204
IPSM21 .....21MM SEMI DE.....204
IPSM22.....1/2DR 22MM S .....204
LSR1570.....THNWALL FLP ..... 581
S6109A.....SOCKET .....584
S6146 .....SOCKET .....584
SIMML210.....1/2DR 21M ... ..203, 583
SNS2467 .....4 LG 4WD SPIN..... 585
SNS2770 .....6 LG 4WD SPIN..... 585
SNS3195 .....4 LG W EXT SPIN ..... 585
SNS3246 .....4 WD SPIN NUT..... 585
YA2224 .....TIE ROD WR.....592

### Transmission/Drive Line
211EFTXRTPY .....TR TORX PLUS .. 119, 156
CJ193 .....PULLER SET..... 600
CJ193-1-1 .....TRS PUL ADPT ..... 600
FIH9057B.....FD TRAN DISC.....598
IPDF12A .....3/8 12P..... 165
LDTM3812.....TRANS OIL CO .....598
M3586.....3/4 DRIVE.....596
PFSXM914B .....14MM SIVEL E .....154
PRT600A.....TRANSMISSION.....599
YA7244A.....TRANS TOOL .....598
YA7646.....FORD CLUTCH ..... 600

### Valve Service
YA188LR .....INST HARM BAL..... 660
YA188LR-2.....M12X1.5 SCREW .... 660

## GM®

### Air Conditioning
ACT106B .....INSTALLER .....627
ACTUVGUNP3.....PAG OIL.....125,622

### Battery Service
YA249.....BOX WRENCH..... 615

### Body
102STMML.....1/4 2PC BU..... 111, 701
A161B .....DOOR TOOL .....702
A177A .....PAD TOOL .....702
A179A .....PAD TOOL .....702
ASGD102BR .....TRIM PAD SET..... 701
S6103A.....TRIM DRI.....702
S6810.....8MM 10MM FL SK.... 117
S9610.....SOCKET .....704
S9614A.....TRIM DRI.....702
YA1201.....DR PL REM .....700
YA6620.....GM DR HING.....703

### Brake
B1467A.....BR WR.....690, 694
B1468.....BR TOOL ..... 691
B1470 .....WRENCH .....694
BB300B39GC.....GM/CHR ADP ..... 688
BT10 .....BR SPR TOOL..... 689
BT13.....BR SPR INST.....N/A
BT1360 .....BR RET.....693
BT14 .....BR SPR REM .....N/A
BT27 .....GM BR SPR ..... 689
S6110A .....BR WR.....690, 694
S6111 .....BR WR 11M .....694
S8184.....BR WR.....694
STX70E .....T70 TORX SOC.....195
YA8610B .....7PC BR CA.....692

### Cooling System
A4503A.....GM X AND J B.....632
HCR1.....HTR HOSE COU.....634
LDT4 .....JIFFY-TITE CON .....N/A
SVT262-28A.....COOL SYS .....632
SVT262-29.....RAD CAP ADP .....632
TA246A.....RAD TEST .....632
TA32A .....RAD TEST .....632
TA33A .....RAD TEST .....632
TA34A .....RAD TEST .....632
TA36GM.....RAT TEST A .....632
TA37 .....CAP ADAP .....632
TA38C .....CAP ADAP .....632
TA39A .....44MM CAP ADAP....632
TA56 .....RAD ADAP CHE .....632
TA57 .....SPRCHGR CAP.....632
TAB10034 .....RAD ADAP FOR .....633
TAB10056 .....RAD ADAP CHE .....633
YA6120 .....FAN CLCH W ..... 635
YA6160 .....FAN CLCH W .....634
YA6180 .....FAN CLCH W .... 415, 635
YA9980.....PULLEY TOOL .....634

### Diagnostics
EETM306A06 .....COIL IN CAP1 ..... 761

### Diesel
IPK1170 .....INJ PLR KIT .....415
M3503B.....SOCKET .....411
S6122 .....SOCKET .....N/A
SWR3.....WATER SENSOR..... 414
TVS1240 .....TURBO VANE SOC....415
YA6925 .....GM DURAMAX F.....415

### Engine Service
A119B .....OIL PRESSURE..... 655
A121A.....SOCKET ..... 655
ADT30KT.....ALT PULLEY KIT..... 657
CJ124A .....P/S PULLER.... 394, 657

CJ147A .....GM PR STRG... 394, 657
SBT12 .....ECOTEC TENS .....659
SAM10LE.....1/2D 10MM L..... 196
YA6490A .....HARM PUL.....394, 660
YA6555 .....GM OIL PMP ..... 655
YA9350B.....SERP BELT.....658
YA9350B1 .....SERP BELT.....658

**Fuel & Engine Systems**

A227.....27MM SOCKET.....544
EEPV312D .....DIESEL COMP ADP..540
FID8320.....NOID LIGT ..... 545
FID8339.....NOID LIGT ..... 545
FID8340.....NOID LIGT ..... 545
FIH500.....FUEL LINE DI.....544
FLR630 .....FUEL TANK TOOL.....544
LDTJT5.....JIFFY-TITE SET ..... 547
M3515.....WRENCH ..... 550
M3564C.....ADAPTOR .....540
S6134 .....DIST WR..... 550
S9622 .....DIST WR..... 550
S9626 .....DIST WR..... 550
YA9375A .....OXY SENSO.....548

**Lubrication**

A106 .....OIL FILTER SOCK.....645
OFA35.....2PC ADPT SET..... 648
OFGMFORD.....GM AND FORD ..... 648
OFKIT.....OIL FILT KIT.....649
OFTOY38.....TOY LEX ..... 648
S3624 .....36/24 MM .....414, 645
S9615A .....BOX WRENCH.....645

**Miscellaneous Tools**

207EFTXY.....TORX DR ST.....155
FLCE180 .....E18 TORX SOCK..... 151
FLEP180 .....18EP TORX PL ..... 151
FTX47E.....47 TORX DRV..... 156
FTX47E2.....TORQ BIT ..... 156
FTX500E2.....TORX BIT.....156, 206
GFTX500E .....TORX DRVR ..... 156
IPSM15 .....1/2D 15M .....204
PFMTS1E .....MTS1E SUP ..... 160
PSTX500E .....TORX DRVR .....206
SHORTORX.....TORX DRVR ..... 316

**Motorcycle Service Tools**

S9704RHS .....13/16 RETE..... 373, 420
S9724RHS .....5/8 RET..... 373, 420

**Pullers**

CJ131P.....PULLER SET.....393
CJ132-6 .....INST GM 3.1L..... 395
CJ134 .....PULLER .....393
CJ145 .....GM PULLER .....393

**Spark Plug Tools**

S9723.....GM SPARK PLU..... 373

**Testing & Electronics**

EEFF500.....MAIN HARN.....521
GMSTB25.....GM MLTIFUNC .....536
SGTT110.....10PC TERM..... 537
TT12KT.....TERM TL..... 537
YA500GM.....TERM TL..... 537
YAGM1 .....GM AIRBAG RE .....536

**Tire & Wheel**

ANS1929A.....LCKNT WR .....584
ANS1930.....LCKNT WR .....584
BJP1 .....BALL JNT P..... 589, 600
CC6630 .....GM CAMB CA .....591
IMFMS21.....SEMI DP SOC ..... 163
IPFM21C.....3/8 21MM 6 ..... 165
IPSFM21A.....21MM SEM DP..... 165
IPSM21 .....21MM SEM DP.....204
IPSM22.....1/2D 22MM S .....204
LSR1000A .....WHL LOCK K .....583
LSR1560 .....THINWALL FLI ..... 581
S6109A.....SOCKET .....584
S6146.....SOCKET .....584
SIMDM300 .....1/2D 30MM.... 202, 585
SIMM360TW.....1/2D 36MM.... 203, 585
SNS2467 .....4 LG 4WD SPDL ..... 585
SNS2770 .....6 LG 4WD SPDL ..... 585
SNS3246 .....4 WD SPDL NT ..... 585
WA7500.....GM STRUT TL.....593
YA2223 .....15.5MM TIE R.....592
YA2224 .....TIE ROD WR.....592

**Transmission/Drive Line**

FHRM10 .....10MM 3/8D .....599
FIH9057B.....FD TRAN DISC.....598
FLEL80.....3/8DR E8 ..... 151
FLEPL100 .....10EPL TORX P ..... 151
IMDM360 .....36MM 1/2D.... 200, 596
IPDF12A .....3/8DR 12P..... 165
M3587 .....3/4DR PI .....596
PFMTS4E.....MTS4E SPR ..... 160
PRT600A.....TRANS .....599
S6657.....1/2D 57MM 12 .....596
SRP1C .....PLRS.....599
YA3050 .....BOOT PLRS .....596
YA3080.....BOOT PLRS .....596
YA9348.....SEAL REM ..... 600
YA9648.....GM TRAN TL ..... 600

**Valve Service**

CJ146 .....PULL SET.....394, 660
S6132A .....SOCKET ..... 656, 662
S6158 .....ENG BAR SKT.....662
YA188LR .....LNG RCH HAR BL ... 660
YA188LR-1 .....CEN SCR M16 ..... 660
YA6470.....GM HARM ..... 660
YA6490A .....HARM PUL.....394, 660
YA6491A .....YA9740 UPD...394, 660
YA9140B .....VAL SPRG.....664

## Honda®/Acura®

**Body**

DPTM10 .....8MM SOCKET..... 123
DPTM8.....10MM SOCKET ..... 123

**Brake**

S6110A .....BRAKE WR.....690, 694
YA8610B.....7PC BRAKE CA.....692

**Cooling System**

SVT262-28A.....COOLING SYS .....632
SVT262-29.....RAD CAP ADP .....632
TA38C .....CAP ADP .....632
TA39A .....44MM CAP ADP.....632
YA9190 .....UNV DRN SKT.....630

**Diagnostics**

EETM306A08 .....COP4 ADP A ..... 761

**Engine Service**

ADT30KT.....ALT PUL KIT ..... 657
S6193 .....10MM SOC.....656
S6194.....12MM SOC ..... 417, 656
YA2675A .....SWIV ADP .....605

**Fuel & Engine Systems**

S6154 .....OXY SEN WR.....548
S6176 .....OXY SENS SOC .....548
SWR4 .....SHLD OXY .....548

**Lubrication**

OFA33.....OIL FIL ADP..... 648
OFHON33.....HON OIL FI ..... 648
OFKIT.....OIL FIL KIT .....649

**Miscellaneous Tools**

DPSM16 .....16MM SOC.....205

**Motorcycle Service Tools**

HXD22 .....22MM HEX SOC.....420

**Spark Plug Tools**

S9714MKL.....14MM SPRK P..... 373
S9714MKMAG....14MM SPRK P..... 372

**Testing & Electronics**

SGTT110 .....10PC TERM..... 537
SGTT7 .....TERM TOOL ..... 537
SGTT8.....TERM TOOL ..... 537
SGTT9.....TERM TOOL ..... 537

**Tire & Wheel**

BJP1-22A .....BALL JNT ADPT.....589
BJP1-24A .....BALL JNT ADPT.....589
BJP1HONDA.....HON BALL JNT.....589
FPS32E .....SHRT NUM ..... 160
LSRM2000.....MET LUGNT ..... 581
YA6510 .....HON/ACU .....591
YA6510-2 .....ACU INTEG .....591
YA6810 .....HON BUSH.....593

**Valve Service**

S6132A .....SOCKET ..... 656, 662
YA6010A .....HRM DMP TL ..... 660
YA9140B .....VAL SPRG.....664

## Nissan®/Subaru®

**Brake**

S6110A .....BRAKE WR.....690, 694
YA8610B.....7PC BRAKE CA.....692

**Cooling System**

SVT262-28A.....COOLING SYS .....632
SVT262-29.....RAD CAP ADP .....632
TAB10036 .....GM FORD JAG .....633

**Engine Service**

S6160 .....12MM 8IN L..... 417, 656
S6193 .....10MM SOCKET .....656
S6194.....12MM SOCK.... 417, 656
S6214 .....SUBARU HEADB .....656
YA9680 .....CAMSHFT TOOL..... 653

**Fuel & Engine Systems**
M3566C.....ADAPTOR.....540
S6176.....OXY SENS SKT.....548
SWR4.....SHIELDED OXY.....548

**Lubrication**
OFHON33.....HON OIL FI..... 648

**Miscellaneous Tools**
FLCE160.....E16 TORX SOC..... 151
PFMTS1E.....MTS1E SUP..... 160

**Spark Plug Tools**
S9714MK.....14MM SPRK P..... 373
S9714MKFUA.....6PT 3/8DR..... 372
S9714MKL.....14MM SPRK P..... 373
S9714MKMAG....14MM SPRK P..... 372
S9714MKR.....14MM SPRK P..... 372

**Testing & Electronics**
SGTT6A.....TERM TOOL..... 537

**Tire & Wheel**
BJR1.....BALL JNT SOC.....590
BJR2.....BALL JNT SOC.....590
BWDM412.....IMP SOC.....587
YA2224.....TIE ROD WR.....592
YA6870.....SUBU REAR.....592
YA6870-1.....6PT 22MM 16.....592
YA6870-2.....17MM/19MMC 6.....592

**Transmission/Drive Line**
FTX50TPE.....TORX PLS BI..... 156
IPLFM16A.....16MM 6PT DP..... 166
K1820A.....T70 TORX SOC.....195
SLEPL200.....20EPL TORX P..193, 598

**Valve Service**
YA6380.....CAM SEAL INS.....663
YA9140B.....VALVE SPR.....664

## Toyota®/Lexus®/Scion®

**Body**
ASGD102BR.....TRIM PAD TL ST..... 701

**Brake**
BT20.....BR SPR TL..... 689
S6004.....BR ADJ TL..... 691
S6005.....BR ADJ TL..... 691
YA8610B.....7PC BR CA.....692

**Cooling System**
HCP10.....PLIERS.....635
TAB10048.....RAD ADAP TOY.....633
YA9190.....UNV DRN SKT.....630

**Diagnostics**
EETM306A05.....COIL INCAP2 I..... 761
EETM306A13.....COIL ON PLUG..... 761
EETM306A14.....COP11 ADPTR..... 761

**Engine Service**
ADT30KT.....ALT PULLEY KIT..... 657
FADM8E.....8MM/HEX SCKT..... 158
FADM8LE.....8MM LNG DBL..... 158
S6193.....10MM SOC.....656
S6194.....12MM SOC..... 417, 656
SADM10E.....10MM DLB HEX..... 196
YA1350.....TOY WATER PUM..... 657
YA65500.....TOY LEX..... 661
YA6551.....TOY/LEX V6 C..... 661
YA9350B.....SERP B.....658
YA9680.....CAMSHFT TL..... 653
YA9730.....TMG BLT TL..... 653

**Fuel & Engine Systems**
M3565C.....ADAP.....540
M3566C.....ADAP.....540
SWR4.....SHIELDED OXY.....548
YA6675.....SHIELDED O2.....548

**Lubrication**
OFA38.....OIL FILT ADP..... 648
OFKIT.....OIL FILT KIT.....649
OFTOY38.....TOY LEX..... 648
OFTOY468.....TOY OIL FILT.....647
OFWTOY3KTA.....TOY 3PC O.....647

**Miscellaneous Tools**
FLCE140.....E14 TORX SOC..... 151
FLCE160.....E16 TORX SOC..... 151

**Spark Plug Tools**
S9714MK.....14MM SPK P..... 373
S9714MKFUA.....6PT 3/8D..... 372
S9714MKL.....14MM SPK P..... 373
S9714MKMAG....14MM SPK P..... 372

**Testing & Electronics**
SGTT110.....10PC TERMINA..... 537
SGTT7.....TERM TOOL..... 537
SGTT8.....TERM TOOL..... 537
SGTT9.....TERM TOOL..... 537

**Tire & Wheel**
B2193.....3/8DR 5PT.....588
IMDM390.....39MM 1/2..... 200, 585
LSR1560.....THINWALL FLI..... 581
LSRM2000.....METRIC LUGNU..... 581
SIMDM300.....1/2D 30M..... 202, 585
YA2218.....18MM TIE ROD.....592
YA6540.....AXLE LOCK NUT KI..585

**Transmission/Drive Line**
FHRM12.....12MM 3/8D.....599
PFSXM910B.....10MM SWIVEL.....154
PFSXM912B.....12MM SWIVEL.....154

**Valve Service**
M2112PK.....2PK OF LEX.....665
M2113.....LEX V8 SPR.....665
YA6380.....CAM SEAL INS.....663
YA8825.....VALV TOOL.....662

## VW®/Audi®

**Body**
RRT105.....CAR STER R.....706
S8703.....SOCKET.....706

**Brake**
BB300B19.....VW ADP..... 688
BBW1270.....3PC 11MM BR B.....694
FTSM4E.....4MM TRIP S....159, 692
FTSM5E.....5MM TRIP S.....159, 692
FTSM6E.....TRIP SQ DR.....159, 692
S5912.....BR TOOL..... 691
S6111.....BR WR 11M.....694
YA8610B.....7PC BR CA.....692

**Cooling System**
HCP10.....PLIERS.....635
TA16B.....RAD TES.....632
TA23A.....RAD TES.....632
TA30A.....RAD TES.....632
TA31A.....RAD TES.....632
TA40.....RAD CAP.....632
TA41.....RAD TES.....632
TAB10022.....RAD ADP VW.....633
TAB10031.....RAD ADP VW.....633
TAB10041.....RAD ADP AUD.....633
YA6210.....BMW FAN CL.....634

**Diagnostics**
EETM306A07.....COIL ON PLG..... 761

**Diesel**
IPK1220.....INJ PULL KIT.....415
S6104B.....FUEL INJ SOC.....415

**Engine Service**
ADT30KT.....ALT PULLY KIT..... 657
FTSM8E.....TRIP SQ DR.....159
FTSM10E.....TRIP SQ DR.....159
S5902.....WRENCH..... 598, 655
SADM10E.....10MM DLB HEX..... 196
SPDL10E.....NO10 POLYDR..... 198
STSM10LE.....10MM TRP SQ SO... 197
STSM12E.....TRIP SQ DR..... 197
STSM14E.....14MM TRIP..... 197
STSM16E.....16MM TRIP..... 197
STSM18E.....18MM TRIP..... 197
TSS7KIT.....TRIP SQ.....159, 197
YA6760.....VW AUDI TIME..... 661
YA8640.....CAM WRENCH..... 661

**Fuel & Engine Systems**
GANM27.....3/8 27MM C.....547
SWR2.....SQ DR.....548

**Lubrication**
S3624.....36/24 MM.....414, 645

**Miscellaneous Tools**
S6324.....24MM SKT.....205

**Testing & Electronics**
SGTT110.....10PC TERM.....537

**Tire & Wheel**
GAW1290.....ALIG WRN.....591
IMDM320.....32MM 1/2D.... 200, 585
LAWM17E.....3/4DR 17M..... 216
LAWM19E.....3/4DR 19M..... 216
SIMDM300.....1/2DR 30M..... 202, 585
YA8730.....NUT SOC.....593

**Transmission/Drive Line**
CPT110A.....SOCKET..... 422, 599
FHRM7.....7MM 3/8D.....599

**Valve Service**
YA8825.....VALVE TOOL.....662
YA8825-1.....SPAC WDGE.....662

**Official Website**
www.snapon.com

**US Customer Service**
1-877-762-7664
www.snapon.com
Click on Customer Service in upper right corner of website

**Canada Customer Service**
1-866-824-0524
www.snapon.com
Click on Customer Service in upper right corner of website

**Snap-on Corporate**
www.snapon.com/corporate

**Request a Franchisee or Snap-on Representative**
www.snapon.com
Click on Find a Franchisee in the upper right corner of website

**Own a Snap-on Franchise**
www.snaponfranchise.com

**Snap-on Credit**
1-877-777-8455
www.snaponcredit.com

**Snap-on Racing**
www.snapon.com/racing

**Snap-on Business Solutions**
www.sbs.snapon.com

**Find us on…**

www.youtube.com/snaponscanner

www.facebook.com/SnaponTools

www.twitter.com/snapon_inc

**Hand Tools**
www.snapon.com/handtools

**Power Tools**
www.snapon.com/powertools

**Tool Storage**
www.snapon.com/toolstorage

**Diagnostics**
www.diagnostics.snapon.com

**Diagnostics Product Support**
1-877-447-6276
diagnostics_Support@snapon.com

**Diagnostic Training – Online**
www.diagnostics.snapon.com/trainingsolutions

**Shop and Technician Tools**
www.snapon.com/shoptools

## Technical Support

| | |
|---|---|
| Specialty Meters (circuit testers and multimeters) | 1-888-382-6522 |
| Trailer Harness Testers and Adaptors (YA7900A, YA7900AP, LT series) | 1-888-786-7899 |
| Handheld Gas Analyzers (all HHGA) | 1-888-717-1333 |
| Carbon Monoxide Analyzer (MT706A) | 1-888-382-6522 |
| Diagnostic Smoke™ Vapor Producing Machines | 1-800-901-1988 |
| Battery Chargers (EEBC100, 400, 500 and accessories) | 1-866-713-6007 |
| Electronic Battery Tester (EECS150, 350, 550, 750, DTac and microvat) | 1-866-592-8052 |
| ECO™ PLUS A/C Service Center, KoolKare Plus (EEAC325A, EEAC325B, EEAC324A, EEAC324B) | 1-866-769-2788 |
| Wheel Balancers and Tire Changers | 1-800-225-5786 |
| Pin Plates and Collet Sets (EEWB3-1A and EEWB3-4) | 1-800-242-6687 |
| TPMS3 Technical Support | 1-888-621-8767 |
| MIG/TIG Welders and Plasma Cutters | 1-800-ABC-WELD |
| Heavy Duty Transmission Fluid Exchangers (EETF303B, EETF304B, EETF306A) | 1-800-303-5874 |
| BrakeKare™ Brake Flush System (EEBR311A) | 1-800-393-1272 ext. 230 |
| TransKare™ 1 ATF Exchanger (EETF305A) | 1-877-906-1395, press 3 for technical support |
| FuelKare™ Fuel Service System (EEFS305A) | 1-877-906-1395, press 3 for technical support |
| Fuel System Decarbonizer (EEFS505A) | 1-877-776-8486 |
| Blast Cabinet (All YA cabinets) | 1-800-253-3661 |
| Solvent Based Parts Washers (all PBC and PBD washers) | 1-800-253-3661 |
| Gauge Sets (Compression, Fuel Injection and Pressure | 1-855-779-8880 |

## Snap-on General Contacts – International

**Snap-on Australia Customer Service**
1-800-810 581
www.snapontools.com.au

**Snap-on Japan**
www.snapon.co.jp

**Snap-on Germany**
www.snapon.de

**Snap-on International**
www.snapon.com/international

**Snap-on Italy**
www.snapon.it

**Snap-on Mexico**
www.snapon.com.mx

**Snap-on Netherlands/Belgium**
www.snap-on.eu

**Snap-on UK**
www.snapon.co.uk

**Snap-on UK Customer Service – Internet Orders**
01536 413877
E-mail: uksales@snapon.com

## Government and Industrial

**Snap-on Industrial**
www.snapon.com/industrial

**Snap-on Industrial Customer Service, US**
1-877-740-1900
E-mail: order.crystallake.rcsc@snapon.com

**Snap-on US Government Customer Service**
1-888-418-5600
Fax: 1-888-418-5900
E-mail: contract.sales@snapon.com

**Canada Industrial and Government Customer Service**
1-888-451-8665
Fax: 1-888-447-8665
E-mail: canadacustomercare@snapon.com
Francais: canadaservicealaclientele@snapon.com

**Snap-on Industrial Europe**
www.snaponindustrial.eu

**Snap-on Industrial UK**
www.snapon.com/uk/industrial
Industrial and Government Customer Service
01536 413904
E-mail: industrialuk@snapon.com

**Industrial Customer Service Australia**
1800 811 480
E-mail: sota.ind.customerservice@snapon.com

**Snap-on Equipment**
www.snaponequipment.com
Equipment Service – North America
1-800-225-5786

# SNAP-ON TOOLS INTERNATIONAL LLC

2801 80th Street
Kenosha, WI 53143
**Telephone:** For general inquiries 262-656-5200 (For export inquiries from within the USA) 1-262-656-5288 or 1-262-656-5119
**Fax:** 1-262-656-1403 / 1-262-656-0837 **e-mail:** intl.sales@snapon.com

**European Division Office – North**
Ylinenkatu 39
23500 Uusikaupunki, Finland
Telephone: 358-400-536351
Fax: 358-401-536351
e-mail: european.division.north@snapon.com

**European Division Office – South**
2801 80th Street
Kenosha, WI 53143
Telephone: 1-262-656-5288
Fax: 1-262-656-1403
e-mail: european.division.south@snapon.com

**Asia/Pacific Division**
25 Tagore Lane #01-02
Singapore 787602
Telephone: +(65) 6459-2712
Fax: +(65) 6459-1520
e-mail: asia.pacific.division@snapon.com
Internet: http://snapon.com.sg

**Latin America Caribbean Division**
9500 South Dadeland Blvd.
Suite 706
Miami Fl 33156
Telephone: +1 305 670 1906
Fax: 1-305-670-1908
e-mail: latinamerica.caribbean@snapon.com

**South East Europe – Middle East/Africa (SEEMEA) Division**
P.O. Box 65 033
Athens 15410, Greece
Telephone: +30 210 6724828
Fax: +30 210 6725754
e-mail1: seemead@snapon.com
e-mail2: south.east.europe.mea.division@snapon.com

---

**United Kingdom:**
**Snap-on Tools – Head Office and Distribution Centre**
23 Telford Way
Kettering
Northants NN16 8SN, England
Telephone: 01536 413800
Fax: 01536 413900

**Industrial – Government and Education, Sales Division – Snap-on Tools**
Industrial Business Centre
38A Telford Way, Kettering
Northants NN16 8UN, England
Telephone: +44 (0)1536 413904
Fax: 01536 413874
e-mail: industrialuk@snapon.com

**U.K. Repair Centre**
Tools Ltd.
Telford Way,
Kettering
Northants NN16 8UN, England
Telephone: 01536 413800
Fax: 01536 410740

---

**Snap-onTools (Australia) Pty LTD.**
National Distribution Centre
80 Holbeche Road
P.O. Box 6077
Blacktown, NSW 2148 Australia
Telephone: (61) 2-9837-9100
Fax: (61) 2-9837-9199
e-mail: sota.webmasters@snapon.com

**Snap-on do Brasil Comércio e Industria Ltda.**
Rua Juscelino Kubitscheck de Oliveira, 470
Santa Bárbara d'Oeste, SP
13456-401 Brazil
Telephone: +55 (19) 2108 1000
Fax: +55 (19) 2108 1040
e-mail: IndustrialBrazil@snapon.com
www.snapon.com.br

**Snap-on Tools B.V. – Netherlands**
Schepenbergweg 34
1105 AT Amsterdam
The Netherlands
Telephone: +31 (0) 20 5682666
Fax: +31 (0) 20-5682670
e-mail: benelux.info@snapon.com
Internet: www.snapon.com/nl

**Snap-on Industrial Belgium & Luxembourg Division**
SNA Germany GmbH
Willettstrasse 10
40822 Mettmann
Germany
Telephone: +32-(0)14-231967
Fax: +32-(0)14-232627
e-mail: industrial.be@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Dealer Group Germany Division**
Geschaftsbereich Snap-on Tools
SNA Germany GmbH
Gewerbering 1
09337 Hohenstein-Ernsttahl / OT Wustenbrand
Germany
Telephone: +49-(0)3723-66820-12/13
Fax: +49-(0)3723-66820-14
e-mail: decustomerservices@snapon.com
Internet: www.snapon.de

**Snap-on Industrial Belgium & Luxembourg Division**
SNA Germany GmbH
Auf dem Hüls 5
40822 Mettmann
Germany
Telephone: +32-(0)14-231967
Fax: +32-(0)14-232627
e-mail: industrial.be@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Industrial International Division**
SNA Germany GmbH
Willettstraße 10
40822 Mettmann
Germany
Telephone: +33-(0) 3 88 65 61 50
Fax: +33-(0) 3 88 65 61 51
e-mail: snapon-intl.europe@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Industrial Germany Division**
SNA Germany GmbH
Willettstraße 10
40822 Mettmann
Germany
Telephone: +49-(0)2104-950-911
Fax: +49-(0)2104-950-999
e-mail: Indus.germany@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Industrial USA Government Business Unit**
SNA Germany GmbH
Willettstraße 10
40822 Mettmann
Germany
Telephone: +49-(0)2104-950-928
Fax: +49-(0)2104-950-955
e-mail: Indus.germany@snapon.com

**Snap-on Industrial Netherlands Division**
SNA Germany GmbH
Willettstraße 10
40822 Mettmann
Germany
Telephone: +31-(0)880 104000
Fax: +31-(0)880 104010
e-mail: industrial.nl@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Tools Italia S.r.l.**
via Bizet, 43/45
20092 Cinisello Balsamo (MI), Italy
Telephone: +39 02 66 04 53 70
Fax: +39 02 61 29 78 15
e-mail: indus.italia@snapon.com
Internet: www.snapon.com/eu/industrial

**Snap-on Tools Japan, K.K.**
Snap-on, Bahco
2-1-6 Shinkiba, Koto-ku,
Tokyo, 136-0082 JAPAN
Telephone: +81-3-5534-1280
Fax: 81-3-5534-1284
e-mail: SOJ-INFO@snapon.co.jp
Industrial: +81-3-5534-1281
OEM/National Accounts: +81-3-5534-1300
Bahco/Distribution: +81-3-5534-1301

# SNAP-ON TOOLS INTERNATIONAL LLC

2801 80th Street
Kenosha, WI 53143
**Telephone:** For general inquiries 262-656-5200 (For export inquiries from within the USA) 1-262-656-5288 or 1-262-656-5119
**Fax:** 1-262-656-1403 / 1-262-656-0837 **e-mail:** intl.sales@snapon.com

**Snap-on Tools Singapore Pte. Ltd.**
25 Tagore Lane #01-01
Singapore 787602
Telephone: +(65) 6451-5570
Fax: +(65) 6451-5574
e-mail: esales.sg@snapon.com
Internet: http://snapon.com.sg

**Snap-on Tools Singapore PTE. Ltd**
**Malaysia Branch**
B-6-10, Street Mall, One South
Jalan OS, Taman Serdang Perdana
43300 Seri Kembangan
Telephone: (60-3) 8957 1938
Fax: (60-3) 8957 2839

**Snap-on Tools Singapore PTE. Ltd**
**Philippines Branch**
Unit 801 Prime Land, Market St.
Madrigal Business Park, Ayala Alabang
Muntinlupa City, 1781 Philippines
Telephone: (63-2) 843 7935
Fax: (63-2) 843 7730

**Snap-on Tools Singapore PTE. Ltd**
**Indonesia Branch**
Graha Pratama Building
14th Floor
Jl.M.T Haryono Kav. 15
Jakarta 12810, Indonesia
Telephone: (62-21) 8370-9611
Fax: (62-21) 8370-9612

**Snap-on Tools Singapore PTE. Ltd**
**Thailand Branch**
Talomsin Bulding
924 Rama 3 Road
Bangpongpang Yannawa
Bangkok 10120, Thailand
Telephone: (66) 2294-9660
Fax: (66) 2294-9665

**Snap-on Trading (Shanghai) Co., Ltd.**
Unit 2001-2005, Ascendas Cross Tower
318 Fuzhou Road, Shanghai 200001
P. R. China
Telephone: +(8621) 6391-2388
Fax: +(8621) 6391-2382
e-mail: esales.cn@snapon.com
Internet: www.snapon.com.cn

**Snap-on Trading (Shanghai) Co., Ltd.**
**Beijing Branch**
Room 517 Tower B, Grand Pacific Building
8A Guanghua Road
Beijing 100026
P.R. China
Telephone: +(8610) 6581-8838
Fax: +(8610) 6581-6681
e-mail: esales.cn@snapon.com
Internet: www.snapon.com.cn

**Snap-on Tools Hong Kong Ltd.**
Unit 2010, 20/F., Laford Centre,
838 Lai Chi Kok Road,
Cheung Sha Wan, Kowloon
Hong Kong
Telephone: +(852) 2370-3700
Fax: +(852) 2370-3400
e-mail: esales.hk@snapon.com
Internet: www.snapon.com.hk

**Snap-on Tools Singapore Pte. Ltd.**
**Taiwan Branch**
Address: 3F-4, No.9, Wuquan 1st Road,
New Taipei Industrial Park,
Xinzhuang District 24892
New Taipei City, Taiwan (R.O.C.)
Telephone: +(886) (2)-2298 9789
Fax: +(886) (2)-2298 2288
e-mail: eric.chen@snapon.com
e-mail: esales.tw@snapon.com

**Snap-on Tools Korea Ltd.**
#505, Bldg 301, Bucheon Techno Park Block 3
365 Samjung-dong, OhJung-Gu
Bucheon City, GyeongGi-Do 421-809
Korea
Telephone: +(8232) 326-7310
Fax: +(8232) 326-7312
e-mail: esales.kr@snapon.com

**Snap-on Tools Private Limited**
**Head Office and North Region Office**
6/2 Begumpur Khatola, 39 Milestone
NH-8
Gurgaon - 122 001, Haryana
India
Telephone: +(91-124) 4599700
Fax: +(91-124) 4056866
e-mail: esales.in@snapon.com

**Snap-on Tools Private Limited**
**Western Region Office (Mumbai)**
Dilkap Chambers 404/406, 4th Floor
Fun Republic Lane, Nr. Bansali Engineering
Veera Desai Road, Andheri West
Mumbai, India
Telephone: +(91-22) 67020909/67020400
Fax: +(91-22) 2673-0571
e-mail: esales.in@snapon.com

**Snap-on Tools Private Limited**
**Southern Region Office (Bangalore)**
B-327, 1st B" Block AECS Layout
Opp. To Brooks Field, Kundalahalli
Bangalore - 560037
India
Telephone: + (91-80) 6537-5197/98
Fax: +(91-80) 2854-0618
e-mail: esales.in@snapon.com

**Snap-on/Sun de Mexico S.A. de C.V.**
Avenida Gustavo Baz 166-B
Colonia la Escuela
Tlalnepantla, Estado de Mexico
CP 54090 Mexico
Telephone: +(52) 55 50 10-3000
Fax: +(52) 55 5010-3025 or 5010-3026
e-mail: info@snapon.com.mx

**Snap-on Tools Puerto Rico**
9500 South Dadeland Blvd.
Tower South Office #601
Miami, FL 33156
Telephone: 1-305-670-1906
Fax: 1-305-670-1908
e-mail: latin.america.caribbean.division@snapon.com

---

**Snap-on South Africa (Pty) Ltd.**
6 Hippo Park
12 Kubu Avenue
Riverhorse Valley
Durban 4051
South Africa
Telephone: +27 861 762 766
Fax: +27 861 762 767
e-mail: enquiries@snapon.co.za
Internet: www.snapon.co.za

---

**Snap-on Canada – Industrial Sales Division**
Snap-on Tools of Canada Ltd.
195A Harry Walker Parkway North
Newmarket, ON
L3Y 7B3 Canada
Toll Free: 1-888-451-8665
Toll Free Fax: 1-888-447-8665
email: Canadaindustrial@snapon.com
Internet: www.snapon.com/canada

**Calgary Velocity & National Repair Centre**
7403-48th Street S.E.
Calgary, Alberta T2C 4H6
Telephone: 1-403-720-0525
Toll Free: 1-800-263-8665
Fax: 1-403-720-0550
Toll Free Fax: 1-888-638-1111

**Snap-on Canada – Industrial Sales Division**
Snap-on Tools of Canada Ltd.
16775 Yonge Street Suite 300
Newmarket, ON
L3Y 8J4 Canada
Toll Free: 1-888-451-8665
Toll Free Fax: 1-888-447-8665
email: CanadaIndustrial@snapon.com
Internet: www.snapon.com/canada

## Warranty for Products

Snap-on Logistics Company, or its assigns, ("Snap-on") warrants to customers who purchase products from authorized Snap-on distribution channels that Snap-on® brand products and Blue-Point® brand products will be free from defects in workmanship and materials for a duration described in each product's warranty code. The warranty duration depends upon the nature of the product. Prior to a product purchase, or if the product information for purchased product does not include a warranty code with the applicable duration, customer can obtain the product warranty code and warranty duration from a Snap-on franchisee or representative. If customer is not serviced by a Snap-on franchisee or representative, then the product warranty code and warranty duration may be obtained by contacting the Snap-on Customer Care Center via telephone at 1-877-762-7664 or e-mail ncccsupport@snapon.com. Outside North America, contact the closest sales office shown on pages 645–646. Consumable products are warranted, at the time of sale, only against defects in workmanship or materials that prevent their use. Consumable products are goods reasonably expected to be used up or damaged during use, including but not limited to drill bits, saw blades, grinding discs, sanding discs, knife blades, files, O2 sensors and batteries. To the extent permitted by law, this warranty only extends to the original customer and cannot be transferred or assigned.

During the applicable duration of the warranty, at its option, Snap-on will repair or replace its products which fail to give satisfactory service due to defective workmanship or materials, or provide a refund by repaying or crediting customer with an amount equal to the purchase price of such products. Repair, replacement or refund shall be at the election and expense of Snap-on, and is customer's exclusive remedy in place of all other rights and remedies. Any products or parts replaced or for which Snap-on has provided a refund are the property of Snap-on and will not be returned.

To obtain warranty service, return products to a Snap-on franchisee or representative.

For customers not serviced by a Snap-on franchisee or representative, contact the Snap-on Customer Care Center via telephone at 1-877-762-7664 or e-mail ncccsupport@snapon.com. Outside North America, contact the closest sales office shown on pages 645–646. The following information will be required with customer's warranty request: (1) date and proof of purchase, (2) where customer purchased the product, (3) full name, (4) shipping address, (5) phone number, (6) e-mail address, and (7) item number(s) or approximate weight of return package. Warranty requests that do not include all the required information will not be processed. Once the warranty request is validated, the customer will be provided a RGA number and will be sent a shipping label either electronically through e-mail or through the US mail, and must ship the product to Snap-on. Upon receipt of the product, the warranty claim will be reviewed and the product will be inspected. If the warranty request is found to be valid, the product will be repaired and returned to the customer or a replacement product or refund will be shipped to the customer. If the warranty claim is found to be invalid, the original product will be returned to the customer. By repairing or replacing a product, or providing a refund, Snap-on does not waive a claim that a product nevertheless has been subject to abnormal use.

If customer chooses not to (1) use a carrier that offers tracking or (2) insure or declare the full value of the product, customer will be responsible for any loss or damage to the product during shipping. Replacement or refund will not be issued unless a valid proof of delivery can be provided.

In addition to any limitations outlined in warranty codes provided with the product, *Snap-on* does NOT provide any warranty for (1) products labeled other than *Snap-on* or *Blue-Point* or (2) products subjected to "abnormal use". Products that are not labeled *Snap-on* or *Blue-Point* are subject to the warranty provided by the manufacturers of those products and *Snap-on* will pass along any such warranties, to the extent that it is permitted to do so, but it is not responsible for warranty services or processing warranty claims. "Abnormal use" includes misuse, accident, modification, unreasonable use, abuse, neglect, lack of maintenance, use in product related service, or use after the product is significantly worn. Abnormal use of tool storage units also includes, without limitation, situations when a unit is pulled using a mechanical vehicle, rolled over large drops, used in a highly corrosive environment, used as a step stool, modified with non-*Snap-on* parts, overloaded or modified in any way.

THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESS, IMPLIED OR COLLATERAL, BY OPERATION OF LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Descriptions of product contained in this catalog are for the sole purpose of identifying product and shall not be construed as an express warranty.

LIMITATION OF LIABILITY. SNAP-ON AND ITS AFFILIATED COMPANIES AND THIRD PARTY SUPPLIERS SHALL NOT BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL LOSSES, COSTS OR DAMAGES INCURRED BY CUSTOMER OR OTHERS, INCLUDING PERSONAL INJURY OR DEATH, DIRECTLY OR INDIRECTLY ARISING FROM THE SALE, HANDLING OR USE OF THE PRODUCTS, OR FROM ANY OTHER CAUSE WITH RESPECT TO THE PRODUCTS OR THE FOREGOING WARRANTY, WHETHER SUCH CLAIM IS BASED UPON BREACH OF CONTRACT, BREACH OF WARRANTY, STRICT LIABILITY IN TORT, NEGLIGENCE OR ANY OTHER LEGAL THEORY (INCLUDING WITHOUT LIMITATION, LOST PROFITS, REVENUES, ANTICIPATED SALES, BUSINESS OPPORTUNITIES, GOODWILL, OR INTERRUPTION OF BUSINESS OR OTHER INJURY OR DAMAGE).

To the extent allowed by applicable law, this warranty and all rights and obligations hereunder shall be governed by and construed in accordance with the laws of the State of Wisconsin, without reference to principles of conflicts of laws. The rights and obligations of the parties hereunder shall not be governed by the 1980 U.N. Convention on Contracts for the International Sale of Goods.

All parts of this warranty apply to the extent permitted by law and unless restricted or prohibited by law. You may have greater rights pursuant to the legislation of your jurisdiction. Any provision which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability but shall not affect the enforceability of such provision in any other jurisdiction.

**Snap-on Incorporated**
**2801 80th Street**
**Kenosha, Wisconsin 53143**

## Your Safety Is Important To Us

Personal safety and the proper use of tools and equipment are reflected in safety statements found throughout this catalog. More safety precautions for these products are detailed on pages W1 to W4.

Using the right tool and using it properly for the job it is designed for are both very important. It will help to safeguard the user as well as the tools and equipment.

## Important Notice

We reserve the right to make changes in design or construction at any time without incurring any obligation in incorporating such changes in tools or equipment previously sold. We also reserve the right to discontinue the manufacture or offering for sale through Snap-on franchisee or representatives of any tools or equipment at such time as we consider necessary. We cannot accept the responsibility for the results of using tools which have been abused or badly worn, such as punches and chisels mushroomed by hammer blows, or the incorrect use of tools, or tools repaired by others. This catalog is distributed by Snap-on Incorporated globally and not all items may be available in each country. For detailed information about the availability and pricing, please contact your local Snap-on representative.

## Tool Dimension Accuracy

Dimensions shown in this catalog have been rounded to the nearest fractional size or nearest tenth millimeter and are not exact product specifications. Ask your Snap-on representative for product specifications if required.

## ISO 9001 Certified

The Snap-on Quality Management System, including merchandised product procurement, is certified to ISO 9001

## ISO 14001/OHSAS 18001 Certified

Snap-on facilities are guided by the Snap-on Environmental, Health and Safety Management System, which is certified to ISO 14001 and OHSAS 18001.

These certifications demonstrate that the Snap-on Quality, Environmental, Health and Safety Management Systems conform to internationally recognized quality standards as verified by independent audits.

## Trademarks

The following are trademarks, some registered in the United States and other countries, of Snap-on Incorporated:
Snap-on®, Blue-Point®, BrakeKare™, Crud Thug®, Docker Locker®, D-TAC™, Dual 80®, ECO™ PLUS, Electrotork®, ETHOS®, Fast-Track®, Flank Drive®, Flank Drive® Plus, FuelKare™, InPulse™, Instinct®, ISO-Ride® and design, KOOL KARE™ PLUS, Lock'n Roll®, Loxocket®, MicroVAT™, Mitchell1®, MODIS™, PowerBank™, PowerCab™, PowerEdge™, PowerFlex™, PowerHouse™, PowerTop™, Scanner™, ShopKey®, ShopKey Live™, Slots-N-Dots™, Smartsmoke®, Snap-on Racing® and logo, SOLUS PRO™, SOLUS™, SOLUS Ultra®, Talon Grip™, TechAngle®, TechLog™, Techmemory™, Techwrench®, TORQLOG®, TORQOMETER®, Torque Tester™, Training Solutions®, TransDrive™ logo, Trans-Drive™, TransKare™, Vantage PRO™, Versameter®, Versatest™, Versatorq®, Versatorq1, VERUS®, THEBIS™.

Listed below are some other trademarks which appear throughout this catalog. They are the sole property of the owners.
4Runner®, Accord®, ACR®, Aerostar®, ARO®, Astro®, Avalanche®, Beetle®, Bonneville®, Boxster®, Bravada®, Cadillac®, Camaro®, Camry®, Caprice®, Caravan®, Cayenne®, Cherokee®, Civic®, Corolla®, Corvette®, Crossfire®, Crown Victoria®, DeVille®, Durango®, Element®, Envoy®, EOS®, Escalade®, Escort®, Fiesta®, Grand Am®, Grand Cherokee®, Grand Prix®, HHR®, Highlander®, Hummer®, Intrepid®, ION®, Jetta®, Latch-on®, Magnum®, Malibu®, Maxima®, Monte Carlo®, Mustang®, Odyssey®, Panamera®, Passat®, Phillips®, Prelude®, Rabbit®, Ram®, Silverado®, Solstice®, Suburban®, Tahoe®, Tempo®, Thunderbird®, Torx®, Velcro®, Vibe®, Windstar®.
All other marks are trademarks of their respective holders.

## Showing Millimeter Sizes, Fractional and Decimal Inch Sizes, and Drill Number Sizes

Note: To convert from inches to millimeters, multiply by 25.4; to convert from millimeters to inches, multiply by 0.03937

| M | DE | F | DN | M | DE | F | DN | M | DE | F | DN | M | DE | F | DN | M | DE | F | M | DE | F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.10 | 0.0039 | — | — | 1.85 | 0.0728 | — | — | — | 0.1660 | — | 19 | 7.25 | 0.2854 | — | — | 13.49 | 0.5313 | 17/32 | 35.00 | 1.3780 | — |
| 0.15 | 0.0059 | — | — | — | 0.0730 | — | 49 | 4.25 | 0.1673 | — | — | 7.30 | 0.2874 | — | — | 13.50 | 0.5315 | — | 36.00 | 1.4173 | — |
| 0.20 | 0.0079 | — | — | 1.90 | 0.0748 | — | — | 4.30 | 0.1693 | — | — | — | 0.2900 | — | L | 13.89 | 0.5469 | 35/64 | 36.51 | 1.4375 | 1 7/16 |
| 0.25 | 0.0098 | — | — | — | 0.0760 | — | 48 | — | 0.1695 | — | 18 | 7.40 | 0.2913 | — | — | 14.00 | 0.5512 | — | 37.00 | 1.4567 | — |
| 0.30 | 0.0118 | — | — | 1.95 | 0.0768 | — | — | 4.37 | 0.1719 | 11/64 | — | — | 0.2950 | — | M | 14.29 | 0.5625 | 9/16 | 38.00 | 1.4961 | — |
| — | 0.0135 | — | 80 | 1.98 | 0.0781 | 5/64 | — | — | 0.1730 | — | 17 | 7.50 | 0.2953 | — | — | 14.50 | 0.5709 | — | 38.10 | 1.5000 | 1 1/2 |
| 0.35 | 0.0138 | — | — | — | 0.0785 | — | 47 | 4.40 | 0.1732 | — | — | 7.54 | 0.2969 | 19/64 | — | 14.68 | 0.5781 | 37/64 | 39.00 | 1.5354 | — |
| — | 0.0145 | — | 79 | 2.00 | 0.0787 | — | — | — | 0.1770 | — | 16 | 7.60 | 0.2992 | — | — | 15.00 | 0.5906 | — | 39.69 | 1.5625 | 1 9/16 |
| 0.40 | 0.0156 | 1/64 | — | 2.05 | 0.0807 | — | — | 4.50 | 0.1772 | — | — | — | 0.3020 | — | N | 15.08 | 0.5938 | 19/32 | 40.00 | 1.5748 | — |
| 0.40 | 0.0157 | — | — | — | 0.0810 | — | 46 | — | 0.1800 | — | 15 | 7.70 | 0.3031 | — | — | 15.48 | 0.6094 | 39/64 | 41.00 | 1.6142 | — |
| — | 0.0160 | — | 78 | — | 0.0820 | — | 45 | 4.60 | 0.1811 | — | — | 7.75 | 0.3051 | — | — | 15.50 | 0.6102 | — | 41.28 | 1.6250 | 1 5/8 |
| 0.45 | 0.0177 | — | — | 2.10 | 0.0827 | — | — | — | 0.1820 | — | 14 | 7.80 | 0.3071 | — | — | 15.88 | 0.6250 | 5/8 | 42.00 | 1.6535 | — |
| — | 0.0180 | — | 77 | 2.15 | 0.0846 | — | — | 4.70 | 0.1850 | — | 13 | 7.90 | 0.3110 | — | — | 16.00 | 0.6299 | — | 42.86 | 1.6875 | 1 11/16 |
| 0.50 | 0.0197 | — | — | — | 0.0860 | — | 44 | 4.75 | 0.1870 | — | — | 7.94 | 0.3125 | 5/16 | — | 16.27 | 0.6406 | 41/64 | 43.00 | 1.6929 | — |
| — | 0.0200 | — | 76 | 2.20 | 0.0866 | — | — | 4.76 | 0.1875 | 3/16 | — | 8.00 | 0.3150 | — | — | 16.50 | 0.6496 | — | 44.00 | 1.7323 | — |
| — | 0.0210 | — | 75 | 2.25 | 0.0886 | — | — | 4.80 | 0.1890 | — | 12 | — | 0.3160 | — | O | 16.67 | 0.6563 | 21/32 | 44.45 | 1.7500 | 1 3/4 |
| 0.55 | 0.0217 | — | — | — | 0.0890 | — | 43 | — | 0.1910 | — | 11 | 8.10 | 0.3189 | — | — | 17.00 | 0.6693 | — | 45.00 | 1.7717 | — |
| — | 0.0225 | — | 74 | 2.30 | 0.0906 | — | — | 4.90 | 0.1929 | — | — | 8.20 | 0.3228 | — | — | 17.07 | 0.6719 | 43/64 | 46.00 | 1.8110 | — |
| 0.60 | 0.0236 | — | — | 2.35 | 0.0925 | — | — | — | 0.1935 | — | 10 | — | 0.3230 | — | P | 17.46 | 0.6875 | 11/16 | 46.04 | 1.8125 | 1 13/16 |
| — | 0.0240 | — | 73 | — | 0.0935 | — | 42 | — | 0.1960 | — | 9 | 8.25 | 0.3248 | — | — | 17.50 | 0.6890 | — | 47.00 | 1.8504 | — |
| — | 0.0250 | — | 72 | 2.38 | 0.0938 | 3/32 | — | 5.00 | 0.1969 | — | — | 8.30 | 0.3268 | — | — | 17.86 | 0.7031 | 45/64 | 47.63 | 1.8750 | 1 7/8 |
| 0.65 | 0.0256 | — | — | 2.40 | 0.0945 | — | — | — | 0.1990 | — | 8 | 8.33 | 0.3281 | 21/64 | — | 18.00 | 0.7087 | — | 48.00 | 1.8898 | — |
| — | 0.0260 | — | 71 | — | 0.0960 | — | 41 | 5.10 | 0.2008 | — | — | 8.40 | 0.3307 | — | — | 18.26 | 0.7188 | 23/32 | 49.00 | 1.9291 | — |
| 0.70 | 0.0276 | — | — | 2.45 | 0.0965 | — | — | — | 0.2010 | — | 7 | — | 0.3320 | — | Q | 18.50 | 0.7283 | — | 49.21 | 1.9375 | 1 15/16 |
| — | 0.0280 | — | 70 | — | 0.0980 | — | 40 | 5.16 | 0.2031 | 13/64 | — | 8.50 | 0.3346 | — | — | 18.65 | 0.7344 | 47/64 | 50.00 | 1.9685 | — |
| — | 0.0292 | — | 69 | 2.50 | 0.0984 | — | — | — | 0.2040 | — | 6 | 8.60 | 0.3386 | — | — | 19.00 | 0.7480 | — | 50.80 | 2.0000 | 2 |
| 0.75 | 0.0295 | — | — | — | 0.0995 | — | 39 | 5.20 | 0.2047 | — | — | — | 0.3390 | — | R | 19.05 | 0.7500 | 3/4 | 51.00 | 2.0079 | — |
| — | 0.0310 | — | 68 | — | 0.1015 | — | 38 | — | 0.2055 | — | 5 | 8.70 | 0.3425 | — | — | 19.45 | 0.7656 | 49/64 | 52.00 | 2.0472 | — |
| 0.79 | 0.0313 | 1/32 | — | 2.60 | 0.1024 | — | — | 5.25 | 0.2067 | — | — | 8.73 | 0.3438 | 11/32 | — | 19.50 | 0.7677 | — | 52.39 | 2.0625 | 2 1/16 |
| 0.80 | 0.0315 | — | — | — | 0.1040 | — | 37 | 5.30 | 0.2087 | — | — | 8.75 | 0.3445 | — | — | 19.84 | 0.7813 | 25/32 | 53.00 | 2.0866 | — |
| — | 0.0320 | — | 67 | 2.70 | 0.1063 | — | — | — | 0.2090 | — | 4 | 8.80 | 0.3465 | — | — | 20.00 | 0.7874 | — | 53.98 | 2.1250 | 2 1/8 |
| — | 0.0330 | — | 66 | — | 0.1065 | — | 36 | 5.40 | 0.2126 | — | — | — | 0.3480 | — | S | 20.24 | 0.7969 | 51/64 | 54.00 | 2.1260 | — |
| 0.85 | 0.0335 | — | — | 2.75 | 0.1083 | — | — | — | 0.2130 | — | 3 | 8.90 | 0.3504 | — | — | 20.50 | 0.8071 | — | 55.00 | 2.1654 | — |
| — | 0.0350 | — | 65 | 2.78 | 0.1094 | 7/64 | — | 5.50 | 0.2165 | — | — | 9.00 | 0.3543 | — | — | 20.64 | 0.8125 | 13/16 | 55.56 | 2.1875 | 2 3/16 |
| 0.90 | 0.0354 | — | — | — | 0.1100 | — | 35 | 5.56 | 0.2188 | 7/32 | — | — | 0.3580 | — | T | 21.00 | 0.8268 | — | 56.00 | 2.2047 | — |
| — | 0.0360 | — | 64 | 2.80 | 0.1102 | — | — | 5.60 | 0.2205 | — | — | 9.10 | 0.3583 | — | — | 21.03 | 0.8281 | 53/64 | 57.00 | 2.2441 | — |
| — | 0.0370 | — | 63 | — | 0.1110 | — | 34 | — | 0.2210 | — | 2 | 9.13 | 0.3594 | 23/64 | — | 21.43 | 0.8438 | 27/32 | 57.15 | 2.2500 | 2 1/4 |
| 0.95 | 0.0374 | — | — | — | 0.1130 | — | 33 | 5.70 | 0.2244 | — | — | 9.20 | 0.3622 | — | — | 21.50 | 0.8465 | — | 58.00 | 2.2835 | — |
| — | 0.0380 | — | 62 | 2.90 | 0.1142 | — | — | 5.75 | 0.2264 | — | — | 9.25 | 0.3642 | — | — | 21.83 | 0.8594 | 55/64 | 58.74 | 2.3125 | 2 5/16 |
| — | 0.0390 | — | 61 | — | 0.1160 | — | 32 | — | 0.2280 | — | 1 | 9.30 | 0.3661 | — | — | 22.00 | 0.8661 | — | 59.00 | 2.3228 | — |
| 1.00 | 0.0394 | — | — | 3.00 | 0.1181 | — | — | 5.80 | 0.2283 | — | — | — | 0.3680 | — | U | 22.23 | 0.8750 | 7/8 | 60.00 | 2.3622 | — |
| — | 0.0400 | — | 60 | — | 0.1200 | — | 31 | 5.90 | 0.2323 | — | — | 9.40 | 0.3701 | — | — | 22.50 | 0.8858 | — | 60.33 | 2.3750 | 2 3/8 |
| — | 0.0410 | — | 59 | 3.10 | 0.1220 | — | — | — | 0.2340 | — | A | 9.50 | 0.3740 | — | — | 22.62 | 0.8906 | 57/64 | 61.00 | 2.4016 | — |
| 1.05 | 0.0413 | — | — | 3.18 | 0.1250 | 1/8 | — | 5.95 | 0.2344 | 15/64 | — | 9.53 | 0.3750 | 3/8 | — | 23.00 | 0.9055 | — | 61.91 | 2.4375 | 2 7/16 |
| — | 0.0420 | — | 58 | 3.20 | 0.1260 | — | — | 6.00 | 0.2362 | — | — | — | 0.3770 | — | V | 23.02 | 0.9063 | 29/32 | 62.00 | 2.4409 | — |
| — | 0.0430 | — | 57 | 3.25 | 0.1280 | — | — | — | 0.2380 | — | B | 9.60 | 0.3780 | — | — | 23.42 | 0.9219 | 59/64 | 63.00 | 2.4803 | — |
| 1.10 | 0.0433 | — | — | — | 0.1285 | — | 30 | 6.10 | 0.2402 | — | — | 9.70 | 0.3819 | — | — | 23.50 | 0.9252 | — | 63.50 | 2.5000 | 2 1/2 |
| 1.15 | 0.0453 | — | — | 3.30 | 0.1299 | — | — | — | 0.2420 | — | C | 9.75 | 0.3838 | — | — | 23.81 | 0.9375 | 15/16 | 64.00 | 2.5197 | — |
| — | 0.0465 | — | 56 | 3.40 | 0.1339 | — | — | 6.20 | 0.2441 | — | — | 9.80 | 0.3858 | — | — | 24.00 | 0.9449 | — | 65.00 | 2.5591 | — |
| 1.19 | 0.0469 | 3/64 | — | — | 0.1360 | — | 29 | 6.25 | 0.2460 | — | D | — | 0.3860 | — | W | 24.21 | 0.9531 | 61/64 | 65.09 | 2.5625 | 2 9/16 |
| 1.20 | 0.0472 | — | — | 3.50 | 0.1378 | — | — | 6.30 | 0.2480 | — | — | 9.90 | 0.3898 | — | — | 24.50 | 0.9646 | — | 66.00 | 2.5984 | — |
| 1.25 | 0.0492 | — | — | — | 0.1405 | — | 28 | 6.35 | 0.2500 | 1/4 | E | 9.92 | 0.3906 | 25/64 | — | 24.61 | 0.9688 | 31/32 | 66.68 | 2.6250 | 2 5/8 |
| 1.30 | 0.0512 | — | — | 3.57 | 0.1406 | 9/64 | — | 6.40 | 0.2520 | — | — | 10.00 | 0.3937 | — | — | 25.00 | 0.9843 | — | 67.00 | 2.6378 | — |
| — | 0.0520 | — | 55 | 3.60 | 0.1417 | — | — | 6.50 | 0.2559 | — | — | — | 0.3970 | — | X | 25.00 | 0.9844 | 63/64 | 68.00 | 2.6772 | — |
| 1.35 | 0.0531 | — | — | — | 0.1440 | — | 27 | — | 0.2570 | — | F | — | 0.4040 | — | Y | 25.40 | 1.0000 | 1 | 68.26 | 2.6875 | 2 11/16 |
| — | 0.0550 | — | 54 | 3.70 | 0.1457 | — | — | 6.60 | 0.2598 | — | — | 10.32 | 0.4063 | 13/32 | — | 26.00 | 1.0236 | — | 69.00 | 2.7165 | — |
| 1.40 | 0.0551 | — | — | — | 0.1470 | — | 26 | — | 0.2610 | — | G | — | 0.4130 | — | Z | 26.99 | 1.0625 | 1 1/16 | 69.85 | 2.7500 | 2 3/4 |
| 1.45 | 0.0571 | — | — | 3.75 | 0.1476 | — | — | 6.70 | 0.2638 | — | — | 10.50 | 0.4134 | — | — | 27.00 | 1.0630 | — | 70.00 | 2.7559 | — |
| 1.50 | 0.0591 | — | — | — | 0.1495 | — | 25 | 6.75 | 0.2656 | 17/64 | — | 10.72 | 0.4219 | 27/64 | — | 28.00 | 1.1024 | — | 71.00 | 2.7953 | — |
| — | 0.0595 | — | 53 | 3.80 | 0.1496 | — | — | 6.75 | 0.2657 | — | — | 11.00 | 0.4331 | — | — | 28.58 | 1.1250 | 1 1/8 | 71.44 | 2.8125 | 2 13/16 |
| 1.55 | 0.0610 | — | — | — | 0.1520 | — | 24 | — | 0.2660 | — | H | 11.11 | 0.4375 | 7/16 | — | 29.00 | 1.1417 | — | 72.00 | 2.8346 | — |
| 1.59 | 0.0625 | 1/16 | — | 3.90 | 0.1535 | — | — | 6.80 | 0.2677 | — | — | 11.50 | 0.4528 | — | — | 30.00 | 1.1811 | — | 73.00 | 2.8740 | — |
| 1.60 | 0.0630 | — | — | — | 0.1540 | — | 23 | 6.90 | 0.2717 | — | — | 11.51 | 0.4531 | 29/64 | — | 30.16 | 1.1875 | 1 3/16 | 73.03 | 2.8750 | 2 7/8 |
| — | 0.0635 | — | 52 | 3.97 | 0.1563 | 5/32 | — | — | 0.2720 | — | I | 11.91 | 0.4688 | 15/32 | — | 31.00 | 1.2205 | — | 74.00 | 2.9134 | — |
| 1.65 | 0.0650 | — | — | — | 0.1570 | — | 22 | 7.00 | 0.2756 | — | — | 12.00 | 0.4724 | — | — | 31.75 | 1.2500 | 1 1/4 | 74.61 | 2.9375 | 2 15/16 |
| 1.70 | 0.0669 | — | — | 4.00 | 0.1575 | — | — | — | 0.2770 | — | J | 12.30 | 0.4844 | 31/64 | — | 32.00 | 1.2598 | — | 75.00 | 2.9528 | — |
| — | 0.0670 | — | 51 | — | 0.1590 | — | 21 | 7.10 | 0.2795 | — | — | 12.50 | 0.4921 | — | — | 33.00 | 1.2992 | — | 76.00 | 2.9921 | — |
| 1.75 | 0.0689 | — | — | — | 0.1610 | — | 20 | — | 0.2810 | — | K | 12.70 | 0.5000 | 1/2 | — | 33.34 | 1.3125 | 1 5/16 | 76.20 | 3.0000 | 3 |
| — | 0.0700 | — | 50 | 4.10 | 0.1614 | — | — | 7.14 | 0.2813 | 9/32 | — | 13.00 | 0.5118 | — | — | 34.00 | 1.3386 | — | — | — | — |
| 1.80 | 0.0709 | — | — | 4.20 | 0.1654 | — | — | 7.20 | 0.2835 | — | — | — | 0.5156 | 33/64 | — | 34.93 | 1.3750 | 1 3/8 | — | — | — |

M = Millimeters, DE = Decimal Equivalents, F = Fractional, DN = Drill Number/Letter




# DO YOU KNOW SOMEONE WHO'S READY TO OWN IT?

SNAP-ON OWN IT FRANCHISE

You know Snap-on as the best tool brand in the world. Did you know it's also a great business opportunity? If you know someone who is looking to move into the driver's seat, send them to **SnaponFranchise.com** where they can find out if they have what it takes to "own it."

**Top Tool Franchise 2014 *Entrepreneur* Franchise 500**

**Extensive initial training**

**Most in-demand product in the category**

**Proven franchise model**

**Financing available through Snap-on Credit**

**Expanded incentives for honorably discharged veterans**

**1-877-476-2766**
**PROUD MEMBER OF VETFRAN**

Snap-on

**SNAPONFRANCHISE.com**

To learn more about Snap-on, talk to your
Snap-on representative or visit snapon.com




CAT1300. Snap-on is a trademark of Snap-on Incorporated. © 2014-2015 Snap-on Incorporated. All rights reserved.