



PROTO[®]

SAFETY OBSESSED

**AVIATION HAND TOOL &
STORAGE SOLUTIONS**

**BUILDING AND MAINTAINING AIRCRAFT
IS A BIG JOB.**

WE MAKE THE TOOLS THAT HELP.





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WE FOCUS ON QUALITY. SO YOU CAN TOO.

If you build or maintain aircraft for a living, you know there is no time for delays. No room for shortcuts. No tolerance for FOD.

Demands are high, pressure is constant, and PROTO® has the tools you need to get the job done.

PROTO® tools are engineered and tested to stringent aerospace standards to help you stay productive and working safely.

PROTO® is safety obsessed. Aerospace specifications are set in place by engineers and technical experts to help promote safety, quality and effectiveness of products and services. PROTO® tools are engineered and tested to help ensure that they are manufactured to meet these strict standards. From hand sockets, torque and drive tools, PROTO® Industrial Tools meet the dimensional and plating requirements developed for the industrial user.



Proto® is a member of SAE International, a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial vehicle industries.



*SAE International is a registered trademark of SAE International

TOOLS THAT ARE TESTED AND TESTED AGAIN...

To meet the specifications as strict as
those that send aircrafts for take-off.





**A LEADER IN GOVERNMENT
& MILITARY SINCE WWII**





HARDNESS & X-RAY TESTING

Tests overall thickness of chrome to ensure tools meet Aerospace specifications.

LIFE-CYCLE TESTING

Checks endurance of product under multiple types of stress.

COORDINATE MEASURING

Determines accuracy of tool manufacturing by precisely measuring aerospace-compliant products.

TORQUE TOLERANCE TESTING

Measures the amount of force a product can withstand.



**PRECISION
MANUFACTURING
AND QUALITY
INSPECTIONS**

PRECISION

PRECISION 90 DEGREE HEAD RATCHETS
AND TORQUE WRENCHES



Aerospace-compliant full polish,
double nickel-chrome plating helps
protect against corrosion.



PROTO®

ACCESSIBILITY

PRECISION AND ACCESSIBILITY
FOR PRODUCTIVITY AND TIME-SAVING

INTERMEDIATE SOCKETS

Intermediate sizes are engineered for tough-to-reach places when standard and deep lengths don't cut it.



Thinner outside diameters on sockets and wrenches help improve access to fasteners in confined areas, without sacrificing strength and durability.*

› 90 tooth count equals 4° arc swing



*Thinner/Slimmer than tools that meet ASME Specs

PROTO® Industrial Tools meet or exceed **ASME Standards**, which helps ensure quality and durability, giving users peace of mind.

ASME



AS

Over 1,460 PROTO® Mechanics Tools take performance and safety to the next level by meeting **AS Specifications**.

SAFETY OBSESSED >>>

TOTAL SAFETY SOLUTION

SAFETY PROGRAM OVERVIEW

Proto® Industrial Tools has developed a Safety Obsessed Training Program which includes an onsite seminar that presents the latest information on safe and responsible tool use for professionals who handle industrial tools. The program helps users identify when tools become worn or damaged and need to be replaced, as well as identifying specific tools and procedures that can improve site safety.

The Proto® Safety Obsessed Seminar can be expanded to include a Tool Safety Audit.



PROTO®



FOD SOLUTIONS



FOAMED MODULAR SETS

Keep tools safely in place to help improve tool identification and FOD prevention.

See pages 25-36 for select Modular Sets (Fully Kitted and Foam-only options available).

EXPRESS TOOL MAT

Allows for safe working environment and FOD control. Mat will catch wandering debris as users kneel on padded surface. See page 24 for more details.



CRIBMASTER®

RFID Technology and kitted tools offer tool control and well-managed tool inventory. CRIBMASTER® keeps electronic records and makes usage and inspection fast and easy.

GLOBAL DISTRIBUTION >>>>>>>>

WE'RE EVERYWHERE YOU ARE

There's more than one way to buy your PROTO® Industrial Tools. In fact, with more than 5,700 distributor locations worldwide,

INCLUDING 5,500 IN NORTH AMERICA ALONE,
PROTO® hand tools and storage are available everywhere you are.

Visit ProtoIndustrial.com to quickly find the distributors near you.

PROTO®



OVER 200 LOCATIONS
OUTSIDE NORTH AMERICA

TOOL STORAGE



560 SERIES BUILT FOR STRENGTH

OUR MOST RUGGED TOOL STORAGE

The 560 Series offers premium, industrial strength for your heaviest loads.



Wood top work surfaces are available for all 560 Series Cabinets.



Lock-in, lock-out drawers for security and safety.



Drawer capacity slides rated to 400 lbs.



Drawer dividers make each drawer custom configurable.



6" casters — 2 swivel, 2 rigid — load-rated to carry 800 lbs per caster.

550 SERIES

BUILT FOR INDUSTRIAL VERSATILITY

WORKSTATIONS, TOP PIECES, AND SIDE CABINETS

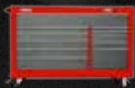
The 550 Series offers Proto®'s largest selection of industrial tool storage options featuring premium, heavy gauge steel, fully extending drawers with up to 200 lbs slide capacity, and casters that hold up to 900 lbs each.

SEVEN DIFFERENT PLATFORM WIDTHS, from 34 inches to 88 inches

allow these tool boxes to fit into any workspace.



TRIPLES



DOUBLES

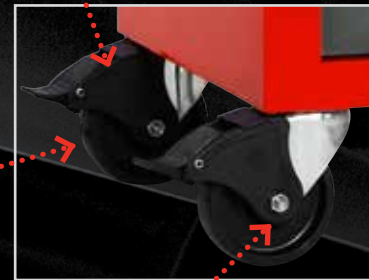


SINGLES

MORE DRAWER CONFIGURATIONS, from narrow to full width, 22 drawers

to 4, as well as power drawers, to fit your full assortment of tools.

The enhanced locking mechanism is easy to actuate.

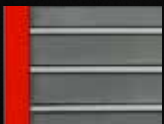


Redesigned casters feature high impact glass filled nylon resin wheels and locks that are resistant to water and most chemicals.

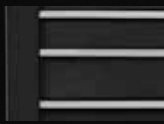
Rolling bearing with hardened steel bushings helps mobility and ease of rolling.

EXPANDED COLOR RANGE including the new Safety Red and Gray.

DURA DRAWER



SAFETY
RED & GRAY



DUAL
BLACK



DUAL
GRAY

HERITAGE GLOSS



GLOSS
RED



GLOSS
BLACK



GLOSS
BLUE

SPECIAL ORDER

CUSTOM COLORS
AVAILABLE UPON
REQUEST.

› CHOOSE YOUR LENGTH

- › Seven different platform lengths.
- › From 34 inches to 88 inches.

› CHOOSE YOUR DRAWERS

- › "E" models have power drawers.
- › Up to 22 drawers.
- › Large shelves available.

› CHOOSE YOUR COLOR

- › Choose from six standard colors.
- › Custom colors available upon request.

Made of industrial strength 14, 16, and 18 gauge steel.

Integrated brushed aluminum drawer pulls for added drawer rigidity.

100% fully extending and recessed drawer pulls.

Ergonomic metal side handle for easy gripping and handling.

Ball-bearing slides provide 125 to 200 lbs of drawer load capacity.

Adjustable drawer detents ensure drawers stay shut when the box is unlocked.

6" x 2" casters with a 900 lbs load capacity each.

Vinyl top and drawer liners included.

Safety Red and Gray Option Shown

PROTO

PROTO

550

Reinforced top and bottom panels to carry extra weight loads.

Heavy-duty locks with tubular keys.

Workstations provide up to 48,654 cubic inches of storage. Add even more space with top and side pieces.

Items shown:
J555041-12SG
J555027-10SG
J551934-6SG-SC



6"x2" Shock Absorbing Casters available for heavy-duty industrial needs.

› CHOOSE YOUR TOP

- › Top chests.
- › Hutches.
- › Wooden tops.
- › Stainless steel tops.

› EXPAND TO THE SIDE

- › Side cabinets.
- › Side shelves.

› ADD ACCESSORIES

- › Covers, foam kits, lock bars, and more to compliment and protect your storage.

540 SERIES

BUILT FOR THE SHOP FLOOR

INDUSTRIAL GRADE STORAGE THAT SATISFIES ALL YOUR ESSENTIAL JOB DEMANDS.

The 540 Series is a well-made, heavy-gauge line of storage boxes featuring the popular Drop Front Top Chests in multiple drawer configurations, allowing you to expand your tool storage capacity.

Drop Front Top Chests add extra protection and security.



Tool Tower is handy for moving equipment around the shop.



DIFFERENT STYLES OF TOP CHESTS



PISTON-ASSISTED LIDS



DROP FRONT CHESTS



LIFT TOP CHESTS



INTERMEDIATE BOX



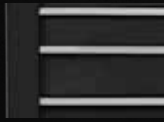
A full length locker cabinet can be added.

EXPANDED COLOR RANGE including the new Safety Red and Gray.

DURA DRAWER



SAFETY RED & GRAY



DUAL BLACK



DUAL GRAY



GLOSS RED



GLOSS BLACK



GLOSS BLUE

HERITAGE GLOSS

SPECIAL ORDER

CUSTOM COLORS AVAILABLE UPON REQUEST.

› CHOOSE YOUR LENGTH


- › Three different platform lengths.
- › 54 inches, 41 inches, 27 inches

› CHOOSE YOUR STYLE

- › Workstation
- › Tool tower

› CHOOSE YOUR COLOR

- › Choose from six standard colors.
- › Custom colors available upon request.



Reinforced top and bottom panels to carry extra weight loads.

Heavy-duty keys.

Made of 18 gauge steel.

Easy grip steel handle.

100% fully extending and recessed drawer pulls.

Ball-bearing slides provide 100 lbs of drawer load capacity.

Adjustable drawer detent ensures the drawers stay shut when the box is unlocked.

5" x 2" casters with 450 lbs load capacity each.

Vinyl top and drawer liners included.

Safety Red and Gray Option Shown

Workstations provide up to 22,248 cubic inches of storage. Add even more space with top and side pieces.

2 reinforcement channels run left to right and 2 run front to back for additional strength.

Items shown:
J545442-14SG
J545423-12SG

› CHOOSE YOUR TOP

- › Top chests
- › Intermediate chests
- › Wooden tops
- › Stainless steel tops

› EXPAND TO THE SIDE

- › Locker cabinet
- › Side cabinets
- › Side shelf

› ADD ACCESSORIES

- › Covers, foam kits, lock bars, and more to compliment and protect your storage.

TOOL STORAGE

WOOD TOPS

- › 1-1/2" thick solid maple with laminated edge hardwood work surface.
- › Clear lacquer top with radius edges.
- › For protection against drying, apply non-toxic mineral oil every 4-6 weeks.



| 550 SERIES | | | | |
|------------|------------|-------------|------------|--------------|
| Product # | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
| J4534-HWT | 33-3/4 | 1-1/2 | 25 | 30.42 |
| J4550-HWT | 50-1/8 | 1-1/2 | 25 | 56.75 |
| J4557-HWT | 56-7/8 | 1-1/2 | 25 | 62.57 |
| J4566-HWT | 66-1/4 | 1-1/2 | 27 | 74.15 |
| J4567-HWT | 66-9/16 | 1-1/2 | 25 | 70.85 |
| J4578-HWT | 78-1/2 | 1-1/2 | 25 | 79.42 |
| J4588-HWT | 87-7/8 | 1-1/2 | 27 | 120.00 |

| 540 SERIES | | | | |
|------------|------------|-------------|------------|--------------|
| Product # | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
| J4427-HWT | 26-21/32 | 1-1/2 | 18 | 20.84 |
| J4441-HWT | 40-37/64 | 1-1/2 | 18 | 30.00 |
| J4454-HWT | 54-41/64 | 1-1/2 | 18 | 40.00 |



WOOD & STAINLESS STEEL TOPS

STAINLESS STEEL TOPS

- › High grade 1/16" thick, 16 gauge 304 stainless steel wrapped around a wood core.
- › Raised front lip prevents parts from rolling off the work surface.



| 550 SERIES | | | | |
|------------|------------|-------------|------------|--------------|
| Product # | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
| J4534-SST | 33-3/4 | 1-1/2 | 25 | 50.00 |
| J4550-SST | 50-1/8 | 1-1/2 | 25 | 100.00 |
| J4557-SST | 56-7/8 | 1-1/2 | 25 | 100.00 |
| J4566-SST | 66-1/4 | 1-1/2 | 27 | 115.00 |
| J4567-SST | 66-9/16 | 1-1/2 | 25 | 105.00 |
| J4578-SST | 78-1/2 | 1-1/2 | 25 | 105.00 |
| J4588-SST | 87-7/8 | 1-1/2 | 27 | 135.00 |

| 540 SERIES | | | | |
|------------|------------|-------------|------------|--------------|
| Product # | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
| J4427-SST | 26-21/32 | 1-1/2 | 18 | 45.00 |
| J4441-SST | 40-37/64 | 1-1/2 | 18 | 55.00 |
| J4454-SST | 54-41/64 | 1-1/2 | 18 | 65.00 |



MODULAR UTILITY CART

- › Universal rail system allows for height adjustable tool holders and accessories.
- › Three drawers with self closing feature.
- › Rubber bumpers protect cabinet and workspace.
- › Handle mounts on either side.

| DURA DRAWER | | Width (in) | Height (in) | Depth (in) | Cubic Capacity (in) | Overall Weight (lbs) |
|-------------|-------------------|------------|-------------|------------|---------------------|----------------------|
| Product # | Color | | | | | |
| JUC3743-3SG | Safety Red & Gray | 37 | 43 | 20 | 20,559 | 231.00 |



Deep tool bin with power supply.



UTILITY CART

TOOL STORAGE

LOCK BARS

- ▶ Provides extra security measure and drawer retention to help keep drawers shut while moving the cabinet from one location to the next (in the locked position).
- ▶ Select 540 and 550 Series cabinets available fully assembled with factory installed lock bar.
- ▶ Also available as individual locking bar for field installation (Gloss Black (BK) Only).
- ▶ 540 Series Field Install lock bars feature a hinge design. Templates included. (JLB32TEMPLATL, JLB32TEMPLATER).
- ▶ 550 Series Field Install lock bars are removable. Templates included.



JLB32 - Hinge Design for select 540 Storage Series (templates included)

LOCK BARS

| 540 SERIES FACTORY INSTALLED SECURITY LOCK BARS | |
|----------------------------------------------------|------------------------------------|
| Product # | Description |
| J542735-7XXL | 27" Short Roller Cabinet, 7 Drawer |
| J542735-3XXL | 27" Short Roller Cabinet, 3 Drawer |
| J542742-11XXL | 27" Cabinet, 11 Drawer |
| J542742-8XXL | 27" Cabinet, 8 Drawer |
| J542742-7XXL | 27" Cabinet, 7 Drawer |
| J542742-4XXL | 27" Cabinet, 4 Drawer |
| J544142-15XXL | 41" Workstation, 15 Drawer |
| J544142-6XXL | 41" Workstation, 6 Drawer |
| J545442-14XXL | 54" Workstation, 14 Drawer |

| 550 SERIES FACTORY INSTALLED SECURITY LOCK BARS | |
|----------------------------------------------------|----------------------------|
| Product # | Description |
| J553441-8XXL | 34" Cabinet, 8 Drawer |
| J555743-13XXL | 57" Workstation, 13 Drawer |
| J555041-10XXL | 50" Workstation, 10 Drawer |
| J556646-12XXL | 66" Workstation, 12 Drawer |
| J556646-11XXL | 66" Workstation, 11 Drawer |

| FIELD INSTALLED SECURITY LOCK BARS | | |
|------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product # | Description | Compatible Proto® Item |
| JLB25 | 25", Field Installed Lock Bar, Black | J542735-7XX, J542735-3XX |
| JLB32 | 32", Field Installed Lock Bar, Black | J545442-14XX, J544142-15XX, J544142-6XX, J542742-11XX, J542742-8XX, J542742-7XX, J542742-4XX <i>(requires 2 lock bars for: J545442-14XX, J544142-15XX, J542742-11XX, J542742-8XX)</i> |
| JLB33 | 33", Field Installed Lock Bar, Black | J555041-12XX, J555041-10XX, J555041-8XX-2S, J555041-8XX-1S, J555041-7XX-1S, J553441-8XX, J553441-7XX, J553441-6XX |
| JLB35 | 35", Field Installed Lock Bar, Black | J555743-13XX, J555743-11XX |
| JLB37 | 37", Field Installed Lock Bar, Black | J556646-12XX, J556646-11XX |

Hinge Design - Closed Position (lock not included)



| "XX" INDICATES COLOR CODES FOR FACTORY INSTALLED LOCK BARS: | | |
|-------------------------------------------------------------|-------------------------|--------------------------|
| SG (Safety Red & Gray) | RD (Gloss Red) | BL (Gloss Blue) |
| DG (Dual Gray) | BK (Gloss Black) | YL (Gloss Yellow) |
| DB (Dual Black) | | |

540 Series
Hinge Lock Bar Design



GENERAL PURPOSE BOX WITH 3 DRAWERS



| Quantity | Type | Length (in) | Depth (in) | Height (in) |
|----------|-------------|-------------|------------|-------------|
| 1 | Compartment | 20 | 8-1/2 | 2-1/4 |
| 3 | Drawer | 18 | 7-1/4 | 1-1/2 |

| Product # | # of Drawers | Color | Cubic Capacity (in) | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
|--------------|--------------|-------|---------------------|------------|-------------|------------|--------------|
| J9993 | 3 | Red | 2,075 | 20-3/16 | 11-3/4 | 8-3/4 | 25.00 |

GENERAL PURPOSE BOXES WITH TRAY

- › Removable steel tote tray.



| Product # | Color | Cubic Capacity (in) | Width (in) | Height (in) | Depth (in) | Weight (lbs) |
|----------------|------------|---------------------|------------|-------------|------------|--------------|
| J9954R | Safety Red | 546 | 14 | 6-1/2 | 6 | 5.00 |
| J9977R | Safety Red | 931 | 19-1/2 | 7 | 8 | 8.00 |
| J9975R | Safety Red | 1,615 | 20 | 9-1/2 | 8-1/2 | 14.00 |
| J9969R* | Safety Red | 2,133 | 26 | 9-1/2 | 8-1/2 | 19.00 |

*Heavy-duty side handles.

CANTILEVER BOX

- › 4 trays - 2 with covers.
- › Trays swing out for easy tool access.



| Product # | Color | Cubic Capacity (in) | Height (in) | Depth (in) | Overall Length (in) | Weight (lbs) |
|--------------|-------|---------------------|-------------|------------|---------------------|--------------|
| J9951 | Black | 2,520 | 10 | 14 | 18 | 20.00 |

MODULAR SETS

TOOL BACKPACK WITH REMOVABLE TOTE

- › Durable 1,200 x 1,200 denier fabric.
- › Rigid and waterproof plastic bottom.
- › Ergonomically designed padded straps and back support provide comfort and durability.
- › Internal storage compartments for maximum organization.
- › Convenient laptop storage included.
- › Quick carry tool pouch included for easy transport of commonly used tools.

| Product # | Height (in) | Depth (in) | Width (in) | Weight (lbs) |
|---------------|-------------|------------|------------|--------------|
| J114BP | 18 | 11 | 14 | 4.50 |



TOOL BAGS

OPEN TOTE TOOL BAG

- › Durable 1,200 x 1,200 denier fabric.
- › Rigid and waterproof plastic bottom.
- › Ergonomically designed leather handle.
- › 14 Internal storage loops for maximum organization.
- › Special storage partition for 12 screwdrivers.
- › 10 External storage pockets.
- › Adjustable saw compartment with self-adhesive strips.
- › Weather flap protects tools and conveniently tucks away.

| Product # | Height (in) | Depth (in) | Overall Length (in) | Weight (lbs) |
|---------------|-------------|------------|---------------------|--------------|
| J120TB | 14-1/2 | 9-1/2 | 19-1/2 | 7.00 |



EXPRESS TOOLMAT™

- › Keeps tools in designated area which prevents foreign object damage and loss control.
- › Detachable safety sign and reflecting tape on the edges, keeping working space protected and visible.
- › Cushioned mat provides comfort when working on knees.
- › Tape mechanism provides easy and fast opening and closing.
- › Easy to carry with shoulder strap and comfort handles.
- › Internal VELCRO® straps for easy adjustability.

| Product # | Size Closed (in) | Size Open (in) |
|---------------|--------------------------|-----------------|
| J95040 | 15-5/8 x 15-5/8 x 15-5/8 | 44-3/8 x 43-3/4 |



MODULAR SETS





DEPTH
Fixed 16"

WIDTH
Available in 5", 11" & 23"



HEIGHT*

*Modular sets vary in height. Measure storage drawer height(s) before placing order to ensure that drawers will accommodate modular sets.

CUSTOMIZE TOOL STORAGE WITH A VARIETY OF COMBINATIONS



› Built to fit most metal storage drawers including the Proto® 500 Series in various combinations.



› High quality cross linked polyethylene foam helps resist chemicals and other industrial solvents.



› Great organization allows for easy and fast tool locating.



› Thick foam layers allow tools to fit tightly in place within drawer while also offering flexibility for easy tool access.



FOAM & DRAWER CONFIGURATION OPTIONS:



MODULAR SETS

WARNING:
 TIPPING HAZARD.
 OVERLOADED DRAWERS
 CAN CAUSE THE
 BOX TO TIP CAUSING
 INJURY. NEVER EXCEED
 MANUFACTURERS
 RECOMMENDED DRAWER
 WEIGHT. PRIOR TO
 LOADING DRAWERS REFER
 TO YOUR BOX MANUAL
 OR INSTRUCTIONS FOR
 DRAWER CAPACITY.

MODULAR SETS

5" W x 16" D MODULES

9 PIECE NON-REVERSIBLE RATCHETING COMBINATION WRENCH SET - BLACK CHROME - SPLINE

Foam + Tool Set Part #: JSCR-9SK

Tool Set Only Part #: JSCR-9S

Foam Only Part #: JSCR-9SF



5" W x 16" D x 1-1/4" H

| Part # | Description | Part # | Description |
|--------|-----------------------|--------|------------------------|
| JSCR08 | WR COMB RCH SPL 1/4" | JSCR18 | WR COMB RCH SPL 9/16" |
| JSCR10 | WR COMB RCH SPL 5/16" | JSCR20 | WR COMB RCH SPL 5/8" |
| JSCR12 | WR COMB RCH SPL 3/8" | JSCR22 | WR COMB RCH SPL 11/16" |
| JSCR14 | WR COMB RCH SPL 7/16" | JSCR24 | WR COMB RCH SPL 3/4" |
| JSCR16 | WR COMB RCH SPL 1/2" | | |

1/2" DRIVE 19 PIECE DEEP IMPACT SOCKET SET - BLACK OXIDE - 6 POINT

Foam + Tool Set Part #: J74116K

Tool Set Only Part #: J74116

Foam Only Part #: J74116F



5" W x 16" D x 3-1/2" H

| Part # | Description | Part # | Description | Part # | Description |
|--------|----------------------------------|--------|-----------------------------------|--------|-----------------------------------|
| J7312H | SKT IMP 1/2" DR 3/8" 6 PT DEEP | J7326H | SKT IMP 1/2" DR 13/16" 6 PT DEEP | J7340H | SKT IMP 1/2" DR 1-1/4" 6 PT DEEP |
| J7314H | SKT IMP 1/2" DR 7/16" 6 PT DEEP | J7328H | SKT IMP 1/2" DR 7/8" 6 PT DEEP | J7342H | SKT IMP 1/2" DR 1-5/16" 6 PT DEEP |
| J7316H | SKT IMP 1/2" DR 1/2" 6 PT DEEP | J7330H | SKT IMP 1/2" DR 15/16" 6 PT DEEP | J7344H | SKT IMP 1/2" DR 1-3/8" 6 PT DEEP |
| J7318H | SKT IMP 1/2" DR 9/16" 6 PT DEEP | J7332H | SKT IMP 1/2" DR 1" 6 PT DEEP | J7346H | SKT IMP 1/2" DR 1-7/16" 6 PT DEEP |
| J7320H | SKT IMP 1/2" DR 5/8" 6 PT DEEP | J7334H | SKT IMP 1/2" DR 1-1/16" 6 PT DEEP | J7348H | SKT IMP 1/2" DR 1-1/2" 6 PT DEEP |
| J7322H | SKT IMP 1/2" DR 11/16" 6 PT DEEP | J7336H | SKT IMP 1/2" DR 1-1/8" 6 PT DEEP | | |
| J7324H | SKT IMP 1/2" DR 3/4" 6 PT DEEP | J7338H | SKT IMP 1/2" DR 1-3/16" 6 PT DEEP | | |

ASME B107.110-2012 

1/2" DRIVE 19 PIECE IMPACT SOCKET SET - BLACK OXIDE - 6 POINT

Foam + Tool Set Part #: J74106K

Tool Set Only Part #: J74106

Foam Only Part #: J74106F



5" W x 16" D x 2-1/4" H

| Part # | Description | Part # | Description | Part # | Description |
|--------|-----------------------------|--------|------------------------------|--------|------------------------------|
| J7412H | SKT IMP 1/2" DR 3/8" 6 PT | J7426H | SKT IMP 1/2" DR 13/16" 6PT | J7440H | SKT IMP 1/2" DR 1-1/4" 6 PT |
| J7414H | SKT IMP 1/2" DR 7/16" 6 PT | J7428H | SKT IMP 1/2" DR 7/8" 6 PT | J7442H | SKT IMP 1/2" DR 1-5/16" 6 PT |
| J7416H | SKT IMP 1/2" DR 1/2" 6 PT | J7430H | SKT IMP 1/2" DR 15/16" 6 PT | J7444H | SKT IMP 1/2" DR 1-3/8" 6 PT |
| J7418H | SKT IMP 1/2" DR 9/16" 6 PT | J7432H | SKT IMP 1/2" DR 1" 6 PT | J7446H | SKT IMP 1/2" DR 1-7/16" 6 PT |
| J7420H | SKT IMP 1/2" DR 5/8" 6 PT | J7434H | SKT IMP 1/2" DR 1-1/16" 6 PT | J7448H | SKT IMP 1/2" DR 1-1/2" 6 PT |
| J7422H | SKT IMP 1/2" DR 11/16" 6 PT | J7436H | SKT IMP 1/2" DR 1-1/8" 6 PT | | |
| J7424H | SKT IMP 1/2" DR 3/4" 6 PT | J7438H | SKT IMP 1/2" DR 1-3/16" 6 PT | | |

ASME B107.110-2012 

1/2" DRIVE 15 PIECE DEEP IMPACT SOCKET SET - BLACK OXIDE - 6 POINT

Foam + Tool Set Part #: J74114K

Tool Set Only Part #: J74114

Foam Only Part #: J74114F



5" W x 16" D x 2-1/2" H

| Part # | Description | Part # | Description | Part # | Description |
|--------|----------------------------------|--------|-----------------------------------|--------|-----------------------------------|
| J7312H | SKT IMP 1/2" DR 3/8" 6 PT DEEP | J7324H | SKT IMP 1/2" DR 3/4" 6 PT DEEP | J7336H | SKT IMP 1/2" DR 1-1/8" 6 PT DEEP |
| J7314H | SKT IMP 1/2" DR 7/16" 6 PT DEEP | J7326H | SKT IMP 1/2" DR 13/16" 6 PT DEEP | J7338H | SKT IMP 1/2" DR 1-3/16" 6 PT DEEP |
| J7316H | SKT IMP 1/2" DR 1/2" 6 PT DEEP | J7328H | SKT IMP 1/2" DR 7/8" 6 PT DEEP | J7340H | SKT IMP 1/2" DR 1-1/4" 6 PT DEEP |
| J7318H | SKT IMP 1/2" DR 9/16" 6 PT DEEP | J7330H | SKT IMP 1/2" DR 15/16" 6 PT DEEP | | |
| J7320H | SKT IMP 1/2" DR 5/8" 6 PT DEEP | J7332H | SKT IMP 1/2" DR 1" 6 PT DEEP | | |
| J7322H | SKT IMP 1/2" DR 11/16" 6 PT DEEP | J7334H | SKT IMP 1/2" DR 1-1/16" 6 PT DEEP | | |

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5" X 16" MODULES

1/4" DRIVE 25 PIECE COMBINATION SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 6 POINT

Foam + Tool Set Part #: J47116K

Tool Set Only Part #: J47116

Foam Only Part #: J47116F



5" W x 16" D x 2-1/2" H

| Part # | Description |
|--------|-------------------------|
| J4706 | SKT 1/4" DR 3/16" 6 PT |
| J4707 | SKT 1/4" DR 7/32" 6 PT |
| J4708 | SKT 1/4" DR 1/4" 6 PT |
| J4709 | SKT 1/4" DR 9/32" 6 PT |
| J4710 | SKT 1/4" DR 5/16" 6 PT |
| J4711 | SKT 1/4" DR 11/32" 6 PT |
| J4712 | SKT 1/4" DR 3/8" 6 PT |
| J4714 | SKT 1/4" DR 7/16" 6 PT |
| J4716 | SKT 1/4" DR 1/2" 6 PT |

| Part # | Description |
|--------|------------------------------|
| J4718 | SKT 1/4" DR 9/16" 6 PT |
| J4706L | SKT 1/4" DR 3/16" 6 PT DEEP |
| J4707L | SKT 1/4" DR 7/32" 6 PT DEEP |
| J4708L | SKT 1/4" DR 1/4" 6 PT DEEP |
| J4709L | SKT 1/4" DR 9/32" 6 PT DEEP |
| J4710L | SKT 1/4" DR 5/16" 6 PT DEEP |
| J4711L | SKT 1/4" DR 11/32" 6 PT DEEP |
| J4712L | SKT 1/4" DR 3/8" 6 PT DEEP |
| J4714L | SKT 1/4" DR 7/16" 6 PT DEEP |

| Part # | Description |
|--------|-----------------------------|
| J4716L | SKT 1/4" DR 1/2" 6 PT DEEP |
| J4718L | SKT 1/4" DR 9/16" 6 PT DEEP |
| J4769 | SKT DRIVER 1/4" DR |
| J4770A | UNIV JOINT 1/4" DR |
| J4759 | EXTENSION 1/4" DR 2" |
| J4761 | EXTENSION 1/4" DR 6" |
| J4749 | CLASSIC RATCHET 1/4" DR 5" |

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11" W x 16" D MODULES

9 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SET - BLACK CHROME - SPLINE

Foam + Tool Set Part #: JSCV-9SK

Tool Set Only Part #: JSCV-9S

Foam Only Part #: JSCV-9SF

| Part # | Description |
|--------|-----------------------|
| JSCV09 | WR COMB REV SPL 9/32" |
| JSCV10 | WR COMB REV SPL 5/16" |
| JSCV12 | WR COMB REV SPL 3/8" |
| JSCV14 | WR COMB REV SPL 7/16" |
| JSCV16 | WR COMB REV SPL 1/2" |

| Part # | Description |
|--------|------------------------|
| JSCV18 | WR COMB REV SPL 9/16" |
| JSCV20 | WR COMB REV SPL 5/8" |
| JSCV22 | WR COMB REV SPL 11/16" |
| JSCV24 | WR COMB REV SPL 3/4" |



11" W x 16" D x 1-1/4" H

13 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SET - BLACK CHROME - SPLINE

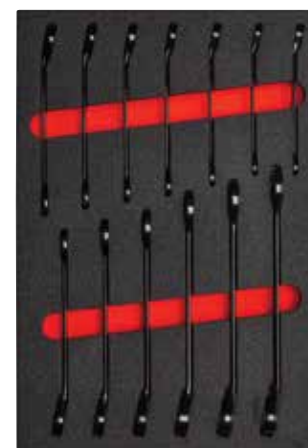
Foam + Tool Set Part #: JSCVM-13SK

Tool Set Only Part #: JSCVM-13S

Foam Only Part #: JSCVM-13SF

| Part # | Description |
|---------|----------------------|
| JSCVM07 | WR COMB REV SPL 7MM |
| JSCVM08 | WR COMB REV SPL 8MM |
| JSCVM09 | WR COMB REV SPL 9MM |
| JSCVM10 | WR COMB REV SPL 10MM |
| JSCVM11 | WR COMB REV SPL 11MM |
| JSCVM12 | WR COMB REV SPL 12MM |
| JSCVM13 | WR COMB REV SPL 13MM |

| Part # | Description |
|---------|----------------------|
| JSCVM14 | WR COMB REV SPL 14MM |
| JSCVM15 | WR COMB REV SPL 15MM |
| JSCVM16 | WR COMB REV SPL 16MM |
| JSCVM17 | WR COMB REV SPL 17MM |
| JSCVM18 | WR COMB REV SPL 18MM |
| JSCVM19 | WR COMB REV SPL 19MM |



11" W x 16" D x 1-1/4" H

5" X 16" MODULES / 11" X 16" MODULES

MODULAR SETS


11" W x 16" D MODULES

3 PIECE ADJUSTABLE WRENCH SET - SATIN

Foam + Tool Set Part #: J795K

Tool Set Only Part #: J795

Foam Only Part #: J795F

| Part # | Description | Part # | Description |
|--------|-----------------------|--------|------------------------------------------------------------------------------------------------------|
| J708 | Adjustable Wrench 8" | J712 | Adjustable Wrench 12" |
| J710 | Adjustable Wrench 10" | | ASME B107.100-2010  |




11" W x 16" D x 1-1/4" H

3/8" DRIVE 22 PIECE SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 6 POINT

Foam + Tool Set Part #: J52134K

Tool Set Only Part #: J52134

Foam Only Part #: J52134F

| Part # | Description | Part # | Description |
|--------|-----------------------------|----------|--------------------------------------------------------------------------------------------------------|
| J5212H | SKT 3/8" DR 3/8" 6 PT | J5018H | SKT 3/8" DR 9/16" 6 PT DEEP |
| J5214H | SKT 3/8" DR 7/16" 6 PT | J5020H | SKT 3/8" DR 5/8" 6 PT DEEP |
| J5216H | SKT 3/8" DR 1/2" 6 PT | J5022H | SKT 3/8" DR 11/16" 6 PT DEEP |
| J5218H | SKT 3/8" DR 9/16" 6 PT | J5024H | SKT 3/8" DR 3/4" 6 PT DEEP |
| J5220H | SKT 3/8" DR 5/8" 6 PT | J5026H | SKT 3/8" DR 13/16" 6 PT DEEP |
| J5222H | SKT 3/8" DR 11/16" 6 PT | J5028H | SKT 3/8" DR 7/8" 6 PT DEEP |
| J5224H | SKT 3/8" DR 3/4" 6 PT | J5270A | SKT 3/8" DR UNIV JOINT |
| J5226H | SKT 3/8" DR 13/16" 6 PT | J5260 | EXTENSION 3/8" DR 3" |
| J5228H | SKT 3/8" DR 7/8" 6 PT | J5260-06 | EXTENSION 3/8" DR 6" |
| J5012H | SKT 3/8" DR 3/8" 6 PT DEEP | J5249 | CLASSIC RATCHET 3/8" DR 7" |
| J5014H | SKT 3/8" DR 7/16" 6 PT DEEP | | ASME B107.110-2012  |
| J5016H | SKT 3/8" DR 1/2" 6 PT DEEP | | |




11" W x 16" D x 1-1/2" H

3/8" DRIVE 22 PIECE SOCKET SET W/ PEAR HEAD RATCHET - FULL POLISH - 6 POINT

Foam + Tool Set Part #: J52134HTCK

Tool Set Only Part #: J52134HTC

Foam Only Part #: J52134HTCF

| Part # | Description | Part # | Description |
|--------|-----------------------------|----------|--------------------------------------------------------------------------------------------------------|
| J5212H | SKT 3/8" DR 3/8" 6 PT | J5018H | SKT 3/8" DR 9/16" 6 PT DEEP |
| J5214H | SKT 3/8" DR 7/16" 6 PT | J5020H | SKT 3/8" DR 5/8" 6 PT DEEP |
| J5216H | SKT 3/8" DR 1/2" 6 PT | J5022H | SKT 3/8" DR 11/16" 6 PT DEEP |
| J5218H | SKT 3/8" DR 9/16" 6 PT | J5024H | SKT 3/8" DR 3/4" 6 PT DEEP |
| J5220H | SKT 3/8" DR 5/8" 6 PT | J5026H | SKT 3/8" DR 13/16" 6 PT DEEP |
| J5222H | SKT 3/8" DR 11/16" 6 PT | J5028H | SKT 3/8" DR 7/8" 6 PT DEEP |
| J5224H | SKT 3/8" DR 3/4" 6 PT | J5270A | UNIV JOINT 3/8" DR |
| J5226H | SKT 3/8" DR 13/16" 6 PT | J5260 | EXTENSION 3/8" DR 3" |
| J5228H | SKT 3/8" DR 7/8" 6 PT | J5260-06 | EXTENSION 3/8" DR 6" |
| J5012H | SKT 3/8" DR 3/8" 6 PT DEEP | J5249HTC | PRECISION 90 RATCHET 3/8" DR 7" |
| J5014H | SKT 3/8" DR 7/16" 6 PT DEEP | | ASME B107.110-2012  |
| J5016H | SKT 3/8" DR 1/2" 6 PT DEEP | | |



11" W x 16" D x 1-1/2" H

11" X 16" MODULES


3/8" DRIVE 22 PIECE SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J52136K

Tool Set Only Part #: J52136

Foam Only Part #: J52136F

| Part # | Description | Part # | Description |
|--------|------------------------------|----------|-------------------------------|
| J5212 | SKT 3/8" DR 3/8" 12 PT | J5018 | SKT 3/8" DR 9/16" 12 PT DEEP |
| J5214 | SKT 3/8" DR 7/16" 12 PT | J5020 | SKT 3/8" DR 5/8" 12 PT DEEP |
| J5216 | SKT 3/8" DR 1/2" 12 PT | J5022 | SKT 3/8" DR 11/16" 12 PT DEEP |
| J5218 | SKT 3/8" DR 9/16" 12 PT | J5024 | SKT 3/8" DR 3/4" 12 PT DEEP |
| J5220 | SKT 3/8" DR 5/8" 12 PT | J5026 | SKT 3/8" DR 13/16" 12 PT DEEP |
| J5222 | SKT 3/8" DR 11/16" 12 PT | J5028 | SKT 3/8" DR 7/8" 12 PT DEEP |
| J5224 | SKT 3/8" DR 3/4" 12 PT | J5270a | UNIV JOINT 3/8" DR |
| J5226 | SKT 3/8" DR 13/16" 12 PT | J5260 | EXTENSION 3/8" DR 3" |
| J5228 | SKT 3/8" DR 7/8" 12 PT | J5260-06 | EXTENSION 3/8" DR 6" |
| J5012 | SKT 3/8" DR 3/8" 12 PT DEEP | J5249 | CLASSIC RATCHET 3/8" DR 7" |
| J5014 | SKT 3/8" DR 7/16" 12 PT DEEP | | |
| J5016 | SKT 3/8" DR 1/2" 12 PT DEEP | | |

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11" W x 16" D x 1-1/2" H


3/8" DRIVE 22 PIECE SOCKET SET W/ PRECISION 90 PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J52136HTCK

Tool Set Only Part #: J52136HTC

Foam Only Part #: J52136HTCF

| Part # | Description | Part # | Description |
|--------|------------------------------|----------|---------------------------------|
| J5212 | SKT 3/8" DR 3/8" 12 PT | J5018 | SKT 3/8" DR 9/16" 12 PT DEEP |
| J5214 | SKT 3/8" DR 7/16" 12 PT | J5020 | SKT 3/8" DR 5/8" 12 PT DEEP |
| J5216 | SKT 3/8" DR 1/2" 12 PT | J5022 | SKT 3/8" DR 11/16" 12 PT DEEP |
| J5218 | SKT 3/8" DR 9/16" 12 PT | J5024 | SKT 3/8" DR 3/4" 12 PT DEEP |
| J5220 | SKT 3/8" DR 5/8" 12 PT | J5026 | SKT 3/8" DR 13/16" 12 PT DEEP |
| J5222 | SKT 3/8" DR 11/16" 12 PT | J5028 | SKT 3/8" DR 7/8" 12 PT DEEP |
| J5224 | SKT 3/8" DR 3/4" 12 PT | J5270A | UNIV JOINT 3/8" DR |
| J5226 | SKT 3/8" DR 13/16" 12 PT | J5260 | EXTENSION 3/8" DR 3" |
| J5228 | SKT 3/8" DR 7/8" 12 PT | J5260-06 | EXTENSION 3/8" DR 6" |
| J5012 | SKT 3/8" DR 3/8" 12 PT DEEP | J5249HTC | PRECISION 90 RATCHET 3/8" DR 7" |
| J5014 | SKT 3/8" DR 7/16" 12 PT DEEP | | |
| J5016 | SKT 3/8" DR 1/2" 12 PT DEEP | | |

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11" W x 16" D x 1-1/2" H

11" X 16" MODULES

MODULAR SETS

11" W x 16" D MODULES

3/8" DRIVE 29 PIECE COMBINATION SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J52222K

Tool Set Only Part #: J52222


Foam Only Part #: J52222F



11" W x 16" D x 2-3/8" H

| Part # | Description | Part # | Description |
|--------|----------------------------|--------|------------------------------|
| J5208M | SKT 3/8" DR 8MM 12 PT | J5009M | SKT 3/8" DR 9MM 12 PT DEEP |
| J5209M | SKT 3/8" DR 9MM 12 PT | J5010M | SKT 3/8" DR 10MM 12 PT DEEP |
| J5210M | SKT 3/8" DR 10MM 12 PT | J5011M | SKT 3/8" DR 11MM 12 PT DEEP |
| J5211M | SKT 3/8" DR 11MM 12 PT | J5012M | SKT 3/8" DR 12MM 12 PT DEEP |
| J5212M | SKT 3/8" DR 12MM 12 PT | J5013M | SKT 3/8" DR 13MM 12 PT DEEP |
| J5213M | SKT 3/8" DR 13MM 12 PT | J5014M | SKT 3/8" DR 14MM 12 PT DEEP |
| J5214M | SKT 3/8" DR 14MM 12 PT | J5015M | SKT 3/8" DR 15MM 12 PT DEEP |
| J5215M | SKT 3/8" DR 15MM 12 PT | J5016M | SKT 3/8" DR 16"MM 12 PT DEEP |
| J5216M | SKT 3/8" DR 16MM 12 PT | J5017M | SKT 3/8" DR 17MM 12 PT DEEP |
| J5217M | SKT 3/8" DR 17MM 12 PT | J5018M | SKT 3/8" DR 18MM 12 PT DEEP |
| J5218M | SKT 3/8" DR 18MM 12 PT | J5019M | SKT 3/8" DR 19MM 12 PT DEEP |
| J5219M | SKT 3/8" DR 19MM 12 PT | J5270A | UNIV JOINT 3/8" DR |
| J5008M | SKT 3/8" DR 8MM 12 PT DEEP | J5260 | EXTENSION 3/8" DR 3" |

| Part # | Description |
|----------|-----------------------------|
| J5260-06 | EXTENSION 3/8" DR 6" |
| J5265 | HANDLE HINGE 3/8" DR 7-7/8" |
| J5249 | CLASSIC RATCHET 3/8" DR 7" |

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11" X 16" MODULES

1/2" DRIVE 18 PIECE SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J54120K

Tool Set Only Part #: J54120

Foam Only Part #: J54120F



11" W x 16" D x 2" H

| Part # | Description | Part # | Description |
|--------|--------------------------|--------|------------------------------|
| J5412 | SKT 1/2" DR 3/8" 12 PT | J5432 | SKT 1/2" DR 1" 12 PT |
| J5414 | SKT 1/2" DR 7/16" 12 PT | J5434 | SKT 1/2" DR 1-1/16" 12 PT |
| J5416 | SKT 1/2" DR 1/2" 12 PT | J5436 | SKT 1/2" DR 1-1/8" 12 PT |
| J5418 | SKT 1/2" DR 9/16" 12 PT | J5438 | SKT 1/2" DR 1-3/16" 12 PT |
| J5420 | SKT 1/2" DR 5/8" 12 PT | J5440 | SKT 1/2" DR 1-1/4" 12 PT |
| J5422 | SKT 1/2" DR 11/16" 12 PT | J5461 | EXTENSION 1/2" DR 5" |
| J5424 | SKT 1/2" DR 3/4" 12 PT | J5467 | HANDLE HINGE 1/2" DR 15-3/4" |
| J5426 | SKT 1/2" DR 13/16" 12 PT | J5449 | CLASSIC RATCHET 1/2" DR 7" |
| J5428 | SKT 1/2" DR 7/8" 12 PT | | |
| J5430 | SKT 1/2" DR 15/16" 12 PT | | |

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1/2" DRIVE 18 PIECE SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 6 POINT

Foam + Tool Set Part #: J54122K


Tool Set Only Part #: J54122

Foam Only Part #: J54122F



11" W x 16" D x 2" H

| Part # | Description | Part # | Description |
|--------|-------------------------|--------|------------------------------|
| J5412H | SKT 1/2" DR 3/8" 6 PT | J5432H | SKT 1/2" DR 1" 6 PT |
| J5414H | SKT 1/2" DR 7/16" 6 PT | J5434H | SKT 1/2" DR 1-1/16" 6 PT |
| J5416H | SKT 1/2" DR 1/2" 6 PT | J5436H | SKT 1/2" DR 1-1/8" 6 PT |
| J5418H | SKT 1/2" DR 9/16" 6 PT | J5438H | SKT 1/2" DR 1-3/16" 6 PT |
| J5420H | SKT 1/2" DR 5/8" 6 PT | J5440H | SKT 1/2" DR 1-1/4" 6 PT |
| J5422H | SKT 1/2" DR 11/16" 6 PT | J5461 | EXTENSION 1/2" DR 5" |
| J5424H | SKT 1/2" DR 3/4" 6 PT | J5467 | HANDLE HINGE 1/2" DR 15-3/4" |
| J5426H | SKT 1/2" DR 13/16" 6 PT | J5449 | CLASSIC RATCHET 1/2" DR 7" |
| J5428H | SKT 1/2" DR 7/8" 6 PT | | |
| J5430H | SKT 1/2" DR 15/16" 6 PT | | |

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1/2" DRIVE 30 PIECE SOCKET SET W/ CLASSIC PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J54126K

Tool Set Only Part #: J54126

Foam Only Part #: J54126F

| Part # | Description | Part # | Description |
|--------|------------------------------|--------|--------------------------------|
| J5412 | SKT 1/2" DR 3/8" 12 PT | J5320 | SKT 1/2" DR 5/8" 12 PT DEEP |
| J5414 | SKT 1/2" DR 7/16" 12 PT | J5322 | SKT 1/2" DR 11/16" 12 PT DEEP |
| J5416 | SKT 1/2" DR 1/2" 12 PT | J5324 | SKT 1/2" DR 3/4" 12 PT DEEP |
| J5418 | SKT 1/2" DR 9/16" 12 PT | J5326 | SKT 1/2" DR 13/16" 12 PT DEEP |
| J5420 | SKT 1/2" DR 5/8" 12 PT | J5328 | SKT 1/2" DR 7/8" 12 PT DEEP |
| J5422 | SKT 1/2" DR 11/16" 12 PT | J5330 | SKT 1/2" DR 15/16" 12 PT DEEP |
| J5424 | SKT 1/2" DR 3/4" 12 PT | J5332 | SKT 1/2" DR 1" 12 PT DEEP |
| J5426 | SKT 1/2" DR 13/16" 12 PT | J5334 | SKT 1/2" DR 1-1/16" 12 PT DEEP |
| J5428 | SKT 1/2" DR 7/8" 12 PT | J5336 | SKT 1/2" DR 1-1/8" 12 PT DEEP |
| J5430 | SKT 1/2" DR 15/16" 12 PT | J5340 | SKT 1/2" DR 1-1/4" 12 PT DEEP |
| J5432 | SKT 1/2" DR 1" 12 PT | J5461 | EXTENSION 1/2" DR 5" |
| J5434 | SKT 1/2" DR 1-1/16" 12 PT | J5463 | EXTENSION 1/2" DR 10" |
| J5436 | SKT 1/2" DR 1-1/8" 12 PT | J5467 | HANDLE HINGE 1/2" DR 15-3/4" |
| J5440 | SKT 1/2" DR 1-1/4" 12 PT | J5449 | CLASSIC RATCHET 1/2" DR 7" |
| J5316 | SKT 1/2" DR 1/2" 12 PT DEEP | | |
| J5318 | SKT 1/2" DR 9/16" 12 PT DEEP | | |

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11" W x 16" D x 2" H

1/2" DRIVE 30 PIECE SOCKET SET W/ PREMIUM PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J54126XLK

Tool Set Only Part #: J54126XL

Foam Only Part #: J54126XLF

| Part # | Description | Part # | Description |
|--------|------------------------------|---------|---------------------------------|
| J5412 | SKT 1/2" DR 3/8" 12 PT | J5320 | SKT 1/2" DR 5/8" 12 PT DEEP |
| J5414 | SKT 1/2" DR 7/16" 12 PT | J5322 | SKT 1/2" DR 11/16" 12 PT DEEP |
| J5416 | SKT 1/2" DR 1/2" 12 PT | J5324 | SKT 1/2" DR 3/4" 12 PT DEEP |
| J5418 | SKT 1/2" DR 9/16" 12 PT | J5326 | SKT 1/2" DR 13/16" 12 PT DEEP |
| J5420 | SKT 1/2" DR 5/8" 12 PT | J5328 | SKT 1/2" DR 7/8" 12 PT DEEP |
| J5422 | SKT 1/2" DR 11/16" 12 PT | J5330 | SKT 1/2" DR 15/16" 12 PT DEEP |
| J5424 | SKT 1/2" DR 3/4" 12 PT | J5332 | SKT 1/2" DR 1" 12 PT DEEP |
| J5426 | SKT 1/2" DR 13/16" 12 PT | J5334 | SKT 1/2" DR 1-1/16" 12 PT DEEP |
| J5428 | SKT 1/2" DR 7/8" 12 PT | J5336 | SKT 1/2" DR 1-1/8" 12 PT DEEP |
| J5430 | SKT 1/2" DR 15/16" 12 PT | J5340 | SKT 1/2" DR 1-1/4" 12 PT DEEP |
| J5432 | SKT 1/2" DR 1" 12 PT | J5461 | EXTENSION 1/2" DR 5" |
| J5434 | SKT 1/2" DR 1-1/16" 12 PT | J5463 | EXTENSION 1/2" DR 10" |
| J5436 | SKT 1/2" DR 1-1/8" 12 PT | J5467 | HANDLE HINGE 1/2" DR 15-3/4" |
| J5440 | SKT 1/2" DR 1-1/4" 12 PT | J5449XL | PREMIUM RATCHET 1/2" DR 10-1/2" |
| J5316 | SKT 1/2" DR 1/2" 12 PT DEEP | | |
| J5318 | SKT 1/2" DR 9/16" 12 PT DEEP | | |

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11" W x 16" D x 2" H

11" X 16" MODULES

MODULAR SETS

11" W x 16" D MODULES

1/2" DRIVE 30 PIECE SOCKET SET W/ PRECISION 90 PEAR HEAD RATCHET - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J54126HTCK

Tool Set Only Part #: J54126HTC


Foam Only Part #: J54126HTCF



11" W x 16" D x 2" H

| Part # | Description | Part # | Description |
|--------|---------------------------|--------|--------------------------------|
| J5412 | SKT 1/2" DR 3/8" 12 PT | J5316 | SKT 1/2" DR 1/2" 12 PT DEEP |
| J5414 | SKT 1/2" DR 7/16" 12 PT | J5318 | SKT 1/2" DR 9/16" 12 PT DEEP |
| J5416 | SKT 1/2" DR 1/2" 12 PT | J5320 | SKT 1/2" DR 5/8" 12 PT DEEP |
| J5418 | SKT 1/2" DR 9/16" 12 PT | J5322 | SKT 1/2" DR 11/16" 12 PT DEEP |
| J5420 | SKT 1/2" DR 5/8" 12 PT | J5324 | SKT 1/2" DR 3/4" 12 PT DEEP |
| J5422 | SKT 1/2" DR 11/16" 12 PT | J5326 | SKT 1/2" DR 13/16" 12 PT DEEP |
| J5424 | SKT 1/2" DR 3/4" 12 PT | J5328 | SKT 1/2" DR 7/8" 12 PT DEEP |
| J5426 | SKT 1/2" DR 13/16" 12 PT | J5330 | SKT 1/2" DR 15/16" 12 PT DEEP |
| J5428 | SKT 1/2" DR 7/8" 12 PT | J5332 | SKT 1/2" DR 1" 12 PT DEEP |
| J5430 | SKT 1/2" DR 15/16" 12 PT | J5334 | SKT 1/2" DR 1-1/16" 12 PT DEEP |
| J5432 | SKT 1/2" DR 1" 12 PT | J5336 | SKT 1/2" DR 1-1/8" 12 PT DEEP |
| J5434 | SKT 1/2" DR 1-1/16" 12 PT | J5340 | SKT 1/2" DR 1-1/4" 12 PT DEEP |
| J5436 | SKT 1/2" DR 1-1/8" 12 PT | J5461 | EXTENSION 1/2" DR 5" |
| J5440 | SKT 1/2" DR 1-1/4" 12 PT | J5463 | EXTENSION 1/2" DR 10" |

| Part # | Description |
|----------|----------------------------------|
| J5467 | HANDLE HINGE 1/2" DR 15-3/4" |
| J5449HTC | PRECISION 90 RATCHET 1/2" DR 11" |

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11" X 16" MODULES / 23" X 16" MODULES

23" W x 16" D MODULES

15 PIECE COMBINATION WRENCH SET - SATIN - 12 POINT

Foam + Tool Set Part #: J1200FASDK


Tool Set Only Part #: J1200FASD

Foam Only Part #: J1200FASDF



23" W x 16" D x 1-1/4" H

| Part # | Description | Part # | Description |
|----------|--------------------------|----------|---------------------------|
| J1210A | WR COMB 5/16" ASD 12 PT | J1226ASD | WR COMB 13/16" ASD 12 PT |
| J1212ASD | WR COMB 3/8" ASD 12 PT | J1228ASD | WR COMB 7/8" ASD 12 PT |
| J1214ASD | WR COMB 7/16" ASD 12 PT | J1230ASD | WR COMB 15/16" ASD 12 PT |
| J1216ASD | WR COMB 1/2" ASD 12 PT | J1232ASD | WR COMB 1" ASD 12 PT |
| J1218ASD | WR COMB 9/16" ASD 12 PT | J1234ASD | WR COMB 1-1/16" ASD 12 PT |
| J1220ASD | WR COMB 5/8" ASD 12 PT | J1236ASD | WR COMB 1-1/8" ASD 12 PT |
| J1222ASD | WR COMB 11/16" ASD 12 PT | J1240ASD | WR COMB 1-1/4" ASD 12 PT |
| J1224ASD | WR COMB 3/4" ASD 12 PT | | |

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14 PIECE COMBINATION WRENCH SET - BLACK CHROME - 12 POINT

Foam + Tool Set Part #: J1200FBASDK

Tool Set Only Part #: J1200FBASD

Foam Only Part #: J1200FBASDF



23" W x 16" D x 1-1/4" H

| Part # | Description | Part # | Description |
|-----------|--------------------------|-----------|---------------------------|
| J1212BASD | WR COMB 3/8" ASD 12 PT | J1228BASD | WR COMB 7/8" ASD 12 PT |
| J1214BASD | WR COMB 7/16" ASD 12 PT | J1230BASD | WR COMB 15/16" ASD 12 PT |
| J1216BASD | WR COMB 1/2" ASD 12 PT | J1232BASD | WR COMB 1" ASD 12 PT |
| J1218BASD | WR COMB 9/16" ASD 12 PT | J1234BASD | WR COMB 1-1/16" ASD 12 PT |
| J1220BASD | WR COMB 5/8" ASD 12 PT | J1236BASD | WR COMB 1-1/8" ASD 12 PT |
| J1222BASD | WR COMB 11/16" ASD 12 PT | J1240BASD | WR COMB 1-1/4" ASD 12 PT |
| J1224BASD | WR COMB 3/4" ASD 12 PT | | |
| J1226BASD | WR COMB 13/16" ASD 12 PT | | |

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15 PIECE COMBINATION WRENCH SETS - FULL POLISH - 12 POINT

Foam + Tool Set Part #: J1200F-T500K

Tool Set Only Part #: J1200F-T500

Foam Only Part #: J1200F-T500F

| Part # | Description | Part # | Description |
|------------|--------------------------|------------|---------------------------|
| J1210-T500 | WR COMB 5/16" ASD 12 PT | J1226-T500 | WR COMB 13/16" ASD 12 PT |
| J1212-T500 | WR COMB 3/8" ASD 12 PT | J1228-T500 | WR COMB 7/8" ASD 12 PT |
| J1214-T500 | WR COMB 7/16" ASD 12 PT | J1230-T500 | WR COMB 15/16" ASD 12 PT |
| J1216-T500 | WR COMB 1/2" ASD 12 PT | J1232-T500 | WR COMB 1" ASD 12 PT |
| J1218-T500 | WR COMB 9/16" ASD 12 PT | J1234-T500 | WR COMB 1-1/16" ASD 12 PT |
| J1220-T500 | WR COMB 5/8" ASD 12 PT | J1236-T500 | WR COMB 1-1/8" ASD 12 PT |
| J1222-T500 | WR COMB 11/16" ASD 12 PT | J1240-T500 | WR COMB 1-1/4" ASD 12 PT |
| J1224-T500 | WR COMB 3/4" ASD 12 PT | | |

AS954G ASME B107.100-2010 



23" W x 16" D x 1-1/4" H


18 PIECE METRIC COMBINATION ASD WRENCH SET - SATIN - 12 POINT

Foam + Tool Set Part #: J1200R-MASDK

Tool Set Only Part #: J1200R-MASD

Foam Only Part #: J1200R-MASDF


| Part # | Description | Part # | Description |
|-----------|------------------------|-----------|------------------------|
| J1207MA | WR COMB 7MM ASD 12 PT | J1215MASD | WR COMB 15MM ASD 12 PT |
| J1208MA | WR COMB 8MM ASD 12 PT | J1216MASD | WR COMB 16MM ASD 12 PT |
| J1209MA | WR COMB 9MM ASD 12 PT | J1217MASD | WR COMB 17MM ASD 12 PT |
| J1210MASD | WR COMB 10MM ASD 12 PT | J1218MASD | WR COMB 18MM ASD 12 PT |
| J1211MASD | WR COMB 11MM ASD 12 PT | J1219MASD | WR COMB 19MM ASD 12 PT |
| J1212MASD | WR COMB 12MM ASD 12 PT | J1220MASD | WR COMB 20MM ASD 12 PT |
| J1213MASD | WR COMB 13MM ASD 12 PT | J1221MASD | WR COMB 21MM ASD 12 PT |
| J1214MASD | WR COMB 14MM ASD 12 PT | J1222MASD | WR COMB 22MM ASD 12 PT |

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23" W x 16" D x 1-1/4" H

| Part # | Description |
|-----------|------------------------|
| J1223MASD | WR COMB 23MM ASD 12 PT |
| J1224MASD | WR COMB 24MM ASD 12 PT |

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MULTI-SIZE MODULES

22 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SET - BLACK CHROME - SPLINE

Foam + Tool Set Part #: JSCVM-22SK

Tool Set Only Part #: JSCVM-22S

Foam Only Part #: JSCVM-22SF

| Part # | Description |
|---------|----------------------|
| JSCVM06 | WR COMB REV SPL 6MM |
| JSCVM07 | WR COMB REV SPL 7MM |
| JSCVM08 | WR COMB REV SPL 8MM |
| JSCVM09 | WR COMB REV SPL 9MM |
| JSCVM10 | WR COMB REV SPL 10MM |
| JSCVM11 | WR COMB REV SPL 11MM |
| JSCVM12 | WR COMB REV SPL 12MM |
| JSCVM13 | WR COMB REV SPL 13MM |
| JSCVM14 | WR COMB REV SPL 14MM |
| JSCVM15 | WR COMB REV SPL 15MM |
| JSCVM16 | WR COMB REV SPL 16MM |
| JSCVM17 | WR COMB REV SPL 17MM |
| JSCVM18 | WR COMB REV SPL 18MM |



23" W x 16" D x 1-1/4" H

| Part # | Description |
|---------|----------------------|
| JSCVM19 | WR COMB REV SPL 19MM |
| JSCVM21 | WR COMB REV SPL 21MM |
| JSCVM22 | WR COMB REV SPL 22MM |
| JSCVM24 | WR COMB REV SPL 24MM |
| JSCVM27 | WR COMB REV SPL 27MM |



23" W x 16" D x 1-1/4" H

| Part # | Description |
|---------|----------------------|
| JSCVM30 | WR COMB REV SPL 30MM |
| JSCVM32 | WR COMB REV SPL 32MM |
| JSCVM34 | WR COMB REV SPL 34MM |
| JSCVM36 | WR COMB REV SPL 36MM |

23" X 16" MODULES / MULTI-SIZE MODULES

MODULAR SETS

MULTI-SIZE MODULES

20 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SET - BLACK CHROME - SPLINE

Foam + Tool Set Part #: JSCV-20SK

Tool Set Only Part #: JSCV-20S

Foam Only Part #: JSCV-20SF



11" W x 16" D x 1-1/4" H



23" W x 16" D x 1-1/4" H

| Part # | Description |
|--------|------------------------|
| JSCV07 | WR COMB REV SPL 7/32" |
| JSCV08 | WR COMB REV SPL 1/4" |
| JSCV09 | WR COMB REV SPL 9/32" |
| JSCV10 | WR COMB REV SPL 5/16" |
| JSCV11 | WR COMB REV SPL 11/32" |
| JSCV12 | WR COMB REV SPL 3/8" |
| JSCV14 | WR COMB REV SPL 7/16" |
| JSCV16 | WR COMB REV SPL 1/2" |
| JSCV18 | WR COMB REV SPL 9/16" |
| JSCV20 | WR COMB REV SPL 5/8" |
| JSCV22 | WR COMB REV SPL 11/16" |
| JSCV24 | WR COMB REV SPL 3/4" |

| Part # | Description |
|--------|------------------------|
| JSCV26 | WR COMB REV SPL 13/16" |
| JSCV28 | WR COMB REV SPL 7/8" |
| JSCV30 | WR COMB REV SPL 15/16" |
| JSCV32 | WR COMB REV SPL 1" |

| Part # | Description |
|--------|-------------------------|
| JSCV34 | WR COMB REV SPL 1-1/16" |
| JSCV36 | WR COMB REV SPL 1-1/8" |
| JSCV40 | WR COMB REV SPL 1-1/4" |
| JSCV48 | WR COMB REV SPL 1-1/2" |

MULTI-SIZE MODULES

1/2" DRIVE 65 PIECE COMBINATION SOCKET SET - FULL POLISH - 8 & 12 POINT

Foam + Tool Set Part #: J54132K

Tool Set Only Part #: J54132

Foam Only Part #: J54132F



11" W x 16" D x 2-1/2" H




23" W x 16" D x 1-1/4" H

| Part # | Description |
|--------|---------------------------|
| J5412S | SKT 1/2" DR 3/8" 8 PT |
| J5414S | SKT 1/2" DR 7/16" 8 PT |
| J5416S | SKT 1/2" DR 1/2" 8 PT |
| J5418S | SKT 1/2" DR 9/16" 8 PT |
| J5420S | SKT 1/2" DR 5/8" 8 PT |
| J5422S | SKT 1/2" DR 11/16" 8 PT |
| J5424S | SKT 1/2" DR 3/4" 8 PT |
| J5426S | SKT 1/2" DR 13/16" 8 PT |
| J5428S | SKT 1/2" DR 7/8" 8 PT |
| J5432S | SKT 1/2" DR 1" 8 PT |
| J5412 | SKT 1/2" DR 3/8" 12 PT |
| J5414 | SKT 1/2" DR 7/16" 12 PT |
| J5416 | SKT 1/2" DR 1/2" 12 PT |
| J5418 | SKT 1/2" DR 9/16" 12 PT |
| J5419 | SKT 1/2" DR 19/32" 12 PT |
| J5420 | SKT 1/2" DR 5/8" 12 PT |
| J5422 | SKT 1/2" DR 11/16" 12 PT |
| J5424 | SKT 1/2" DR 3/4" 12 PT |
| J5425 | SKT 1/2" DR 25/32" 12 PT |
| J5426 | SKT 1/2" DR 13/16" 12 PT |
| J5428 | SKT 1/2" DR 7/8" 12 PT |
| J5429 | SKT 1/2" DR 29/32" 12 PT |
| J5430 | SKT 1/2" DR 15/16" 12 PT |
| J5432 | SKT 1/2" DR 1" 12 PT |
| J5434 | SKT 1/2" DR 1-1/16" 12 PT |
| J5436 | SKT 1/2" DR 1-1/8" 12 PT |
| J5438 | SKT 1/2" DR 1-3/16" 12 PT |
| J5440 | SKT 1/2" DR 1-1/4" 12 PT |

| Part # | Description |
|----------|--------------------------------|
| J5442 | SKT 1/2" DR 1-5/16" 12 PT |
| J5444 | SKT 1/2" DR 1-3/8" 12 PT |
| J5446 | SKT 1/2" DR 1-7/16" 12 PT |
| J5448 | SKT 1/2" DR 1-1/2" 12 PT |
| J5316 | SKT 1/2" DR 1/2" 12 PT DEEP |
| J5318 | SKT 1/2" DR 9/16" 12 PT DEEP |
| J5320 | SKT 1/2" DR 5/8" 12 PT DEEP |
| J5322 | SKT 1/2" DR 11/16" 12 PT DEEP |
| J5324 | SKT 1/2" DR 3/4" 12 PT DEEP |
| J5326 | SKT 1/2" DR 13/16" 12 PT DEEP |
| J5328 | SKT 1/2" DR 7/8" 12 PT DEEP |
| J5330 | SKT 1/2" DR 15/16" 12 PT DEEP |
| J5332 | SKT 1/2" DR 1" 12 PT DEEP |
| J5334 | SKT 1/2" DR 1-1/16" 12 PT DEEP |
| J5336 | SKT 1/2" DR 1-1/8" 12 PT DEEP |
| J5340 | SKT 1/2" DR 1-1/4" 12 PT DEEP |
| J5444A | SKT DRAG LINK 1/2" DR 3/4" |
| J54411/2 | SKT HEX BIT 1/2" DR 1/2" |
| J54411/4 | SKT HEX BIT 1/2" DR 1/4" |
| J54413/8 | SKT HEX BIT 1/2" DR 3/8" |

| Part # | Description |
|-----------|------------------------------|
| J54415/16 | SKT HEX BIT 1/2" DR 5/16" |
| J54415/8 | SKT HEX BIT 1/2" DR 5/8" |
| J54417/16 | SKT HEX BIT 1/2" DR 7/16" |
| J54419/16 | SKT HEX BIT 1/2" DR 9/16" |
| J5470A | UNIV JOINT 1/2" DR |
| J5475A | UNIV SKT 1/2" DR 1/2" 12 PT |
| J5476A | UNIV SKT 1/2" DR 9/16" 12 PT |
| J5477A | UNIV SKT 1/2" DR 5/8" 12 PT |
| J5460 | EXTENSION 1/2" DR 2-1/2" |
| J5461 | EXTENSION 1/2" DR 5" |
| J5463 | EXTENSION 1/2" DR 10" |
| J5468 | HANDLE HINGE 1/2" DR 18-5/8" |
| J5480G | HANDLE SLIDING-T 1/2" DR |
| J5485 | HANDLE SLIDING-T 1/2" DR |
| J5447 | RATCHET ADAPTER 1/2" DR |
| J5449 | CLASSIC RATCHET 1/2" DR 10" |
| J5450 | CLASSIC RATCHET 1/2" DR 16" |

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MASTER SETS



MASTER SETS

KITTED MASTER SETS

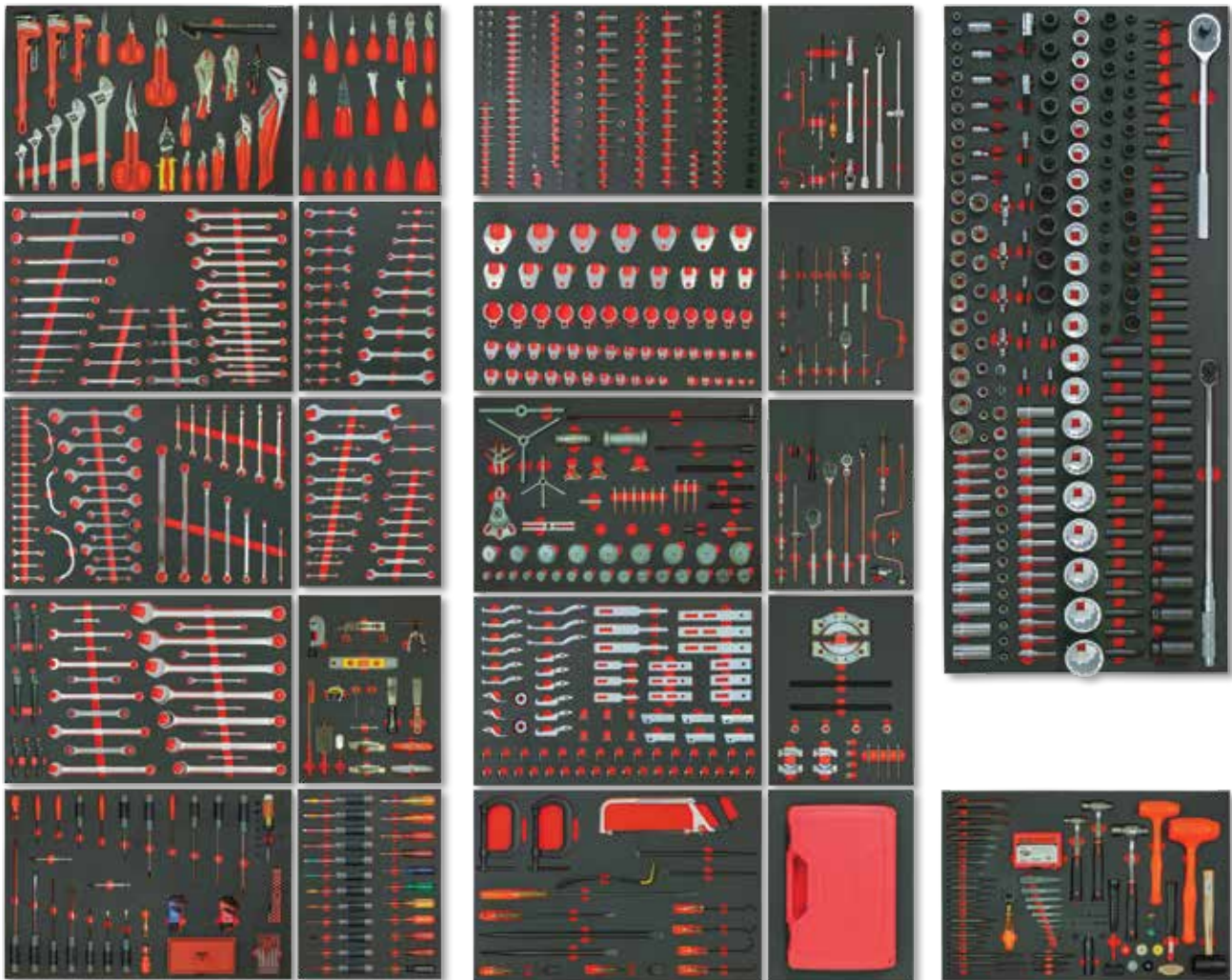
1046 PIECE FOAMED MASTER TECHNICIAN MAINTENANCE SET

Foam + Tool Set + Top Chest J556627-10SG and
Workstation J556646-12SG Part #: JCS-1046MASBX3K
Tool Set Only Part #: JCS-1046MAS

- › 1/4", 3/8", 1/2", 3/4" Drive tools
- › Designed for fastener sizes:
1/16" - 2-3/8", 2 mm - 24 mm.
- › 469 - Sockets and Accessories
- › 240 - Wrenches
- › 42 - Striking and Struck Tools
- › 32 - Pliers
- › 111 - Screwdrivers
- › 152 - Miscellaneous Tools
- › Visit ProtoIndustrial.com or contact your local representative for more set details.



TECHNICIAN MAINTENANCE SET

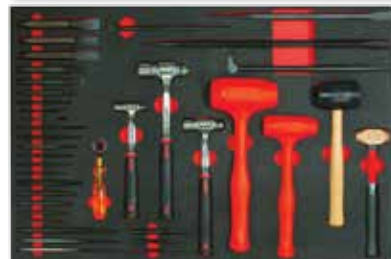
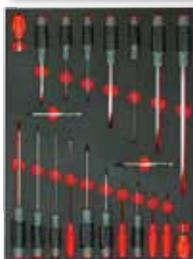
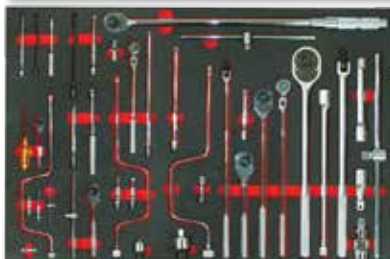


613 PIECE FOAMED MASTER TECHNICIAN MAINTENANCE SET

Foam + Tool Set + Workstation J556646-12SG Part #: JCS-0613MASBX3K

Tool Set Only Part #: JCS-0613MAS

- › 1/4", 3/8", 1/2", 3/4" Drive tools
- › Designed for fastener sizes:
1/16" - 2-3/8", 2 mm - 24 mm.
- › 305 - Sockets and Accessories
- › 170 - Wrenches
- › 34 - Striking and Struck Tools
- › 27 - Pliers
- › 32 - Screwdrivers
- › 45 - Miscellaneous Tools
- › Visit ProtoIndustrial.com or contact your local representative for more set details.



TECHNICIAN MAINTENANCE SET

MASTER SETS

KITTED MASTER SETS

497 PIECE FOAMED MASTER TECHNICIAN MAINTENANCE SET

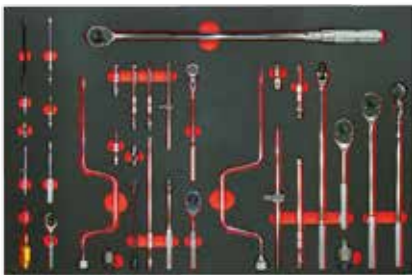
Foam + Tool Set + Workstation J556646-11SG Part #: J99923K

Tool Set Only Part #: J99920

- › 1/4", 3/8", 1/2" Drive tools
- › Designed for fastener sizes:
1/16" - 1-1/2", 2.5 mm - 24 mm
- › 259 - Sockets and Accessories
- › 128 - Wrenches
- › 32 - Striking and Struck Tools
- › 14 - Pliers
- › 30 - Screwdrivers
- › 34 - Miscellaneous Tools
- › Visit ProtoIndustrial.com or contact your local representative for more set details.



TECHNICIAN MAINTENANCE SET



411 PIECE AIRCRAFT MAINTENANCE SET

- › 1/4", 3/8", 1/2" Drive tools.
- › Designed for fastener sizes 1/16" - 1".
- › 173 Sockets and Accessories
- › 107 Wrenches
- › 17 Striking and Struck Tools
- › 17 Pliers
- › 40 Screwdrivers
- › 57 Miscellaneous Tools.
- › Enhanced version of Proto® J98200 Aircraft Maintenance Set.
- › Weight (lbs): 129.0 (Tools Only)



MASTER SETS

411 PIECE AIRCRAFT MAINTENANCE SET (CONT'D)

Product #: **JTS-0411AIR**

AIRCRAFT SETS

| Contents | Description |
|------------|-----------------------------------------------|
| J725/16S2 | Chisel, Cape 7/32" |
| J765/16S2 | Chisel, Diamond PT 3/16" |
| J86A1/4S2 | Chisel, Cold 5/16" |
| J86A3/8S2 | Chisel, Cold 7/16" |
| J86A7/16S2 | Chisel, Cold 1/2" |
| J5260 | Extension, 3/8" DR 3" |
| J5260-06 | Extension, 3/8" DR 6" |
| J5261 | Extension, 3/8" DR 8" |
| J5262 | Extension, 3/8" DR 12" |
| J4759L | Extension, Locking 1/4" DR 2" |
| J4761L | Extension, Locking 1/4" DR 6" |
| J5260-06L | Extension, Locking 3/8" DR 6" |
| J5262L | Extension, Locking 3/8" DR 12" |
| J5461L | Extension, Locking 1/2" DR 5" |
| J5463L | Extension, Locking 1/2" DR 10" |
| J4760W | Extension, Wobble 1/4" DR 3" |
| J5260-06W | Extension, Wobble 3/8" DR 6" |
| J5461W | Extension, Wobble 1/2" DR 5" |
| J69X00 | Extractor Set, Bolt 10 PC |
| J000AA | Feeler Gauge Set, Master 25 Blade |
| 95-112E | Flashlight, LED Tripod, Molded Legs |
| J000K | Gauge Set, Spark Plug Gap |
| 28-240 | Putty Knife, Nylon Handle, Flexible 1-1/4" |
| 15-113 | Hacksaw, High-Tension 12" |
| J1308AVP | Hammer, Ball Pein, Anti-Vibe® 8 oz. |
| J1316AVP | Hammer, Ball Pein, Anti-Vibe® 16 oz. |
| J57-532 | Hammer, Dead Blow Combo Face 28 oz. |
| J57-533 | Hammer, Dead Blow Combo Face 48 oz. |
| J4780G | Handle, Speed 1/2" DR |
| J5265 | Handle, Hinge 3/8" DR |
| J5280G | Handle, Speed 1/4" DR 15-1/2" |
| J5285 | Handle, Sliding-T 3/4" DR |
| J5467 | Handle, Hinge 1/2" DR 15-3/4" |
| J5480G | Handle, Sliding-T 3/8" DR |
| J4980 | Hex Key Set, 13 PC |
| J2108 | Holder, Punch and Chisel |
| 10-189C | Knife, Self Retracting Safety Blade Utility |
| J6066CXLR | Lock Ring for J6072CX |
| J2373 | Mirror, Rectangular Telescoping 2-1/8" |
| JN113204R | Nut Driver, 11/32" x 4" |
| JN1204R | Nut Driver, 1/2" x 4" |
| JN1404R | Nut Driver, 1/4" x 4" |
| JN31604R | Nut Driver, 3/16" x 4" |
| JN3804R | Nut Driver, 3/8" x 4" |
| JN51604R | Nut Driver, 5/16" x 4" |
| JN71604R | Nut Driver, 7/16" x 4" |
| J2381 | Pick, Cotter Pin Puller |
| J197 | Pliers, Wire Twister Reversible Safety 11" |
| J206G | Pliers, Diagonal Cutting w/Grip 6-1/16" |
| J226G | Pliers, Needle Nose w/ Cutter 6-5/8" |
| J227G | Pliers, Duckbill w/ Grip 7-25/32" |
| J253G | Pliers, Cannon Plug Soft Jaw 9-1/2" |
| J276GXL | Pliers, XL Series Combo Slip-Joint w/ Grip 6" |

| Contents | Description |
|-------------|---------------------------------------------------|
| J291NC | Pliers, Nickel Chrome Locking Straight 7-15/32" |
| J298 | Pliers, Wire Strippers 8-1/4" |
| J360B | Pliers Set, Convertible Retaining Ring 12 PC |
| J2116 | Pry Bar, Aligning 16" |
| J413/8S2 | Punch, Center 3/8" |
| J471/4X3/32 | Punch, Pin 3/32" |
| J473/8X3/16 | Punch, Pin 3/16" |
| J475/16X1/8 | Punch, Pin 1/8" |
| J503/16 | Punch, Starting 1/16" |
| J503/8 | Punch, Starting 3/16" |
| J505/16 | Punch, Starting 1/8" |
| J4749HS | Ratchet, Aerospace Classic 1/4" DR 5" |
| J4749XL | Ratchet, Premium Pear Head 1/4" DR 6-11/16" |
| J5247 | Ratchet, Adapter 3/8" DR |
| J5248S | Ratchet, Stubby Classic Pear Head 3/8" DR 5" |
| J5249HS | Ratchet, Aerospace Classic 3/8" DR 7" |
| J5249XL | Ratchet, Premium Pear Head 3/8" DR 8-1/2" |
| J5449XL | Ratchet, Premium Pear Head 1/2" DR 10-1/2" |
| J2344 | Tool, Holder/Retriever, Flexible 13-1/2" |
| J2375 | Tool, Retriever, Pocket Magnetic 16-3/4 - 26-3/4" |
| J2343 | Scraper, Carbon 1-1/2" |
| J9853 | Screw Starter, Slotted 5-5/8" |
| J9884 | Screw Starter, Phillips 5-3/4" |
| J341/4 | Screwdriver, Offset Phillips # 1 / # 2 |
| J343/8 | Screwdriver, Offset Phillips # 3 / # 4 |
| J361/4 | Screwdriver, Slotted Offset 1/4" |
| J363/8 | Screwdriver, Slotted Offset 3/8" |
| J9322 | Screwdriver Bit Set, Ratcheting Magnetic 11 PC |
| JC31604R | Screwdriver, Slotted Cabinet Round 3/16" x 4" |
| JCP1803R | Screwdriver, Slotted Cabinet Round 1/8" x 3" |
| JCP1804R | Screwdriver, Slotted Cabinet Round 1/8" x 4" |
| JCP1806R | Screwdriver, Slotted Round Cabinet 1/8" x 6" |
| JCP1808R | Screwdriver, Slotted Cabinet Round 1/8" x 8" |
| JK1404R | Screwdriver, Slotted Keystone Round 1/4" x 4" |
| JK14112R | Screwdriver, Slotted Round Stubby 1/4" x 1-1/2" |
| JK3808R | Screwdriver, Slotted Keystone Round 3/8" x 8" |
| JK3810R | Screwdriver, Slotted Keystone Round 3/8" x 10" |
| JK51606R | Screwdriver, Slotted Keystone Round 5/16" x 6" |
| JP0103R | Screwdriver, Phillips Round # 1 x 3" |
| JP0204R | Screwdriver, Phillips Round # 2 x 4" |
| JP02112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" |
| JP0306R | Screwdriver, Phillips Round # 3 x 6" |
| JP0408R | Screwdriver, Phillips Round # 4 x 8" |
| JPP0003R | Screwdriver, Phillips Round # 0 x 3" |
| J303L | Snips, Aviation Left |
| J303R | Snips, Aviation Right |
| J303S | Snips, Aviation Straight |
| J5246 | Socket, Bit Screwdriver Slotted 3/8" DR 1/4" |
| J4706T | Socket, 1/4" DR 3/16" 12 PT |
| J4707T | Socket, 1/4" DR 7/32" 12 PT |
| J4708T | Socket, 1/4" DR 1/4" 12 PT |
| J4709T | Socket, 1/4" DR 9/32" 12 PT |
| J4710T | Socket, 1/4" DR 5/16" 12 PT |

| Contents | Description |
|-----------|---------------------------------------|
| J4711T | Socket, 1/4" DR 11/32" 12 PT |
| J4712T | Socket, 1/4" DR 3/8" 12 PT |
| J4714T | Socket, 1/4" DR 7/16" 12 PT |
| J4716T | Socket, 1/4" DR 1/2" 12 PT |
| J4718T | Socket, 1/4" DR 9/16" 12 PT |
| J4706LT | Socket, Deep 1/4" DR 3/16" 12 PT |
| J4707LT | Socket, Deep 1/4" DR 7/32 12 PT |
| J4708LT | Socket, Deep 1/4" DR 1/4" 12 PT |
| J4709LT | Socket, Deep 1/4" DR 9/32" 12 PT |
| J4710LT | Socket, Deep 1/4" DR 5/16" 12 PT |
| J4711LT | Socket, Deep 1/4" DR 11/32" 12 PT |
| J4712LT | Socket, Deep 1/4" DR 3/8" 12 PT |
| J4714LT | Socket, Deep 1/4" DR 7/16" 12 PT |
| J4716LT | Socket, Deep 1/4" DR 1/2" 12 PT |
| J4718LT | Socket, Deep 1/4" DR 9/16" 12 PT |
| J4706SPL | Socket, Spline #6 1/4" DR 3/16" |
| J4707SPL | Socket, Spline #7 1/4" DR 7/32" |
| J4708SPL | Socket, Spline #8 1/4" DR 1/4" |
| J4709SPL | Socket, Spline #9 1/4" DR 9/32" |
| J4710SPL | Socket, Spline #10 1/4" DR 5/16" |
| J4712SPL | Socket, Spline #12 1/4" DR 3/8" |
| J4714SPL | Socket, Spline #14 1/4" DR 7/16" |
| J4706DPL | Socket, Deep Spline #6 1/4" DR 3/16" |
| J4707DPL | Socket, Deep Spline #7 1/4" DR 7/32" |
| J4708DPL | Socket, Deep Spline #8 1/4" DR 1/4" |
| J4709DPL | Socket, Deep Spline #9 1/4" DR 9/32" |
| J4710DPL | Socket, Deep Spline #10 1/4" DR 5/16" |
| J4712DPL | Socket, Deep Spline #12 1/4" DR 3/8" |
| J4714DPL | Socket, Deep Spline #14 1/4" DR 7/16" |
| J47701/16 | Socket, Hex Bit 1/4" DR 1/16" |
| J47701/4 | Socket, Hex Bit 1/4" DR 1/4" |
| J47701/8 | Socket, Hex Bit 1/4" DR 1/8" |
| J47703/16 | Socket, Hex Bit 1/4" DR 3/16" |
| J47703/32 | Socket, Hex Bit 1/4" DR 3/32" |
| J47705/16 | Socket, Hex Bit 1/4" DR 5/16" |
| J47705/32 | Socket, Hex Bit 1/4" DR 5/32" |
| J47705/64 | Socket, Hex Bit 1/4" DR 5/64" |
| J47707/32 | Socket, Hex Bit 1/4" DR 7/32" |
| J47707/64 | Socket, Hex Bit 1/4" DR 7/64" |
| J47709/64 | Socket, Hex Bit 1/4" DR 9/64" |
| J4771TA | Socket, Universal 1/4" DR 1/4" 12 PT |
| J4772TA | Socket, Universal 1/4" DR 5/16" 12 PT |
| J4773TA | Socket, Universal 1/4" DR 3/8" 12 PT |
| J4774TA | Socket, Universal 1/4" DR 7/16" 12 PT |
| J49901/4 | Socket, Hex Bit 3/8" DR 1/4" |
| J49901/8 | Socket, Hex Bit 3/8" DR 1/8" |
| J49903/16 | Socket, Hex Bit 3/8" DR 3/16" |
| J49903/8 | Socket, Hex Bit 3/8" DR 3/8" |
| J49905/16 | Socket, Hex Bit 3/8" DR 5/16" |
| J49905/32 | Socket, Hex Bit 3/8" DR 5/32" |
| J49907/32 | Socket, Hex Bit 3/8" DR 7/32" |
| J5012DPL | Socket, Deep Spline #12 3/8" DR 3/8" |
| J5014DPL | Socket, Deep Spline #14 3/8" DR 7/16" |

| Contents | Description |
|----------|----------------------------------------|
| J5016DPL | Socket, Deep Spline #16 3/8" DR 1/2" |
| J5018DPL | Socket, Deep Spline #18 3/8" DR 9/16" |
| J5020DPL | Socket, Deep Spline #20 3/8" DR 5/8" |
| J5008 | Socket, Deep 3/8" DR 1/4" 12 PT |
| J5010 | Socket, Deep 3/8" DR 5/16" 12 PT |
| J5012 | Socket, Deep 3/8" DR 3/8" 12 PT |
| J5014 | Socket, Deep 3/8" DR 7/16" 12 PT |
| J5016 | Socket, Deep 3/8" DR 1/2" 12 PT |
| J5018 | Socket, Deep 3/8" DR 9/16" 12 PT |
| J5020 | Socket, Deep 3/8" DR 5/8" 12 PT |
| J5022 | Socket, Deep 3/8" DR 11/16" 12 PT |
| J5024 | Socket, Deep 3/8" DR 3/4" 12 PT |
| J5026 | Socket, Deep 3/8" DR 13/16" 12 PT |
| J5028 | Socket, Deep 3/8" DR 7/8" 12 PT |
| J5030 | Socket, Deep 3/8" DR 15/16" 12 PT |
| J5032 | Socket, Deep 3/8" DR 1" 12 PT |
| J5208 | Socket, 3/8" DR 1/4" 12 PT |
| J5208S | Socket, 3/8" DR 1/4" 8 PT |
| J5210 | Socket, 3/8" DR 5/16" 12 PT |
| J5210S | Socket, 3/8" DR 5/16" 8 PT |
| J5212 | Socket, 3/8" DR 3/8" 12 PT |
| J5212S | Socket, 3/8" DR 3/8" 8 PT |
| J5214 | Socket, 3/8" DR 7/16" 12 PT |
| J5214S | Socket, 3/8" DR 7/16" 8 PT |
| J5216 | Socket, 3/8" DR 1/2" 12 PT |
| J5216S | Socket, 3/8" DR 1/2" 8 PT |
| J5218 | Socket, 3/8" DR 9/16" 12 PT |
| J5220 | Socket, 3/8" DR 5/8" 12 PT |
| J5222 | Socket, 3/8" DR 11/16" 12 PT |
| J5224 | Socket, 3/8" DR 3/4" 12 PT |
| J5226 | Socket, 3/8" DR 13/16" 12 PT |
| J5228 | Socket, 3/8" DR 7/8" 12 PT |
| J5230 | Socket, 3/8" DR 15/16" 12 PT |
| J5232 | Socket, 3/8" DR 1" 12 PT |
| J5212SPL | Socket, Spline #12 3/8" DR - 3/8" |
| J5214SPL | Socket, Spline #14 3/8" DR - 7/16" |
| J5216SPL | Socket, Spline #16 3/8" DR 1/2" |
| J5218SPL | Socket, Spline #18 3/8" DR - 9/16" |
| J5220SPL | Socket, Spline #20 3/8" DR - 5/8" |
| J5273A | Socket, Universal 3/8" DR 3/8" 12 PT |
| J5274A | Socket, Universal 3/8" DR 7/16" 12 PT |
| J5275A | Socket, Universal 3/8" DR 1/2" 12 PT |
| J5276A | Socket, Universal 3/8" DR 9/16" 12 PT |
| J5277A | Socket, Universal 3/8" DR 5/8" 12 PT |
| J5278A | Socket, Universal 3/8" DR 11/16" 12 PT |
| J5279A | Socket, Universal 3/8" DR 3/4" 12 PT |
| J5316DPL | Socket, Deep Spline #16 1/2" DR 1/2" |
| J5318DPL | Socket, Deep Spline #16 1/2" DR 9/16" |
| J5320DPL | Socket, Deep Spline #16 1/2" DR 5/8" |
| J5322DPL | Socket, Deep Spline #16 1/2" DR 11/16" |
| J5324DPL | Socket, Deep Spline #16 1/2" DR 3/4" |
| J5326DPL | Socket, Deep Spline #16 1/2" DR 13/16" |
| J5328DPL | Socket, Deep Spline #16 1/2" DR 7/8" |

MASTER SETS

411 PIECE AIRCRAFT MAINTENANCE SET (CONT'D)

Product #: **JTS-0411AIR**

AIRCRAFT SETS

| Contents | Description |
|-----------|---------------------------------------------------|
| J5330DPL | Socket, Deep Spline #16 1/2" DR 15/16" |
| J5414 | Socket, 1/2" DR 7/16" 12 PT |
| J5416 | Socket, 1/2" DR 1/2" 12 PT |
| J5418 | Socket, 1/2" DR 9/16" 12 PT |
| J5420 | Socket, 1/2" DR 5/8" 12 PT |
| J5422 | Socket, 1/2" DR 11/16" 12 PT |
| J5424 | Socket, 1/2" DR 3/4" 12 PT |
| J5426 | Socket, 1/2" DR 13/16" 12 PT |
| J5428 | Socket, 1/2" DR 7/8" 12 PT |
| J5430 | Socket, 1/2" DR 15/16" 12 PT |
| J5432 | Socket, 1/2" DR 1" 12 PT |
| J5416SPL | Socket, Spline #16 1/2" DR 1/2" |
| J5418SPL | Socket, Spline #18 1/2" DR 9/16" |
| J5420SPL | Socket, Spline #20 1/2" DR 5/8" |
| J5422SPL | Socket, Spline #22 1/2" DR 11/16" |
| J5424SPL | Socket, Spline #24 1/2" DR 3/4" |
| J5426SPL | Socket, Spline #26 1/2" DR 13/16" |
| J5428SPL | Socket, Spline #28 1/2" DR 7/8" |
| J5430SPL | Socket, Spline #30 1/2" DR 15/16" |
| J5241 | Socket, Phillips Bit 3/8" DR #2 |
| J5242 | Socket, Phillips Bit 3/8" DR #3 |
| J5243 | Socket, Phillips Bit 3/8" DR #4 |
| J2584 | Socket Bar, 6-1/4" |
| J2586 | Socket Bar, 13" |
| J2599 | Socket Bar, Torque Adapters |
| J2590 | Socket Clip, 1/4" DR |
| J2591 | Socket Clip, 3/8" DR |
| J4769 | Socket Driver, 1/4" DR |
| 46-123 | Square, Premium Die-Cast Handle Combination 12" |
| 33-212 | Tape Rule, PowerLock® Metal Case, 1/2" x 12' |
| J25TR01C | Tool Roll, 7 Pockets |
| J25TR02C | Tool Roll, 12 Pocket |
| J25TR08C | Tool Roll, 14 Pockets |
| J25TR34C | Tool Roll, 15 Pockets |
| JSBV8SP | Tool Roll, 8 Pocket |
| JSCVM13SP | Tool Roll, 13 Pocket |
| JSCV9SP | Tool Pouch |
| J5112 | Torque Adapter, 3/8" DR 3/8" |
| J5114 | Torque Adapter, 3/8" DR 7/16" |
| J5116 | Torque Adapter, 3/8" DR 1/2" |
| J5118 | Torque Adapter, 3/8" DR 9/16" |
| J5120 | Torque Adapter, 3/8" DR 5/8" |
| J5122 | Torque Adapter, 3/8" DR 11/16" |
| J5124 | Torque Adapter, 3/8" DR 3/4" |
| J5126 | Torque Adapter, 3/8" DR 13/16" |
| J5128 | Torque Adapter, 3/8" DR 7/8" |
| J6064CX | Torque Wrench, Ratcheting Head Micrometer 3/8" DR |
| J6066C | Torque Wrench, Ratcheting Head Micrometer 3/8" DR |
| J6072C | Torque Wrench, Ratcheting Head Micrometer 1/2" DR |
| J4770A | Universal Joint, 1/4" DR |
| J5270A | Universal Joint, 3/8" DR |
| J5470A | Universal Joint, 1/2" DR |
| J704L | Wrench, Adjustable Clik-Stop Satin 4" |

| Contents | Description |
|------------|---------------------------------------------------|
| J708L | Wrench, Adjustable Clik-Stop Satin 8" |
| J712L | Wrench, Adjustable Clik-Stop Satin 12" |
| J1120 | Wrench, Short Double Box Satin 5/16" x 3/8" 12 PT |
| J1122 | Wrench, Short Double Box Satin 3/8" x 7/16" 12 PT |
| J1126 | Wrench, Short Double Box Satin 1/2" x 9/16" 12 PT |
| J1131 | Wrench, Short Double Box Satin 5/8" x 3/4" 12 PT |
| J1210-T500 | Wrench, Combination Full Polish 5/16" 12 PT |
| J1212-T500 | Wrench, Combination Full Polish 3/8" 12 PT |
| J1214-T500 | Wrench, Combination Full Polish 7/16" 12 PT |
| J1216-T500 | Wrench, Combination Full Polish 1/2" 12 PT |
| J1218-T500 | Wrench, Combination Full Polish 9/16" 12 PT |
| J1220-T500 | Wrench, Combination Full Polish 5/8" 12 PT |
| J1222-T500 | Wrench, Combination Full Polish 11/16" 12 PT |
| J1224-T500 | Wrench, Combination Full Polish 3/4" 12 PT |
| J1226-T500 | Wrench, Combination Full Polish 13/16" 12 PT |
| J1228-T500 | Wrench, Combination Full Polish 7/8" 12 PT |
| J1230-T500 | Wrench, Combination Full Polish 15/16" 12 PT |
| J1232-T500 | Wrench, Combination Full Polish 1" 12 PT |
| J1234-T500 | Wrench, Combination Full Polish 1-1/16" 12 PT |
| J1236-T500 | Wrench, Combination Full Polish 1-1/8" 12 PT |
| J1240-T500 | Wrench, Combination Full Polish 1-1/4" 12 PT |
| J1725 | Wrench, Obstruction Box Satin 7/16" x 1/2" 12 PT |
| J1730 | Wrench, Obstruction Box Satin 9/16" x 5/8" 12 PT |
| J1731 | Wrench, Obstruction Box Satin 5/8" x 3/4" 12 PT |
| J3112 | Wrench, Angle Open-End Full Polish 3/8" |
| J3114 | Wrench, Angle Open-End Full Polish 7/16" |
| J3116 | Wrench, Angle Open-End Full Polish 1/2" |
| J3118 | Wrench, Angle Open-End Full Polish 9/16" |
| J3120 | Wrench, Angle Open-End Full Polish 5/8" |
| J3122 | Wrench, Angle Open-End Full Polish 11/16" |
| J3124 | Wrench, Angle Open-End Full Polish 3/4" |
| J3126 | Wrench, Angle Open-End Full Polish 13/16" |
| J3128 | Wrench, Angle Open-End Full Polish 7/8" |
| J3130 | Wrench, Angle Open-End Full Polish 15/16" |
| J3132 | Wrench, Angle Open-End Full Polish 1" |
| J3134 | Wrench, Angle Open-End Full Polish 1-1/16" |
| J3136 | Wrench, Angle Open-End Full Polish 1-1/8" |
| J3140 | Wrench, Angle Open-End Full Polish 1-1/4" |
| J3425 | Wrench, Extra Thin Open-End Satin 7/16" x 1/2" |
| J3426 | Wrench, Extra Thin Open-End Satin 1/2" x 9/16" |
| J3430 | Wrench, Extra Thin Open-End Satin 9/16" x 5/8" |
| J3435 | Wrench, Extra Thin Open-End Satin 11/16" x 3/4" |
| J3440 | Wrench, Extra Thin Open-End Satin 13/16" x 7/8" |
| J3751 | Wrench, Combination Flare Nut Satin 3/8" 6 PT |
| J3752 | Wrench, Combination Flare Nut Satin 7/16" 6 PT |
| J3753 | Wrench, Combination Flare Nut Satin 1/2" 6 PT |
| J3754 | Wrench, Combination Flare Nut Satin 9/16" 6 PT |
| J3755 | Wrench, Combination Flare Nut Satin 5/8" 6 PT |
| J3756 | Wrench, Combination Flare Nut Satin 11/16" 6 PT |
| J3757 | Wrench, Combination Flare Nut Satin 3/4" 6 PT |
| J4708CF | Wrench, Crowfoot Open End 1/4" DR 1/4" |
| J4710CF | Wrench, Crowfoot Open End 1/4" DR 5/16" |
| J4712CF | Wrench, Crowfoot Open End 1/4" DR 3/8" |

| Contents | Description |
|----------|-----------------------------------------------------------------|
| J4714CF | Wrench, Crowfoot Open End 1/4" DR 7/16" |
| J4716CF | Wrench, Crowfoot Open End 1/4" DR 1/2" |
| J4718CF | Wrench, Crowfoot Open End 1/4" DR 9/16" |
| J4912CF | Wrench, Crowfoot Open End 3/8" DR 3/8" |
| J4914CF | Wrench, Crowfoot Open End 3/8" DR 7/16" |
| J4916CF | Wrench, Crowfoot Open End 3/8" DR 1/2" |
| J4918CF | Wrench, Crowfoot Open End 3/8" DR 9/16" |
| J4920CF | Wrench, Crowfoot Open End 3/8" DR 5/8" |
| J4922CF | Wrench, Crowfoot Open End 3/8" DR 11/16" |
| J4924CF | Wrench, Crowfoot Open End 3/8" DR 3/4" |
| J4926CF | Wrench, Crowfoot Open End 3/8" DR 13/16" |
| J4928CF | Wrench, Crowfoot Open End 3/8" DR 7/8" |
| J4930CF | Wrench, Crowfoot Open End 3/8" DR 15/16" |
| J4932CF | Wrench, Crowfoot Open End 3/8" DR 1" |
| J8180 | Wrench, Deep Offset Double Box Satin 3/8" x 7/16" 12 PT |
| J8181 | Wrench, Deep Offset Double Box Satin 1/2" x 9/16" 12 PT |
| J8182 | Wrench, Deep Offset Double Box Satin 5/8" x 11/16" 12 PT |
| J8183A | Wrench, Deep Offset Double Box Satin 11/16" x 13/16" 12 PT |
| J8184 | Wrench, Deep Offset Double Box Satin 3/4" x 7/8" 12 PT |
| J8185 | Wrench, Deep Offset Double Box Satin 15/16" x 1" 12 PT |
| JSBV0709 | Wrench, Reversible Ratcheting Double Box 7/32" x 9/32" Spline |
| JSBV0810 | Wrench, Reversible Ratcheting Double Box 1/4" x 5/16" Spline |
| JSBV1214 | Wrench, Reversible Ratcheting Double Box 3/8" x 7/16" Spline |
| JSBV1618 | Wrench, Reversible Ratcheting Double Box 1/2" x 9/16" Spline |
| JSBV2022 | Wrench, Reversible Ratcheting Double Box 5/8" x 11/16" Spline |
| JSBV2428 | Wrench, Reversible Ratcheting Double Box 3/4" x 7/8" Spline |
| JSBV2630 | Wrench, Reversible Ratcheting Double Box 13/16" x 15/16" Spline |
| JSBV3236 | Wrench, Reversible Ratcheting Double Box 1" x 1-1/8" Spline |
| JSCV09 | Wrench, Reversible Ratcheting Combination 9/32" Spline |
| JSCV10 | Wrench, Reversible Ratcheting Combination 5/16" Spline |
| JSCV12 | Wrench, Reversible Ratcheting Combination 3/8" Spline |
| JSCV14 | Wrench, Reversible Ratcheting Combination 7/16" Spline |
| JSCV16 | Wrench, Reversible Ratcheting Combination 1/2" Spline |
| JSCV18 | Wrench, Reversible Ratcheting Combination 9/16" Spline |
| JSCV20 | Wrench, Reversible Ratcheting Combination 5/8" Spline |

| Contents | Description |
|----------|---------------------------------------------------------|
| JSCV22 | Wrench, Reversible Ratcheting Combination 11/16" Spline |
| JSCV24 | Wrench, Reversible Ratcheting Combination 3/4" Spline |
| JSCVM07 | Wrench, Reversible Ratcheting Combination 7 mm Spline |
| JSCVM08 | Wrench, Reversible Ratcheting Combination 8 mm Spline |
| JSCVM09 | Wrench, Reversible Ratcheting Combination 9 mm Spline |
| JSCVM10 | Wrench, Reversible Ratcheting Combination 10 mm Spline |
| JSCVM11 | Wrench, Reversible Ratcheting Combination 11 mm Spline |
| JSCVM12 | Wrench, Reversible Ratcheting Combination 12 mm Spline |
| JSCVM13 | Wrench, Reversible Ratcheting Combination 13 mm Spline |
| JSCVM14 | Wrench, Reversible Ratcheting Combination 14 mm Spline |
| JSCVM15 | Wrench, Reversible Ratcheting Combination 15 mm Spline |
| JSCVM16 | Wrench, Reversible Ratcheting Combination 16 mm Spline |
| JSCVM17 | Wrench, Reversible Ratcheting Combination 17 mm Spline |
| JSCVM18 | Wrench, Reversible Ratcheting Combination 18 mm Spline |
| JSCVM19 | Wrench, Reversible Ratcheting Combination 19 mm Spline |
| J25TR19C | Tool Roll, 9 Pockets |
| J2806SMP | Pliers Set, Miniature 6 PC |

MASTER SETS

233 PIECE AIRCRAFT MAINTENANCE SET

► Weight (lbs): 60.99 (Tools Only)

Tools Only



JTS-233FACM-1

With Roller Cabinet J559000-3SG



JTS-233FACMA



AIRCRAFT SETS

| Contents | Description |
|----------|-----------------------------------------|
| 69-006 | Awl, 100 Plus® Scratch |
| J61906 | Insert/Power Bit Set 38 PC |
| J9200DPB | Case, Blow Molded Red |
| 16-308 | Chisel, Bi-Material Wood 1/2" |
| 16-329 | Chisel, FATMAX® Concrete 3/4" |
| 16-978 | Chisel, FATMAX® Short Blade 1" |
| J350 | Cutter, Tubing 12" |
| J5260 | Extension, 3/8" DR 3" |
| 22-314 | File Set, w/ Handle 5PC |
| 95-112B | Flashlight, LED Tripod |
| 95-152 | Flashlight, Stanley® Pocket Performance |
| 20-531 | Hacksaw, FATMAX® High-Tension 12" |
| 54-024 | Hammer, Ball Pein 24oz |

| Contents | Description |
|----------|--------------------------------------------|
| J4981 | Hex Key Set 11 PC |
| J4984 | Hex Key Set, Metric 9 PC |
| 10-778 | Knife, Retractable Utility |
| 28-246 | Joint Knife, Flexible Nylon 6" |
| 43-511 | Level, Shock-Resistant Magnetic Torpedo 9" |
| J2372 | Mirror, Inspection Circle 2-1 |
| J9206 | Nut Driver, 3/16" x 2-3/4" |
| J9207 | Nut Driver, 7/32" x 2-3/4" |
| J9208 | Nut Driver, 1/4" x 2-3/4" |
| J9209 | Nut Driver, 9/32" x 2-3/4" |
| J9210 | Nut Driver, 5/16" x 2-3/4" |
| J9211 | Nut Driver, 11/32" x 2-3/4" |
| J9212 | Nut Driver, 3/8" x 2-3/4" |

233 PIECE AIRCRAFT MAINTENANCE SET (CONT'D)

Product #: **JTS-233FACM-1**

| Contents | Description |
|----------|-----------------------------------------------------|
| J9214 | Nut Driver 7/16" x 2-3/4" |
| J9216 | Nut Driver, 1/2" x 2-3/4" |
| J9218 | Nut Driver, 9/16" x 2-3/4" |
| J9220 | Nut Driver, 5/8" x 2-3/4" |
| J262SG | Pliers, Tongue and Groove 7-1/8" w/Grip |
| J264SG | Pliers, Power Track 12" |
| J268G | Pliers, Lineman's w/Grip 8-5/8" |
| J286LNXL | Pliers, Locking Mini Long Nose 6-29/32" |
| J209G | Pliers, Diagonal Cutting HD w/Grip 7-5/16" |
| J229-03G | Pliers, Needle-Nose w/ Grip |
| J297 | Pliers, Wire Stripper/Cutter 6-1/16" |
| J299 | Pliers, Wire Stripper/Crimper 8-1/2" |
| J288 | Pliers, Cable Cutter |
| J293XI | Pliers, Locking Straight 10" |
| J501/4S2 | Punch, Starting 3/32" |
| 28-241 | Putty Knife, Flexible Nylon 1-1/2" |
| J5249 | Ratchet, Classic Pear Head 3/8" DR 7" |
| J2345 | Retriever & Holder Flex |
| J2375 | Retriever Tool, Pocket Magnetic 16-3/4 - 26-3/4" |
| 20-556 | Saw, FATMAX® Jab |
| 20-046 | Saw, FATMAX® w/BladeArmor® 15" |
| 15-106 | Saw, Coping |
| 28-500 | Scraper, Razor Blade |
| 28-139 | Scraper, Stiff Nylon 3" |
| J61929 | Screwdriver Set, Magnetic 28 PC |
| 62-574 | Screwdriver Set, STANLEY® Ratcheting Multi-bit 21PC |
| JC31604R | Screwdriver, Slotted Cabinet Round 3/16" x 4" |
| JC31608R | Screwdriver, Slotted Cabinet Round 3/16" x 8" |
| JCP1803R | Screwdriver, Slotted Cabinet Round 1/8" x 3" |
| JCP1804R | Screwdriver, Slotted Cabinet Round 1/8" x 4" |
| JCP1808R | Screwdriver, Slotted Cabinet Round 1/8" x 8" |
| JK1404S | Screwdriver, Slotted Square 1/4" x 4" |
| JK14112R | Screwdriver, Slotted Round Stubby 1/4" x 1-1/2" |
| JK31604S | Screwdriver, Slotted Square 3/16" x 4" |
| JK3808S | Screwdriver, Slotted Square 3/8" x 8" |
| JK3812S | Screwdriver, Slotted Square 3/8" x 12" |
| JK51606S | Screwdriver, Slotted Square 5/16" x 6" |
| JPO103R | Screwdriver, Phillips Round # 1 x 3" |
| JPO108R | Screwdriver, Phillips Round # 1 x 8" |
| JPO204R | Screwdriver, Phillips Round # 2 x 4" |
| JPO208R | Screwdriver, Phillips Round # 2 x 8" |
| JPO2112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" |
| JPO306R | Screwdriver, Phillips Round # 3 x 6" |
| JPO408R | Screwdriver, Phillips Round # 4 x 8" |
| JPP0003R | Screwdriver, Phillips Round # 0 x 3" |
| J5010 | Socket, Deep 3/8" DR 5/16" 12 PT |
| J5012 | Socket, Deep 3/8" DR 3/8" 12 PT |
| J5014 | Socket, Deep 3/8" DR 7/16" 12 PT |
| J5016 | Socket, Deep 3/8" DR 1/2" 12 PT |
| J5018 | Socket, Deep 3/8" DR 9/16" 12 PT |
| J5020 | Socket, Deep 3/8" DR 5/8" 12 PT |
| J5022 | Socket, Deep 3/8" DR 11/16" 12 PT |
| J5024 | Socket, Deep 3/8" DR 3/4" 12 PT |

| Contents | Description |
|------------|-----------------------------------------------|
| J5026 | Socket, Deep 3/8" DR 13/16" 12 PT |
| J5028 | Socket, Deep 3/8" DR 7/8" 12 PT |
| J5208 | Socket, 3/8" DR 1/4" 12 PT |
| J5210 | Socket, 3/8" DR 5/16" 12 PT |
| J5212 | Socket, 3/8" DR 3/8" 12 PT |
| J5214 | Socket, 3/8" DR 7/16" 12 PT |
| J5216 | Socket, 3/8" DR 1/2" 12 PT |
| J5218 | Socket, 3/8" DR 9/16" 12 PT |
| J5220 | Socket, 3/8" DR 5/8" 12 PT |
| J5222 | Socket, 3/8" DR 11/16" 12 PT |
| J5224 | Socket, 3/8" DR 3/4" 12 PT |
| J5226 | Socket, 3/8" DR 13/16" 12 PT |
| J5228 | Socket, 3/8" DR 7/8" 12 PT |
| J5230 | Socket, 3/8" DR 15/16" 12 PT |
| J5232 | Socket, 3/8" DR 1" 12 PT |
| J5208M | Socket, 3/8" DR 8 mm 12 PT |
| J5209M | Socket, 3/8" DR 9 mm 12 PT |
| J5210M | Socket, 3/8" DR 10 mm 12 PT |
| J5211M | Socket, 3/8" DR 11 mm 12 PT |
| J5212M | Socket, 3/8" DR 12 mm 12 PT |
| J5213M | Socket, 3/8" DR 13 mm 12 PT |
| J5214M | Socket, 3/8" DR 14 mm 12 PT |
| J5215M | Socket, 3/8" DR 15 mm 12 PT |
| J5216M | Socket, 3/8" DR 16 mm 12 PT |
| J5217M | Socket, 3/8" DR 17 mm 12 PT |
| J5218M | Socket, 3/8" DR 18 mm 12 PT |
| J5219M | Socket, 3/8" DR 19 mm 12 PT |
| TR110 | Staple Gun |
| 55-525 | Super Wonderbar |
| 33-116 | Tape Rule, PowerLock®, 3/4" x 16' |
| J25TR34C | Tool Roll, 15 Pockets |
| J1210-T500 | Wrench, Combination Full Polish 5/16" 12 PT |
| J1212-T500 | Wrench, Combination Full Polish 3/8" 12 PT |
| J1214-T500 | Wrench, Combination Full Polish 7/16" 12 PT |
| J1216-T500 | Wrench, Combination Full Polish 1/2" 12 PT |
| J1218-T500 | Wrench, Combination Full Polish 9/16" 12 PT |
| J1220-T500 | Wrench, Combination Full Polish 5/8" 12 PT |
| J1222-T500 | Wrench, Combination Full Polish 11/16" 12 PT |
| J1224-T500 | Wrench, Combination Full Polish 3/4" 12 PT |
| J1226-T500 | Wrench, Combination Full Polish 13/16" 12 PT |
| J1228-T500 | Wrench, Combination Full Polish 7/8" 12 PT |
| J1230-T500 | Wrench, Combination Full Polish 15/16" 12 PT |
| J1232-T500 | Wrench, Combination Full Polish 1" 12 PT |
| J1234-T500 | Wrench, Combination Full Polish 1-1/16" 12 PT |
| J1236-T500 | Wrench, Combination Full Polish 1-1/8" 12 PT |
| J1240-T500 | Wrench, Combination Full Polish 1-1/4" 12 PT |
| J706 | Wrench, Adjustable Satin 6" |
| J710 | Wrench, Adjustable Satin 10" |
| J812A | Wrench, Pipe Aluminum 12" |
| J2585 | Socket Bar, 9" |
| J2586 | Socket Bar, 13" |
| J2591 | Socket Clip, 3/8" DR |

MASTER SETS

199 PIECE AIRCRAFT BASE MAINTENANCE SET

► Weight (lbs): 123.19

Tools Only



JTS-199AEROBK

With Roller Cabinet J553441-8DB



JTS-199AEROBK1A

AIRCRAFT SETS



199 PIECE AIRCRAFT BASE MAINTENANCE SET (CONT'D)

Product #: **JTS-199AEROBK**

| Contents | Description |
|------------|----------------------------------------------------------|
| 22-175 | File, Double Cut Flat Bastard 8" |
| 22-307 | File, Single Cut Round Bastard 6" |
| 28-141 | Putty Knife, Nylon Handle, Stiff 1-1/2" |
| 30-506 | Tape Rule, 1/2" x 6' |
| 66-039 | Screwdriver Set, Jeweler's Precision 6 PC |
| 66-101 | Screwdriver, 100 Plus® Standard Slotted Pocket 1/8" x 2" |
| FA-105.230 | Wrench, Monkey 9" |
| J000AA | Feeler Gauge Set, 5 Blade Master |
| J000D | Feeler Gauge, Ignition 10 Blade Set |
| J1120LB | Wrench, Double Box Black Oxide 5/16" x 3/8" 12 Point |
| J1125LB | Wrench, Double Box Black Oxide 7/16" x 1/2" 12 Point |
| J1130LB | Wrench, Double Box Black Oxide 9/16" x 5/8" 12 Point |
| J1135B | Wrench, Double Box Black Oxide 11/16" x 3/4" 12 Point |
| J1140B | Wrench, Double Box Black Oxide 13/16" x 7/8" 12 Point |
| J1145B | Wrench, Double Box Black Oxide 15/16" x 1" 12 Point |
| J1150B | Wrench, Double Box Black Oxide 1-1/16" x 1-1/8" 12 Point |
| J1151B | Wrench, Double Box Black Oxide 1-1/16" x 1-1/4" 12 Point |
| J1212BASD | Wrench, Combination Black Oxide 3/8" 12 Point |
| J1214BASD | Wrench, Combination Black Oxide 7/16" 12 Point |
| J1216BASD | Wrench, Combination Black Oxide 1/2" 12 Point |
| J1218BASD | Wrench, Combination Black Oxide 9/16" 12 Point |
| J1220BASD | Wrench, Combination Black Oxide 5/8" 12 Point |
| J1222BASD | Wrench, Combination Black Oxide 11/16" 12 Point |
| J1224BASD | Wrench, Combination Black Oxide 3/4" 12 Point |
| J1226BASD | Wrench, Combination Black Oxide 13/16" 12 Point |
| J1228BASD | Wrench, Combination Black Oxide 7/8" 12 Point |
| J1230BASD | Wrench, Combination Black Oxide 15/16" 12 Point |
| J1232BASD | Wrench, Combination Black Oxide 1" 12 Point |
| J1234BASD | Wrench, Combination Black Oxide 1-1/16" 12 Point |
| J1236BASD | Wrench, Combination Black Oxide 1-1/8" 12 Point |
| J1240BASD | Wrench, Combination Black Oxide 1-1/4" 12 Point |
| J1308AVP | Hammer, Anti-Vibe Ball Pein 8oz. |
| J18545B | Knife, Lockback 3-3/4" |
| J196 | Pliers, Safety Wire Twister Reversible 8-3/4" |
| J205G | Pliers, Diagonal Cutting w/Grip 5-1/16" |
| J226G | Pliers, Needle Nose w/ Cutter 6-5/8" |
| J227G | Pliers, Duckbill w/Grip 7-25/32" |
| J2302 | File, Ignition Point |
| J2345 | Retriever & Holder Flex |
| J235 | Pliers, Small Angle Nose w/Grip 5-1/4" |
| J2373 | Mirror, Rectangular Telescoping 2-1/8" |
| J2375 | Pocket Magnetic Retrieving Tool |
| J2587 | Socket Bar, 17" |
| J2592 | Socket Clip, 1/2" DR |
| J25TR08C | Tool Roll, 14 Pockets |
| J25TR10C | Tool Roll, 13 Pockets |
| J25TR20C | Tool Roll, 12 Pockets |
| J25TR27C | Tool Roll, 8 Pockets |
| J25TR41C | Tool Roll, 15 Pockets |
| J262SG | Pliers, Tongue and Groove 7-1/8" w/Grip |
| J270XL | Pliers, Locking Mini C-Clamp w/Swivel Pads 12-19/32" |

| Contents | Description |
|-------------|----------------------------------------------------|
| J275G | Pliers, Combination Slip-Joint w/Grip 5-13/16" |
| J290XL | Pliers, Locking Curved Jaw 7-15/32" |
| J3020B | Wrench, Open-End Black Oxide 5/16" x 3/8" |
| J3025B | Wrench, Open-End Black Oxide 7/16" x 1/2" |
| J3030B | Wrench, Open-End Black Oxide 9/16" x 5/8" |
| J3035B | Wrench, Open-End Black Oxide 11/16" x 3/4" |
| J303S | Snips, Aviation Straight |
| J3040B | Wrench, Open-End Black Oxide 13/16" x 7/8" |
| J3045B | Wrench, Open-End Black Oxide 15/16" x 1" |
| J3050B | Wrench, Open-End Black Oxide 1-1/16" x 1-1/8" |
| J3055B | Wrench, Open-End Black Oxide 1-1/4" x 1-5/16" |
| J3060B | Wrench, Open-End Black Oxide 1-3/8" x 1-7/16" |
| J3070B | Wrench, Open-End Black Oxide 1-1/2" x 1-5/8" |
| J3112 | Wrench, Angle Open-End Full Polish 3/8" |
| J3114 | Wrench, Angle Open-End Full Polish 7/16" |
| J3116 | Wrench, Angle Open-End Full Polish 1/2" |
| J3118 | Wrench, Angle Open-End Full Polish 9/16" |
| J3120 | Wrench, Angle Open-End Full Polish 5/8" |
| J3122 | Wrench, Angle Open-End Full Polish 11/16" |
| J3124 | Wrench, Angle Open-End Full Polish 3/4" |
| J3126 | Wrench, Angle Open-End Full Polish 13/16" |
| J3128 | Wrench, Angle Open-End Full Polish 7/8" |
| J3130 | Wrench, Angle Open-End Full Polish 15/16" |
| J3132 | Wrench, Angle Open-End Full Polish 1" |
| J3134 | Wrench, Angle Open-End Full Polish 1-1/16" |
| J3136 | Wrench, Angle Open-End Full Polish 1-1/8" |
| J3140 | Wrench, Angle Open-End Full Polish 1-1/4" |
| J3210 | Wrench, Ignition 13/64" x 15/64" |
| J3211 | Wrench, Ignition 15/64" x 13/64" |
| J3215 | Wrench, Ignition 7/32" x 1/4" |
| J3216 | Wrench, Ignition 1/4" x 7/32" |
| J3220 | Wrench, Ignition 9/32" x 5/16" |
| J3221 | Wrench, Ignition 5/16" x 9/32" |
| J3225 | Wrench, Ignition 11/32" x 3/8" |
| J3226 | Wrench, Ignition 3/8" x 11/32" |
| J341/4 | Screwdriver, Offset Phillips #1/#2 |
| J361/4 | Screwdriver, Slotted Offset 1/4" |
| J413/8S2 | Punch, Center 3/8" |
| J4707B | Socket, 1/4" Drive Black Oxide 7/32" 6 Point |
| J4707LB | Socket, 1/4" Drive Black Oxide Deep 7/32" 6 Point |
| J4707TB | Socket, 1/4" Drive Black Oxide 7/32" 12 Point |
| J4708B | Socket, 1/4" Drive Black Oxide 1/4" 6 Point |
| J4708LB | Socket, 1/4" Drive Black Oxide Deep 1/4" 6 Point |
| J4708TB | Socket, 1/4" Drive Black Oxide 1/4" 12 Point |
| J4709B | Socket, 1/4" Drive Black Oxide 9/32" 6 Point |
| J4709LB | Socket, 1/4" Drive Black Oxide Deep 9/32" 6 Point |
| J4709TB | Socket, 1/4" Drive Black Oxide 9/32" 12 Point |
| J471/4X3/32 | Punch, Pin 3/32" |
| J4710B | Socket, 1/4" Drive Black Oxide 5/16" 6 Point |
| J4710LB | Socket, 1/4" Drive Black Oxide Deep 5/16" 6 Point |
| J4710TB | Socket, 1/4" Drive Black Oxide 5/16" 12 Point |
| J4711B | Socket, 1/4" Drive Black Oxide 11/32" 6 Point |
| J4711LB | Socket, 1/4" Drive Black Oxide Deep 11/32" 6 Point |

MASTER SETS

199 PIECE AIRCRAFT BASE MAINTENANCE SET (CONT'D)

Product #: **JTS-199AEROBK**

AIRCRAFT SETS

| Contents | Description |
|--------------|------------------------------------------------------------|
| J4711TB | Socket, 1/4" Drive Black Oxide 11/32" 12 Point |
| J4712B | Socket, 1/4" Drive Black Oxide 3/8" 6 Point |
| J4712LB | Socket, 1/4" Drive Black Oxide Deep 3/8" 6 Point |
| J4712TB | Socket, 1/4" Drive Black Oxide 3/8" 12 Point |
| J4714B | Socket, 1/4" Drive Black Oxide 7/16" 6 Point |
| J4714LB | Socket, 1/4" Drive Black Oxide Deep 1/2" 6 Point |
| J4714TB | Socket, 1/4" Drive Black Oxide 7/16" 12 Point |
| J4716B | Socket, 1/4" Drive Black Oxide 1/2" 6 Point |
| J4716LB | Socket, 1/4" Drive Black Oxide Deep 7/16" 6 Point |
| J4716TB | Socket, 1/4" Drive Black Oxide 1/2" 12 Point |
| J4749XLBL | Ratchet, 1/4" Drive Premium Pear Head 6-11/16" Black Oxide |
| J475/16X1/8 | Punch, Pin 1/8" |
| J475/16X5/32 | Punch, Pin 5/32" |
| J4759B | Extension, 1/4" Drive Black Oxide 2" |
| J4761B | Extension, 1/4" Drive Black Oxide 6" |
| J4769 | Socket Driver, 1/4" Drive |
| J4770AB | Universal Joint, 1/4" Drive Black Oxide |
| J4770TA | Socket, Universal 1/4" Drive 7/32" 12 Point |
| J4771TA | Socket, Universal 1/4" Drive 1/4" 12 Point |
| J4772TA | Socket, Universal 1/4" Drive 5/16" 12 Point |
| J4773TA | Socket, Universal 1/4" Drive 3/8" 12 Point |
| J4774TA | Socket, Universal 1/4" Drive 7/16" 12 Point |
| J4775TA | Socket, Universal 1/4" Drive 1/2" 12 Point |
| J4777TA | Socket, Universal 1/4" Drive 9/32" 12 Point |
| J4778TA | Socket, Universal 1/4" Drive 11/32" 12 Point |
| J4780G | Handle, Speed 1/4" Drive 15-1/2" |
| J4980 | Hex Key, 13 PC Set |
| J5212B | Socket, 3/8" Drive Black Oxide 3/8" 12 Point |
| J5214B | Socket, 3/8" Drive Black Oxide 7/16" 12 Point |
| J5216B | Socket, 3/8" Drive Black Oxide 1/2" 12 Point |
| J5218B | Socket, 3/8" Drive Black Oxide 9/16" 12 Point |
| J5220B | Socket, 3/8" Drive Black Oxide 5/8" 12 Point |
| J5222B | Socket, 3/8" Drive Black Oxide 11/16" 12 Point |
| J5224B | Socket, 3/8" Drive Black Oxide 3/4" 12 Point |
| J5226B | Socket, 3/8" Drive Black Oxide 13/16" 12 Point |
| J5228B | Socket, 3/8" Drive Black Oxide 7/8" 12 Point |
| J5230B | Socket, 3/8" Drive Black Oxide 15/16" 12 Point |
| J5232B | Socket, 3/8" Drive Black Oxide 1" 12 Point |
| J5249XLBL | Ratchet, 3/8" Drive Premium Pear Head 8-1/2" Black Oxide |
| J5253B | Adapter, 3/8" F x 1/2" M Black Oxide |
| J5256B | Adapter, 1/4" F x 3/8" M Black Oxide |
| J5260B | Extension, 3/8" Drive 3" Black Oxide |

| Contents | Description |
|------------|-----------------------------------------------------------|
| J5262B | Extension, 3/8" Drive 12" Black Oxide |
| J5268 | Extension, 3/8" Drive Flexible 8" |
| J5270AB | Universal Joint, 3/8" Drive Black Oxide |
| J5412B | Socket, 1/2" Drive Black Oxide 3/8" 12 Point |
| J5414B | Socket, 1/2" Drive Black Oxide 7/16" 12 Point |
| J5416B | Socket, 1/2" Drive Black Oxide 1/2" 12 Point |
| J5418B | Socket, 1/2" Drive Black Oxide 9/16" 12 Point |
| J5420B | Socket, 1/2" Drive Black Oxide 5/8" 12 Point |
| J5422B | Socket, 1/2" Drive Black Oxide 11/16" 12 Point |
| J5424B | Socket, 1/2" Drive Black Oxide 3/4" 12 Point |
| J5426B | Socket, 1/2" Drive Black Oxide 13/16" 12 Point |
| J5428B | Socket, 1/2" Drive Black Oxide 7/8" 12 Point |
| J5430B | Socket, 1/2" Drive Black Oxide 15/16" 12 Point |
| J5432B | Socket, 1/2" Drive Black Oxide 1" 12 Point |
| J5434B | Socket, 1/2" Drive Black Oxide 1-1/16" 12 Point |
| J5436B | Socket, 1/2" Drive Black Oxide 1-1/8" 12 Point |
| J5438B | Socket, 1/2" Drive Black Oxide 1-3/16" 12 Point |
| J5440B | Socket, 1/2" Drive Black Oxide 1-1/4" 12 Point |
| J5449XLBL | Ratchet, 1/2" Drive Premium Pear Head 10-1/2" Black Oxide |
| J5461B | Extension, 1/2" Drive 5" Black Oxide |
| J5463B | Extension, 1/2" Drive 10" Black Oxide |
| J5470AB | Universal Joint, 1/2" Drive Black Oxide |
| J61304 | Extension, 1/4" Square 1/4" Hex |
| J61404 | Extension, 3/8" Square 1/4" Hex |
| J725/16S2 | Chisel, Cape 7/32" |
| J86012 | Chisel, Cold Super Duty 1/2" |
| J95218 | Sheath, Folding Knife - Leather |
| J963/4S2 | Punch, Drift 3/8" |
| J965/8S2 | Punch, Drift 5/16" |
| J9853 | Screw Starter, Slotted 5-5/8" |
| JK1404R | Screwdriver, Slotted Keystone Round 1/4" x 4" |
| JK1406R | Screwdriver, Slotted Round Bar 1/4" x 6" |
| JK3808R | Screwdriver, Slotted Keystone Round 3/8" x 8" |
| JK3810R | Screwdriver, Slotted Keystone Round 3/8" x 10" |
| JK3812R | Screwdriver, Slotted Round Bar 3/8" x 12" |
| JKB31603RP | Screwdriver, Slotted Keystone Round 3/16" x 3" |
| JP0103R | Screwdriver, Phillips Round # 1 x 3" |
| JP0204R | Screwdriver, Phillips Round # 2 x 4" |
| JP02112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" |
| JP0306R | Screwdriver, Phillips Round # 3 x 6" |
| JPP0003R | Screwdriver, Phillips Round # 0 x 3" |
| JSF105HM | Hammer, Soft Face 12" w/Tips - SF10 |

116 PIECE AIRCRAFT MECHANIC'S STARTER SET

- › 1/4", 3/8", 1/2" Drive tools.
- › Designed for fastener sizes 5/64" - 7/8".
- › 43 Sockets and Accessories
- › 16 Wrenches
- › 7 Striking and Struck Tools
- › 14 Pliers
- › 21 Screwdrivers
- › 15 Miscellaneous Tools.
- › Weight (lbs): 38 (Tools Only)

Tools Only



JTS-0116AIR

With Tool Box J9969R



JTS-0116AIRBX1A



MASTER SETS

116 PIECE AIRCRAFT MECHANIC'S STARTER SET (CONT'D)

Product #: **JTS-0116AIR**

AIRCRAFT SETS

| Contents | Description |
|-------------|---------------------------------------------------|
| J5253 | Adapter, 3/8" F x 1/2" M |
| J9322 | Bit Set, Screwdriver, Ratcheting Magnetic 11 PC |
| J86A1/2S2 | Chisel, Cold 5/8" |
| J4759 | Extension, 1/4" DR 2" |
| J4761 | Extension, 1/4" DR 6" |
| J5260 | Extension, 3/8" DR 3" |
| J5260-06 | Extension, 3/8" DR 6" |
| J5262 | Extension, 3/8" DR 12" |
| J000AA | Feeler Gauge Set, Master 25 Blade |
| 95-112E | Flashlight, LED Tripod, Molded Legs |
| 28-240 | Putty Knife, Nylon Handle, Flexible 1-1/4" |
| 15-113 | Hacksaw, High-Tension 12" |
| 57-595 | Hammer, Hickory Handle Soft Face, 16 oz. |
| J1308AVP | Hammer, Ball Pein, Anti-Vibe® 8 oz. |
| J5265 | Handle, Hinge 3/8" DR |
| J5280G | Handle, Speed 1/4" DR 15-1/2" |
| J4982 | Hex Key Set, 7 PC |
| J2108 | Holder, Punch and Chisel |
| J2373 | Mirror, Rectangular Telescoping 2-1/8" |
| J197 | Pliers, Wire Twister Reversible Safety 11" |
| J206G | Pliers, Diagonal Cutting w/Grip 6-1/16" |
| J226G | Pliers, Needle Nose w/ Cutter 6-5/8" |
| J227G | Pliers, Duckbill w/Grip 7-25/32" |
| J260SGXL | Pliers, XL Series Groove Joint w/ Grip 10" |
| J276GXL | Pliers, XL Series Combo Slip-Joint w/ Grip 6" |
| J291NC | Pliers, Nickel Chrome Locking Straight 7-15/32" |
| J297 | Pliers, Wire Stripper/Cutter 6-1/16" |
| J413/8S2 | Punch, Center 3/8" |
| J473/8X3/16 | Punch, Pin 3/16" |
| J475/16X1/8 | Punch, Pin 1/8" |
| J505/16S2 | Punch, Starting 1/8" |
| J4749XL | Ratchet, Premium Pear Head 1/4" DR 6-11/16" |
| J5249XL | Ratchet, Premium Pear Head 3/8" DR 8-1/2" |
| J2344 | Tool, Holder/Retriever, Flexible 13-1/2" |
| J2375 | Tool, Retriever, Pocket Magnetic 16-3/4 - 26-3/4" |
| J341/4 | Screwdriver, Offset Phillips # 1 / # 2 |
| J361/4 | Screwdriver, Slotted Offset 1/4" |
| JC31603R | Screwdriver, Slotted Cabinet Round 3/16" x 3" |
| JC31604R | Screwdriver, Slotted Cabinet Round 3/16" x 4" |
| JC31605R | Screwdriver, Slotted Cabinet Round 3/16" x 5" |
| JK1404R | Screwdriver, Slotted Keystone Round 1/4" x 4" |
| JK14112R | Screwdriver, Slotted Round Stubby 1/4" x 1-1/2" |
| JK51606R | Screwdriver, Slotted Keystone Round 5/16" x 6" |
| JPO103R | Screwdriver, Phillips Round # 1 x 3" |
| JPO204R | Screwdriver, Phillips Round # 2 x 4" |
| JPO2112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" |
| JPO306R | Screwdriver, Phillips Round # 3 x 6" |
| J303L | Snips, Aviation Left |
| J303R | Snips, Aviation Right |
| J303S | Snips, Aviation Straight |
| J4706T | Socket, 1/4" DR 3/16" 12 PT |
| J4707T | Socket, 1/4" DR 7/32" 12 PT |

| Contents | Description |
|------------|-----------------------------------------------|
| J4708T | Socket, 1/4" DR 1/4" 12 PT |
| J4709T | Socket, 1/4" DR 9/32" 12 PT |
| J4710T | Socket, 1/4" DR 5/16" 12 PT |
| J4711T | Socket, 1/4" DR 11/32" 12 PT |
| J4712T | Socket, 1/4" DR 3/8" 12 PT |
| J4714T | Socket, 1/4" DR 7/16" 12 PT |
| J4716T | Socket, 1/4" DR 1/2" 12 PT |
| J4718T | Socket, 1/4" DR 9/16" 12 PT |
| J4706LT | Socket, Deep 1/4" DR 3/16" 12 PT |
| J4707LT | Socket, Deep 1/4" DR 7/32" 12 PT |
| J4708LT | Socket, Deep 1/4" DR 1/4" 12 PT |
| J4709LT | Socket, Deep 1/4" DR 9/32" 12 PT |
| J4710LT | Socket, Deep 1/4" DR 5/16" 12 PT |
| J4711LT | Socket, Deep 1/4" DR 11/32" 12 PT |
| J4712LT | Socket, Deep 1/4" DR 3/8" 12 PT |
| J4714LT | Socket, Deep 1/4" DR 7/16" 12 PT |
| J4716LT | Socket, Deep 1/4" DR 1/2" 12 PT |
| J4718LT | Socket, Deep 1/4" DR 9/16" 12 PT |
| J5328H | Socket, Deep 1/2" DR 7/8" 6 PT |
| J5212 | Socket, 3/8" DR 3/8" 12 PT |
| J5214 | Socket, 3/8" DR 7/16" 12 PT |
| J5216 | Socket, 3/8" DR 1/2" 12 PT |
| J5218 | Socket, 3/8" DR 9/16" 12 PT |
| J5220 | Socket, 3/8" DR 5/8" 12 PT |
| J5222 | Socket, 3/8" DR 11/16" 12 PT |
| J5224 | Socket, 3/8" DR 3/4" 12 PT |
| J5226 | Socket, 3/8" DR 13/16" 12 PT |
| J5228 | Socket, 3/8" DR 7/8" 12 PT |
| J2584 | Socket Bar, 6-1/4" |
| J2590 | Socket Clip, 1/4" DR |
| J4769 | Socket Driver, 1/4" DR |
| 33-212 | Tape Rule, PowerLock® Metal Case, 1/2" x 12" |
| J25TR15C | Tool Roll, 5 Pockets |
| J25TR34C | Tool Roll, 15 Pockets |
| J4770A | Universal Joint, 1/4" DR |
| J5270A | Universal Joint, 3/8" DR |
| J710L | Wrench, Adjustable Clic-Stop Satin 10" |
| J1210-T500 | Wrench, Combination Full Polish 5/16" 12 PT |
| J1212-T500 | Wrench, Combination Full Polish 3/8" 12 PT |
| J1214-T500 | Wrench, Combination Full Polish 7/16" 12 PT |
| J1216-T500 | Wrench, Combination Full Polish 1/2" 12 PT |
| J1218-T500 | Wrench, Combination Full Polish 9/16" 12 PT |
| J1220-T500 | Wrench, Combination Full Polish 5/8" 12 PT |
| J1222-T500 | Wrench, Combination Full Polish 11/16" 12 PT |
| J1224-T500 | Wrench, Combination Full Polish 3/4" 12 PT |
| J1226-T500 | Wrench, Combination Full Polish 13/16" 12 PT |
| J1228-T500 | Wrench, Combination Full Polish 7/8" 12 PT |
| J1230-T500 | Wrench, Combination Full Polish 15/16" 12 PT |
| J1232-T500 | Wrench, Combination Full Polish 1" 12 PT |
| J1234-T500 | Wrench, Combination Full Polish 1-1/16" 12 PT |
| J1236-T500 | Wrench, Combination Full Polish 1-1/8" 12 PT |
| J1240-T500 | Wrench, Combination Full Polish 1-1/4" 12 PT |

84 PIECE AIRCRAFT SUPPORT SET - BLACK OXIDE

Product #: **JTS-84AEROBK**

› Weight (lbs): 123.19



AIRCRAFT SETS

MASTER SETS

84 PIECE AIRCRAFT SUPPORT SET - BLACK OXIDE (CONT'D)

Product #: **JTS-84AEROBK**

AIRCRAFT SETS

| Contents | Description |
|--------------|------------------------------------------------------------|
| J5256B | Adapter, 1/4" F x 3/8" M Black Oxide |
| 69-006 | Awl, 100 Plus® Scratch |
| J4759B | Extension, 1/4" Drive Black Oxide 2" |
| J5268 | Extension, 3/8" Drive Flexible 8" |
| J1308AVP | Hammer, Antivibe Ball Pein Boz. |
| JSF105HM | Hammer, Soft Face 12" w/Tips - SF10 |
| J4980 | Hex Key, 13 PC Set |
| J18545B | Knife, Lockback 3-3/4" |
| J2373 | Mirror, Rectangular Telescoping 2-1/8" |
| J275G | Pliers, Combination Slip-Joint w/Grip 5-13/16" |
| J205G | Pliers, Diagonal Cutting w/Grip 5-1/16" |
| J227G | Pliers, Duckbill w/Grip 7-25/32" |
| J289LNXL | Pliers, Locking Long Nose 9-1/32" |
| J290XL | Pliers, Locking Curved Jaw 7-15/32" |
| J226G | Pliers, Needle Nose w/ Cutter 6-5/8" |
| J262SG | Pliers, Tongue and Groove 7-1/8" w/Grip |
| J2375 | Pocket Magnetic Retrieving Tool |
| J963/4S2 | Punch, Drift 3/8" |
| J475/16X1/8 | Punch, Pin 1/8" |
| J471/4X3/32 | Punch, Pin 3/32" |
| J475/16X5/32 | Punch, Pin 5/32" |
| 28-141 | Putty Knife, Nylon Handle, Stiff 1-1/2" |
| J4749XLBL | Ratchet, 1/4" Drive Premium Pear Head 6-11/16" Black Oxide |
| J2345 | Retriever & Holder Flex |
| J9320 | Screwdriver, Ratcheting Magnetic - 4 Bit |
| JK1404R | Screwdriver, Slotted Keystone Round 1/4" x 4" |
| JK3808R | Screwdriver, Slotted Keystone Round 3/8" x 8" |
| JK3810R | Screwdriver, Slotted Keystone Round 3/8" x 10" |
| JKB31603RP | Screwdriver, Slotted Keystone Round 3/16" x 3" |
| JK1406R | Screwdriver, Slotted Round Bar 1/4" x 6" |
| JK3812R | Screwdriver, Slotted Round Bar 3/8" x 12" |
| JPD103R | Screwdriver, Phillips Round # 1 x 3" |
| JPD204R | Screwdriver, Phillips Round # 2 x 4" |
| JPD2112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" |
| JPD306R | Screwdriver, Phillips Round # 3 x 6" |

| Contents | Description |
|------------|----------------------------------------------------|
| JPP0003R | Screwdriver, Phillips Round # 0 x 3" |
| J9521B | Sheath, Folding Knife - Leather |
| J4707TB | Socket, 1/4" Drive Black Oxide 7/32" 12 Point |
| J4708TB | Socket, 1/4" Drive Black Oxide 1/4" 12 Point |
| J4709TB | Socket, 1/4" Drive Black Oxide 9/32" 12 Point |
| J4710TB | Socket, 1/4" Drive Black Oxide 5/16" 12 Point |
| J4711TB | Socket, 1/4" Drive Black Oxide 11/32" 12 Point |
| J4712TB | Socket, 1/4" Drive Black Oxide 3/8" 12 Point |
| J4714TB | Socket, 1/4" Drive Black Oxide 7/16" 12 Point |
| J4707LB | Socket, 1/4" Drive Black Oxide Deep 7/32" 6 Point |
| J4708LB | Socket, 1/4" Drive Black Oxide Deep 1/4" 6 Point |
| J4709LB | Socket, 1/4" Drive Black Oxide Deep 9/32" 6 Point |
| J4710LB | Socket, 1/4" Drive Black Oxide Deep 5/16" 6 Point |
| J4711LB | Socket, 1/4" Drive Black Oxide Deep 11/32" 6 Point |
| J4712LB | Socket, 1/4" Drive Black Oxide Deep 3/8" 6 Point |
| J4714LB | Socket, 1/4" Drive Black Oxide Deep 1/2" 6 Point |
| J4716LB | Socket, 1/4" Drive Black Oxide Deep 7/16" 6 Point |
| J4716TB | Socket, 1/4" Drive Black Oxide 1/2" 12 Point |
| 30-506 | Tape Rule, 1/2" x 6' |
| J25TR37C | Tool Roll, 7 Pockets |
| J4770AB | Universal Joint, 1/4" Drive Black Oxide |
| FA-105.230 | Wrench, Monkey 9" |
| J1212BASD | Wrench, Combination Black Oxide 3/8" 12 Point |
| J1214BASD | Wrench, Combination Black Oxide 7/16" 12 Point |
| J1216BASD | Wrench, Combination Black Oxide 1/2" 12 Point |
| J1218BASD | Wrench, Combination Black Oxide 9/16" 12 Point |
| J1220BASD | Wrench, Combination Black Oxide 5/8" 12 Point |
| J1222BASD | Wrench, Combination Black Oxide 11/16" 12 Point |
| J1224BASD | Wrench, Combination Black Oxide 3/4" 12 Point |
| J3020B | Wrench, Open-End Black Oxide 5/16" x 3/8" |
| J3021B | Wrench, Open-End Black Oxide 3/8" x 7/16" |
| J3025B | Wrench, Open-End Black Oxide 7/16" x 1/2" |
| J3026B | Wrench, Open-End Black Oxide 1/2" x 9/16" |
| J3030B | Wrench, Open-End Black Oxide 9/16" x 5/8" |
| J3031B | Wrench, Open-End Black Oxide 5/8" x 3/4" |



DRIVE TOOLS

DRIVE TOOLS

PRECISION 90 PEAR HEAD RATCHETS

- › 90 tooth count allows for 4 degree arc swing.
- › Double nickel chrome plated for enhanced corrosion protection.
- › Small, pear head design for access in tight, hard-to-reach work areas.
- › Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › Contoured, ergonomically designed handle for comfort.
- › Low profile reversing lever design for quick, one hand operation.
- › Knurled bands allow for increased grip and slip resistance.



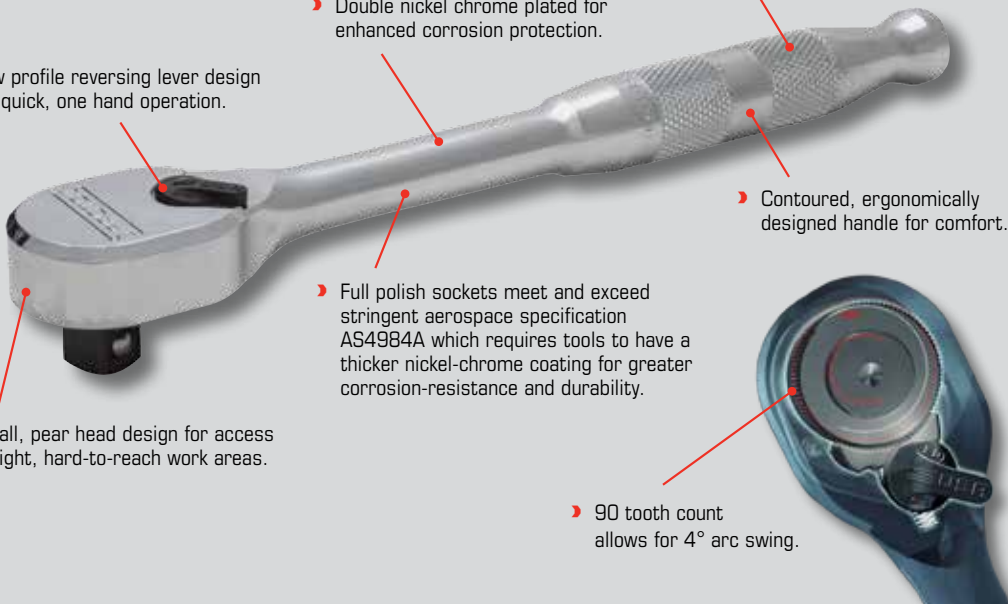
PRECISION 90 PEAR HEAD RATCHETS

| Product # | Drive Size (in) | Length | Finish | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-------------|-----------------|----------------------|-------------|---------------------|--------------|-------------------|
| J4749HTC* | 1/4 | Standard | Full Polish | 5-7/32 | 0.25 | J47HTCFRK |
| J4749HTCBL* | 1/4 | Standard | Black Oxide | 5-7/32 | 0.25 | J47HTCFRK |
| J4750HTC | 1/4 | Long | Full Polish | 9 | 0.25 | J47HTCFRK |
| J4750HTCF | 1/4 | Long - Flex Head | Full Polish | 9 | 0.44 | J47HTCFRK |
| J5249HTC* | 3/8 | Standard | Full Polish | 7-11/16 | 0.69 | J52HTCFRK |
| J5249HTCBL* | 3/8 | Standard | Black Oxide | 7-11/16 | 0.69 | J52HTCFRK |
| J5250HTC | 3/8 | Long | Full Polish | 12-39/64 | 0.83 | J52HTCFRK |
| J5250HTCBL | 3/8 | Long | Black Oxide | 12-39/64 | 0.83 | J52HTCFRK |
| J5249HTCF | 3/8 | Standard - Flex Head | Full Polish | 7-11/16 | 0.74 | J52HTCFRK |
| J5250HTCF | 3/8 | Long - Flex Head | Full Polish | 12-11/16 | 0.88 | J52HTCFRK |
| J5449HTC* | 1/2 | Standard | Full Polish | 10-11/16 | 1.83 | J54HTCFRK |
| J5449HTCBL* | 1/2 | Standard | Black Oxide | 10-11/16 | 1.83 | J54HTCFRK |
| J5450HTC | 1/2 | Long | Full Polish | 17-11/16 | 2.52 | J54HTCFRK |
| J5450HTCBL | 1/2 | Long | Black Oxide | 17-11/16 | 2.52 | J54HTCFRK |
| J5426HTC | 1/2 | Extra Long | Full Polish | 25-11/16 | 3.28 | J54HTCFRK |
| J5426HTCBL | 1/2 | Extra Long | Black Oxide | 25-11/16 | 3.28 | J54HTCFRK |
| J5450HTCF | 1/2 | Long - Flex Head | Full Polish | 17-11/16 | 2.65 | J54HTCFRK |

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PRECISION 90

- › Low profile reversing lever design for quick, one hand operation.
- › Double nickel chrome plated for enhanced corrosion protection.
- › Knurled bands allow for increased grip and slip resistance.
- › Contoured, ergonomically designed handle for comfort.
- › Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › 90 tooth count allows for 4° arc swing.
- › Small, pear head design for access in tight, hard-to-reach work areas.



PREMIUM PEAR HEAD RATCHETS



- › Small pear head design for access in tight, hard-to-reach work areas.
- › 45-tooth gear provides balance between 8° articulation angle and high torque carrying capacity.
- › Sealed design helps prevent debris from entering ratchet mechanism reducing wear. Also, helps to keep lubrication contained within the components. Patent pending design.
- › Low profile reversing lever design for quick, one-hand operation.
- › Contoured, ergonomically designed handle for comfort. Knurled bands allow for increased grip and slip resistance.
- › Double nickel chrome plated for enhanced corrosion protection or black oxide finish.
- › Field repairable.



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|---------------------|-----------------|-------------|---------------|---------------------|--------------|-------------------|
| J4749XL* | 1/4 | Full Polish | Pear Head | 5-5/8 | 0.25 | J4749XLRK |
| J4749XLBL* | 1/4 | Black Oxide | Pear Head | 5-9/16 | 0.25 | J4749XLRK |
| J4749XLQR* | 1/4 | Full Polish | Quick-Release | 5-5/8 | 0.25 | J4749XLQRRK |
| J4749XLQRBL* | 1/4 | Black Oxide | Quick-Release | 5-5/8 | 0.25 | J4749XLQRRK |
| J5249XL* | 3/8 | Full Polish | Pear Head | 8-1/2 | 0.86 | J5249XLRK |
| J5249XLBL* | 3/8 | Black Oxide | Pear Head | 8-1/2 | 0.87 | J5249XLRK |
| J5249XLQR* | 3/8 | Full Polish | Quick-Release | 8-1/2 | 0.86 | J5249XLQRRK |
| J5249XLQRBL* | 3/8 | Black Oxide | Quick-Release | 8-1/2 | 0.86 | J5249XLQRRK |
| J5449XL | 1/2 | Full Polish | Pear Head | 10-1/2 | 1.72 | J5449XLRK |
| J5449XLBL | 1/2 | Black Oxide | Pear Head | 10-1/2 | 1.72 | J5449XLRK |
| J5449XLQR | 1/2 | Full Polish | Quick-Release | 10-1/2 | 1.72 | J5449XLQRRK |
| J5449XLQRBL | 1/2 | Black Oxide | Quick-Release | 10-1/2 | 1.72 | J5449XLQRRK |

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LONG HANDLE



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|---------------------|-----------------|-------------|---------------|---------------------|--------------|-------------------|
| J5250XL* | 3/8 | Full Polish | Pear Head | 11 | 1.03 | J5249XLRK |
| J5250XLBL* | 3/8 | Black Oxide | Pear Head | 11 | 0.98 | J5249XLRK |
| J5250XLQRBL* | 3/8 | Black Oxide | Quick-Release | 11 | 1.03 | J5249XLQRRK |
| J5450XL | 1/2 | Full Polish | Pear Head | 15 | 2.18 | J5449XLRK |
| J5450XLQR | 1/2 | Full Polish | Quick-Release | 15 | 2.18 | J5449XLQRRK |
| J5450XLBL | 1/2 | Black Oxide | Pear Head | 15 | 2.18 | J5449XLRK |
| J5450XLQRBL | 1/2 | Black Oxide | Quick-Release | 15 | 2.18 | J5449XLQRRK |

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AEROSPACE PREMIUM PEAR HEAD RATCHETS



- › Vertical hole drilled in drive plug, designed for installation of frangible collars on threaded pins.
- › Robust 45-tooth gear pawl design provides 8° ratcheting angle while maximizing ultimate torque.
- › Thin head design for access into tight work areas.
- › Reversing lever designed for quick, one-hand operation.
- › Full polish nickel chrome plated.



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|------------------|-----------------|-------------|-----------|---------------------|--------------|-------------------|
| J4749XLHS | 1/4 | Full Polish | Aerospace | 5-45/64 | 0.25 | J4749XLHSRK |
| J5249XLHS | 3/8 | Full Polish | Aerospace | 8-1/2 | 0.86 | J5249XLHSRK |

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6 POINT
 8 POINT
 12 POINT
 SPL SPLINE
 HEX HEX
 FULL POLISH
 SATIN
 BLACK OXIDE
 INSULATED

PREMIUM PEAR HEAD RATCHETS

DRIVE TOOLS

CLASSIC PEAR HEAD RATCHETS



- ▶ Robust 24-tooth gear/floating pawl design provides 15° ratcheting angle while maximizing ultimate torque.
- ▶ Thin head design for access into tight work areas.
- ▶ Reversing lever designed for quick, one-hand operation.



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-----------|-----------------|-------------|-----------|---------------------|--------------|-------------------|
| J4749 | 1/4 | Full Polish | Pear Head | 5 | 0.26 | J4749RK |
| J4749BL | 1/4 | Black Oxide | Pear Head | 5 | 0.24 | J4749RK |
| J5249 | 3/8 | Full Polish | Pear Head | 7 | 0.61 | J5249RK |
| J5249BL | 3/8 | Black Oxide | Pear Head | 7 | 0.62 | J5249RK |
| J5449 | 1/2 | Full Polish | Pear Head | 10 | 1.57 | J5449RK |
| J5449BL | 1/2 | Black Oxide | Pear Head | 10 | 1.74 | J5449RK |
| J5649 | 3/4 | Satin | Pear Head | 20 | 6.00 | J5649RK |
| J5649BL | 3/4 | Black Oxide | Pear Head | 20 | 6.00 | J5649RK |

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LONG HANDLE



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-----------|-----------------|-------------|-----------|---------------------|--------------|-------------------|
| J5250 | 3/8 | Full Polish | Pear Head | 11 | 0.89 | J5249RK |
| J5250BL | 3/8 | Black Oxide | Pear Head | 11 | 0.81 | J5249RK |
| J5450 | 1/2 | Full Polish | Pear Head | 16 | 2.03 | J5449RK |
| J5450BL | 1/2 | Black Oxide | Pear Head | 16 | 2.03 | J5449RK |

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STUBBY



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-----------|-----------------|-------------|-----------|---------------------|--------------|-------------------|
| J5248S | 3/8 | Full Polish | Pear Head | 5 | 0.28 | J6064RK |



ROUND HEAD RATCHETS

- ▶ Round head ratchet mechanism allows for a compact head.
- ▶ 72-tooth = 5° swing arc.
- ▶ Small head design and tight swing arc allow for fastener access in tight areas.
- ▶ Full polish shaft with knurled grip for strong slip-resistant grip.



| Product # | Drive Size (in) | Finish | Style | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-----------|-----------------|-------------|------------|---------------------|--------------|-------------------|
| J4752F | 1/4 | Full Polish | Round Head | 4-1/2 | 0.26 | J4752FRK |
| J4752FBL | 1/4 | Black Oxide | Round Head | 4-1/2 | 0.24 | J4752FRK |
| J5252F | 3/8 | Full Polish | Round Head | 7-3/8 | 0.57 | J5252FRK |
| J5252FBL | 3/8 | Black Oxide | Round Head | 7-3/8 | 0.57 | J5252FRK |
| J5452F | 1/2 | Full Polish | Round Head | 9-3/8 | 1.12 | J5452FRK |
| J5452FBL | 1/2 | Black Oxide | Round Head | 9-3/8 | 1.12 | J5452FRK |


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CLASSIC PEAR HEAD & ROUND HEAD RATCHETS

SPINNER RATCHET

- › Made from alloy steel.
- › Heat-treated for strength and durability.
- › Fits on the drive end of the ratchet for quickly running down the fastener before final tightening with the ratchet.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|-------------|---------------------|--------------|
| J5251 | 3/8 | Full Polish | 1-1/2 | 0.56 |


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RATCHET ADAPTERS

- › Converts standard handles to ratcheting handles.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|-------------|---------------------|--------------|
| J5247 | 3/8 | Full Polish | 2-1/16 | 0.34 |
| J5447 | 1/2 | Full Polish | 2-21/32 | 0.86 |
| J5647 | 3/4 | Full Polish | 3-3/4 | 2.38 |

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SOCKET DRIVER

- › 1/4" square female drive in handle.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|-------------|---------------------|--------------|
| J4769 | 1/4 | Full Polish | 6 | 0.22 |


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FLEXIBLE DRIVERS

- › Flexible shaft for bending around obstructions in low torque applications.

| Product # | Drive Size (in) | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|---------------------|--------------|
| J4764 | 1/4 | 6-3/4 | 0.19 |
| J5267 | 3/8 | 9 | 0.35 |





| | | | | | | | | |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  6 POINT |  8 POINT |  12 POINT |  SPL SPLINE |  HEX HEX |  FULL POLISH |  SATIN |  BLACK OXIDE |  INSULATED |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|

DRIVE TOOLS

HINGE HANDLES

- › Head flexes 90° from horizontal.
- › Made of heat-treated alloy steel.
- › Chrome plated and black oxide finish options.



| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|-----------|-----------------|-------------|---------------------|--------------|
| J4766 | 1/4 | Full Polish | 5-3/4 | 0.22 |
| J5265 | 3/8 | Full Polish | 8-1/2 | 0.58 |
| J5265BL | 3/8 | Black Oxide | 8-1/2 | 0.58 |
| J5266-10 | 3/8 | Full Polish | 10 | 0.65 |
| J5266* | 3/8 | Full Polish | 12 | 0.80 |
| J5466* | 1/2 | Full Polish | 10-7/8 | 1.14 |
| J5467 | 1/2 | Full Polish | 15-3/4 | 1.52 |
| J5468 | 1/2 | Full Polish | 18-5/8 | 1.69 |
| J5468BL | 1/2 | Black Oxide | 18-5/8 | 1.69 |
| J5469 | 1/2 | Full Polish | 24 | 2.68 |
| J5668 | 3/4 | Full Polish | 20 | 4.32 |
| J5668BL | 3/4 | Black Oxide | 20 | 4.41 |
| J5868* | 1 | Full Polish | 27 | 7.56 |

SAE AS4283C ASME B107.110-2012 

*Meets and exceeds ASME B107.110-2012 only

SPEED HANDLES

- › Made from alloy steel.
- › Heat-treated for strength and durability.



| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|-----------|-----------------|-------------|---------------------|--------------|
| J4780AG | 1/4 | Full Polish | 15-1/2 | 0.52 |
| J5280AG | 3/8 | Full Polish | 17-1/2 | 0.86 |
| J5480AG | 1/2 | Full Polish | 18-5/16 | 1.55 |

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SLIDING T-HANDLES

- › Made from alloy steel.
- › Heat-treated for strength and durability.



| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|-----------|-----------------|-------------|---------------------|--------------|
| J4785 | 1/4 | Full Polish | 4-1/2 | 0.08 |
| J5285 | 3/8 | Full Polish | 8 | 0.41 |
| J5485 | 1/2 | Full Polish | 12-15/16 | 1.11 |
| J5685 | 3/4 | Full Polish | 20 | 2.95 |
| J5886 | 1 | Full Polish | 28-1/2 | 6.30 |

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STANDARD EXTENSIONS

- › Extensions help provide access to fasteners in areas that might otherwise be difficult to reach.



| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|-----------|-----------------|-------------|---------------------|--------------|
| J4759 | 1/4 | Full Polish | 2 | 0.05 |
| J4759B | 1/4 | Black Oxide | 2 | 0.05 |
| J4760* | 1/4 | Full Polish | 3 | 0.08 |
| J4760-04 | 1/4 | Full Polish | 4 | 0.10 |
| J4761 | 1/4 | Full Polish | 6 | 0.15 |
| J4762* | 1/4 | Full Polish | 10 | 0.24 |
| J4761B | 1/4 | Black Oxide | 6 | 0.15 |
| J4763 | 1/4 | Full Polish | 14-3/32 | 0.30 |
| J5259 | 3/8 | Full Polish | 1-3/4 | 0.11 |
| J5259B | 3/8 | Black Oxide | 1-3/4 | 0.11 |
| J5260 | 3/8 | Full Polish | 3 | 0.16 |
| J5260B | 3/8 | Black Oxide | 3 | 0.16 |
| J5260-06 | 3/8 | Full Polish | 6 | 0.31 |
| J5260-06B | 3/8 | Black Oxide | 6 | 0.30 |
| J5261 | 3/8 | Full Polish | 8 | 0.40 |
| J5262 | 3/8 | Full Polish | 12 | 0.61 |
| J5262B | 3/8 | Black Oxide | 12 | 0.62 |
| J5263 | 3/8 | Full Polish | 17-3/16 | 0.94 |
| J5460 | 1/2 | Full Polish | 2-1/2 | 0.24 |
| J5460B | 1/2 | Black Oxide | 2-1/2 | 0.24 |
| J5461 | 1/2 | Full Polish | 5 | 0.44 |
| J5461B | 1/2 | Black Oxide | 5 | 0.44 |
| J5463 | 1/2 | Full Polish | 10 | 0.89 |
| J5463B | 1/2 | Black Oxide | 10 | 0.89 |
| J5464 | 1/2 | Full Polish | 20 | 1.87 |
| J5465 | 1/2 | Full Polish | 36 | 3.41 |
| J5660 | 3/4 | Full Polish | 4 | 0.88 |
| J5661 | 3/4 | Full Polish | 8 | 1.80 |
| J5663 | 3/4 | Full Polish | 16 | 2.36 |
| J5861* | 1 | Full Polish | 8 | 2.88 |
| J5863* | 1 | Full Polish | 17 | 4.87 |

SAE AS4283C ASME B107.110-2012 

*Meets and exceeds ASME B107.110-2012 only

HANDLES & EXTENSIONS

LOCKING EXTENSIONS

- › One piece extension design.
- › Provides positive socket retention.
- › Use where accidental socket disengagement may be a concern or safety hazard.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|------------------|-----------------|-------------|---------------------|--------------|
| J4759L | 1/4 | Full Polish | 2 | 0.07 |
| J4761L | 1/4 | Full Polish | 6 | 0.15 |
| J4762L | 1/4 | Full Polish | 10 | 0.25 |
| J4763L | 1/4 | Full Polish | 14-3/32 | 0.33 |
| J5260-03L | 3/8 | Full Polish | 3 | 0.21 |
| J5260-06L | 3/8 | Full Polish | 6 | 0.37 |
| J5261L | 3/8 | Full Polish | 8 | 0.49 |
| J5262L | 3/8 | Full Polish | 12 | 0.71 |
| J5460-03L | 1/2 | Full Polish | 3 | 0.40 |
| J5461L | 1/2 | Full Polish | 5 | 0.55 |
| J5463L | 1/2 | Full Polish | 10 | 1.04 |

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WOBBLE EXTENSIONS

- › Provides up to 17° angle of operation.
- › Socket can be pushed past the detent ball for straight driving.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|------------------|-----------------|-------------|---------------------|--------------|
| J4759W | 1/4 | Full Polish | 2 | 0.06 |
| J4760W | 1/4 | Full Polish | 3 | 0.07 |
| J4764W | 1/4 | Full Polish | 4 | 0.10 |
| J4761W | 1/4 | Full Polish | 6 | 0.14 |
| J4762W | 1/4 | Full Polish | 10 | 0.20 |
| J5259W | 3/8 | Full Polish | 1-3/4 | 0.11 |
| J5260W | 3/8 | Full Polish | 3 | 0.17 |
| J5260-06W | 3/8 | Full Polish | 6 | 0.29 |
| J5261W | 3/8 | Full Polish | 8 | 0.42 |
| J5262W | 3/8 | Full Polish | 12 | 0.65 |
| J5263W | 3/8 | Full Polish | 17-3/16 | 0.92 |
| J5460W | 1/2 | Full Polish | 2-1/2 | 0.24 |
| J5461W | 1/2 | Full Polish | 5 | 0.44 |
| J5463W | 1/2 | Full Polish | 10 | 0.89 |
| J5464W | 1/2 | Full Polish | 20 | 1.90 |




EXTENSIONS

FLEXIBLE EXTENSIONS

- › Flexible shaft extensions help reach around obstructions in low torque applications.

| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|-------------|---------------------|--------------|
| J4765 | 1/4 | Full Polish | 6-1/4 | 0.11 |
| J5268 | 3/8 | Black Oxide | 8 | 0.25 |

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| | | | | | | | | |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|  6 POINT |  8 POINT |  12 POINT |  SPLINE |  HEX |  FULL POLISH |  SATIN |  BLACK OXIDE |  INSULATED |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|

DRIVE TOOLS

6 PIECE ADAPTER SET

Product #: J52006

- › Set includes socket bar and socket clips.
- › A variety of adapters are offered to meet most industrial applications.



| Contents | Description |
|----------|---------------------------------|
| J5255 | Adapter, 3/8" F x 1/4" M |
| J5256 | Adapter, 1/4" F x 3/8" M |
| J5253 | Adapter, 3/8" F x 1/2" M |
| J7651 | Adapter, Impact 1/2" F x 3/4" M |
| J7652 | Adapter, Impact 1/2" F x 3/8" M |
| J7653 | Adapter, Impact 3/4" F x 1/2" M |
| J2584 | Socket, Bar 6-1/2" |
| J2590 | Socket, Clip 1/4" DR |
| J2592 | Socket, Clip 1/2" DR |


Weight (lbs): 1.33

UNIVERSAL JOINTS

- › Full polish tools meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.



| Product # | Drive Size (in) | Finish | Overall Length (in) | Weight (lbs) |
|-----------------|-----------------|-------------|---------------------|--------------|
| J4770A | 1/4 | Full Polish | 1-11/32 | 0.04 |
| J4770AB | 1/4 | Black Oxide | 1-11/32 | 0.04 |
| J5270A* | 3/8 | Full Polish | 2 | 0.13 |
| J5270AB* | 3/8 | Black Oxide | 2 | 0.13 |
| J5470A | 1/2 | Full Polish | 2-3/4 | 0.30 |
| J5470AB | 1/2 | Black Oxide | 2-3/4 | 0.30 |
| J5670* | 3/4 | Full Polish | 4 | 1.03 |

*AS4283C ASME B107.110-2012 


ADAPTERS & UNIVERSAL JOINTS

DRIVE ADAPTERS

- › Full polish tools meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.



| Product # | Input Drive (in) | Output Drive (in) | Finish | Overall Length (in) | Weight (lbs) |
|---------------|------------------|-------------------|-------------|---------------------|--------------|
| J5255 | 3/8 | 1/4 | Full Polish | 1 | 0.05 |
| J5256 | 1/4 | 3/8 | Full Polish | 1 | 0.04 |
| J5256B | 1/4 | 3/8 | Black Oxide | 1 | 0.04 |
| J5253 | 3/8 | 1/2 | Full Polish | 1-7/16 | 0.11 |
| J5253B | 3/8 | 1/2 | Black Oxide | 1-7/16 | 0.11 |
| J5254 | 1/2 | 3/8 | Full Polish | 1-3/8 | 0.13 |
| J5653 | 1/2 | 3/4 | Full Polish | 1-11/16 | 0.24 |
| J5653B | 1/2 | 3/4 | Black Oxide | 1-11/16 | 0.24 |
| J5453 | 3/4 | 1/2 | Full Polish | 1-7/8 | 0.39 |
| J5853 | 3/4 | 1 | Full Polish | 2-1/2 | 0.82 |
| J5854 | 1 | 3/4 | Full Polish | 2-7/8 | 1.27 |

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HAND SOCKETS




HAND SOCKETS

1/4" DRIVE 25 PIECE COMBINATION SOCKET SETS

SET OPTIONS

| Product # | Ratchet Choices | Weight (lbs) |
|-----------------|------------------------------------------|--------------|
| J47118XL | J4749XL Ratchet, Prem. Pear Head 1/4" DR | 3.99 |
| J47118 | J4749 Ratchet, Classic Pear Head 1/4" DR | 4.12 |

| Contents | Description |
|----------|-----------------------------------|
| J4706T | Socket, 1/4" DR 3/16" 12 PT |
| J4707T | Socket, 1/4" DR 7/32" 12 PT |
| J4708T | Socket, 1/4" DR 1/4" 12 PT |
| J4709T | Socket, 1/4" DR 9/32" 12 PT |
| J4710T | Socket, 1/4" DR 5/16" 12 PT |
| J4711T | Socket, 1/4" DR 11/32" 12 PT |
| J4712T | Socket, 1/4" DR 3/8" 12 PT |
| J4714T | Socket, 1/4" DR 7/16" 12 PT |
| J4716T | Socket, 1/4" DR 1/2" 12 PT |
| J4718T | Socket, 1/4" DR 9/16" 12 PT |
| J4706LT | Socket, Deep 1/4" DR 3/16" 12 PT |
| J4707LT | Socket, Deep 1/4" DR 7/32" 12 PT |
| J4708LT | Socket, Deep 1/4" DR 1/4" 12 PT |
| J4709LT | Socket, Deep 1/4" DR 9/32" 12 PT |
| J4710LT | Socket, Deep 1/4" DR 5/16" 12 PT |
| J4711LT | Socket, Deep 1/4" DR 11/32" 12 PT |
| J4712LT | Socket, Deep 1/4" DR 3/8" 12 PT |
| J4714LT | Socket, Deep 1/4" DR 7/16" 12 PT |
| J4716LT | Socket, Deep 1/4" DR 1/2" 12 PT |
| J4718LT | Socket, Deep 1/4" DR 9/16" 12 PT |
| J4769 | Socket Driver, 1/4" DR |
| J4759 | Extension, 1/4" DR 2" |
| J4761 | Extension, 1/4" DR 6" |
| J4770A | Universal Joint, 1/4" DR |
| JBM1002 | Case, Blow Molded Red |

ASME B107.110-2012 



J47118XL

12

INCH

1/4" DRIVE SOCKET SETS

1/4" DRIVE 11 PIECE METRIC SOCKET SETS - 12 POINT

Product #: **J47201**

12

MM



| Contents | Description |
|----------|------------------------------|
| J4705TM | Socket, 1/4" DR 5 mm 12 PT |
| J47055TM | Socket, 1/4" DR 5.5 mm 12 PT |
| J4706TM | Socket, 1/4" DR 6 mm 12 PT |
| J4707TM | Socket, 1/4" DR 7 mm 12 PT |
| J4708TM | Socket, 1/4" DR 8 mm 12 PT |
| J4709TM | Socket, 1/4" DR 9 mm 12 PT |
| J4710TM | Socket, 1/4" DR 10 mm 12 PT |
| J4711TM | Socket, 1/4" DR 11 mm 12 PT |
| J4712TM | Socket, 1/4" DR 12 mm 12 PT |
| J4713TM | Socket, 1/4" DR 13 mm 12 PT |
| J4714TM | Socket, 1/4" DR 14 mm 12 PT |
| J2590 | Socket Clip, 1/4" DR |
| J2585 | Socket Bar, 9" |

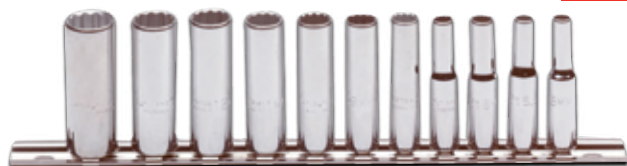
Weight (lbs): 1.03

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Product #: **J47203**

12

MM



| Contents | Description |
|-----------|-----------------------------------|
| J4705LTM | Socket, Deep 1/4" DR 5 mm 12 PT |
| J47055LTM | Socket, Deep 1/4" DR 5.5 mm 12 PT |
| J4706LTM | Socket, Deep 1/4" DR 6 mm 12 PT |
| J4707LTM | Socket, Deep 1/4" DR 7 mm 12 PT |
| J4708LTM | Socket, Deep 1/4" DR 8 mm 12 PT |
| J4709LTM | Socket, Deep 1/4" DR 9 mm 12 PT |
| J4710LTM | Socket, Deep 1/4" DR 10 mm 12 PT |
| J4711LTM | Socket, Deep 1/4" DR 11 mm 12 PT |
| J4712LTM | Socket, Deep 1/4" DR 12 mm 12 PT |
| J4713LTM | Socket, Deep 1/4" DR 13 mm 12 PT |
| J4714LTM | Socket, Deep 1/4" DR 14 mm 12 PT |
| J2590 | Socket Clip, 1/4" DR |
| J2585 | Socket Bar, 9" |

Weight (lbs): 0.56

ASME B107.110-2012 

HAND SOCKETS

1/4" DRIVE 10 PIECE SOCKET SETS - 12 POINT

Product #: **J47104**

12

INCH



| Contents | Description |
|----------|------------------------------|
| J4706T | Socket, 1/4" DR 3/16" 12 PT |
| J4707T | Socket, 1/4" DR 7/32" 12 PT |
| J4708T | Socket, 1/4" DR 1/4" 12 PT |
| J4709T | Socket, 1/4" DR 9/32" 12 PT |
| J4710T | Socket, 1/4" DR 5/16" 12 PT |
| J4711T | Socket, 1/4" DR 11/32" 12 PT |
| J4712T | Socket, 1/4" DR 3/8" 12 PT |
| J4714T | Socket, 1/4" DR 7/16" 12 PT |
| J4716T | Socket, 1/4" DR 1/2" 12 PT |
| J4718T | Socket, 1/4" DR 9/16" 12 PT |
| J2584 | Socket Bar, 6-1/4" |
| J2590 | Socket Clip, 1/4" DR |

Weight (lbs): 0.42

ASME B107.110-2012



Product #: **J47100**

12

INCH



| Contents | Description |
|----------|-----------------------------------|
| J4706LT | Socket, Deep 1/4" DR 3/16" 12 PT |
| J4707LT | Socket, Deep 1/4" DR 7/32" 12 PT |
| J4708LT | Socket, Deep 1/4" DR 1/4" 12 PT |
| J4709LT | Socket, Deep 1/4" DR 9/32" 12 PT |
| J4710LT | Socket, Deep 1/4" DR 5/16" 12 PT |
| J4711LT | Socket, Deep 1/4" DR 11/32" 12 PT |
| J4712LT | Socket, Deep 1/4" DR 3/8" 12 PT |
| J4714LT | Socket, Deep 1/4" DR 7/16" 12 PT |
| J4716LT | Socket, Deep 1/4" DR 1/2" 12 PT |
| J4718LT | Socket, Deep 1/4" DR 9/16" 12 PT |
| J2584 | Socket Bar, 6-1/4" |
| J2590 | Socket Clip, 1/4" DR |

Weight (lbs): 0.79

ASME B107.110-2012



1/4" DRIVE 6 PIECE METRIC HEX BIT SET

Product #: **J4770-6**

HEX

MM



| Contents | Description |
|------------|--------------------------------|
| J4770-2M | Socket, Hex Bit 1/4" DR 2 mm |
| J4770-2.5M | Socket, Hex Bit 1/4" DR 2.5 mm |
| J4770-3M | Socket, Hex Bit 1/4" DR 3 mm |
| J4770-4M | Socket, Hex Bit 1/4" DR 4 mm |
| J4770-5M | Socket, Hex Bit 1/4" DR 5 mm |
| J4770-6M | Socket, Hex Bit 1/4" DR 6 mm |
| J2590 | Socket Clip, 1/4" DR |
| J2584 | Socket Bar, 6-1/4" |

Weight (lbs): 0.41



1/4" DRIVE 6 PIECE CROWFOOT WRENCH SET

Product #: **J4700CF**



| Contents | Description | INCH |
|----------|-----------------------------------------|------|
| J4708CF | Wrench, Crowfoot Open End 1/4" DR 1/4" | |
| J4710CF | Wrench, Crowfoot Open End 1/4" DR 5/16" | |
| J4712CF | Wrench, Crowfoot Open End 1/4" DR 3/8" | |
| J4714CF | Wrench, Crowfoot Open End 1/4" DR 7/16" | |
| J4716CF | Wrench, Crowfoot Open End 1/4" DR 1/2" | |
| J4718CF | Wrench, Crowfoot Open End 1/4" DR 9/16" | |

Weight (lbs): 0.41

ASME B107.100-2010



1/4" DRIVE SOCKET SETS, HEX BIT SETS & CROWFOOT WRENCH SET

6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
FULL POLISH
SATIN
BLACK OXIDE
INSULATED

HAND SOCKETS

1/4" DRIVE SOCKETS

- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.



- Radius-corner socket design
- Engages flats for better grip
- Improves the ability to turn worn or rounded fasteners



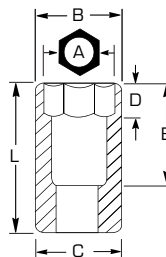
1/4" DRIVE SOCKETS

| INCH | 6 | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|---------|--------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/8 | J4704 | J4704B | - | - | 1/4 | 5/32 | 15/32 | 11/32 | 7/8 | 0.02 |
| 5/32 | J4705 | J4705B | J4705T | J4705TB | 17/64 | 31/64 | 11/64 | 11/32 | 7/8 | 0.03 |
| 3/16 | J4706 | J4706B | J4706T | J4706TB | 5/16 | 31/64 | 13/64 | 11/32 | 7/8 | 0.03 |
| 7/32 | J4707 | J4707B | J4707T | J4707TB | 11/32 | 31/64 | 13/64 | 11/32 | 7/8 | 0.02 |
| 1/4 | J4708 | J4708B* | J4708T | J4708TB | 11/32 | 31/64 | 7/32 | 11/32 | 7/8 | 0.02 |
| 9/32 | J4709 | J4709B* | J4709T | J4709TB | 27/64 | 31/64 | 1/4 | 11/32 | 7/8 | 0.02 |
| 5/16 | J4710 | J4710B | J4710T | J4710TB | 31/64 | 31/64 | 19/64 | 9/16 | 7/8 | 0.03 |
| 11/32 | J4711 | J4711B* | J4711T | J4711TB | 33/64 | 33/64 | 11/32 | 17/32 | 7/8 | 0.03 |
| 3/8 | J4712 | J4712B* | J4712T | J4712TB | 9/16 | 11/32 | 17/32 | 17/32 | 7/8 | 0.03 |
| 7/16 | J4714 | J4714B* | J4714T | J4714TB | 5/8 | 5/8 | 23/64 | 17/32 | 7/8 | 0.05 |
| 1/2 | J4716 | J4716B* | J4716T | J4716TB | 11/16 | 11/16 | 23/64 | 17/32 | 7/8 | 0.06 |
| 9/16 | J4718 | J4718B | J4718T | J4718TB | 47/64 | 47/64 | 23/64 | 9/16 | 7/8 | 0.07 |
| 5/8 | J4720A | J4720AB | - | - | 5/8 | 3/8 | 7/8 | 9/16 | 7/8 | 0.09 |

*SAE AS4984A ASME B107.110-2012

| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|---------|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 4 | J4704M | J4704TM | 17/64 | 15/32 | 11/64 | 13/32 | 7/8 | 0.01 |
| 4.5 | J47045M | J47045TM | 5/16 | 15/32 | 11/64 | 13/32 | 7/8 | 0.01 |
| 5 | J4705M | J4705TM | 5/16 | 15/32 | 11/64 | 13/32 | 7/8 | 0.02 |
| 5.5 | J47055M | J47055TM | 21/64 | 15/32 | 11/64 | 13/32 | 7/8 | 0.02 |
| 6 | J4706M | J4706TM | 3/8 | 15/32 | 7/32 | 13/32 | 7/8 | 0.02 |
| 7 | J4707M | J4707TM | 27/64 | 15/32 | 1/4 | 15/32 | 7/8 | 0.02 |
| 8 | J4708M | J4708TM | 15/32 | 15/32 | 19/64 | 35/64 | 7/8 | 0.04 |
| 9 | J4709M | J4709TM | 33/64 | 33/64 | 23/64 | 35/64 | 7/8 | 0.03 |
| 10 | J4710M | J4710TM | 37/64 | 37/64 | 23/64 | 35/64 | 7/8 | 0.04 |
| 11 | J4711M | J4711TM | 5/8 | 5/8 | 23/64 | 35/64 | 7/8 | 0.05 |
| 12 | J4712M | J4712TM | 21/32 | 21/32 | 23/64 | 35/64 | 7/8 | 0.05 |
| 13 | J4713M | J4713TM | 11/16 | 11/16 | 23/64 | 35/64 | 7/8 | 0.05 |
| 14 | J4714M | J4714TM | 3/4 | 3/4 | 23/64 | 9/16 | 7/8 | 0.06 |
| 15 | J4715M | J4715TM | 51/64 | 51/64 | 23/64 | 9/16 | 7/8 | 0.08 |
| 16 | J4716M | - | 7/8 | 7/8 | 3/8 | 9/16 | 7/8 | 0.09 |

ASME B107.110-2012



HAND SOCKETS

1/4" DRIVE SOCKETS - 8 POINT

- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.



- Radius-corner socket design
- Engages flats for better grip
- Improves the ability to turn worn or rounded fasteners

| INCH | 8 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J4708S | 31/64 | 31/64 | 1/4 | 17/32 | 7/8 | 0.03 |
| 5/16 | J4710S | 9/16 | 9/16 | 1/4 | 17/32 | 7/8 | 0.05 |
| 3/8 | J4712S | 11/16 | 11/16 | 1/4 | 17/32 | 7/8 | 0.06 |

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1/4" DRIVE SOCKETS - SPLINE

- Proto® Spline tools are designed to service high tensile strength fasteners used widely on military and commercial aircraft and in heavy machinery applications where vibration is prevalent. They are also used in automotive and industrial areas where high performance torque needs to be achieved.
- Spline sockets help tighten high strength bolts to high torque loads. They help lower the force required to turn standard fasteners by allowing the torque load to be moved away from the corners to help prevent fastener rounding. They also turn fasteners with damaged corners.
- Spline helps reduce foreign object debris (FOD) by having a precise fit between the fastening tool and its fastener.



1/4" DRIVE SOCKETS

STANDARD

| INCH | Spline Size | SPL | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|------|-------------|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | 6 | J4706SPL | 5/16 | 7/16 | 3/16 | 9/16 | 59/64 | 0.02 |
| 7/32 | 7 | J4707SPL | 11/32 | 7/16 | 13/64 | 9/16 | 59/64 | 0.02 |
| 1/4 | 8 | J4708SPL | 3/8 | 7/16 | 1/4 | 9/16 | 59/64 | 0.02 |
| 9/32 | 9 | J4709SPL | 7/16 | 7/16 | 9/32 | 9/16 | 59/64 | 0.02 |
| 5/16 | 10 | J4710SPL | 29/64 | 29/64 | 5/16 | 9/16 | 59/64 | 0.03 |
| 3/8 | 12 | J4712SPL | 35/64 | 35/64 | 11/32 | 9/16 | 59/64 | 0.04 |
| 7/16 | 14 | J4714SPL | 5/8 | 5/8 | 27/64 | 11/16 | 1-1/32 | 0.05 |

DEEP

| INCH | Spline Size | SPL | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|------|-------------|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | 6 | J4706DPL | 5/16 | 7/16 | 3/16 | 1-21/32 | 2 | 0.03 |
| 7/32 | 7 | J4707DPL | 11/32 | 7/16 | 13/64 | 1-21/32 | 2 | 0.04 |
| 1/4 | 8 | J4708DPL | 3/8 | 7/16 | 1/4 | 1-21/32 | 2 | 0.04 |
| 9/32 | 9 | J4709DPL | 7/16 | 7/16 | 9/32 | 1-21/32 | 2 | 0.05 |
| 5/16 | 10 | J4710DPL | 29/64 | 29/64 | 5/16 | 1-21/32 | 2 | 0.06 |
| 3/8 | 12 | J4712DPL | 35/64 | 35/64 | 11/32 | 1-21/32 | 2 | 0.08 |
| 7/16 | 14 | J4714DPL | 5/8 | 5/8 | 27/64 | 1-21/32 | 2 | 0.09 |

| | | | | | | | | |
|---------|---------|----------|------------|-----|-------------|-------|-------------|-----------|
| 6 POINT | 8 POINT | 12 POINT | SPL SPLINE | HEX | FULL POLISH | SATIN | BLACK OXIDE | INSULATED |
|---------|---------|----------|------------|-----|-------------|-------|-------------|-----------|

HAND SOCKETS

1/4" DRIVE INTERMEDIATE SOCKETS - 12 POINT

- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- Intermediate depth gives additional reach without limiting accessibility in tighter spaces.
- The TorquePlus™ design is a high performance drive configuration which allows for quick and easy socket engagement to the fastener flats, not the corners.
- The TorquePlus™ configuration employs a radius-corner design, shifting contact area and stress away from the fastener corners and distributing contact stresses over a large area of the socket, minimizing slippage.
- The TorquePlus™ internal design minimizes fastener rounding, helps to extend fastener life, and allows the user to more easily turn worn, rounded, or rusted fasteners.



- Radius-corner socket design
- Engages flats for better grip
- Improves the ability to turn worn or rounded fasteners



1/4" DRIVE SOCKETS

| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | J4706N | 19/64 | 7/16 | 17/64 | 29/64 | 1-15/64 | 0.02 |
| 7/32 | J4707N | 21/64 | 7/16 | 9/32 | 29/64 | 1-15/64 | 0.02 |
| 1/4 | J4708N | 3/8 | 7/16 | 19/64 | 29/64 | 1-15/64 | 0.02 |
| 9/32 | J4709N | 27/64 | 27/64 | 5/16 | 29/64 | 1-15/64 | 0.02 |
| 5/16 | J4710N | 29/64 | 29/64 | 11/32 | 19/32 | 1-15/64 | 0.03 |
| 11/32 | J4711N | 31/64 | 31/64 | 3/8 | 19/32 | 1-15/64 | 0.03 |
| 3/8 | J4712N | 35/64 | 35/64 | 3/8 | 19/32 | 1-15/64 | 0.04 |
| 7/16 | J4714N | 5/8 | 5/8 | 3/4 | 7/8 | 1-15/64 | 0.04 |
| 1/2 | J4716N | 43/64 | 43/64 | 3/4 | 7/8 | 1-15/64 | 0.05 |
| 9/16 | J4718N | 47/64 | 47/64 | 3/4 | 7/8 | 1-15/64 | 0.06 |

SAE AS954G ASME B107.110-2012

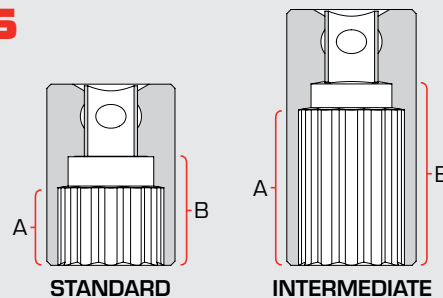
| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5 | J4705MN | 5/16 | 15/32 | 1/4 | 25/64 | 1-17/64 | 0.03 |
| 5.5 | J47055MN | 11/32 | 15/32 | 17/64 | 25/64 | 1-17/64 | 0.03 |
| 6 | J4706MN | 25/64 | 15/32 | 9/32 | 13/32 | 1-17/64 | 0.03 |
| 7 | J4707MN | 27/64 | 15/32 | 21/64 | 7/16 | 1-17/64 | 0.04 |
| 8 | J4708MN | 15/32 | 15/32 | 23/64 | 17/32 | 1-17/64 | 0.04 |
| 9 | J4709MN | 17/32 | 17/32 | 13/32 | 17/32 | 1-17/64 | 0.06 |
| 10 | J4710MN | 37/64 | 37/64 | 27/64 | 9/16 | 1-17/64 | 0.06 |
| 11 | J4711MN | 5/8 | 5/8 | 15/32 | 19/32 | 1-17/64 | 0.07 |
| 12 | J4712MN | 43/64 | 43/64 | 33/64 | 41/64 | 1-17/64 | 0.08 |
| 13 | J4713MN | 23/32 | 23/32 | 17/32 | 43/64 | 1-17/64 | 0.08 |
| 14 | J4714MN | 3/4 | 3/4 | 9/16 | 23/32 | 1-17/64 | 0.09 |

SAE AS955 ASME B107.110-2012

INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.

A - Nut Depth B - Bolt Clearance



HAND SOCKETS

1/4" DRIVE DEEP SOCKETS

- ▶ PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



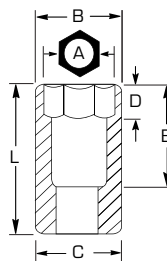
- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|---------|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | J4706L | J4706LB | J4706LT* | 5/16 | 29/64 | 9/32 | 1-21/32 | 2 | 0.05 |
| 7/32 | J4707L | J4707LB | J4707LT* | 11/32 | 15/32 | 3/8 | 1-21/32 | 2 | 0.05 |
| 1/4 | J4708L | J4708LB | J4708LT* | 25/64 | 15/32 | 3/8 | 1-1/2 | 2 | 0.05 |
| 9/32 | J4709L | J4709LB | J4709LT* | 7/16 | 15/32 | 3/8 | 1-1/2 | 2 | 0.05 |
| 5/16 | J4710L | J4710LB | J4710LT* | 15/32 | 15/32 | 3/8 | 1-1/2 | 2 | 0.06 |
| 11/32 | J4711L | J4711LB | J4711LT* | 1/2 | 1/2 | 5/8 | 1-1/2 | 2 | 0.06 |
| 3/8 | J4712L | J4712LB | J4712LT* | 9/16 | 9/16 | 5/8 | 1-27/64 | 2 | 0.08 |
| 7/16 | J4714L | J4714LB | J4714LT* | 37/64 | 39/64 | 5/8 | 1-27/64 | 2 | 0.09 |
| 1/2 | J4716L | J4716LB | J4716LT* | 11/16 | 11/16 | 5/8 | 1-27/64 | 2 | 0.13 |
| 9/16 | J4718L | J4718LB | J4718LT* | 3/4 | 3/4 | 5/8 | 1-27/64 | 2 | 0.14 |

*SAE AS954G ASME B107.110-2012

| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|----------|-----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 4 | J4704LM | - | 9/32 | 29/64 | 13/64 | 55/64 | 1-63/64 | 0.04 |
| 5 | J4705LM | J4705LTM | 5/16 | 29/64 | 9/32 | 55/64 | 1-63/64 | 0.04 |
| 5.5 | J47055LM | J47055LTM | 11/32 | 29/64 | 9/32 | 55/64 | 1-63/64 | 0.04 |
| 6 | J4706LM | J4706LTM | 3/8 | 29/64 | 3/8 | 55/64 | 1-63/64 | 0.04 |
| 7 | J4707LM | J4707LTM | 27/64 | 29/64 | 3/8 | 55/64 | 1-63/64 | 0.04 |
| 8 | J4708LM | J4708LTM | 29/64 | 29/64 | 13/32 | 1-5/32 | 1-63/64 | 0.06 |
| 9 | J4709LM | J4709LTM | 1/2 | 1/2 | 39/64 | 1-5/32 | 1-63/64 | 0.06 |
| 10 | J4710LM | J4710LTM | 9/16 | 9/16 | 5/8 | 1-27/64 | 1-63/64 | 0.07 |
| 11 | J4711LM | J4711LTM | 39/64 | 39/64 | 5/8 | 1-27/64 | 1-63/64 | 0.09 |
| 12 | J4712LM | J4712LTM | 21/32 | 21/32 | 5/8 | 1-27/64 | 1-63/64 | 0.11 |
| 13 | J4713LM | J4713LTM | 11/16 | 11/16 | 5/8 | 1-27/64 | 1-63/64 | 0.15 |
| 14 | J4714LM | J4714LTM | 49/64 | 49/64 | 5/8 | 1-27/64 | 1-63/64 | 0.15 |
| 15 | J4715LM | J4715LTM* | 53/64 | 53/64 | 5/8 | 1-27/64 | 2 | 0.20 |

*SAE AS955 ASME B107.110-2012



6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
FULL POLISH
SATIN
BLACK OXIDE
INSULATED

HAND SOCKETS

1/4" DRIVE UNIVERSAL SOCKETS

- ▶ PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|----------|-----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 7/32 | - | J4770TA | J4770TAB | 11/32 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.05 |
| 1/4 | J4771A | J4771TA° | J4771TAB° | 3/8 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.05 |
| 9/32 | - | J4777TA | J4777TAB | 7/16 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.06 |
| 5/16 | J4772A | J4772TA° | J4772TAB° | 15/32 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.04 |
| 11/32 | - | J4778TA | J4778TAB | 1/2 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.05 |
| 3/8 | J4773A | J4773TA° | J4773TAB° | 9/16 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.04 |
| 7/16 | J4774A | J4774TA° | J4774TAB° | 5/8 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.05 |
| 1/2 | - | J4775TA° | J4775TAB° | 11/16 | 1/2 | 9/32 | 3/8 | 1-1/4 | 0.05 |
| 9/16 | - | J4776TA | J4776TAB | 3/4 | 1/2 | 23/64 | 29/64 | 1-21/64 | 0.07 |

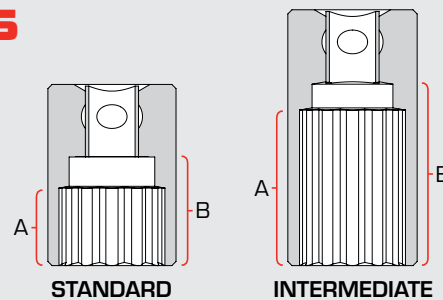
*SAE AS955 ASME B107.110-2012

1/4" DRIVE SOCKETS

INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.

A - Nut Depth B - Bolt Clearance



HAND SOCKETS

1/4" DRIVE INTERMEDIATE UNIVERSAL SOCKETS

- › Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › 12-Point sockets are ideal for use on stubborn or damaged fasteners.
- › Intermediate lengths give additional reach without limiting accessibility in tight spaces.



- › Radius-corner socket design
- › Engages flats for better grip
- › Improves the ability to turn worn or rounded fasteners



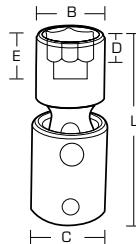
| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 7/32 | J4770AS | 21/64 | 1/2 | 7/32 | 13/32 | 1-17/64 | 0.03 |
| 1/4 | J4771AS | 3/8 | 1/2 | 7/32 | 13/32 | 1-17/64 | 0.03 |
| 5/16 | J4772AS | 29/64 | 1/2 | 17/64 | 17/32 | 1-25/64 | 0.04 |
| 3/8 | J4773AS | 17/32 | 1/2 | 17/64 | 29/64 | 1-25/64 | 0.05 |
| 7/16 | J4774AS | 39/64 | 1/2 | 11/32 | 9/16 | 1-29/64 | 0.06 |
| 1/2 | J4775AS | 43/64 | 1/2 | 3/8 | 9/16 | 1-29/64 | 0.09 |
| 9/16 | J4776AS | 47/64 | 1/2 | 31/64 | 37/64 | 1-37/64 | 0.07 |
| 9/32 | J4777AS | 27/64 | 1/2 | 1/2 | 17/32 | 1-37/64 | 0.04 |
| 11/32 | J4778AS | 31/64 | 1/2 | 1/2 | 29/64 | 1-37/64 | 0.04 |

SAE AS954G ASME B107.100-2010



| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5.5 | J4805MAS | 11/32 | 1/2 | 5/32 | 13/32 | 1-9/32 | 0.03 |
| 5 | J4805MAS | 5/16 | 1/2 | 11/64 | 13/32 | 1-9/32 | 0.03 |
| 6 | J4806MAS | 3/8 | 1/2 | 13/64 | 13/32 | 1-9/32 | 0.03 |
| 7 | J4807MAS | 27/64 | 1/2 | 7/32 | 33/64 | 1-3/8 | 0.04 |
| 8 | J4808MAS | 15/32 | 1/2 | 1/4 | 33/64 | 1-3/8 | 0.04 |
| 9 | J4809MAS | 33/64 | 1/2 | 17/64 | 33/64 | 1-3/8 | 0.05 |
| 10 | J4810MAS | 37/64 | 1/2 | 17/64 | 35/64 | 1-29/64 | 0.04 |
| 11 | J4811MAS | 43/64 | 1/2 | 11/32 | 39/64 | 1-29/64 | 0.06 |
| 12 | J4812MAS | 11/16 | 1/2 | 11/32 | 21/32 | 1-37/64 | 0.09 |
| 13 | J4813MAS | 45/64 | 1/2 | 11/32 | 11/16 | 1-37/64 | 0.09 |
| 14 | J4814MAS | 47/64 | 1/2 | 23/64 | 47/64 | 1-37/64 | 0.07 |

SAE AS955 ASME B107.110-2012



6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
FULL POLISH
SATIN
BLACK OXIDE
INSULATED

HAND SOCKETS

1/4" DRIVE BIT SOCKETS

- › Bit holders have a hex opening to hold the bit, allowing the bit holder to take the full load of torque.

| | Size | Product # | Tip Thickness (in) | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|----------|-------|-------------|--------------------|-----------------|---------------------|--------------|
| Slotted | 1/4" | ⊖ J4743 | 3/64 | – | 1-3/16 | 0.05 |
| | 3/16" | ⊖ J4744 | 1/32 | – | 1-53/64 | 0.05 |
| | 1/4" | ⊖ J4745 | 3/64 | – | 1-53/64 | 0.06 |
| Phillips | #1 | ⊕ J4737 | – | – | 1-13/64 | 0.04 |
| | #2 | ⊕ J4738 | – | – | 1-13/64 | 0.05 |
| Torx® | T10 | ⊕ J4739-10W | – | 5/8 | 1-1/2 | 0.06 |
| | T15 | ⊕ J4739-15W | – | 5/8 | 1-1/2 | 0.05 |
| | T20 | ⊕ J4739-20W | – | 5/8 | 1-1/2 | 0.05 |
| | T25 | ⊕ J4739-25W | – | 5/8 | 1-1/2 | 0.05 |
| | T27 | ⊕ J4739-27W | – | 5/8 | 1-1/2 | 0.06 |
| | T30 | ⊕ J4739-30W | – | 7/8 | 1-3/4 | 0.05 |



1/4" DRIVE HEX BIT SOCKETS

- › Bit holders have a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- › Made of heat-treated alloy steel.
- › Polished chrome finish on socket.

| INCH | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------|-----------|-----------------|---------------------|--------------|
| 1/16 | J47701/16 | 1 | 1-7/8 | 0.05 |
| 5/64 | J47705/64 | 1 | 1-7/8 | 0.05 |
| 3/32 | J47703/32 | 1 | 1-7/8 | 0.05 |
| 7/64 | J47707/64 | 1 | 1-7/8 | 0.06 |
| 1/8 | J47701/8 | 1 | 1-7/8 | 0.05 |
| 9/64 | J47709/64 | 1 | 1-7/8 | 0.05 |
| 5/32 | J47705/32 | 1 | 1-7/8 | 0.05 |
| 3/16 | J47703/16 | 1 | 1-7/8 | 0.05 |
| 7/32 | J47707/32 | 1 | 1-7/8 | 0.05 |
| 1/4 | J47701/4 | 1 | 1-7/8 | 0.06 |
| 5/16 | J47705/16 | 1 | 1-7/8 | 0.06 |



1/4" DRIVE BALL END HEX BIT SOCKETS

- › Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.

| INCH | HEX | Overall Length (in) | Weight (lbs) |
|------|------------|---------------------|--------------|
| 1/4 | J47701/4B | 1-1/2 | 0.05 |
| 1/8 | J47701/8B | 1-1/2 | 0.05 |
| 3/16 | J47703/16B | 1-1/2 | 0.05 |
| 3/32 | J47703/32B | 1-1/2 | 0.05 |
| 5/32 | J47705/32B | 1-1/2 | 0.05 |
| 7/32 | J47707/32B | 1-1/2 | 0.05 |
| 7/64 | J47707/64B | 1-1/2 | 0.05 |
| 9/64 | J47709/64B | 1-1/2 | 0.05 |



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1/4" DRIVE BIT SOCKETS

1/4" DRIVE METRIC HEX BIT SOCKETS

- ▶ Bit holders have a hex opening to hold the bit, allowing the bit holder to take the full load of torque.

| MM | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) | Repair Kit Part # |
|-----|------------|-----------------|---------------------|--------------|-------------------|
| 2 | J4770-2M | 1 | 1-7/8 | 0.04 | - |
| 2.5 | J4770-2.5M | 1 | 1-7/8 | 0.05 | J4770-2.5MRKA |
| 3 | J4770-3M | 1 | 1-7/8 | 0.05 | J4770-3MRKA |
| 4 | J4770-4M | 1 | 1-7/8 | 0.05 | J4770-4MRKA |
| 5 | J4770-5M | 1 | 1-7/8 | 0.05 | - |
| 6 | J4770-6M | 1 | 1-7/8 | 0.05 | - |



1/4" DRIVE CROWFOOT WRENCHES

- ▶ Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- ▶ Anti-Slip Design open end (ASD).
- ▶ The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- ▶ Broad size range ensures the right tool for the application will be available.
- ▶ Typically used in lower torque applications.
- ▶ Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



| INCH | Product # | Overall Length (in) | Weight (lbs) |
|------|-----------|---------------------|--------------|
| 1/4 | J4708CF | 15/16 | 0.02 |
| 5/16 | J4710CF | 1 | 0.03 |
| 3/8 | J4712CF | 1-1/16 | 0.03 |
| 7/16 | J4714CF | 1-5/32 | 0.04 |
| 1/2 | J4716CF | 1-3/16 | 0.05 |
| 9/16 | J4718CF | 1-9/32 | 0.05 |



| MM | Product # | Overall Length (in) | Weight (lbs) |
|----|-----------|---------------------|--------------|
| 7 | J4707MCF | 15/16 | 0.02 |
| 8 | J4708MCF | 31/32 | 0.02 |
| 10 | J4710MCF | 1-1/16 | 0.03 |
| 11 | J4711MCF | 1-1/8 | 0.04 |
| 12 | J4712MCF | 1-5/32 | 0.04 |
| 13 | J4713MCF | 1-3/16 | 0.05 |
| 14 | J4714MCF | 1-1/4 | 0.05 |



1/4" DRIVE HEX BIT SOCKETS & CROWFOOT WRENCHES

| | | | | | | | | |
|---------|---------|----------|--------|-----|-------------|-------|-------------|-----------|
| 6 POINT | 8 POINT | 12 POINT | SPLINE | HEX | FULL POLISH | SATIN | BLACK OXIDE | INSULATED |
|---------|---------|----------|--------|-----|-------------|-------|-------------|-----------|


HAND SOCKETS

3/8" DRIVE 22 PIECE SOCKET SETS

SET OPTIONS

| Product # | Ratchet Choices | Weight (lbs) |
|-----------------|------------------------------------------|--------------|
| J52136XL | J5249XL Ratchet, Prem. Pear Head 3/8" DR | 6.60 |
| J52136 | J5249 Ratchet, Classic Pear Head 3/8" DR | 7.70 |

| Contents | Description |
|----------|-----------------------------------|
| J5212 | Socket, 3/8" DR 3/8" 12 PT |
| J5214 | Socket, 3/8" DR 7/16" 12 PT |
| J5216 | Socket, 3/8" DR 1/2" 12 PT |
| J5218 | Socket, 3/8" DR 9/16" 12 PT |
| J5220 | Socket, 3/8" DR 5/8" 12 PT |
| J5222 | Socket, 3/8" DR 11/16" 12 PT |
| J5224 | Socket, 3/8" DR 3/4" 12 PT |
| J5226 | Socket, 3/8" DR 13/16" 12 PT |
| J5228 | Socket, 3/8" DR 7/8" 12 PT |
| J5012 | Socket, Deep 3/8" DR 3/8" 12 PT |
| J5014 | Socket, Deep 3/8" DR 7/16" 12 PT |
| J5016 | Socket, Deep 3/8" DR 1/2" 12 PT |
| J5018 | Socket, Deep 3/8" DR 9/16" 12 PT |
| J5020 | Socket, Deep 3/8" DR 5/8" 12 PT |
| J5022 | Socket, Deep 3/8" DR 11/16" 12 PT |
| J5024 | Socket, Deep 3/8" DR 3/4" 12 PT |
| J5026 | Socket, Deep 3/8" DR 13/16" 12 PT |
| J5028 | Socket, Deep 3/8" DR 7/8" 12 PT |
| J5260 | Extension, 3/8" DR 3" |
| J5260-06 | Extension, 3/8" DR 6" |
| J5270A | Universal Joint, 3/8" DR |
| JBM1102 | Case, Blow Molded Red |

ASME B107.110-2012 



J52136

3/8" DRIVE SOCKET SETS

3/8" DRIVE 12 PIECE SOCKET SETS - 12 POINT

Product #: **J52216**


12

MM



| Contents | Description |
|----------|-----------------------------|
| J5208M | Socket, 3/8" DR 8 mm 12 PT |
| J5209M | Socket, 3/8" DR 9 mm 12 PT |
| J5210M | Socket, 3/8" DR 10 mm 12 PT |
| J5211M | Socket, 3/8" DR 11 mm 12 PT |
| J5212M | Socket, 3/8" DR 12 mm 12 PT |
| J5213M | Socket, 3/8" DR 13 mm 12 PT |
| J5214M | Socket, 3/8" DR 14 mm 12 PT |
| J5215M | Socket, 3/8" DR 15 mm 12 PT |
| J5216M | Socket, 3/8" DR 16 mm 12 PT |
| J5217M | Socket, 3/8" DR 17 mm 12 PT |
| J5218M | Socket, 3/8" DR 18 mm 12 PT |
| J5219M | Socket, 3/8" DR 19 mm 12 PT |
| J2591 | Socket Clip, 3/8" DR |
| J2586 | Socket Bar, 13" |

Weight (lbs): 1.32

ASME B107.110-2012 

Product #: **J52209**


12

MM



| Contents | Description |
|----------|----------------------------------|
| J5008M | Socket, Deep 3/8" DR 8 mm 12 PT |
| J5009M | Socket, Deep 3/8" DR 9 mm 12 PT |
| J5010M | Socket, Deep 3/8" DR 10 mm 12 PT |
| J5011M | Socket, Deep 3/8" DR 11 mm 12 PT |
| J5012M | Socket, Deep 3/8" DR 12 mm 12 PT |
| J5013M | Socket, Deep 3/8" DR 13 mm 12 PT |
| J5014M | Socket, Deep 3/8" DR 14 mm 12 PT |
| J5015M | Socket, Deep 3/8" DR 15 mm 12 PT |
| J5016M | Socket, Deep 3/8" DR 16 mm 12 PT |
| J5017M | Socket, Deep 3/8" DR 17 mm 12 PT |
| J5018M | Socket, Deep 3/8" DR 18 mm 12 PT |
| J5019M | Socket, Deep 3/8" DR 19 mm 12 PT |
| J2591 | Socket Clip, 3/8" DR |
| J2586 | Socket Bar, 13" |

Weight (lbs): 2.52

ASME B107.110-2012 

HAND SOCKETS

3/8" DRIVE 13 PIECE SOCKET SET - 12 POINT

Product #: J52124

12

INCH



| Contents | Description |
|----------|------------------------------|
| J5208 | Socket, 3/8" DR 1/4" 12 PT |
| J5210 | Socket, 3/8" DR 5/16" 12 PT |
| J5212 | Socket, 3/8" DR 3/8" 12 PT |
| J5214 | Socket, 3/8" DR 7/16" 12 PT |
| J5216 | Socket, 3/8" DR 1/2" 12 PT |
| J5218 | Socket, 3/8" DR 9/16" 12 PT |
| J5220 | Socket, 3/8" DR 5/8" 12 PT |
| J5222 | Socket, 3/8" DR 11/16" 12 PT |
| J5224 | Socket, 3/8" DR 3/4" 12 PT |
| J5226 | Socket, 3/8" DR 13/16" 12 PT |
| J5228 | Socket, 3/8" DR 7/8" 12 PT |
| J5230 | Socket, 3/8" DR 15/16" 12 PT |
| J5232 | Socket, 3/8" DR 1" 12 PT |
| J2591 | Socket Clip, 3/8" DR |
| J2586 | Socket Bar, 13" |

Weight (lbs): 1.96

ASME B107.110-2012



Product #: J52112

12

INCH



| Contents | Description |
|----------|-----------------------------------|
| J5008 | Socket, Deep 3/8" DR 1/4" 12 PT |
| J5010 | Socket, Deep 3/8" DR 5/16" 12 PT |
| J5012 | Socket, Deep 3/8" DR 3/8" 12 PT |
| J5014 | Socket, Deep 3/8" DR 7/16" 12 PT |
| J5016 | Socket, Deep 3/8" DR 1/2" 12 PT |
| J5018 | Socket, Deep 3/8" DR 9/16" 12 PT |
| J5020 | Socket, Deep 3/8" DR 5/8" 12 PT |
| J5022 | Socket, Deep 3/8" DR 11/16" 12 PT |
| J5024 | Socket, Deep 3/8" DR 3/4" 12 PT |
| J5026 | Socket, Deep 3/8" DR 13/16" 12 PT |
| J5028 | Socket, Deep 3/8" DR 7/8" 12 PT |
| J5030 | Socket, Deep 3/8" DR 15/16" 12 PT |
| J5032 | Socket, Deep 3/8" DR 1" 12 PT |
| J2591 | Socket Clip, 3/8" DR |
| J2586 | Socket Bar, 13" |

Weight (lbs): 3.64

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3/8" DRIVE 7 PIECE METRIC HEX BIT SET

Product #: J4900-7C

HEX

INCH



| Contents | Description |
|-----------|-------------------------------|
| J49901/8 | Socket, Hex Bit 3/8" DR 1/8" |
| J49905/32 | Socket, Hex Bit 3/8" DR 5/32" |
| J49903/16 | Socket, Hex Bit 3/8" DR 3/16" |
| J49907/32 | Socket, Hex Bit 3/8" DR 7/32" |
| J49901/4 | Socket, Hex Bit 3/8" DR 1/4" |
| J49905/16 | Socket, Hex Bit 3/8" DR 5/16" |
| J49903/8 | Socket, Hex Bit 3/8" DR 3/8" |
| J2584 | Socket, Bar 6-1/4" |
| J2591 | Socket, Clip 3/8" DR |

Weight (lbs): 0.99



Product #: J4990-SMA

HEX

MM



| Contents | Description |
|-----------|-------------------------------|
| J4990-4M | Socket, Hex Bit 3/8" DR 4 mm |
| J4990-5M | Socket, Hex Bit 3/8" DR 5 mm |
| J4990-6M | Socket, Hex Bit 3/8" DR 6 mm |
| J4990-7M | Socket, Hex Bit 3/8" DR 7 mm |
| J4990-8M | Socket, Hex Bit 3/8" DR 8 mm |
| J4990-9M | Socket, Hex Bit 3/8" DR 9 mm |
| J4990-10M | Socket, Hex Bit 3/8" DR 10 mm |
| J2584 | Socket, Bar 6-1/4" |
| J2591 | Socket, Clip 3/8" DR |

Weight (lbs): 1.04



6 6 POINT 8 8 POINT 12 12 POINT SPL SPLINE HEX HEX FULL POLISH SATIN BLACK OXIDE INSULATED

3/8" DRIVE SOCKET SETS

HAND SOCKETS

3/8" DRIVE SOCKETS

- ▶ Proto® Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

3/8" DRIVE SOCKETS

| INCH | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | J5206H | - | - | 5/16 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.07 |
| 1/4 | J5208H | J5208 | J5208B | 25/64 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.05 |
| 9/32 | J5209H | J5209 | - | 27/64 | 43/64 | 21/32 | 21/32 | 1-3/32 | 0.05 |
| 5/16 | J5210H | J5210 | J5210B | 15/32 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.05 |
| 11/32 | J5211H | J5211 | J5211B | 1/2 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.05 |
| 3/8 | J5212H | J5212 | J5212B | 35/64 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.06 |
| 7/16 | J5214H | J5214 | J5214B | 41/64 | 43/64 | 23/64 | 21/32 | 1-3/32 | 0.06 |
| 1/2 | J5216H | J5216 | J5216B | 47/64 | 47/64 | 23/64 | 21/64 | 1-1/8 | 0.08 |
| 17/32 | - | J5217 | - | 49/64 | 49/64 | 23/64 | 11/16 | 1-1/8 | 0.08 |
| 9/16 | J5218H | J5218 | J5218B | 13/16 | 13/16 | 1/2 | 11/16 | 1-1/8 | 0.09 |
| 19/32 | - | J5219 | - | 33/64 | 27/32 | 1/2 | 11/16 | 1-1/8 | 0.09 |
| 5/8 | J5220H | J5220 | J5220B | 7/8 | 7/8 | 33/64 | 11/16 | 1-1/8 | 0.10 |
| 11/16 | J5222H | J5222 | J5222B | 61/64 | 61/64 | 17/32 | 11/16 | 1-1/8 | 0.13 |
| 3/4 | J5224H | J5224 | J5224B | 1-1/32 | 1-1/32 | 39/64 | 3/4 | 1-3/16 | 0.15 |
| 25/32 | - | J5225 | - | 1-1/16 | 1-1/16 | 39/64 | 3/4 | 1-3/16 | 0.16 |
| 13/16 | J5226H | J5226 | J5226B | 1-3/32 | 1-3/32 | 39/64 | 3/4 | 1-3/16 | 0.17 |
| 7/8 | J5228H | J5228 | J5228B | 1-3/16 | 1-3/16 | 41/64 | 7/8 | 1-5/16 | 0.24 |
| 15/16 | J5230H | J5230 | J5230B | 1-1/4 | 1-1/4 | 49/64 | 7/8 | 1-5/16 | 0.25 |
| 1 | J5232H | J5232 | J5232B | 1-5/16 | 1-5/16 | 13/16 | 59/64 | 1-3/8 | 0.27 |

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| MM | 6 | 12 | | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|----------|--------|--|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5.5 | J52055MH | - | | 23/64 | 43/64 | 1/4 | 21/32 | 1-3/32 | 0.04 |
| 6 | J5206MH | J5206M | | 25/64 | 43/64 | 1/4 | 45/64 | 1-3/32 | 0.05 |
| 7 | J5207MH | J5207M | | 27/64 | 43/64 | 1/4 | 45/64 | 1-3/32 | 0.05 |
| 8 | J5208MH | J5208M | | 15/32 | 43/64 | 1/4 | 45/64 | 1-3/32 | 0.06 |
| 9 | J5209MH | J5209M | | 33/64 | 43/64 | 9/32 | 45/64 | 1-3/32 | 0.05 |
| 10 | J5210MH | J5210M | | 19/32 | 43/64 | 5/16 | 45/64 | 1-3/32 | 0.06 |
| 11 | J5211MH | J5211M | | 41/64 | 43/64 | 21/64 | 45/64 | 1-3/32 | 0.07 |
| 12 | J5212MH | J5212M | | 45/64 | 45/64 | 9/32 | 1/2 | 1-1/8 | 0.05 |
| 13 | J5213MH | J5213M | | 47/64 | 47/64 | 9/32 | 1/2 | 1-1/8 | 0.07 |
| 14 | J5214MH | J5214M | | 25/32 | 25/32 | 15/32 | 7/16 | 1-1/8 | 0.08 |
| 15 | J5215MH | J5215M | | 27/32 | 27/32 | 17/32 | 7/16 | 1-1/8 | 0.10 |
| 16 | J5216MH | J5216M | | 55/64 | 55/64 | 17/32 | 7/16 | 1-1/8 | 0.10 |
| 17 | J5217MH | J5217M | | 15/16 | 15/16 | 17/32 | 7/16 | 1-1/8 | 0.12 |
| 18 | J5218MH | J5218M | | 61/64 | 61/64 | 17/32 | 1/2 | 1-3/16 | 0.12 |
| 19 | J5219MH | J5219M | | 1 | 1 | 17/32 | 1/2 | 1-3/16 | 0.14 |
| 20 | J5220MH | J5220M | | 1-3/32 | 1-3/32 | 5/8 | 1/2 | 1-3/16 | 0.17 |
| 21 | J5221MH | J5221M | | 1-3/32 | 1-3/32 | 9/16 | 41/64 | 1-9/32 | 0.18 |
| 22 | J5222MH | J5222M | | 1-11/64 | 1-11/64 | 43/64 | 5/8 | 1-5/16 | 0.22 |
| 23 | J5223MH | J5223M | | 1-3/16 | 1-3/16 | 47/64 | 5/8 | 1-5/16 | 0.21 |
| 24 | J5224MH | J5224M | | 1-1/4 | 1-1/4 | 49/64 | 37/64 | 1-5/16 | 0.23 |
| 25 | J5225MH | J5225M | | 1-21/64 | 1-21/64 | 49/64 | 5/8 | 1-3/8 | 0.29 |
| 26 | J5226MH | J5226M | | 1-21/64 | 1-21/64 | 49/64 | 59/64 | 1-3/8 | 0.26 |

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HAND SOCKETS

3/8" DRIVE SOCKETS - SPLINE


- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.

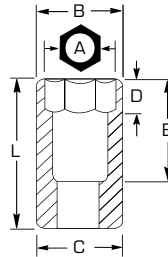


STANDARD

| INCH | Spline Size |  | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|------|-------------|-----------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | 12 | J5212SPL | 9/16 | 21/32 | 3/8 | 11/16 | 1 | 0.06 |
| 7/16 | 14 | J5214SPL | 5/8 | 11/16 | 7/16 | 3/4 | 1-1/16 | 0.06 |
| 1/2 | 16 | J5216SPL | 3/4 | 23/32 | 7/16 | 3/4 | 1-1/16 | 0.07 |
| 9/16 | 18 | J5218SPL | 13/16 | 13/16 | 15/32 | 3/4 | 1-1/16 | 0.01 |
| 5/8 | 20 | J5220SPL | 7/8 | 7/8 | 17/32 | 7/8 | 1-3/16 | 0.13 |

DEEP

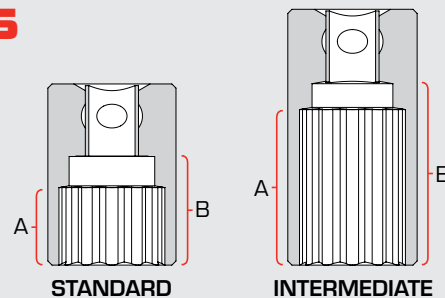
| INCH | Spline Size |  | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|------|-------------|-----------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | 12 | J5012DPL | 9/16 | 21/32 | 3/8 | 1-5/8 | 2-1/8 | 0.08 |
| 7/16 | 14 | J5014DPL | 5/8 | 11/16 | 7/16 | 1-5/8 | 2-1/8 | 0.10 |
| 1/2 | 16 | J5016DPL | 3/4 | 23/32 | 7/16 | 1-5/8 | 2-1/8 | 0.12 |
| 9/16 | 18 | J5018DPL | 13/16 | 13/16 | 15/32 | 1-7/8 | 2-3/8 | 0.19 |
| 5/8 | 20 | J5020DPL | 7/8 | 7/8 | 17/32 | 1-7/8 | 2-3/8 | 0.22 |



INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.

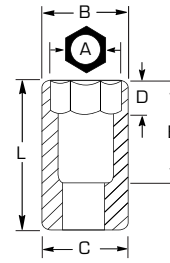
A - Nut Depth B - Bolt Clearance



HAND SOCKETS

3/8" DRIVE INTERMEDIATE SOCKETS - 12 POINT

- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- ▶ 12-Point sockets are ideal for use on stubborn or damaged fasteners.
- ▶ Intermediate lengths give additional reach without limiting accessibility in tight spaces.



3/8" DRIVE SOCKETS

| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J5208N | 25/64 | 11/16 | 5/16 | 11/16 | 1-15/64 | 0.05 |
| 9/32 | J5209N | 27/64 | 11/16 | 5/16 | 11/16 | 1-15/64 | 0.06 |
| 5/16 | J5210N | 29/64 | 11/16 | 11/32 | 11/16 | 1-15/64 | 0.06 |
| 11/32 | J5211N | 31/64 | 11/16 | 3/8 | 11/16 | 1-15/64 | 0.06 |
| 3/8 | J5212N | 35/64 | 11/16 | 3/8 | 11/16 | 1-15/64 | 0.06 |
| 7/16 | J5214N | 21/32 | 11/16 | 7/16 | 11/16 | 1-15/64 | 0.08 |
| 1/2 | J5216N | 23/32 | 23/32 | 1/2 | 11/16 | 1-15/64 | 0.09 |
| 9/16 | J5218N | 51/64 | 51/64 | 9/16 | 7/8 | 1-47/64 | 0.13 |
| 5/8 | J5220N | 7/8 | 7/8 | 5/8 | 1 | 1-47/64 | 0.14 |
| 11/16 | J5222N | 61/64 | 61/64 | 11/16 | 1 | 1-47/64 | 0.17 |
| 3/4 | J5224N | 1-1/64 | 1-1/64 | 11/16 | 1 | 1-47/64 | 0.20 |
| 13/16 | J5226N | 1-1/8 | 1-1/8 | 3/4 | 1 | 1-47/64 | 0.24 |
| 7/8 | J5228N | 1-3/16 | 1-25/32 | 25/32 | 1-5/32 | 1-47/64 | 0.28 |
| 15/16 | J5230N | 1-15/64 | 1-15/64 | 1-5/32 | 1-3/16 | 1-47/64 | 0.28 |
| 1 | J5232N | 1-19/64 | 1-19/64 | 1-3/16 | 1-15/64 | 1-47/64 | 0.29 |

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| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 6 | J5206MN | 25/64 | 43/64 | 21/64 | 13/32 | 1-17/64 | 0.06 |
| 7 | J5207MN | 7/16 | 43/64 | 21/64 | 7/16 | 1-17/64 | 0.06 |
| 8 | J5208MN | 15/32 | 43/64 | 21/64 | 15/32 | 1-17/64 | 0.07 |
| 9 | J5209MN | 33/64 | 43/64 | 3/8 | 33/64 | 1-17/64 | 0.06 |
| 10 | J5210MN | 19/32 | 43/64 | 27/64 | 9/16 | 1-33/64 | 0.09 |
| 11 | J5211MN | 21/32 | 43/64 | 15/32 | 19/32 | 1-33/64 | 0.09 |
| 12 | J5212MN | 45/64 | 45/64 | 33/64 | 41/64 | 1-33/64 | 0.10 |
| 13 | J5213MN | 47/64 | 47/64 | 17/32 | 43/64 | 1-25/32 | 0.14 |
| 14 | J5214MN | 25/32 | 25/32 | 37/64 | 23/32 | 1-25/32 | 0.16 |
| 15 | J5215MN | 27/32 | 27/32 | 39/64 | 3/4 | 1-25/32 | 0.17 |
| 16 | J5216MN | 9/16 | 9/16 | 41/64 | 51/64 | 1-25/32 | 0.19 |
| 17 | J5217MN | 15/16 | 15/16 | 21/32 | 53/64 | 1-25/32 | 0.22 |
| 18 | J5218MN | 61/64 | 61/64 | 45/64 | 7/8 | 1-25/32 | 0.22 |
| 19 | J5219MN | 1-1/32 | 1-1/32 | 47/64 | 29/32 | 1-25/32 | 0.24 |
| 20 | J5220MN | 1.085 | 1.085 | 0.776 | 1.009 | 1-25/32 | 0.28 |
| 21 | J5221MN | 1.085 | 1.085 | 0.815 | 1.029 | 1-25/32 | 0.26 |
| 22 | J5222MN | 1.175 | 1.175 | 0.835 | 1.127 | 1-25/32 | 0.31 |
| 23 | J5223MN | 1-3/16 | 1-3/16 | 7/8 | 1-9/64 | 1-25/32 | 0.28 |
| 24 | J5224MN | 1-1/4 | 1-1/4 | 29/32 | 1-3/16 | 1-25/32 | 0.32 |
| 25 | J5225MN | 1-19/64 | 1-19/64 | 61/64 | 1-7/32 | 1-25/32 | 0.32 |

SAE AS955 ASME B107.110-2012

HAND SOCKETS

3/8" DRIVE DEEP SOCKETS

- ▶ Proto® Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|--------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J5008H | J5008° | - | 13/32 | 21/32 | 5/16 | 1-11/16 | 2-1/8 | 0.10 |
| 5/16 | J5010H | J5010° | - | 15/32 | 21/32 | 13/32 | 1-11/16 | 2-1/8 | 0.10 |
| 11/32 | J5011H | J5011° | - | 1/2 | 21/32 | 25/64 | 1-11/16 | 2-1/8 | 0.09 |
| 3/8 | J5012H | J5012° | J5012B° | 35/64 | 21/32 | 13/32 | 1-11/16 | 2-1/8 | 0.10 |
| 7/16 | J5014H | J5014° | J5014B° | 21/32 | 21/32 | 7/16 | 1-11/16 | 2-1/8 | 0.12 |
| 1/2 | J5016H | J5016° | J5016B° | 23/32 | 23/32 | 33/64 | 1-11/16 | 2-1/8 | 0.14 |
| 9/16 | J5018H | J5018° | J5018B° | 51/64 | 51/64 | 19/32 | 1-11/16 | 2-1/8 | 0.18 |
| 5/8 | J5020H | J5020° | J5020B° | 7/8 | 7/8 | 43/64 | 2-5/16 | 2-3/4 | 0.24 |
| 11/16 | J5022H | J5022° | J5022B° | 15/16 | 15/16 | 43/64 | 2-5/16 | 2-3/4 | 0.30 |
| 3/4 | J5024H | J5024° | J5024B° | 1-1/64 | 1-1/64 | 43/64 | 2-5/16 | 2-3/4 | 0.33 |
| 13/16 | J5026H | J5026° | J5026B° | 1-5/64 | 1-5/64 | 43/64 | 2-5/16 | 2-3/4 | 0.36 |
| 7/8 | J5028H | J5028° | J5028B° | 1-15/64 | 1-15/64 | 1-3/16 | 2-5/16 | 2-3/4 | 0.43 |
| 15/16 | J5030H | J5030° | J5030B° | 1-15/64 | 1-15/64 | 1-3/16 | 2-5/16 | 2-3/4 | 0.46 |
| 1 | J5032H | J5032° | J5032B° | 1-5/16 | 1-5/16 | 1-3/16 | 2-5/16 | 2-3/4 | 0.54 |

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| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 6 | J5006MH | J5006M° | 25/64 | 21/32 | 5/16 | 1-11/16 | 2-1/8 | 0.10 |
| 7 | J5007MH | J5007M° | 27/64 | 21/32 | 5/16 | 1-11/16 | 2-1/8 | 0.09 |
| 8 | J5008MH | J5008M° | 15/32 | 21/32 | 5/16 | 1-15/16 | 2-1/8 | 0.10 |
| 9 | J5009MH | J5009M° | 33/64 | 21/32 | 25/64 | 1-11/16 | 2-1/8 | 0.10 |
| 10 | J5010MH | J5010M° | 37/64 | 21/32 | 25/64 | 1-11/16 | 2-1/8 | 0.11 |
| 11 | J5011MH | J5011M° | 21/32 | 21/32 | 7/16 | 1-11/16 | 2-1/8 | 0.12 |
| 12 | J5012MH | J5012M° | 45/64 | 45/64 | 33/64 | 1-1/2 | 2-1/8 | 0.14 |
| 13 | J5013MH | J5013M° | 23/32 | 23/32 | 33/64 | 1-1/2 | 2-1/8 | 0.15 |
| 14 | J5014MH | J5014M° | 25/32 | 25/32 | 19/32 | 1-1/2 | 2-1/8 | 0.16 |
| 15 | J5015MH | J5015M° | 55/64 | 55/64 | 21/32 | 2-5/16 | 2-3/4 | 0.24 |
| 16 | J5016MH | J5016M° | 55/64 | 55/64 | 21/32 | 2-5/16 | 2-3/4 | 0.24 |
| 17 | J5017MH | J5017M° | 15/16 | 15/16 | 21/32 | 2-5/16 | 2-3/4 | 0.28 |
| 18 | J5018MH | J5018M° | 15/16 | 15/16 | 21/32 | 2-5/16 | 2-3/4 | 0.28 |
| 19 | J5019MH | J5019M° | 1-1/64 | 1-1/64 | 11/16 | 2-5/16 | 2-3/4 | 0.33 |
| 20 | J5020MH | J5020M° | 1-5/64 | 1-5/64 | 11/16 | 2-5/16 | 2-3/4 | 0.35 |
| 21 | J5021MH | J5021M° | 1-5/64 | 1-5/64 | 11/16 | 2-5/16 | 2-3/4 | 0.35 |
| 22 | J5022MH | J5022M° | 1-11/64 | 1-11/64 | 11/16 | 2-5/16 | 2-3/4 | 0.46 |
| 23 | J5023MH | J5023M° | 1-15/64 | 1-15/64 | 1-3/16 | 2-5/16 | 2-3/4 | 0.55 |
| 24 | J5024MH | - | 1-9/32 | 1-9/32 | 1-3/16 | 2-5/16 | 2-3/4 | 0.56 |
| 25 | J5025MH | - | 1-9/32 | 1-9/32 | 1-3/16 | 2-5/16 | 2-3/4 | 0.56 |
| 26 | J5026MH | J5026M° | 1-9/32 | 1-9/32 | 1-3/16 | 2-5/16 | 2-3/4 | 0.65 |

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HAND SOCKETS

3/8" DRIVE UNIVERSAL SOCKETS

- ▶ PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



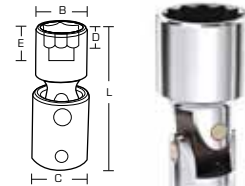
- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|---------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5/16 | J5272HA | J5272A | 15/32 | 3/4 | 9/32 | 9/32 | 1-3/4 | 0.12 |
| 3/8 | J5273HA | J5273A | 35/64 | 3/4 | 9/32 | 9/32 | 1-3/4 | 0.12 |
| 7/16 | J5274HA | J5274A | 41/64 | 3/4 | 5/16 | 5/16 | 1-25/32 | 0.12 |
| 1/2 | J5275HA | J5275A | 23/32 | 3/4 | 5/16 | 5/16 | 1-25/32 | 0.12 |
| 9/16 | J5276HA | J5276A | 25/32 | 3/4 | 3/8 | 3/8 | 1-7/8 | 0.13 |
| 5/8 | J5277HA | J5277A | 7/8 | 3/4 | 3/8 | 3/8 | 1-7/8 | 0.14 |
| 11/16 | J5278HA | J5278A | 31/32 | 3/4 | 13/32 | 15/32 | 1-31/32 | 0.15 |
| 3/4 | J5279HA | J5279A | 1 | 3/4 | 13/32 | 15/32 | 2 | 0.16 |
| 13/16 | - | J5280A | 1-3/32 | 25/32 | 13/32 | 9/16 | 1-7/8 | 0.27 |
| 7/8 | - | J5281A | 1-3/16 | 25/32 | 17/32 | 5/8 | 1-61/64 | 0.31 |
| 15/16 | - | J5282A | 1-1/4 | 25/32 | 17/32 | 5/8 | 1-61/64 | 0.35 |
| 1 | - | J5283A | 1-11/32 | 25/32 | 9/16 | 45/64 | 2 | 0.39 |

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3/8" DRIVE INTERMEDIATE UNIVERSAL SOCKETS

- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5/16 | J5272AS | 15/32 | 3/4 | 1/4 | 1/4 | 1-47/64 | 0.08 |
| 3/8 | J5273AS | 35/64 | 3/4 | 17/64 | 7/16 | 2 | 0.08 |
| 7/16 | J5274AS | 21/32 | 3/4 | 11/32 | 3/8 | 2-1/8 | 0.09 |
| 1/2 | J5275AS | 47/64 | 3/4 | 35/64 | 35/64 | 2-3/16 | 0.09 |
| 9/16 | J5276AS | 13/16 | 3/4 | 9/16 | 9/16 | 2-1/4 | 0.10 |
| 5/8 | J5277AS | 7/8 | 3/4 | 9/16 | 9/16 | 2-1/4 | 0.10 |
| 11/16 | J5278AS | 5/8 | 3/4 | 45/64 | 23/32 | 2-1/4 | 0.12 |
| 3/4 | J5279AS | 11/16 | 3/4 | 19/32 | 13/16 | 2-5/16 | 0.13 |
| 13/16 | J5280AS | 1-1/8 | 3/4 | 21/32 | 21/32 | 2-1/4 | 0.14 |
| 7/8 | J5281AS | 1-3/16 | 3/4 | 45/64 | 45/64 | 2-1/4 | 0.15 |
| 15/16 | J5282AS | 1-1/4 | 3/4 | 23/32 | 23/32 | 2-1/4 | 0.17 |
| 1 | J5283AS | 1-5/16 | 3/4 | 47/64 | 47/64 | 2-1/4 | 0.18 |

SAE AS954G ASME B107.110-2012

| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 10 | J5273MAS | 35/64 | 3/4 | 9/32 | 1/2 | 1-29/32 | 0.09 |
| 11 | J5274MAS | 39/64 | 3/4 | 11/32 | 1/2 | 1-29/32 | 0.09 |
| 12 | J5275MAS | 21/32 | 3/4 | 35/64 | 9/16 | 2-7/64 | 0.09 |
| 13 | J5276MAS | 23/32 | 3/4 | 35/64 | 9/16 | 2-7/64 | 0.10 |
| 14 | J5277MAS | 3/4 | 3/4 | 35/64 | 37/64 | 2-7/64 | 0.65 |
| 15 | J5278MAS | 13/16 | 3/4 | 19/32 | 5/8 | 2-3/16 | 0.12 |
| 16 | J5279MAS | 7/8 | 3/4 | 19/32 | 11/16 | 2-3/16 | 0.13 |
| 17 | J5280MAS | 61/64 | 3/4 | 43/64 | 47/64 | 2-19/64 | 0.14 |
| 18 | J5281MAS | 61/64 | 3/4 | 43/64 | 25/32 | 2-19/64 | 0.15 |
| 19 | J5282MAS | 1-1/32 | 3/4 | 43/64 | 53/64 | 2-19/64 | 0.17 |

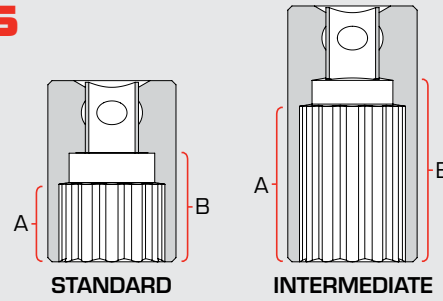
SAE AS955 ASME B107.110-2012

3/8" DRIVE SOCKETS

Torx® is a trademark of Acument Intellectual Properties, LLC

INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.



A - Nut Depth B - Bolt Clearance

3/8" DRIVE SPARK PLUG SOCKETS - 6 POINT

- ▶ Chrome finish.
- ▶ With rubber insert.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.

| INCH | 6 | Nut End Outside Diameter (in) | Overall Length (in) | Weight (lbs) |
|-------|----------|-------------------------------|---------------------|--------------|
| 5/8 | J5020-50 | 3/16 | 2-1/2 | 0.21 |
| 13/16 | J5026HPA | 19/64 | 2-3/4 | 0.35 |

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3/8" DRIVE BIT SOCKETS

| | Size | Product # | Tip Width (in) | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|----------|-------|-------------|----------------|-----------------|---------------------|--------------|
| Slotted | 1/4" | ⊖ J5246 | 1/32 | - | 1-13/16 | 0.01 |
| | 5/16" | ⊖ J5240A* | 3/64 | - | 3 | 0.13 |
| Phillips | #2 | ⊕ J5241 | - | - | 1-31/32 | 0.11 |
| | #3 | ⊕ J5242 | - | - | 1-31/32 | 0.12 |
| | #4 | ⊕ J5243 | - | - | 1-31/32 | 0.12 |
| | Torx® | T10 | ⊕ J5239-10W | - | 5/8 | 1-23/32 |
| | T15 | ⊕ J5239-15W | - | 5/8 | 1-23/32 | 0.10 |
| | T20 | ⊕ J5239-20W | - | 5/8 | 1-23/32 | 0.10 |
| | T25 | ⊕ J5239-25W | - | 5/8 | 1-23/32 | 0.10 |
| | T27 | ⊕ J5239-27W | - | 5/8 | 1-23/32 | 0.10 |
| | T30 | ⊕ J5239-30W | - | 7/8 | 1-23/32 | 0.12 |
| | T40 | ⊕ J5239-40W | - | 7/8 | 1-23/32 | 0.11 |
| | T45 | ⊕ J5239-45W | - | 7/8 | 1-23/32 | 0.12 |
| | T50 | ⊕ J5239-50W | - | 7/8 | 1-23/32 | 0.12 |
| | T55 | ⊕ J5239-55W | - | 7/8 | 1-23/32 | 0.13 |

*One-piece design



3/8" DRIVE SOCKETS & BIT SOCKETS

| | | | | | | | | |
|---------|---------|----------|------------|---------|-------------|-------|-------------|-----------|
| 6 POINT | 8 POINT | 12 POINT | SPL SPLINE | HEX HEX | FULL POLISH | SATIN | BLACK OXIDE | INSULATED |
|---------|---------|----------|------------|---------|-------------|-------|-------------|-----------|

HAND SOCKETS

3/8" DRIVE HEX BIT SOCKETS

3/8" DRIVE HEX BIT SOCKETS

| | INCH | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|---------------------|------------|-------------|-----------------|---------------------|--------------|
| STANDARD | 1/8 | J49901/8 | 1-5/8 | 2-23/32 | 0.12 |
| | 9/64 | J49909/64 | 1-5/8 | 2-23/32 | 0.10 |
| | 5/32 | J49905/32 | 1-5/8 | 2-23/32 | 0.12 |
| | 3/16 | J49903/16 | 1-5/8 | 2-23/32 | 0.12 |
| | 7/32 | J49907/32 | 1-5/8 | 2-23/32 | 0.12 |
| | 1/4 | J49901/4 | 1-5/8 | 2-23/32 | 0.12 |
| | 5/16 | J49905/16 | 1-5/8 | 2-23/32 | 0.13 |
| | 3/8 | J49903/8 | 1-5/8 | 2-23/32 | 0.15 |
| SHORT | 1/8 | J49901/8ST | 3/4 | 1-13/16 | 0.10 |
| | 5/32 | J49905/32ST | 3/4 | 1-13/16 | 0.11 |
| | 3/16 | J49903/16ST | 3/4 | 1-13/16 | 0.10 |
| | 7/32 | J49907/32ST | 3/4 | 1-13/16 | 0.10 |
| | 1/4 | J49901/4ST | 3/4 | 1-13/16 | 0.11 |
| | 5/16 | J49905/16ST | 3/4 | 1-13/16 | 0.11 |
| | 3/8 | J49903/8ST | 3/4 | 1-13/16 | 0.12 |
| | EXTRA LONG | 1/8 | J49901/8XL | 5 | 6-3/32 |
| 5/32 | | J49905/32XL | 5 | 6-3/32 | 0.12 |
| 3/16 | | J49903/16XL | 5 | 6-3/32 | 0.12 |
| 7/32 | | J49907/32XL | 5 | 6-3/32 | 0.13 |
| 1/4 | | J49901/4XL | 5 | 6-3/32 | 0.17 |
| 5/16 | | J49905/16XL | 5 | 6-3/32 | 0.21 |
| 3/8 | | J49903/8XL | 5 | 6-3/32 | 0.26 |
| EXTRA LONG BALL END | | 1/8 | J4904BD | 5 | 6-3/32 |
| | 5/32 | J4905BD | 5 | 6-3/32 | 0.17 |
| | 3/16 | J4906BD | 5 | 6-3/32 | 0.17 |
| | 7/32 | J4907BD | 5 | 6-3/32 | 0.16 |
| | 1/4 | J4908BD | 5 | 6-3/32 | 0.17 |
| | 5/16 | J4910BD | 5 | 6-3/32 | 0.22 |
| | 3/8 | J4912BD | 5 | 6-3/32 | 0.28 |



| | MM | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------------|-------|-------------|-----------------|---------------------|--------------|
| STANDARD | 4 | J4990-4M | 1-5/8 | 2-23/32 | 0.12 |
| | 5 | J4990-5M | 1-5/8 | 2-23/32 | 0.12 |
| | 6 | J4990-6M | 1-5/8 | 2-23/32 | 0.12 |
| | 7 | J4990-7M | 1-5/8 | 2-23/32 | 0.12 |
| | 8 | J4990-8M | 1-5/8 | 2-23/32 | 0.13 |
| | 9 | J4990-9M | 1-5/8 | 2-23/32 | 0.15 |
| | 10 | J4990-10M | 1-5/8 | 2-23/32 | 0.16 |
| | SHORT | 4 | J4990-4MST | 11/16 | 1-25/32 |
| 5 | | J4990-5MST | 11/16 | 1-25/32 | 0.10 |
| 6 | | J4990-6MST | 11/16 | 1-25/32 | 0.10 |
| 7 | | J4990-7MST | 11/16 | 1-25/32 | 0.11 |
| 8 | | J4990-8MST | 11/16 | 1-25/32 | 0.10 |
| 9 | | J4990-9MST | 11/16 | 1-25/32 | 0.11 |
| 10 | | J4990-10MST | 11/16 | 1-25/32 | 0.12 |
| EXTRA LONG | | 4 | J4990-4MXL | 5 | 6-3/32 |
| | 5 | J4990-5MXL | 5 | 6-3/32 | 0.17 |
| | 6 | J4990-6MXL | 5 | 6-3/32 | 0.17 |
| | 7 | J4990-7MXL | 5 | 6-3/32 | 0.17 |
| | 8 | J4990-8MXL | 5 | 6-3/32 | 0.21 |
| | 10 | J4990-10MXL | 5 | 6-3/32 | 0.28 |



- ▶ Made using a heat-treated alloy for wear resistance, which helps minimize distortion for a long life.
- ▶ Hex opening holds the bit, allowing the bit holder to take the torque load.



HAND SOCKETS

3/8" DRIVE CROWFOOT WRENCHES

- › Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- › Anti-Slip Design open end (ASD).
- › The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- › Broad size range ensures the right tool for the application will be available.
- › Typically used in lower torque applications.
- › Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › Locking hole on 3/8" drive crowfoot wrenches available on fractional openings 1" and larger.



| INCH | Product # | Overall Length (in) | Weight (lbs) |
|-------------|------------------|----------------------------|---------------------|
| 3/8 | J4912CF | 1-13/64 | 0.06 |
| 7/16 | J4914CF | 1-3/16 | 0.06 |
| 1/2 | J4916CF | 1-5/16 | 0.07 |
| 9/16 | J4918CF | 1-9/32 | 0.07 |
| 5/8 | J4920CF | 1-1/2 | 0.09 |
| 11/16 | J4922CF | 1-31/64 | 0.09 |
| 3/4 | J4924CF | 1-41/64 | 0.11 |
| 13/16 | J4926CF | 1-5/8 | 0.11 |
| 7/8 | J4928CF | 1-19/32 | 0.12 |
| 15/16 | J4930CF | 1-5/8 | 0.13 |
| 1 | J4932CF | 1-49/64 | 0.13 |
| 1-1/16 | J4934CF | 2-3/16 | 0.24 |
| 1-1/8 | J4936CF | 2-7/32 | 0.24 |
| 1-3/16 | J4938CF | 2-9/32 | 0.24 |
| 1-1/4 | J4940CF | 2-5/32 | 0.21 |
| 1-5/16 | J4942CF | 2-1/2 | 0.25 |
| 1-3/8 | J4944CF | 2-1/2 | 0.29 |
| 1-7/16 | J4946CF | 2-5/8 | 0.29 |
| 1-1/2 | J4948CF | 2-11/16 | 0.33 |
| 1-9/16 | J4950CF | 2-3/4 | 0.34 |
| 1-5/8 | J4952CF | 2-13/16 | 0.38 |
| 1-11/16 | J4954CF | 2-15/16 | 0.36 |
| 1-3/4 | J4956CF | 2-15/16 | 0.39 |
| 1-13/16 | J4958CF | 3-1/16 | 0.40 |
| 1-7/8 | J4960CF | 3-1/8 | 0.45 |
| 1-15/16 | J4962CF | 3-1/4 | 0.49 |
| 2 | J4964CF | 3-3/8 | 0.73 |
| 2-1/16 | J4966CF | 3-7/16 | 0.71 |
| 2-1/8 | J4968CF | 3-7/16 | 0.74 |
| 2-3/16 | J4970CF | 3-5/8 | 0.78 |
| 2-1/4 | J4972CF | 3-11/16 | 0.89 |
| 2-5/16 | J4974CF | 3-3/4 | 0.90 |
| 2-3/8 | J4976CF | 3-15/16 | 1.01 |
| 2-7/16 | J4978CF | 4-1/4 | 1.03 |
| 2-1/2 | J4980CF | 4-1/4 | 1.10 |
| 2-9/16 | J4982CF | 4-5/16 | 1.11 |
| 2-5/8 | J4984CF | 4-1/2 | 1.27 |
| 2-11/16 | J4986CF | 4-9/16 | 1.34 |
| 2-3/4 | J4988CF | 4-11/16 | 1.37 |
| 2-13/16 | J4990CF | 4-13/16 | 1.38 |
| 2-7/8 | J4992CF | 4-15/16 | 1.52 |
| 2-15/16 | J4994CF | 4-15/16 | 1.58 |
| 3 | J4996CF | 5 | 1.55 |

| MM | Product # | Overall Length (in) | Weight (lbs) |
|-----------|------------------|----------------------------|---------------------|
| 9 | J4909MCF | 1-5/6 | 0.05 |
| 10 | J4910MCF | 1-11/32 | 0.05 |
| 11 | J4911MCF | 1-3/8 | 0.07 |
| 12 | J4912MCF | 1-15/32 | 0.07 |
| 13 | J4913MCF | 1-1/2 | 0.06 |
| 14 | J4914MCF | 1-1/2 | 0.07 |
| 15 | J4915MCF | 1-5/8 | 0.10 |
| 16 | J4916MCF | 1-21/32 | 0.09 |
| 17 | J4917MCF | 1-23/32 | 0.10 |
| 18 | J4918MCF | 1-15/16 | 0.13 |
| 19 | J4919MCF | 1-15/16 | 0.13 |
| 20 | J4920MCF | 2-1/16 | 0.13 |
| 21 | J4921MCF | 2-3/32 | 0.14 |
| 22 | J4922MCF | 2-7/32 | 0.15 |
| 23 | J4923MCF | 2-11/32 | 0.19 |
| 24 | J4924MCF | 2-13/32 | 0.19 |

SAE AS4984A ASME B107.100-2010 

3/8" CROWFOOT WRENCHES


 6 POINT
  8 POINT
  12 POINT
  SPLINE
  HEX
  FULL POLISH
  SATIN
  BLACK OXIDE
  INSULATED

HAND SOCKETS

3/8" DRIVE FLARE NUT CROWFOOT WRENCHES - 6 POINT

- › Flare Nut Crowfoot wrenches are used in hard to reach or restricted access situations where a standard flare nut wrench cannot reach.
- › The flare nut slot opening is used to slide over hydraulic lines or other hoses which allows for easy access to hex connectors at ends.
- › Typically used in low torque applications.
- › Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › Locking hole feature helps keep the crowfoot engaged on the extension during use, helping to reduce downtime and improve working efficiency.
- › Use with locking extensions to reach into small spaces where the fastener is out of sight.

| INCH | Product # | Overall Length (in) | Weight (lbs) |
|-------|-----------|---------------------|--------------|
| 3/8 | J4912HFL | 1-13/16 | 0.07 |
| 7/16 | J4914HFL | 1-1/2 | 0.08 |
| 1/2 | J4916HFL | 1-5/8 | 0.10 |
| 9/16 | J4918HFL | 1-5/8 | 0.11 |
| 5/8 | J4920HFL | 1-3/4 | 0.13 |
| 11/16 | J4922HFL | 1-13/16 | 0.13 |
| 3/4 | J4924HFL | 1-15/16 | 0.16 |
| 13/16 | J4926HFL | 2 | 0.18 |

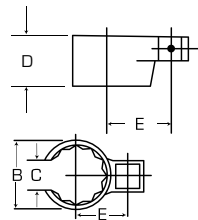
ASME B107.110-2010 




3/8" CROWFOOT WRENCHES

3/8" DRIVE FLARE NUT CROWFOOT WRENCHES - 12 POINT

- › Designed for speed and safety.
- › Special heat-treated alloy steel helps increase strength and durability.
- › 12 point box end allows for fine indexing, helping to improve speed and access. Fits 6 and 12 point fasteners.
- › Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › Locking hole helps hold crowfoot in place during use.
- › Use with a locking extension to help prevent tool loss in awkward locations.



| INCH | Product # | Head Outside Diameter (in) (B) | Head Opening (in) (C) | Head Thickness (in) (D) | Offset Height (in) (E) | Weight (lbs) |
|--------|-----------|--------------------------------|-----------------------|-------------------------|------------------------|--------------|
| 5/8 | J4920FL | 63/64 | 15/32 | 11/16 | 3/4 | 0.09 |
| 11/16 | J4922FL | 13/16 | 1/2 | 11/16 | 13/16 | 0.10 |
| 3/4 | J4924FL | 1-11/64 | 17/32 | 23/32 | 27/32 | 0.12 |
| 13/16 | J4926FL | 29/32 | 19/32 | 23/32 | 29/32 | 0.12 |
| 7/8 | J4928FL | 1 | 21/32 | 3/4 | 1 | 0.16 |
| 15/16 | J4930FL | 31/32 | 11/16 | 3/4 | 31/32 | 0.17 |
| 1 | J4932FL | 1-1/2 | 23/32 | 25/32 | 1-1/32 | 0.18 |
| 1-1/16 | J4934FL | 1-37/64 | 25/32 | 25/32 | 1-1/16 | 0.20 |

ASME B107.110-2010 

HAND SOCKETS

1/2" DRIVE SOCKETS

- ▶ PROTO® Sockets with TorquePlus™ are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

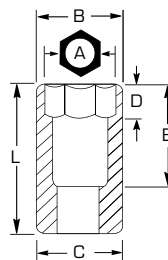


| INCH | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|----------|---------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J5408H | J5408T | - | 1/4 | 23/32 | 23/64 | 23/32 | 1-34/64 | 0.11 |
| 5/16 | J5410H** | J5410** | - | 17/32 | 55/64 | 23/64 | 23/32 | 1-34/64 | 0.11 |
| 3/8 | J5412H | J5412 | J5412B° | 9/16 | 55/64 | 23/64 | 7/8 | 1-31/64 | 0.11 |
| 7/16 | J5414H | J5414 | J5414B° | 43/64 | 55/64 | 23/64 | 7/8 | 1-31/64 | 0.11 |
| 1/2 | J5416H | J5416 | J5416B° | 47/64 | 55/64 | 23/64 | 7/8 | 1-31/64 | 0.11 |
| 17/32 | - | J5417 | - | 7/8 | 55/64 | 23/64 | 23/32 | 1-31/64 | 0.12 |
| 9/16 | J5418H | J5418 | J5418B° | 13/16 | 55/64 | 23/64 | 51/64 | 1-1/2 | 0.13 |
| 19/32 | J5419H** | J5419** | - | 7/8 | 55/64 | 9/16 | 21/32 | 1-1/2 | 0.13 |
| 5/8 | J5420H | J5420 | J5420B° | 7/8 | 7/8 | 9/16 | 21/32 | 1-1/2 | 0.14 |
| 21/32 | J5421H** | J5421** | - | 61/64 | 61/64 | 9/16 | 21/32 | 1-1/2 | 0.15 |
| 11/16 | J5422H | J5422 | J5422B° | 61/64 | 61/64 | 9/16 | 21/32 | 1-1/2 | 0.15 |
| 3/4 | J5424H | J5424 | J5424B° | 1-1/32 | 1-1/64 | 11/16 | 21/32 | 1-1/2 | 0.15 |
| 25/32 | J5425H** | J5425** | - | 1-1/16 | 1-5/64 | 11/16 | 21/32 | 1-1/2 | 0.20 |
| 13/16 | J5426H | J5426 | J5426B° | 1-3/32 | 1-5/64 | 11/16 | 21/32 | 1-1/2 | 0.23 |
| 7/8 | J5428H | J5428 | J5428B° | 1-11/64 | 1-3/16 | 11/16 | 45/64 | 1-9/16 | 0.26 |
| 29/32 | - | J5429 | - | 1-3/16 | 1-3/16 | 13/16 | 45/64 | 1-9/16 | 0.30 |
| 15/16 | J5430H | J5430 | J5430B° | 1-1/4 | 1-1/4 | 13/16 | 45/64 | 1-9/16 | 0.33 |
| 31/32 | J5431H | J5431 | - | 1-9/32 | 1-9/32 | 13/16 | 45/64 | 1-9/16 | 0.35 |
| 1 | J5432H | J5432 | J5432B° | 1-21/64 | 1-5/16 | 27/32 | 45/64 | 1-9/16 | 0.38 |
| 1-1/16 | J5434H | J5434 | J5434B° | 1-13/32 | 1-25/64 | 13/16 | 25/32 | 1-5/8 | 0.42 |
| 1-1/8 | J5436H | J5436 | J5436B° | 1-31/64 | 1-31/64 | 15/16 | 29/32 | 1-3/4 | 0.47 |
| 1-3/16 | J5438H | J5438 | J5438B° | 1-9/16 | 1-17/32 | 59/64 | 29/32 | 1-3/4 | 0.59 |
| 1-1/4 | J5440H | J5440 | J5440B° | 1-39/64 | 1-37/64 | 1 | 7/8 | 1-3/4 | 0.66 |
| 1-5/16 | J5442H | J5442 | J5442B° | 1-21/32 | 1-41/64 | 27/32 | 1-19/64 | 1-55/64 | 0.69 |
| 1-3/8 | J5444H | J5444 | J5444B° | 1-25/32 | 1-5/8 | 25/32 | 1-19/64 | 2 | 0.79 |
| 1-7/16 | J5446H | J5446 | J5446B° | 1-59/64 | 1-5/8 | 27/32 | 1-19/64 | 2-1/8 | 0.98 |
| 1-1/2 | J5448H | J5448 | J5448B° | 1-63/64 | 1-5/8 | 27/32 | 1-19/64 | 2-1/4 | 1.12 |
| 1-9/16 | J5450H | - | - | 2-1/32 | 1-5/8 | 1 | 1-9/32 | 2-1/4 | 1.12 |

1/2" DRIVE SOCKETS

*SAE AS4984A ASME B107.110-2012

**Meets and exceeds ASME B107.110-2012 only



6 POINT
 8 POINT
 12 POINT
 SPL SPLINE
 HEX
 FULL POLISH
 SATIN
 BLACK OXIDE
 INSULATED

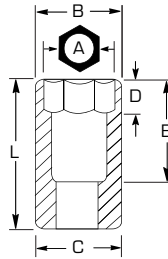
HAND SOCKETS

1/2" DRIVE SOCKETS (CONT'D)

1/2" DRIVE SOCKETS

| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 8 | J5408MH | J5408M | 35/64 | 55/64 | 23/64 | 25/32 | 1-19/64 | 0.11 |
| 9 | J5409MH | J5409M | 19/32 | 55/64 | 23/64 | 25/32 | 1-31/64 | 0.11 |
| 10 | J5410MH | J5410M | 39/64 | 55/64 | 23/64 | 55/64 | 1-31/64 | 0.11 |
| 11 | J5411MH | J5411M | 45/64 | 55/64 | 23/64 | 55/64 | 1-31/64 | 0.11 |
| 12 | J5412MH | J5412M | 47/64 | 55/64 | 23/64 | 55/64 | 1-31/64 | 0.11 |
| 13 | J5413MH | J5413M | 3/4 | 55/64 | 23/64 | 55/64 | 1-31/64 | 0.12 |
| 14 | J5414MH | J5414M | 13/16 | 55/64 | 23/64 | 7/8 | 1-1/2 | 0.13 |
| 15 | J5415MH | J5415M | 55/64 | 55/64 | 37/64 | 7/8 | 1-1/2 | 0.13 |
| 16 | J5416MH | J5416M | 7/8 | 7/8 | 37/64 | 7/8 | 1-1/2 | 0.13 |
| 17 | J5417MH | J5417M | 61/64 | 61/64 | 37/64 | 7/8 | 1-1/2 | 0.14 |
| 18 | J5418MH | J5418M | 61/64 | 61/64 | 37/64 | 7/8 | 1-1/2 | 0.17 |
| 19 | J5419MH | J5419M | 1-1/32 | 1-1/32 | 11/16 | 27/32 | 1-1/2 | 0.19 |
| 20 | J5420MH | J5420M | 1-3/32 | 1-3/32 | 11/16 | 27/32 | 1-1/2 | 0.22 |
| 21 | J5421MH | J5421M | 1-3/32 | 1-3/32 | 11/16 | 27/32 | 1-1/2 | 0.24 |
| 22 | J5422MH | J5422M | 1-11/64 | 1-11/64 | 11/16 | 27/32 | 1-17/32 | 0.26 |
| 23 | J5423MH | J5423M | 1-13/64 | 1-13/64 | 25/32 | 59/64 | 1-17/32 | 0.27 |
| 24 | J5424MH | J5424M | 1-1/4 | 1-1/4 | 53/64 | 59/64 | 1-17/32 | 0.28 |
| 25 | J5425MH | J5425M | 1-9/32 | 1-9/32 | 53/64 | 59/64 | 1-17/32 | 0.30 |
| 26 | J5426MH | J5426M* | 1-21/64 | 1-21/64 | 55/64 | 63/64 | 1-39/64 | 0.33 |
| 27 | J5427MH | J5427M | 1-13/32 | 1-13/32 | 15/16 | 1-3/64 | 1-43/64 | 0.39 |
| 28 | J5428MH | J5428M* | 1-31/64 | 1-31/64 | 63/64 | 1-5/32 | 1-25/32 | 0.48 |
| 29 | J5429MH | J5429M* | 1-31/64 | 1-31/64 | 63/64 | 1-5/32 | 1-25/32 | 0.62 |
| 30 | J5430MH | J5430M | 1-9/16 | 1-17/32 | 63/64 | 1-5/32 | 1-25/32 | 0.63 |
| 31 | J5431MH | J5431M* | 1-39/64 | 1-39/64 | 1-1/16 | 1-5/32 | 1-25/32 | 0.63 |
| 32 | J5432MH | J5432M | 1-39/64 | 1-39/64 | 1-1/8 | 1-7/32 | 1-27/32 | 0.63 |
| 34 | J5434MH | J5434M | 1-49/64 | 1-49/64 | 1 | 1-35/64 | 1-27/32 | 0.63 |
| 36 | J5436MH | J5436M | 1-31/32 | 1-31/32 | 1-3/8 | 1-39/64 | 2-15/64 | 1.04 |
| 38 | - | J5438M | 2-1/32 | 2-1/32 | 1-3/8 | 1-39/64 | 2-1/4 | 1.04 |

*SAE AS955 ASME B107.110-2012 




HAND SOCKETS


1/2" DRIVE SOCKETS - SPLINE



STANDARD

| INCH | Spline Size |  | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|-------------|-----------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/2 | 16 | J5416SPL | 7/8 | 7/8 | 31/64 | 13/16 | 1-7/16 | 0.11 |
| 9/16 | 18 | J5418SPL | 7/8 | 7/8 | 31/64 | 13/16 | 1-7/16 | 0.11 |
| 5/8 | 20 | J5420SPL | 7/8 | 7/8 | 17/32 | 1-1/16 | 1-9/16 | 0.14 |
| 11/16 | 22 | J5422SPL | 61/64 | 61/64 | 17/32 | 1-1/16 | 1-9/16 | 0.17 |
| 3/4 | 24 | J5424SPL | 1-3/64 | 1-3/64 | 17/32 | 1-1/16 | 1-9/16 | 0.20 |
| 13/16 | 26 | J5426SPL | 1-1/8 | 1-1/8 | 17/32 | 1-1/16 | 1-9/16 | 0.23 |
| 7/8 | 28 | J5428SPL | 1-3/16 | 1-3/16 | 17/32 | 1-1/16 | 1-9/16 | 0.24 |
| 15/16 | 30 | J5430SPL | 1-5/16 | 1-5/16 | 17/32 | 1-1/16 | 1-9/16 | 0.30 |

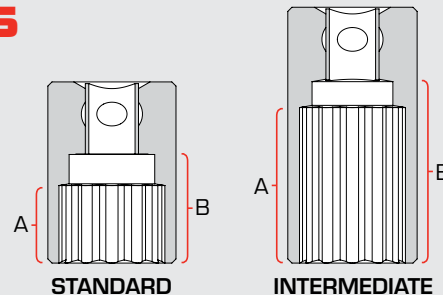
DEEP

| INCH | Spline Size |  | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|-------------|------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 9/16 | 18 | J5318DPL | 7/8 | 7/8 | 31/64 | 2-7/8 | 3-3/8 | 0.28 |
| 5/8 | 20 | J5320DPL | 7/8 | 7/8 | 33/64 | 2-7/8 | 3-3/8 | 0.32 |
| 11/16 | 22 | J5322DPL | 61/64 | 61/64 | 17/32 | 2-7/8 | 3-3/8 | 0.29 |
| 3/4 | 24 | J5324DPL | 1-3/64 | 1-3/64 | 17/32 | 2-7/8 | 3-3/8 | 0.33 |
| 13/16 | 26 | J5326DPL | 1-1/8 | 1-1/8 | 17/32 | 2-7/8 | 3-3/8 | 0.37 |
| 7/8 | 28 | J5328DPL | 1-3/16 | 1-3/16 | 17/32 | 2-7/8 | 3-3/8 | 0.41 |
| 15/16 | 30 | J5330DPL | 1-5/16 | 1-5/16 | 17/32 | 2-7/8 | 3-3/8 | 0.48 |

INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.

A - Nut Depth B - Bolt Clearance



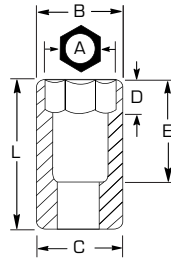
HAND SOCKETS

1/2" DRIVE INTERMEDIATE SOCKETS - 12 POINT

- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- 12-Point sockets are ideal for use on stubborn or damaged fasteners.
- Intermediate lengths give additional reach without limiting accessibility in tight spaces.



- Radius-corner socket design
- Engages flats for better grip
- Improves the ability to turn worn or rounded fasteners



1/2" DRIVE SOCKETS

| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | J5412N | 9/16 | 55/64 | 3/8 | 11/16 | 1-17/32 | 0.09 |
| 7/16 | J5414N | 43/64 | 55/64 | 7/16 | 11/16 | 1-17/32 | 0.11 |
| 1/2 | J5416N | 43/64 | 55/64 | 7/16 | 11/16 | 1-17/32 | 0.11 |
| 9/16 | J5418N | 13/16 | 55/64 | 5/8 | 11/16 | 1-5/8 | 0.12 |
| 5/8 | J5420N | 55/64 | 55/64 | 5/8 | 25/32 | 1-45/64 | 0.12 |
| 11/16 | J5422N | 61/64 | 61/64 | 13/16 | 27/32 | 1-47/64 | 0.13 |
| 3/4 | J5424N | 1-1/64 | 1-1/64 | 15/16 | 1 | 1-3/4 | 0.14 |
| 13/16 | J5426N | 1-3/32 | 1-3/32 | 31/32 | 1-1/32 | 1-3/4 | 0.21 |
| 7/8 | J5428N | 1-3/16 | 1-3/16 | 1 | 1-9/64 | 1-13/16 | 0.26 |
| 15/16 | J5430N | 1-1/4 | 1-1/4 | 1 | 1-3/16 | 1-7/8 | 0.27 |
| 1 | J5432N | 1-21/64 | 1-21/64 | 1-1/16 | 1-15/64 | 1-59/64 | 0.29 |
| 1-1/16 | J5434N | 1-7/16 | 1-7/16 | 1-1/8 | 1-7/32 | 1-61/64 | 0.46 |
| 1-1/8 | J5436N | 1-1/2 | 1-1/2 | 1-1/8 | 1-9/32 | 1-63/64 | 0.47 |
| 1-3/16 | J5438N | 1-1/2 | 1-1/2 | 1-1/8 | 1-19/64 | 2 | 0.50 |
| 1-1/4 | J5440N | 1-1/4 | 1-1/4 | 1 | 1-3/16 | 1-7/8 | 0.27 |
| 1-5/16 | J5442N | 1-41/64 | 1-41/64 | 29/32 | 1-23/64 | 2-3/64 | 0.56 |

SAE AS954G ASME B107.110-2012

| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 10 | J5410MN | 9/16 | 55/64 | 3/8 | 11/16 | 1-17/32 | 0.09 |
| 11 | J5411MN | 43/64 | 55/64 | 7/16 | 11/16 | 1-17/32 | 0.11 |
| 12 | J5412MN | 43/64 | 55/64 | 7/16 | 11/16 | 1-17/32 | 0.11 |
| 13 | J5413MN | 13/16 | 55/64 | 5/8 | 11/16 | 1-5/8 | 0.12 |
| 14 | J5414MN | 13/16 | 55/64 | 5/8 | 11/16 | 1-5/8 | 0.12 |
| 15 | J5415MN | 13/16 | 55/64 | 5/8 | 11/16 | 1-5/8 | 0.12 |
| 16 | J5416MN | 55/64 | 55/64 | 5/8 | 25/32 | 1-45/64 | 0.12 |
| 17 | J5417MN | 61/64 | 61/64 | 13/16 | 27/32 | 1-47/64 | 0.13 |
| 18 | J5418MN | 61/64 | 61/64 | 13/16 | 27/32 | 1-47/64 | 0.13 |
| 19 | J5419MN | 1-1/64 | 1-1/64 | 15/16 | 1 | 1-3/4 | 0.14 |
| 20 | J5420MN | 1-3/32 | 1-3/32 | 31/32 | 1-1/32 | 1-3/4 | 0.21 |
| 21 | J5421MN | 1-3/32 | 1-3/32 | 11/16 | 27/32 | 1-13/32 | 0.21 |
| 22 | J5422MN | 1-11/64 | 1-11/64 | 11/16 | 57/64 | 1-35/64 | 0.26 |
| 23 | J5423MN | 1-3/16 | 1-3/16 | 1 | 1-9/64 | 1-13/16 | 0.26 |
| 24 | J5424MN | 1-1/4 | 1-1/4 | 1 | 1-3/16 | 1-7/8 | 0.27 |
| 25 | J5425MN | 1-21/64 | 1-21/64 | 1-1/16 | 1-15/64 | 1-59/64 | 0.29 |
| 27 | J5427MN | 1-7/16 | 1-7/16 | 1-1/8 | 1-7/32 | 1-61/64 | 0.46 |
| 30 | J5430MN | 1-1/2 | 1-1/2 | 1-1/8 | 1-19/64 | 2 | 0.50 |
| 32 | J5432MN | 1-9/16 | 1-9/16 | 1-1/8 | 1-5/16 | 1-1/64 | 0.48 |

SAE AS955 ASME B107.110-2012

HAND SOCKETS

1/2" DRIVE DEEP SOCKETS



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 12 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|--------|--------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | J5312H | J5312° | - | 9/16 | 7/8 | 1/4 | 2-39/64 | 3-1/4 | 0.28 |
| 7/16 | J5314H | J5314° | - | 9/16 | 7/8 | 23/64 | 2-39/64 | 3-1/4 | 0.28 |
| 1/2 | J5316H | J5316° | J5316B° | 47/64 | 55/64 | 25/32 | 2-39/64 | 3-1/4 | 0.29 |
| 9/16 | J5318H | J5318° | J5318B° | 13/16 | 27/32 | 15/16 | 2-39/64 | 3-1/4 | 0.29 |
| 5/8 | J5320H | J5320° | J5320B° | 7/8 | 7/8 | 1-7/32 | 2-39/64 | 3-1/4 | 0.30 |
| 11/16 | J5322H | J5322° | J5322B° | 31/32 | 31/32 | 1-7/32 | 2-39/64 | 3-1/4 | 0.42 |
| 3/4 | J5324H | J5324° | J5324B° | 1-3/64 | 1-3/64 | 1-7/32 | 2-39/64 | 3-1/4 | 0.42 |
| 13/16 | J5326H | J5326° | J5326B° | 1-3/32 | 1-3/32 | 1-7/32 | 2-39/64 | 3-1/4 | 0.52 |
| 7/8 | J5328H | J5328° | J5328B° | 1-11/64 | 1-11/64 | 1-7/32 | 2-39/64 | 3-1/4 | 0.58 |
| 15/16 | J5330H | J5330° | J5330B° | 1-1/4 | 1-1/4 | 1-7/32 | 2-39/64 | 3-1/4 | 0.67 |
| 1 | J5332H | J5332° | J5332B° | 1-21/64 | 1-21/64 | 1-7/32 | 2-29/64 | 3-1/4 | 0.67 |
| 1-1/16 | J5334H | J5334° | J5334B° | 1-13/32 | 1-13/32 | 1-9/32 | 2-29/64 | 3-1/4 | 0.75 |
| 1-1/8 | J5336H | J5336° | J5336B° | 1-1/2 | 1-1/2 | 1-5/32 | 2-29/64 | 3-1/4 | 0.83 |
| 1-3/16 | J5338H | J5338° | - | 1-35/64 | 1-35/64 | 1-7/64 | 2-1/4 | 3-1/4 | 0.83 |
| 1-1/4 | J5340H | J5340° | J5340B° | 1-9/16 | 1-9/16 | 1-13/32 | 2-29/64 | 3-1/4 | 1.06 |
| 1-5/16 | J5342H | J5342° | - | 1-7/8 | 1-5/8 | 27/32 | 2-1/4 | 3-1/2 | 1.06 |
| 1-3/8 | J5344H | J5344° | - | 1-7/8 | 1-5/8 | 61/64 | 2-1/4 | 3-1/2 | 1.23 |
| 1-7/16 | J5346H | J5346° | - | 2-1/16 | 1-5/8 | 61/64 | 2-1/4 | 3-1/2 | 1.27 |
| 1-1/2 | J5348H | J5348° | - | 2-1/16 | 1-5/8 | 1 | 2-1/4 | 3-1/2 | 1.58 |

*SAE AS954G ASME B107.110-2012

| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 10 | J5310M | 39/64 | 55/64 | 19/32 | 2-3/32 | 3-1/4 | 0.25 |
| 11 | J5311M | 45/64 | 55/64 | 5/8 | 2-3/32 | 3-1/4 | 0.25 |
| 12 | J5312M | 47/64 | 55/64 | 43/64 | 2-3/32 | 3-1/4 | 0.26 |
| 13 | J5313M | 3/4 | 55/64 | 43/64 | 2-3/32 | 3-1/4 | 0.26 |
| 14 | J5314M | 27/32 | 27/32 | 15/16 | 2-3/32 | 3-1/4 | 0.30 |
| 15 | J5315M | 55/64 | 55/64 | 1-1/16 | 2-3/32 | 3-1/4 | 0.32 |
| 16 | J5316M | 55/64 | 55/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.32 |
| 17 | J5317M | 61/64 | 61/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.33 |
| 18 | J5318M | 63/64 | 63/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.33 |
| 19 | J5319M | 1-3/64 | 1-3/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.37 |
| 20 | J5320M | 1-3/32 | 1-3/32 | 1-3/16 | 2-3/32 | 3-1/4 | 0.46 |
| 21 | J5321M | 1-3/32 | 1-3/32 | 1-3/16 | 2-3/32 | 3-1/4 | 0.51 |
| 22 | J5322M | 1-11/64 | 1-11/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.51 |
| 23 | J5323M | 1-13/64 | 1-13/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.51 |
| 24 | J5324M | 1-1/4 | 1-1/4 | 1-3/16 | 2-3/32 | 3-1/4 | 0.51 |
| 25 | J5325M | 1-5/16 | 1-5/16 | 1-3/16 | 2-3/32 | 3-1/4 | 0.62 |
| 26 | J5326M | 1-21/64 | 1-21/64 | 1-3/16 | 2-3/32 | 3-1/4 | 0.63 |
| 27 | J5327M | 1-1/64 | 1-1/64 | 1-7/64 | 2-3/32 | 3-1/4 | 0.65 |
| 28 | J5328M | 1-3/32 | 1-31/64 | 1-7/64 | 2-3/32 | 3-1/4 | 0.68 |
| 29 | J5329M | 1-31/64 | 1-31/64 | 1-7/64 | 2-3/32 | 3-1/4 | 0.68 |
| 30 | J5330M | 1-9/16 | 1-9/16 | 1-7/64 | 2-5/8 | 3-1/4 | 0.70 |
| 31 | J5331M | 1-39/64 | 1-39/64 | 1-7/64 | 2-5/8 | 3-1/4 | 0.73 |
| 32 | J5332M | 1-39/64 | 1-39/64 | 1-7/64 | 2-5/8 | 3-1/4 | 0.73 |
| 36 | J5336M | 1-31/32 | 1-31/32 | 1-7/64 | 2-5/8 | 3-1/4 | 0.99 |

SAE AS955 ASME B107.110-2012


6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
FULL POLISH
SATIN
BLACK OXIDE
INSULATED

HAND SOCKETS

1/2" DRIVE SPARK PLUG SOCKETS - 6 POINT

- › With rubber insert.
- › Proto® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.

| INCH | 6 | Overall Length (in) | Weight (lbs) |
|-------|----------|---------------------|--------------|
| 5/8 | J5320-50 | 2-1/2 | 0.23 |
| 13/16 | J5326HPA | 2-47/64 | 0.35 |

ASME B107.110-2012 




- › Radius-corner socket design
- › Engages flats for better grip
- › Improves the ability to turn worn or rounded fasteners

1/2" DRIVE SCREWDRIVER BIT SOCKETS

- › Made of heat-treated alloy steel.
- › Ball detent.

| | Size | Product # | Tip Width (in) | Overall Length (in) | Weight (lbs) |
|----------|-------|-----------|----------------|---------------------|--------------|
| Slotted | 7/16" | ⊖ J5407A | 1/16 | 3-5/32 | 0.2 |
| | 1/2" | ⊖ J5408A | 5/64 | 3-5/32 | 0.22 |
| | 5/8" | ⊖ J5409A | 3/32 | 3-5/32 | 0.27 |
| Phillips | #2 | ⊕ J5402 | 2-5/32 | 2-5/32 | 0.19 |
| | #3 | ⊕ J5403 | 2-5/32 | 2-5/32 | 0.18 |
| | #4 | ⊕ J5404 | 2-5/32 | 2-5/32 | 0.19 |






1/2" DRIVE HEX BIT SOCKETS


- › Bit holders have a hex opening to hold the bit allowing the bit holder to take the full load of torque.
- › Made of heat-treated alloy steel.
- › Polished chrome finish.



| | INCH | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------------|------|-------------|-----------------|---------------------|--------------|
| STANDARD | 1/4 | J54411/4° | 1-3/4 | 3-1/4 | 0.19 |
| | 5/16 | J54415/16° | 1-3/4 | 3-1/4 | 0.22 |
| | 3/8 | J54413/8° | 1-3/4 | 3-1/4 | 0.25 |
| | 7/16 | J54417/16° | 1-3/4 | 3-1/4 | 0.28 |
| | 1/2 | J54411/2° | 1-7/8 | 3-5/8 | 0.46 |
| | 9/16 | J54419/16° | 1-7/8 | 3-5/8 | 0.50 |
| | 5/8 | J54415/8° | 2 | 4 | 0.85 |
| | 3/4 | J54413/4° | 2 | 4 | 0.92 |
| EXTRA LONG | 1/4 | J54411/4XL | 3-1/8 | 4-5/8 | 0.20 |
| | 5/16 | J54415/16XL | 4-1/8 | 5-5/8 | 0.29 |
| | 3/8 | J54413/8XL | 4-1/8 | 5-5/8 | 0.42 |
| | 1/2 | J54411/2XL | 5-3/8 | 7-1/8 | 0.60 |
| | 9/16 | J54419/16XL | 5-3/8 | 7-1/8 | 0.77 |
| | 5/8 | J54415/8XL | 5-3/16 | 7-3/16 | 0.86 |


| | MM | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------------|----|-------------|-----------------|---------------------|--------------|
| STANDARD | 6 | J5441-6M° | 1-3/4 | 3-1/4 | 0.20 |
| | 8 | J5441-8M° | 1-3/4 | 3-1/4 | 0.22 |
| | 10 | J5441-10M° | 1-3/4 | 3-1/4 | 0.26 |
| | 12 | J5441-12M° | 1-3/4 | 3-1/4 | 0.29 |
| | 13 | J5441-13M° | 1-7/8 | 3-41/64 | 0.46 |
| | 14 | J5441-14M° | 1-7/8 | 3-41/64 | 0.50 |
| | 15 | J5441-15M° | 1-7/8 | 3-41/64 | 0.50 |
| | 17 | J5441-17M° | 2 | 4 | 0.87 |
| | 18 | J5441-18M° | 2 | 4 | 0.90 |
| | 19 | J5441-19M° | 2 | 4 | 0.94 |
| EXTRA LONG | 12 | J5441-12MXL | 5-5/8 | 7-1/8 | 0.50 |
| | 14 | J5441-14MXL | 5-3/8 | 7-1/8 | 0.75 |
| | 17 | J5441-17MXL | 5-1/8 | 7-1/8 | 1.20 |

*SAE AS4984A 

*SAE AS4984A 

1/2" DRIVE CROWFOOT WRENCHES

| INCH | Product # | Overall Length (in) | Weight (lbs) |
|---------|-----------|---------------------|--------------|
| 15/16 | J5330CF | 2-13/16 | 0.47 |
| 1 | J5332CF | 2-13/16 | 0.46 |
| 1-1/16 | J5334CF | 2-7/8 | 0.51 |
| 1-1/8 | J5336CF | 3 | 0.54 |
| 1-3/16 | J5338CF | 3 | 0.58 |
| 1-1/4 | J5340CF | 3-5/16 | 0.66 |
| 1-5/16 | J5342CF | 3-5/16 | 0.66 |
| 1-3/8 | J5344CF | 3-3/8 | 0.72 |
| 1-7/16 | J5346CF | 3-3/8 | 0.75 |
| 1-1/2 | J5348CF | 3-7/16 | 0.77 |
| 1-9/16 | J5350CF | 3-1/2 | 0.80 |
| 1-5/8 | J5352CF | 3-1/2 | 0.83 |
| 1-11/16 | J5354CF | 3-13/16 | 0.95 |
| 1-3/4 | J5356CF | 3-13/16 | 0.98 |
| 1-13/16 | J5358CF | 3-7/8 | 1.01 |
| 1-7/8 | J5360CF | 3-7/8 | 1.05 |
| 2 | J5364CF | 3-15/16 | 1.10 |
| 2-1/8 | J5368CF | 4-1/16 | 1.09 |
| 2-1/4 | J5372CF | 4-3/8 | 1.27 |
| 2-3/8 | J5376CF | 4-7/16 | 1.29 |
| 2-7/16 | J5378CF | 4-7/16 | 1.28 |
| 2-1/2 | J5380CF | 4-1/2 | 1.25 |

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- › Crowfoot wrenches are used in hard to reach, restricted access situations where a standard wrench or ratchet cannot reach.
- › Anti-Slip Design open end (ASD).
- › The arched surfaces are designed to spread the contact forces over a greater area and they keep the loads off the corners of the fastener which helps prevent fastener rounding.
- › Broad size range ensures the right tool for the application will be available.
- › Typically used in lower torque applications.
- › Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- › Locking hole feature helps keep the crowfoot wrench engaged on the extension during use reducing downtime due to detachment of crowfoot in awkward spaces.
- › Use with locking extensions to reach into spaces too small for a mechanic's arm or where the fastener is out of site.



1/2" DRIVE CROWFOOT WRENCHES

1/2" DRIVE FLARE NUT CROWFOOT WRENCHES - 12 POINT

| INCH | Product # | Overall Length (in) | Weight (lbs) |
|---------|-----------|---------------------|--------------|
| 1-1/8 | J5336FL | 2-13/16 | 0.19 |
| 1-3/16 | J5338FL | 2-7/8 | 0.19 |
| 1-1/4 | J5340FL | 3 | 0.19 |
| 1-5/16 | J5342FL | 3-1/16 | 0.19 |
| 1-3/8 | J5344FL | 3-5/16 | 0.25 |
| 1-7/16 | J5346FL | 3-3/8 | 0.25 |
| 1-1/2 | J5348FL | 3-7/16 | 0.25 |
| 1-9/16 | J5350FL | 3-9/16 | 0.31 |
| 1-5/8 | J5352FL | 3-3/4 | 0.31 |
| 1-11/16 | J5354FL | 3-13/16 | 0.31 |
| 1-3/4 | J5356FL | 3-7/8 | 0.38 |
| 1-13/16 | J5358FL | 4 | 0.38 |
| 1-7/8 | J5360FL | 4-1/4 | 0.45 |
| 1-15/16 | J5362FL | 4-5/16 | 0.50 |
| 2 | J5364FL | 4-7/16 | 0.50 |

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- › Designed for speed and safety.
- › Special heat-treated alloy steel helps increase strength and durability.
- › 12 point Box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- › Full polish crowfoot wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.



HAND SOCKETS

3/4" DRIVE SOCKETS - 12 POINT

- ▶ Proto® 12 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Ball detent design.
- ▶ Made of heat-treated alloy steel.
- ▶ Side locking hole.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

3/4" DRIVE SOCKETS

| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|---------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/4 | J5524 | 1-5/16 | 1-5/16 | 19/32 | 1-1/16 | 2 | 0.35 |
| 13/16 | J5526 | 1-5/16 | 1-5/16 | 21/32 | 1-1/16 | 2 | 0.36 |
| 7/8 | J5528 | 1-5/16 | 1-5/16 | 45/64 | 1-1/16 | 2 | 0.46 |
| 15/16 | J5530 | 1-7/16 | 1-7/16 | 3/4 | 1-1/16 | 2 | 0.51 |
| 1 | J5532 | 1-1/2 | 1-1/2 | 3/4 | 1-1/16 | 2 | 0.56 |
| 1-1/16 | J5534 | 1-37/64 | 1-37/64 | 3/4 | 1-1/16 | 2 | 0.61 |
| 1-1/8 | J5536 | 1-37/64 | 1-15/32 | 25/32 | 1 | 2-7/32 | 0.72 |
| 1-3/16 | J5538 | 1-37/64 | 1-15/32 | 25/32 | 1 | 2-7/32 | 0.61 |
| 1-1/4 | J5540* | 1-13/16 | 1-19/32 | 13/16 | 1-5/32 | 2-15/64 | 0.87 |
| 1-5/16 | J5542* | 1-7/8 | 1-19/32 | 27/32 | 1-5/32 | 2-9/32 | 0.89 |
| 1-3/8 | J5544* | 1-7/8 | 1-5/8 | 29/32 | 1-5/32 | 2-9/32 | 0.84 |
| 1-7/16 | J5546* | 2-3/64 | 1-5/8 | 61/64 | 1-1/4 | 2-13/32 | 1.07 |
| 1-1/2 | J5548* | 2-3/64 | 1-5/8 | 1 | 1-1/4 | 2-13/32 | 0.94 |
| 1-9/16 | J5550* | 2-3/16 | 1-23/32 | 1-3/64 | 1-15/16 | 2-5/8 | 0.97 |
| 1-5/8 | J5552* | 2-15/64 | 1-3/4 | 1-7/64 | 1-15/16 | 2-5/8 | 1.03 |
| 1-11/16 | J5554* | 2-3/8 | 1-3/4 | 1-5/32 | 1-15/32 | 2-3/4 | 1.14 |
| 1-3/4 | J5556* | 2-3/8 | 1-3/4 | 1-13/64 | 1-15/32 | 2-3/4 | 1.30 |
| 1-13/16 | J5558 | 2-9/16 | 1-3/4 | 1-1/4 | 1-39/64 | 2-29/32 | 1.41 |
| 1-7/8 | J5560 | 2-9/16 | 1-3/4 | 1-19/64 | 1-39/64 | 2-31/32 | 1.55 |
| 2 | J5564 | 2-47/64 | 2 | 1-3/4 | 1-3/4 | 3-7/64 | 1.59 |
| 2-1/16 | J5566 | 2-49/64 | 2-1/32 | 1-3/4 | 1-3/4 | 3-5/32 | 1.60 |
| 2-1/8 | J5568 | 2-61/64 | 2-3/32 | 1-13/16 | 1-13/16 | 3-9/32 | 1.64 |
| 2-3/16 | J5570 | 2-61/64 | 2-3/32 | 1-13/16 | 2-5/32 | 3-9/32 | 1.90 |
| 2-1/4 | J5572 | 3-17/64 | 2-3/32 | 1-61/64 | 2-3/16 | 3-13/32 | 1.91 |
| 2-3/8 | J5576 | 3-17/64 | 2-29/64 | 2-1/8 | 2-3/16 | 3-43/64 | 2.28 |

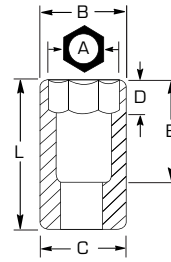
*SAE AS954G ASME B107.110-2012

| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 19 | J5519M | 1-1/8 | 1-19/64 | 9/16 | 1-5/16 | 2 | 0.36 |
| 20 | J5520M | 1-3/16 | 1-19/64 | 9/16 | 1-5/16 | 2 | 0.37 |
| 21 | J5521M | 1-17/64 | 1-19/64 | 9/16 | 1-5/16 | 2 | 0.40 |
| 22 | J5522M | 1-5/16 | 1-19/64 | 9/16 | 1-5/16 | 2 | 0.41 |
| 23 | J5523M | 1-13/32 | 1-13/32 | 9/16 | 1-5/16 | 2 | 0.52 |
| 24 | J5524M | 1-7/16 | 1-7/16 | 9/16 | 1-5/16 | 2 | 0.41 |
| 25 | J5525M | 1-31/64 | 1-31/64 | 5/8 | 1-5/16 | 2 | 0.60 |
| 26 | J5526M | 1-1/2 | 1-1/2 | 5/8 | 1-5/16 | 2 | 0.59 |
| 27 | J5527M | 1-35/64 | 1-35/64 | 11/16 | 1-5/16 | 2 | 0.62 |
| 28 | J5528M | 1-19/32 | 1-31/64 | 3/4 | 1-5/16 | 2-7/32 | 0.64 |
| 29 | J5529M | 1-19/32 | 1-31/64 | 49/64 | 1-5/16 | 2-7/32 | 0.65 |
| 30 | J5530M | 1-19/32 | 1-31/64 | 49/64 | 1-5/16 | 2-7/32 | 0.63 |
| 31 | J5531M | 1-47/64 | 1-47/64 | 13/16 | 1-5/16 | 2-7/32 | 0.72 |
| 32 | J5532M* | 1-25/32 | 1-31/64 | 13/16 | 1-5/16 | 2-7/32 | 0.78 |
| 35 | J5535M* | 1-55/64 | 1-19/32 | 1-5/32 | 1-5/16 | 2-9/32 | 0.87 |
| 36 | J5536M* | 2-3/64 | 1-19/32 | 1-15/64 | 1-5/16 | 2-13/32 | 1.09 |
| 38 | J5538M* | 2-3/64 | 1-19/32 | 1-15/64 | 1-5/16 | 2-13/32 | 1.04 |
| 41 | J5541M* | 2-15/64 | 1-23/32 | 1-9/32 | 1-5/16 | 2-39/64 | 1.06 |
| 42 | J5542M* | 2-23/64 | 1-23/32 | 1-15/32 | 1-5/16 | 2-23/32 | 1.06 |
| 46 | J5546M* | 2-37/64 | 1-25/32 | 1-39/64 | 1-5/16 | 2-31/32 | 1.45 |
| 50 | J5550M* | 2-49/64 | 2-1/32 | 1-47/64 | 1-5/16 | 3-5/32 | 2.39 |
| 54 | J5554M* | 2-15/16 | 2-3/32 | 1-3/8 | 1-5/16 | 3-9/32 | 1.97 |
| 55 | J5555M* | 2-15/16 | 2-3/32 | 1-13/16 | 1-5/16 | 3-9/32 | 2.64 |
| 58 | J5558M* | 3-9/64 | 2-3/32 | 1-61/64 | 1-5/16 | 3-13/32 | 2.99 |
| 60 | J5560M* | 3-17/64 | 2-17/32 | 2-1/8 | 1-5/16 | 3-21/32 | 2.27 |

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HAND SOCKETS

3/4" DRIVE SOCKETS - SPLINE



| INCH | Spline Size | SPL | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|-------------|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/4 | 24 | J5524SPL | 1-3/64 | 1-3/8 | 5/8 | 9/16 | 1-5/8 | 0.30 |
| 13/16 | 26 | J5526SPL | 1-3/16 | 1-3/8 | 5/8 | 9/16 | 1-5/8 | 0.36 |
| 7/8 | 28 | J5528SPL | 1-5/16 | 1-3/8 | 3/4 | 11/16 | 1-11/16 | 0.33 |
| 15/16 | 30 | J5530SPL | 1-3/8 | 1-3/8 | 3/4 | 3/4 | 1-7/8 | 0.36 |
| 1 | 32 | J5532SPL | 1-7/16 | 1-7/16 | 13/16 | 1-1/8 | 1-15/16 | 0.45 |
| 1-1/16 | 34 | J5534SPL | 1-1/2 | 1-1/2 | 7/8 | 1-3/32 | 1-31/32 | 0.53 |



3/4" DRIVE INTERMEDIATE SOCKETS - 12 POINT

- Full polish sockets meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance and durability.
- 12-Point sockets are ideal for use on stubborn or damaged fasteners.
- Intermediate lengths give additional reach without limiting accessibility in tight spaces.



| INCH | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/4 | J5524N | 1-1/8 | 1-19/64 | 55/64 | 31/32 | 2-9/32 | 0.43 |
| 13/16 | J5526N | 1-7/32 | 1-19/64 | 55/64 | 1-1/32 | 2-9/32 | 0.44 |
| 7/8 | J5528N | 1-19/64 | 1-19/64 | 55/64 | 1-1/8 | 2-9/32 | 0.45 |
| 15/16 | J5530N | 1-13/32 | 1-13/32 | 55/64 | 1-11/64 | 2-9/32 | 0.56 |
| 1 | J5532N | 1-1/2 | 1-1/2 | 55/64 | 1-15/64 | 2-9/32 | 0.66 |
| 1-1/16 | J5534N | 1-9/16 | 1-9/16 | 1-1/32 | 1-1/4 | 2-9/32 | 0.69 |
| 1-1/8 | J5536N | 1-1/2 | 1-11/16 | 1-1/32 | 1-9/32 | 2-21/64 | 0.67 |
| 1-3/16 | J5538N | 1-1/2 | 1-11/16 | 1-1/32 | 1-19/64 | 2-21/64 | 0.63 |

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| MM | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|----------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 19 | J5519MN | 1-1/4 | 1-9/32 | 55/64 | 31/32 | 2-5/16 | 0.40 |
| 20 | J5520MN* | 1-7/8 | 1-19/64 | 55/64 | 1 | 2-5/16 | 0.43 |
| 21 | J5521MN | 1-1/4 | 1-9/32 | 55/64 | 1-1/32 | 2-5/16 | 0.45 |
| 22 | J5522MN | 1-19/64 | 1-19/64 | 55/64 | 1-1/8 | 2-5/16 | 0.47 |
| 23 | J5523MN | 1-13/32 | 1-13/32 | 7/8 | 1-9/64 | 2-5/16 | 0.60 |
| 24 | J5524MN | 1-7/16 | 1-7/16 | 29/32 | 1-3/16 | 2-5/16 | 0.61 |
| 25 | J5525MN | 1-31/64 | 1-31/64 | 61/64 | 1-7/32 | 2-5/16 | 0.64 |
| 27 | J5527MN | 1-35/64 | 1-35/64 | 1 | 1-7/32 | 2-5/16 | 0.70 |
| 30 | J5530MN | 1-19/32 | 1-1/2 | 1-7/64 | 1-15/64 | 2-21/64 | 0.62 |

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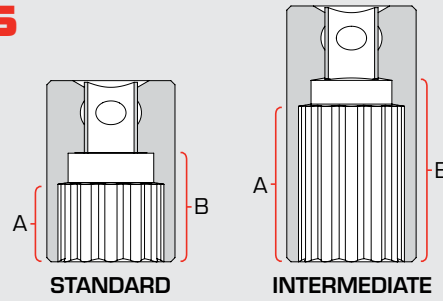
3/4" DRIVE SOCKETS

HAND SOCKETS

INTERMEDIATE SOCKETS

PROTO® intermediate sockets feature increased Nut Depth and Bolt Clearance vs. standard length sockets. This gives PROTO® intermediate sockets versatility in tight spaces.

A - Nut Depth B - Bolt Clearance



3/4" DRIVE SOCKETS

3/4" DRIVE DEEP SOCKETS - 6 POINT

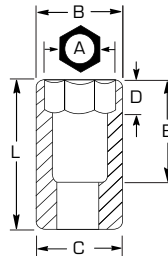
- ▶ Proto® 6 Point Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Made from alloy steel.
- ▶ Heat-treated for strength and durability.
- ▶ Hand use only.
- ▶ Ball detent design.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 7/8 | J5528HL | 1-3/8 | 1-3/8 | 9/16 | 2-9/16 | 3-1/2 | 0.91 |
| 15/16 | J5530HL | 1-7/16 | 1-7/16 | 9/16 | 2-9/16 | 3-1/2 | 0.80 |
| 1 | J5532HL | 1-1/2 | 1-1/2 | 5/8 | 2-9/16 | 3-1/2 | 1.11 |
| 1-1/16 | J5534HL | 1-9/16 | 1-7/16 | 11/16 | 2-9/16 | 3-1/2 | 0.97 |
| 1-1/8 | J5536HL | 1-19/32 | 1-1/2 | 25/32 | 2-3/8 | 3-1/2 | 1.12 |
| 1-1/4 | J5540HL | 1-13/16 | 1-21/32 | 13/16 | 2-11/32 | 3-1/2 | 1.28 |
| 1-5/16 | J5542HL | 1-55/64 | 1-21/32 | 27/32 | 2-19/64 | 3-1/2 | 1.32 |
| 1-3/8 | J5544HL | 1-55/64 | 1-21/32 | 29/32 | 2-9/32 | 3-1/2 | 1.64 |
| 1-7/16 | J5546HL | 2-1/16 | 1-21/32 | 61/64 | 2-1/4 | 3-1/2 | 1.65 |
| 1-1/2 | J5548HL | 2-1/16 | 1-1/32 | 1 | 2-1/4 | 3-1/2 | 1.65 |
| 1-5/8 | J5552HL | 2-1/4 | 1-3/4 | 1-7/64 | 2-13/64 | 3-1/2 | 1.52 |

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A close-up photograph of an impact socket being used on a bolt. The socket is grey and has the word "TITANIUM" embossed on it. The bolt is being tightened on a metal surface. In the background, there is a complex mechanical assembly with various parts, including a yellow component and a blue component. A red banner with white text is overlaid at the top of the image.

IMPACT SOCKETS

TORQUEPLUS™ FOR IMPACT SOCKETS

TORQUEPLUS™ is a fresh look at an old problem in sockets: worn, stripped, and stubborn nuts and bolts. Conventional sockets contact the fasteners near the points of both the fastener and the socket, where they are the weakest. Excessive force on this combination of fastener and socket can cause fastener rounding or cut through the socket wall. The TorquePlus™ design enables sockets to grip the fastener flats, away from the points. Allows up to 15% more torque to be applied safely to the fastener. Reduces the risk of fastener rounding. Improves the ability to turn worn or rounded fasteners.

Rounded Corners.

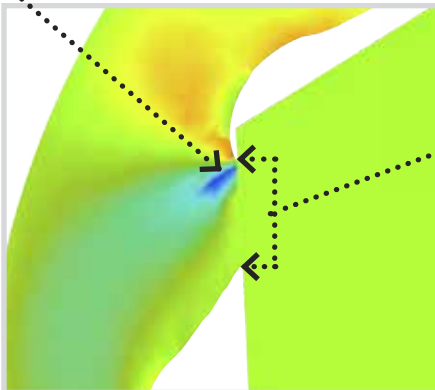


Nearly All Sizes.

Every Proto® socket, except the smallest or largest, have the TorquePlus™ feature.



Blue indicates Stress Point.

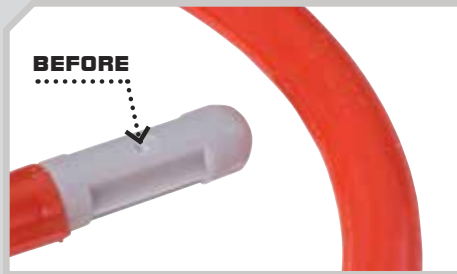


Point of Contact.

Stress point has moved away from the tip. Wall of the socket meets with the flat of the fastener for a much wider area of contact.



IMPACT SOCKET SAFETY

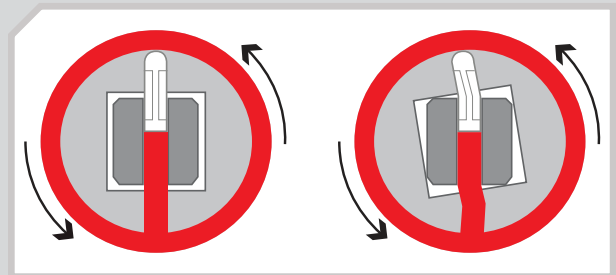
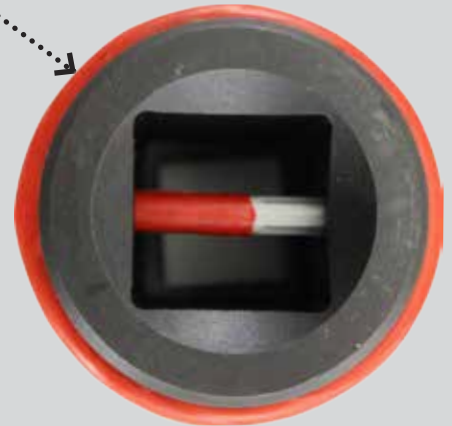


BEFORE
Straight Pin with Smooth Sides.



AFTER
Bent Pin with Notched Sides.

.....
This is your sign of safety.



RETAINING SAFETY

Properly used, retaining rings hold sockets firmly in place on drive anvils.

- ▶ Always use retaining rings with pneumatic drive anvils and sockets.
- ▶ Install rings correctly to ensure all rotational force stays between the anvil and socket as rings are only intended to support the weight of the socket.
- ▶ Consider using crush gauge rings for added safety.
- ▶ Be sure to inspect both drive anvil and socket carefully before using.

HOW THE CRUSH GAUGE IMPROVES SAFETY

Cracked or worn sockets pose a safety hazard. Our Crush Gauge Ring can indicate wear before there's a catastrophic failure. When a socket is cracked or excessively worn or when an anvil is worn, the drive tool and socket don't rotate tightly together. That action crimps the pin or "crush gauge" on the retaining ring. If that happens, you know to inspect and replace the socket or drive anvil.

RETAINING RINGS

When used correctly, retaining rings improve both the safety and performance of pneumatic impact drivers. Proto® offers three styles.



▶ **Crush Gauge Rings** work like one-piece rings, but they are specially designed to indicate damage or wear on sockets and drive anvils. Fast and reliable, they add an element of safety to your work.

.....
▶ **One-Piece Rings** eliminate having to handle two small parts. They work in much the same way, but the pin is integrated into the ring and installs quickly.



.....
▶ **Traditional Rings** are made in two pieces that include a steel pin and O-ring. To install, slip the pin through the socket and drive anvil and slip the O-ring into the socket groove.

IMPACT SOCKETS

1/4" DRIVE IMPACT SOCKETS - 6 POINT

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Socket size stamped on tool for easy identification.
- ▶ Side locking hole.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

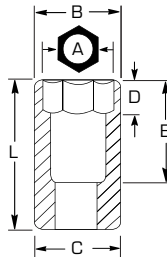
1/4" DRIVE IMPACT SOCKETS

| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | J6906H | 5/16 | 1/2 | 11/64 | 1/2 | 7/8 | 0.04 |
| 7/32 | J6907H | 11/32 | 1/2 | 13/64 | 1/2 | 7/8 | 0.03 |
| 1/4 | J6908H | 25/64 | 1/2 | 7/32 | 1/2 | 7/8 | 0.03 |
| 9/32 | J6909H | 7/16 | 1/2 | 15/64 | 1/2 | 7/8 | 0.03 |
| 5/16 | J6910H | 1/2 | 1/2 | 15/64 | 1/2 | 7/8 | 0.03 |
| 11/32 | J6911H | 33/64 | 33/64 | 17/64 | 1/2 | 7/8 | 0.04 |
| 3/8 | J6912H | 9/16 | 9/16 | 17/64 | 1/2 | 7/8 | 0.04 |
| 7/16 | J6914H | 21/32 | 21/32 | 5/16 | 1/2 | 7/8 | 0.05 |
| 1/2 | J6916H | 45/64 | 11/16 | 3/8 | 1/2 | 7/8 | 0.05 |
| 9/16 | J6918H | 51/64 | 51/64 | 3/8 | 1/2 | 7/8 | 0.08 |
| 5/8 | J6920H | 7/8 | 7/8 | 3/8 | 1/2 | 7/8 | 0.09 |

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| MM | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 4 | J6904M | 17/64 | 1/2 | 5/32 | 1/2 | 7/8 | 0.03 |
| 5 | J6905M | 5/16 | 1/2 | 3/16 | 1/2 | 7/8 | 0.04 |
| 5.5 | J69055M | 11/32 | 1/2 | 3/16 | 1/2 | 7/8 | 0.04 |
| 6 | J6906M | 25/64 | 1/2 | 7/32 | 1/2 | 7/8 | 0.03 |
| 7 | J6907M | 7/16 | 1/2 | 7/32 | 1/2 | 7/8 | 0.03 |
| 8 | J6908M | 1/2 | 1/2 | 7/32 | 1/2 | 7/8 | 0.04 |
| 9 | J6909M | 33/64 | 33/64 | 1/4 | 1/2 | 7/8 | 0.04 |
| 10 | J6910M | 9/16 | 9/16 | 1/4 | 1/2 | 7/8 | 0.04 |
| 11 | J6911M | 21/32 | 21/32 | 9/32 | 1/2 | 7/8 | 0.05 |
| 12 | J6912M | 11/16 | 11/16 | 19/64 | 1/2 | 7/8 | 0.06 |
| 13 | J6913M | 23/32 | 23/32 | 5/16 | 1/2 | 7/8 | 0.07 |
| 14 | J6914M | 51/64 | 51/64 | 3/8 | 1/2 | 7/8 | 0.08 |
| 15 | J6915M | 53/64 | 53/64 | 3/8 | 1/2 | 7/8 | 0.08 |

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IMPACT SOCKETS

1/4" DRIVE DEEP IMPACT SOCKETS - 6 POINT

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Socket size stamped on tool for easy identification.
- ▶ Side locking hole.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/16 | J6506H | 5/16 | 1/2 | 1/4 | 1-5/8 | 2 | 0.08 |
| 7/32 | J6507H | 23/64 | 1/2 | 7/64 | 1-5/8 | 2 | 0.08 |
| 1/4 | J6508H | 25/64 | 1/2 | 9/32 | 1-5/8 | 2 | 0.08 |
| 9/32 | J6509H | 7/16 | 1/2 | 19/64 | 1-5/8 | 2 | 0.08 |
| 5/16 | J6510H | 1/2 | 1/2 | 5/16 | 1-5/8 | 2 | 0.07 |
| 11/32 | J6511H | 33/64 | 33/64 | 11/32 | 1-5/8 | 2 | 0.07 |
| 3/8 | J6512H | 9/16 | 9/16 | 3/8 | 1-5/8 | 2 | 0.09 |
| 7/16 | J6514H | 21/32 | 21/32 | 3/8 | 1-5/8 | 2 | 0.12 |
| 1/2 | J6516H | 11/16 | 11/16 | 7/16 | 1-5/8 | 2 | 0.12 |
| 9/16 | J6518H | 51/64 | 51/64 | 7/16 | 1-5/8 | 2 | 0.15 |
| 5/8 | J6520H | 7/8 | 7/8 | 7/16 | 1-5/8 | 2 | 0.12 |

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| MM | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 5 | J6505MH | 5/16 | 1/2 | 1/4 | 1-5/8 | 2 | 0.08 |
| 5.5 | J6505MH | 23/64 | 1/2 | 17/64 | 1-5/8 | 2 | 0.09 |
| 6 | J6506MH | 25/64 | 1/2 | 9/32 | 1-5/8 | 2 | 0.08 |
| 7 | J6507MH | 7/16 | 1/2 | 19/64 | 1-5/8 | 2 | 0.08 |
| 8 | J6508MH | 1/2 | 1/2 | 5/16 | 1-5/8 | 2 | 0.07 |
| 9 | J6509MH | 33/64 | 33/64 | 5/16 | 1-5/8 | 2 | 0.07 |
| 10 | J6510MH | 9/16 | 9/16 | 3/8 | 1-5/8 | 2 | 0.08 |
| 11 | J6511MH | 21/32 | 21/32 | 3/8 | 1-5/8 | 2 | 0.11 |
| 12 | J6512MH | 11/16 | 11/16 | 13/32 | 1-5/8 | 2 | 0.13 |
| 13 | J6513MH | 23/32 | 23/32 | 7/16 | 1-5/8 | 2 | 0.14 |
| 14 | J6514MH | 51/64 | 51/64 | 7/16 | 1-5/8 | 2 | 0.18 |
| 15 | J6515MH | 53/64 | 53/64 | 7/16 | 1-5/8 | 2 | 0.18 |

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1/4" DRIVE IMPACT SOCKETS

| | | | | | | | | |
|---------|---------|----------|--------|-----|-------------|-------|-------------|-----------|
| 6 POINT | 8 POINT | 12 POINT | SPLINE | HEX | FULL POLISH | SATIN | BLACK OXIDE | INSULATED |
|---------|---------|----------|--------|-----|-------------|-------|-------------|-----------|


IMPACT SOCKETS

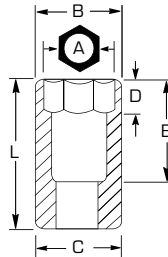
1/4" DRIVE HIGH STRENGTH MAGNETIC POWER SOCKETS - 6 POINT

- ▶ ProtoGrip™ Magnetic Sockets use high strength magnets made from a rare earth magnet alloy/nylon blend.
- ▶ ProtoGrip™ Magnetic Sockets require no bushings to hold the magnet in place. Allows room for more magnet material, helping increase total magnetic strength.
- ▶ Designed to easily pick up heavy fasteners and hold them tightly during use.
- ▶ Strong magnetic hold helps increase efficiency when installing fasteners in awkward or hard-to-reach locations.
- ▶ Size stamped on tool for easy identification.



| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Overall Length (in) (L) | Weight (lbs) |
|-------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------|--------------|
| 3/16 | J6906PF | 5/16 | 1/2 | 5/32 | 7/8 | 0.03 |
| 1/4 | J6908PF | 25/64 | 1/2 | 11/64 | 7/8 | 0.03 |
| 5/16 | J6910PF | 1/2 | 1/2 | 13/64 | 15/16 | 0.04 |
| 11/32 | J6911PF | 33/64 | 33/64 | 7/32 | 15/16 | 0.04 |
| 3/8 | J6912PF | 9/16 | 9/16 | 15/64 | 15/16 | 0.05 |
| 7/16 | J6914PF | 21/32 | 21/32 | 1/4 | 1 | 0.07 |
| 1/2 | J6916PF | 11/16 | 11/16 | 1/4 | 1 | 0.08 |

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1/4" DRIVE IMPACT UNIVERSAL JOINT

- ▶ Tight tolerances for snug fit on fastener.
- ▶ Used wherever powered drive tools are used to install or remove fasteners.
- ▶ Designed to withstand the high torque and force associated with impact tools in repetitive application.
- ▶ Features two through holes and a groove to accept a Proto® Retaining Ring or pin and O-ring to help secure the socket to the drive tool anvil.
- ▶ Position at appropriate angle to turn fasteners where obstructions prevent a straight application.
- ▶ Ball and spring design which allows for a 30° working angle.
- ▶ Smooth 360° rotation.



| INCH | Product # | Drive End Outside Diameter (in) | Overall Length (in) | Weight (lbs) |
|------|-----------|---------------------------------|---------------------|--------------|
| 1/4 | J66170P | 5/8 | 1-3/8 | 0.27 |



1/4" DRIVE IMPACT SOCKETS & UNIVERSAL JOINT

IMPACT SOCKETS

3/8" DRIVE IMPACT SOCKETS - 6 POINT

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Size stamped on tool for easy identification.
- ▶ Side locking hole.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners



| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J7208H | 7/16 | 11/16 | 9/32 | 19/32 | 1-3/32 | 0.07 |
| 9/32 | J7209H | 31/64 | 11/16 | 5/16 | 19/32 | 1-3/32 | 0.07 |
| 5/16 | J7210H | 1/2 | 11/16 | 5/16 | 19/32 | 1-3/32 | 0.07 |
| 11/32 | J7211H | 35/64 | 11/16 | 3/8 | 19/32 | 1-3/32 | 0.07 |
| 3/8 | J7212H | 19/32 | 11/16 | 3/8 | 19/32 | 1-3/32 | 0.07 |
| 7/16 | J7214H | 11/16 | 11/16 | 3/8 | 19/32 | 1-3/32 | 0.06 |
| 1/2 | J7216H | 3/4 | 3/4 | 3/8 | 19/32 | 1-3/32 | 0.08 |
| 9/16 | J7218H | 13/16 | 13/16 | 9/16 | 19/32 | 1-3/32 | 0.11 |
| 5/8 | J7220H | 29/32 | 29/32 | 9/16 | 19/32 | 1-3/32 | 0.12 |
| 11/16 | J7222H | 1 | 1 | 9/16 | 19/32 | 1-3/32 | 0.15 |
| 3/4 | J7224H | 1-1/16 | 1-1/16 | 17/32 | 19/32 | 1-3/32 | 0.16 |
| 13/16 | J7226H | 1-3/16 | 1-13/64 | 11/16 | 23/32 | 1-7/32 | 0.24 |
| 7/8 | J7228H | 1-9/32 | 1-9/32 | 11/16 | 23/32 | 1-7/32 | 0.26 |
| 15/16 | J7230H | 1-23/64 | 1-23/64 | 51/64 | 27/32 | 1-11/32 | 0.35 |
| 1 | J7232H | 1-1/2 | 1-1/2 | 51/64 | 27/32 | 1-11/32 | 0.42 |

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| MM | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 6 | J7206M | 27/64 | 11/16 | 7/32 | 27/64 | 59/64 | 0.06 |
| 7 | J7207M | 31/64 | 11/16 | 15/64 | 27/64 | 59/64 | 0.06 |
| 8 | J7208M | 33/64 | 11/16 | 5/16 | 17/32 | 1-1/32 | 0.06 |
| 9 | J7209M | 37/64 | 11/16 | 11/32 | 17/32 | 1-1/32 | 0.06 |
| 10 | J7210M | 11/16 | 11/16 | 3/8 | 17/32 | 1-1/32 | 0.06 |
| 11 | J7211M | 11/16 | 11/16 | 13/32 | 17/32 | 1-1/32 | 0.06 |
| 12 | J7212M | 23/32 | 23/32 | 7/16 | 17/32 | 1-1/32 | 0.07 |
| 13 | J7213M | 3/4 | 3/4 | 7/16 | 17/32 | 1-3/32 | 0.08 |
| 14 | J7214M | 13/16 | 13/16 | 9/16 | 19/32 | 1-3/32 | 0.09 |
| 15 | J7215M | 55/64 | 55/64 | 9/16 | 19/32 | 1-3/32 | 0.10 |
| 16 | J7216M | 29/32 | 29/32 | 9/16 | 19/32 | 1-3/32 | 0.12 |
| 17 | J7217M | 1 | 1 | 9/16 | 19/32 | 1-3/32 | 0.15 |
| 18 | J7218M | 1-1/32 | 1-1/32 | 9/16 | 19/32 | 1-3/32 | 0.16 |
| 19 | J7219M | 1-1/16 | 1-1/16 | 17/32 | 19/32 | 1-3/32 | 0.15 |
| 20 | J7220M | 1-7/64 | 1-7/64 | 17/32 | 19/32 | 1-3/32 | 0.18 |
| 21 | J7221M | 1-5/32 | 1-5/32 | 17/32 | 19/32 | 1-3/32 | 0.19 |
| 22 | J7222M | 1-13/64 | 1-13/64 | 17/32 | 19/32 | 1-3/32 | 0.20 |
| 23 | J7223M | 1-1/4 | 1-1/4 | 17/32 | 19/32 | 1-3/32 | 0.26 |
| 24 | J7224M | 1-19/64 | 1-19/64 | 17/32 | 19/32 | 1-3/32 | 0.27 |

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6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
FULL POLISH
SATIN
BLACK OXIDE
INSULATED

IMPACT SOCKETS

3/8" DRIVE DEEP IMPACT SOCKETS - 6 POINT

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Socket size stamped on tool for easy identification.
- ▶ Side locking hole.



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

3/8" DRIVE IMPACT SOCKETS

| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|-------|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 1/4 | J7708H | 7/16 | 11/16 | 9/32 | 2-1/4 | 2-3/4 | 0.21 |
| 9/32 | J7709H | 31/64 | 11/16 | 5/16 | 2-1/4 | 2-3/4 | 0.18 |
| 5/16 | J7710H | 33/64 | 11/16 | 21/64 | 2-1/4 | 2-3/4 | 0.20 |
| 11/32 | J7711H | 35/64 | 11/16 | 11/32 | 2-1/4 | 2-3/4 | 0.19 |
| 3/8 | J7712H | 19/32 | 11/16 | 3/8 | 2-1/4 | 2-3/4 | 0.19 |
| 7/16 | J7714H | 11/16 | 11/16 | 27/64 | 2-1/4 | 2-3/4 | 0.17 |
| 1/2 | J7716H | 3/4 | 3/4 | 15/32 | 2-1/4 | 2-3/4 | 0.21 |
| 9/16 | J7718H | 13/16 | 13/16 | 11/16 | 2-1/4 | 2-3/4 | 0.22 |
| 5/8 | J7720H | 29/32 | 29/32 | 11/16 | 2-1/4 | 2-3/4 | 0.29 |
| 11/16 | J7722H | 1 | 1 | 11/16 | 2-1/4 | 2-3/4 | 0.34 |
| 3/4 | J7724H | 1-1/16 | 1-1/16 | 43/64 | 2-1/4 | 2-3/4 | 0.38 |
| 13/16 | J7726H | 1-13/64 | 1-13/64 | 13/16 | 2-1/8 | 2-3/4 | 0.53 |
| 7/8 | J7728H | 1-9/32 | 1-9/32 | 13/16 | 2-1/8 | 2-3/4 | 0.59 |
| 15/16 | J7730H | 1-23/64 | 1-23/64 | 13/16 | 2-1/8 | 2-3/4 | 0.66 |
| 1 | J7732H | 1-1/2 | 1-1/2 | 13/16 | 2-1/8 | 2-3/4 | 0.85 |

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| MM | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|--------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 6 | J7006M | 27/64 | 11/16 | 9/32 | 2-1/4 | 2-3/4 | 0.19 |
| 7 | J7007M | 31/64 | 11/16 | 5/16 | 2-1/4 | 2-3/4 | 0.20 |
| 8 | J7008M | 33/64 | 11/16 | 5/16 | 2-1/4 | 2-3/4 | 0.19 |
| 9 | J7009M | 37/64 | 11/16 | 3/8 | 2-1/4 | 2-3/4 | 0.20 |
| 10 | J7010M | 5/8 | 11/16 | 3/8 | 2-1/4 | 2-3/4 | 0.19 |
| 11 | J7011M | 11/16 | 11/16 | 13/32 | 2-1/4 | 2-3/4 | 0.18 |
| 12 | J7012M | 3/4 | 3/4 | 7/16 | 2-1/4 | 2-3/4 | 0.20 |
| 13 | J7013M | 3/4 | 3/4 | 15/32 | 2-1/4 | 2-3/4 | 0.22 |
| 14 | J7014M | 13/16 | 13/16 | 1/2 | 2-1/4 | 2-3/4 | 0.22 |
| 15 | J7015M | 55/64 | 55/64 | 11/16 | 2-1/4 | 2-3/4 | 0.25 |
| 16 | J7016M | 29/32 | 29/32 | 11/16 | 2-1/4 | 2-3/4 | 0.29 |
| 17 | J7017M | 1 | 1 | 11/16 | 2-1/4 | 2-3/4 | 0.37 |
| 18 | J7018M | 1-1/32 | 1-1/32 | 11/16 | 2-1/4 | 2-3/4 | 0.38 |
| 19 | J7019M | 1-1/16 | 1-1/16 | 11/16 | 2-1/4 | 2-3/4 | 0.38 |
| 20 | J7020M | 1-7/64 | 1-7/64 | 25/32 | 2-1/4 | 2-3/4 | 0.42 |
| 21 | J7021M | 1-5/32 | 1-5/32 | 25/32 | 2-1/4 | 2-3/4 | 0.46 |
| 22 | J7022M | 1-13/64 | 1-13/64 | 51/64 | 2-1/4 | 2-3/4 | 0.49 |
| 23 | J7023M | 1-1/4 | 1-1/4 | 51/64 | 2-1/4 | 2-3/4 | 0.53 |
| 24 | J7024M | 1-19/64 | 1-19/64 | 59/64 | 2-1/4 | 2-3/4 | 0.58 |

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IMPACT SOCKETS

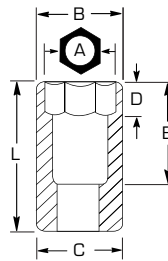
3/8" DRIVE HIGH STRENGTH MAGNETIC POWER SOCKETS - 6 POINT

- ▶ ProtoGrip™ Magnetic Sockets use high strength magnets made from a rare earth magnet alloy/nylon blend.
- ▶ ProtoGrip™ Magnetic Sockets require no bushings to hold the magnet in place. This allows room for more magnet material, helping increase total magnetic strength.
- ▶ Designed to easily pick up heavy fasteners and hold them tightly during use.
- ▶ Strong magnetic hold helps increase efficiency when installing fasteners in awkward or hard-to-reach locations.
- ▶ Impact sockets with high impact strength are used in automated and hand impact socket applications.
- ▶ Socket size stamped on tool for easy identification.
- ▶ Side locking hole.



| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Overall Length (in) (L) | Weight (lbs) |
|------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------|--------------|
| 5/16 | J7210PF | 1/2 | 11/16 | 3/16 | 1-3/32 | 0.08 |
| 3/8 | J7212PF | 39/64 | 11/16 | 15/64 | 1-3/32 | 0.09 |
| 7/16 | J7214PF | 11/16 | 11/16 | 1/4 | 1-3/16 | 0.08 |
| 1/2 | J7216PF | 3/4 | 3/4 | 9/32 | 1-3/16 | 0.10 |
| 9/16 | J7218PF | 13/16 | 13/16 | 21/64 | 1-3/16 | 0.11 |

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3/8" DRIVE IMPACT HEX BIT SOCKETS

- ▶ Proto® Hex Bit Impact Sockets can be used on stubborn fasteners.
- ▶ Tight tolerances for snug fit on fastener.
- ▶ Hex bit impact sockets are used wherever powered drive tools are used to install or remove fasteners.
- ▶ Hex bit impact sockets are designed to withstand the high torque and force associated with impact tools in repetitive application.
- ▶ Side locking hole.



| INCH | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------|-----------|-----------------|---------------------|--------------|
| 1/8 | J72901/8 | 1-5/8 | 2-23/32 | 0.07 |
| 5/32 | J72905/32 | 1-5/8 | 2-23/32 | 0.08 |
| 3/16 | J72903/16 | 1-5/8 | 2-23/32 | 0.08 |
| 7/32 | J72907/32 | 1-5/8 | 2-23/32 | 0.09 |
| 1/4 | J72901/4 | 1-5/8 | 2-23/32 | 0.10 |
| 5/16 | J72905/16 | 1-5/8 | 2-23/32 | 0.13 |
| 3/8 | J72903/8 | 1-5/8 | 2-23/32 | 0.14 |

| MM | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|----|-----------|-----------------|---------------------|--------------|
| 4 | J7290-4M | 1-5/8 | 2-23/32 | 0.07 |
| 5 | J7290-5M | 1-5/8 | 2-23/32 | 0.08 |
| 6 | J7290-6M | 1-5/8 | 2-23/32 | 0.09 |
| 8 | J7290-8M | 1-5/8 | 2-23/32 | 0.12 |
| 10 | J7290-10M | 1-5/8 | 2-23/32 | 0.14 |

6 POINT 8 POINT 12 POINT SPL SPLINE HEX FULL POLISH SATIN BLACK OXIDE INSULATED

3/8" DRIVE IMPACT SOCKETS & HEX BIT SOCKETS


IMPACT SOCKETS

3/8" DRIVE IMPACT UNIVERSAL JOINT

- › Tight tolerances for snug fit on fastener.
- › Used wherever powered drive tools are used to install or remove fasteners.
- › Designed to withstand the high torque and force associated with impact tools in repetitive application.
- › Features two through holes and a groove to accept a Proto® Retaining Ring or pin and O-ring to help secure the socket to the drive tool anvil.
- › Position at appropriate angle to turn fasteners where obstructions prevent a straight application.
- › Ball and spring design which allows for a 30° working angle.
- › Smooth 360° rotation.



| INCH | Product # | Drive End Outside Diameter (in) | Overall Length (in) | Weight (lbs) |
|------|----------------|---------------------------------|---------------------|--------------|
| 3/8 | J77270P | 15/16 | 2-1/32 | 0.21 |


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3/8" DRIVE IMPACT ADAPTERS

- › Use adapters to help increase or decrease drive end size.
- › Do not use hand adapters with power tools.
- › Do not over torque small sockets when using them with adapters on large drive tools.
- › Size stamped on tool for easy identification.
- › Side locking hole.



| INCH | Size (in) | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|---------------------|--------------|
| J7653 | 3/4" F x 1/2" M | 2-1/16 | 0.48 |
| J7650 | 3/8" F x 1/2" M | 1-5/16 | 0.13 |
| J7651 | 1/2" F x 3/8" M | 1-7/16 | 0.12 |


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3/8" DRIVE IMPACT EXTENSIONS

- › Use extensions to gain access to fasteners in locations that would otherwise be difficult to reach.
- › Male square is oriented in line with female squares for use with fixed head torque wrenches.
- › Full chamfer at drive opening (when applicable) for easy engagement with drive tools.
- › Drive end chamfer and four detents help provide quick positive engagement with drive tool on any of the socket drive walls.
- › Size stamped on tool for easy identification.
- › Side locking hole.



| Product # | Overall Length (in) | Weight (lbs) |
|---------------|---------------------|--------------|
| J7175P | 3 | 0.16 |
| J7176P | 6 | 0.32 |
| J7178P | 12 | 0.64 |

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3/8" DRIVE IMPACT UNIVERSAL JOINT, ADAPTERS & EXTENSIONS

3/8" DRIVE IMPACT LOCKING EXTENSIONS

- ▶ Black oxide finish.
- ▶ Easy operating spring loaded locking mechanism.

| Product # | Overall Length (in) | Weight (lbs) |
|-----------|---------------------|--------------|
| J7203L | 3 | 0.25 |
| J7206L | 6 | 0.41 |
| J7212L | 12 | 0.75 |



3/8" DRIVE HAND IMPACT DRIVER

- ▶ Designed to loosen hard to turn bolts and screws.
- ▶ Heavy-Duty spring for added torque.

| Product # | Overall Length (in) | Weight (lbs) |
|-----------|---------------------|--------------|
| J7099 | 5-1/2 | 1.68 |



3/8" DRIVE RETAINING RINGS

- ▶ Proto® 3/8" Drive Retaining Rings have a one-piece, without a crush gauge.



| Product # | Description | For Groove Dia. (in) | Diameter (in) | Height (in) | Weight (lbs) |
|-----------|----------------------------------|----------------------|---------------|-------------|--------------|
| JRR37560 | Retaining Ring, 3/8" DR 600 GRV | 19/32 | 11/16 | 1/16 | 0.01 |
| JRR37567 | Retaining Ring, 3/8" DR 670 GRV | 43/64 | 3/4 | 1/16 | 0.01 |
| JRR37575 | Retaining Ring, 3/8" DR 750 GRV | 3/4 | 13/16 | 1/16 | 0.01 |
| JRR37582 | Retaining Ring, 3/8" DR 820 GRV | 13/64 | 7/8 | 1/16 | 0.01 |
| JRR37595 | Retaining Ring, 3/8" DR 950 GRV | 61/64 | 1 | 1/16 | 0.01 |
| JRR37511 | Retaining Ring, 3/8" DR 1100 GRV | 1-3/32 | 1-3/16 | 1/16 | 0.01 |
| JRR37512 | Retaining Ring, 3/8" DR 1200 GRV | 1-3/16 | 1-1/4 | 1/16 | 0.01 |

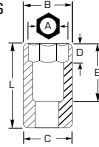
3/8" DRIVE IMPACT EXTENSIONS, HAND IMPACT DRIVER & RETAINING RINGS



IMPACT SOCKETS

1/2" DRIVE IMPACT SOCKETS

- Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.



- Radius-corner socket design
- Engages flats for better grip
- Improves the ability to turn worn or rounded fasteners

1/2" DRIVE IMPACT SOCKETS

| INCH | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|--------|-------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | J7412H | J7412 | 41/64 | 15/16 | 11/32 | 27/32 | 1-1/2 | 0.17 |
| 7/16 | J7414H | J7414 | 23/32 | 15/16 | 13/32 | 27/32 | 1-1/2 | 0.18 |
| 1/2 | J7416H | J7416 | 51/64 | 15/16 | 13/32 | 27/32 | 1-1/2 | 0.18 |
| 9/16 | J7418H | J7418 | 7/8 | 15/16 | 7/16 | 27/32 | 1-1/2 | 0.18 |
| 5/8 | J7420H | J7420 | 1 | 1 | 1/2 | 27/32 | 1-1/2 | 0.20 |
| 11/16 | J7422H | J7422 | 1-1/32 | 1-1/32 | 1/2 | 27/32 | 1-1/2 | 0.22 |
| 3/4 | J7424H | J7424 | 1-7/64 | 1-7/64 | 51/64 | 27/32 | 1-1/2 | 0.24 |
| 13/16 | J7426H | J7426 | 1-13/64 | 1-13/64 | 11/16 | 31/32 | 1-5/8 | 0.31 |
| 7/8 | J7428H | J7428 | 1-17/64 | 1-9/32 | 43/64 | 31/32 | 1-5/8 | 0.34 |
| 15/16 | J7430H | J7430 | 1-23/64 | 1-23/64 | 51/64 | 1-3/32 | 1-3/4 | 0.44 |
| 1 | J7432H | J7432 | 1-1/2 | 1-1/2 | 25/32 | 1-3/32 | 1-3/4 | 0.55 |
| 1-1/16 | J7434H | J7434 | 1-33/64 | 1-33/64 | 25/32 | 1-3/32 | 1-3/4 | 0.53 |
| 1-1/8 | J7436H | J7436 | 1-19/32 | 1-19/32 | 25/32 | 1-1/32 | 2 | 0.65 |
| 1-3/16 | J7438H | J7438 | 1-19/32 | 1-19/32 | 3/4 | 1-1/64 | 2 | 0.85 |
| 1-1/4 | J7440H | J7440 | 1-3/4 | 1-3/4 | 3/4 | 1-3/4 | 2 | 0.78 |
| 1-5/16 | J7442H | J7442 | 1-3/4 | 1-3/4 | 13/16 | 63/64 | 2 | 0.73 |
| 1-3/8 | J7444H | J7444 | 1-51/64 | 1-5/8 | 15/16 | 1-3/32 | 2-1/8 | 0.72 |
| 1-7/16 | J7446H | J7446 | 1-59/64 | 1-5/8 | 1 | 1-37/64 | 2-15/64 | 0.87 |
| 1-1/2 | J7448H | J7448 | 2 | 1-5/8 | 1 | 1-37/64 | 2-15/64 | 1.03 |
| 1-9/16 | J7450H | - | 2-1/32 | 1-5/8 | 1 | 1-1/2 | 2-1/4 | 1.16 |

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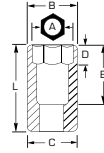
| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 8 | J7408M° | - | 37/64 | 15/16 | 9/32 | 27/32 | 1-1/2 | 0.18 |
| 9 | J7409M° | - | 41/64 | 15/16 | 3/8 | 27/32 | 1-1/2 | 0.18 |
| 10 | J7410M° | J7410MT | 43/64 | 15/16 | 3/8 | 27/32 | 1-1/2 | 0.18 |
| 11 | J7411M° | J7411MT | 23/32 | 15/16 | 3/8 | 27/32 | 1-1/2 | 0.18 |
| 12 | J7412M° | J7412MT | 51/64 | 15/16 | 13/32 | 27/32 | 1-1/2 | 0.17 |
| 13 | J7413M° | J7413MT | 51/64 | 15/16 | 7/16 | 27/32 | 1-1/2 | 0.16 |
| 14 | J7414M° | J7414MT | 7/8 | 15/16 | 15/32 | 27/32 | 1-1/2 | 0.18 |
| 15 | J7415M° | J7415MT | 15/16 | 15/16 | 1/2 | 27/32 | 1-1/2 | 0.18 |
| 16 | J7416M° | J7416MT | 1 | 1 | 17/32 | 27/32 | 1-1/2 | 0.20 |
| 17 | J7417M° | J7417MT | 1-1/32 | 1-1/32 | 9/16 | 27/32 | 1-1/2 | 0.22 |
| 18 | J7418M° | J7418MT | 1-1/8 | 1-1/8 | 51/64 | 27/32 | 1-1/2 | 0.27 |
| 19 | J7419M° | J7419MT | 1-7/64 | 1-7/64 | 47/64 | 27/32 | 1-1/2 | 0.25 |
| 20 | J7420M° | J7420MT | 1-5/32 | 1-5/32 | 11/16 | 31/32 | 1-5/8 | 0.30 |
| 21 | J7421M° | J7421MT | 1-13/64 | 1-13/64 | 43/64 | 31/32 | 1-5/8 | 0.30 |
| 22 | J7422M° | J7422MT | 1-9/32 | 1-9/32 | 43/64 | 31/32 | 1-5/8 | 0.36 |
| 23 | J7423M° | J7423MT | 1-3/8 | 1-3/8 | 43/64 | 31/32 | 1-5/8 | 0.39 |
| 24 | J7424M° | J7424MT | 1-23/64 | 1-23/64 | 43/64 | 31/32 | 1-5/8 | 0.43 |
| 25 | J7425M° | - | 1-3/8 | 1-3/8 | 51/64 | 1-3/32 | 1-3/4 | 0.48 |
| 26 | J7426M° | - | 1-1/2 | 1-1/2 | 1-1/32 | 1-11/32 | 2 | 0.54 |
| 27 | J7427M° | - | 1-1/2 | 1-1/2 | 1-1/32 | 1-11/32 | 2 | 0.62 |
| 28 | J7428M° | - | 1-5/8 | 1-5/8 | 1-1/32 | 1-11/32 | 2 | 0.72 |
| 29 | J7429M° | - | 1-5/8 | 1-5/8 | 1-1/64 | 1-11/32 | 2 | 0.67 |
| 30 | J7430M° | J7430MT | 1-33/64 | 1-33/64 | 25/32 | 1-3/32 | 2 | 0.82 |
| 31 | J7431M° | - | 1-33/64 | 1-33/64 | 51/64 | 1-3/32 | 2 | 0.83 |
| 32 | J7432M° | J7432MT | 1-33/64 | 1-33/64 | 51/64 | 1-3/32 | 2 | 0.75 |
| 33 | J7433M° | - | 1-27/32 | 1-27/32 | 1-1/64 | 1-9/32 | 2 | 0.95 |
| 34 | J7434M° | - | 1-29/32 | 1-29/32 | 1-1/64 | 1-9/32 | 2 | 1.00 |
| 36 | J7436M° | - | 2-1/64 | 2-1/64 | 1-3/16 | 1-11/32 | 2 | 0.89 |
| 38 | J7438M° | - | 2-5/32 | 2-5/32 | 1-3/16 | 1-11/32 | 2-3/8 | 0.96 |
| 41 | J7441M° | - | 2-19/64 | 2-19/64 | 1-21/64 | 1-17/32 | 2-3/8 | 1.20 |
| 46 | J7446M° | - | 2-3/8 | 2-3/8 | 63/64 | 1-17/32 | 2-7/16 | 1.24 |

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IMPACT SOCKETS

1/2" DRIVE DEEP IMPACT SOCKETS

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Socket size stamped on tool for easy identification.
- ▶ Side locking hole.



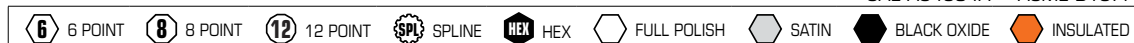
- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners

| INCH | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|--------|---------|-------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 3/8 | J7312H | J7312 | 19/32 | 15/16 | 15/16 | 2-5/8 | 3-1/4 | 0.42 |
| 7/16 | J7314H | J7314 | 23/32 | 15/16 | 11/32 | 1-5/8 | 3-1/4 | 0.44 |
| 1/2 | J7316H* | J7316 | 1-25/32 | 15/16 | 7/16 | 1-5/8 | 3-1/4 | 0.43 |
| 9/16 | J7318H | J7318 | 7/8 | 15/16 | 1/2 | 1-5/8 | 3-1/4 | 0.41 |
| 5/8 | J7320H | J7320 | 1 | 1 | 9/16 | 1-5/8 | 3-1/4 | 0.44 |
| 11/16 | J7322H* | J7322 | 1-1/32 | 1-1/32 | 5/8 | 2-5/8 | 3-1/4 | 0.47 |
| 3/4 | J7324H | J7324 | 1-7/64 | 1-1/8 | 1-5/32 | 2-5/8 | 3-1/4 | 0.53 |
| 13/16 | J7326H* | J7326 | 1-3/16 | 1-3/16 | 1-5/32 | 2-5/8 | 3-1/4 | 0.62 |
| 7/8 | J7328H | J7328 | 1-19/64 | 1-9/32 | 1-13/32 | 2-7/8 | 3-1/2 | 0.78 |
| 15/16 | J7330H* | J7330 | 1-3/8 | 1-3/8 | 1-13/32 | 2-7/8 | 3-1/2 | 0.86 |
| 1 | J7332H* | J7332 | 1-1/2 | 1-1/2 | 1-13/32 | 2-7/8 | 3-1/2 | 1.02 |
| 1-1/16 | J7334H* | J7334 | 1-1/2 | 1-33/64 | 1-17/32 | 2-7/8 | 3-1/2 | 1.11 |
| 1-1/8 | J7336H | J7336 | 1-5/8 | 1-5/8 | 1-13/32 | 2-7/8 | 3-1/2 | 1.20 |
| 1-3/16 | J7338H | J7338 | 1-13/16 | 1-21/32 | 1-1/64 | 2-7/8 | 3-1/2 | 1.47 |
| 1-1/4 | J7340H* | J7340 | 1-13/16 | 1-21/32 | 1-1/64 | 2-7/8 | 3-1/2 | 1.39 |
| 1-5/16 | J7342H | J7342 | 1-7/8 | 1-21/32 | 1-1/16 | 2-7/8 | 3-1/2 | 1.41 |
| 1-3/8 | J7344H | J7344 | 1-7/8 | 1-21/32 | 1-7/64 | 2-7/8 | 3-1/2 | 1.31 |
| 1-7/16 | J7346H* | J7346 | 2-1/16 | 1-21/32 | 1-5/32 | 2-7/8 | 3-1/2 | 1.67 |
| 1-1/2 | J7348H | J7348 | 2-1/16 | 1-21/32 | 1-13/64 | 2-7/8 | 3-1/2 | 1.50 |
| 1-9/16 | J7350H | - | 2 | 1-5/8 | 1-1/4 | 1-1/4 | 3-1/2 | 1.80 |

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| MM | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) |
|----|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|
| 8 | J7308M | 37/64 | 7/8 | 5/16 | 2-19/32 | 3-1/4 | 0.37 |
| 9 | J7309M | 19/32 | 7/8 | 3/8 | 2-19/32 | 3-1/4 | 0.36 |
| 10 | J7310M | 41/64 | 15/16 | 7/16 | 2-19/32 | 3-1/4 | 0.43 |
| 11 | J7311M | 45/64 | 15/16 | 7/16 | 2-19/32 | 3-1/4 | 0.43 |
| 12 | J7312M* | 47/64 | 15/16 | 1/2 | 2-19/32 | 3-1/4 | 0.43 |
| 13 | J7313M* | 25/32 | 15/16 | 1/2 | 2-19/32 | 3-1/4 | 0.42 |
| 14 | J7314M* | 55/64 | 15/16 | 1/2 | 2-19/32 | 3-1/4 | 0.40 |
| 15 | J7315M* | 15/16 | 1 | 37/64 | 2-19/32 | 3-1/4 | 0.40 |
| 16 | J7316M* | 1 | 1-1/32 | 19/32 | 2-19/32 | 3-1/4 | 0.46 |
| 17 | J7317M* | 1-1/32 | 1-1/16 | 5/8 | 2-19/32 | 3-1/4 | 0.45 |
| 18 | J7318M* | 1-1/16 | 1-1/16 | 43/64 | 2-19/32 | 3-1/4 | 0.49 |
| 19 | J7319M* | 1-7/64 | 1-7/64 | 1-5/32 | 2-19/32 | 3-1/4 | 0.52 |
| 20 | J7320M | 1-5/32 | 1-5/32 | 1-5/32 | 2-19/32 | 3-1/4 | 0.55 |
| 21 | J7321M* | 1-13/64 | 1-13/64 | 1-13/32 | 2-19/32 | 3-1/4 | 0.66 |
| 22 | J7322M* | 1-9/32 | 1-9/32 | 1-13/32 | 2-27/32 | 3-1/2 | 0.75 |
| 23 | J7323M | 1-19/64 | 1-19/64 | 1-13/32 | 2-27/32 | 3-1/2 | 0.75 |
| 24 | J7324M* | 1-23/64 | 1-23/64 | 1-13/32 | 2-27/32 | 3-1/2 | 0.81 |
| 25 | J7325M* | 1-7/16 | 1-7/16 | 1-13/32 | 2-27/32 | 3-1/2 | 0.92 |
| 26 | J7326M | 1-1/2 | 1-1/2 | 1-13/32 | 2-27/32 | 3-1/2 | 1.03 |
| 27 | J7327M | 1-9/16 | 1-9/16 | 1-13/32 | 2-27/32 | 3-1/2 | 1.14 |
| 28 | J7328M | 1-5/8 | 1-5/8 | 1-13/32 | 2-27/32 | 3-1/2 | 1.20 |
| 29 | J7329M | 1-5/8 | 1-5/8 | 1-33/64 | 2-27/32 | 3-1/2 | 1.16 |
| 30 | J7330M | 1-11/16 | 1-11/16 | 1-13/32 | 2-27/32 | 3-1/2 | 1.53 |
| 32 | J7332M | 1-25/32 | 1-25/32 | 1-13/64 | 2-27/32 | 3-1/2 | 1.32 |
| 33 | J7333M | 1-55/64 | 1-55/64 | 1-25/64 | 2-27/32 | 3-1/2 | 1.48 |
| 34 | J7334M | 1-15/16 | 1-15/16 | 1-25/64 | 2-27/32 | 3-1/2 | 1.50 |
| 35 | J7335M | 2-1/16 | 2-1/16 | 1-25/64 | 2-27/32 | 3-1/2 | 1.61 |
| 36 | J7336M | 2-1/16 | 2-1/16 | 1-25/64 | 2-27/32 | 3-1/2 | 1.63 |

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1/2" DRIVE IMPACT SOCKETS

IMPACT SOCKETS

1/2" DRIVE IMPACT UNIVERSAL JOINT

- › Tight tolerances for snug fit on fastener.
- › Used wherever powered drive tools are used to install or remove fasteners.
- › Designed to withstand the high torque and force associated with impact tools in repetitive application.
- › Position at appropriate angle to turn fasteners where obstructions prevent a straight application.
- › Ball and spring design which allows for a 30° working angle.
- › Smooth 360° rotation.

| Product # | Overall Length (in) | Weight (lbs) |
|----------------|---------------------|--------------|
| J74470P | 2-19/32 | 0.57 |


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1/2" DRIVE IMPACT HEX BIT SOCKETS

- › Proto® Hex Bit Impact Sockets can be used on stubborn fasteners.
- › Tight tolerances for snug fit on fastener.
- › Hex bit impact sockets are used wherever powered drive tools are used to install or remove fasteners.
- › Hex bit impact sockets are designed to withstand the high torque and force associated with impact tools in repetitive application.
- › Side locking hole.

| INCH | HEX | Bit Length (in) | Overall Length (in) | Weight (lbs) |
|------|------------------|-----------------|---------------------|--------------|
| 1/4 | J74411/4 | 1-3/4 | 3-1/4 | 0.18 |
| 5/16 | J74415/16 | 1-3/4 | 3-1/4 | 0.22 |
| 3/8 | J74413/8 | 1-3/4 | 3-1/4 | 0.24 |
| 7/16 | J74417/16 | 1-3/4 | 3-1/4 | 0.27 |
| 1/2 | J74411/2 | 1-7/8 | 3-5/8 | 0.47 |
| 9/16 | J74419/16 | 1-7/8 | 3-5/8 | 0.49 |
| 5/8 | J74415/8 | 2 | 4 | 0.84 |






1/2" DRIVE ADAPTERS

- › Use adapters to help increase or decrease drive end size.
- › Do not use hand adapters with power tools.
- › Do not over torque small sockets when using them with adapters on large drive tools.
- › Size stamped on tool for easy identification.
- › Side locking hole.

| Product # | INCH | Overall Length (in) | Weight (lbs) |
|--------------|-----------------|---------------------|--------------|
| J7650 | 3/8" F x 1/2" M | 1-5/16 | 0.13 |
| J7651 | 1/2" F x 3/8" M | 1-7/16 | 0.12 |
| J7652 | 1/2" F x 3/4" M | 1-29/32 | 0.35 |
| J7653 | 3/4" F x 1/2" M | 2-1/16 | 0.48 |
| J7655 | 5/8" F x 1/2" M | 1-53/64 | 0.34 |

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1/2" DRIVE IMPACT UNIVERSAL JOINT,
HEX BIT SOCKETS & ADAPTERS

1/2" DRIVE IMPACT EXTENSIONS

- › Use extensions to gain access to fasteners in locations that would otherwise be difficult to reach.
- › Male square is oriented in-line with female squares for use with fixed head torque wrenches.
- › Full chamfer at drive opening (when applicable) for easy engagement with drive tools.
- › Drive end chamfer and four detents help provide quick positive engagement with drive tool on any of the socket drive walls.
- › Size stamped on tool for easy identification.
- › Side locking hole.



| Product # | Overall Length (in) | Weight (lbs) |
|-----------------|---------------------|--------------|
| J7180P | 2 | 0.19 |
| J7182P | 3 | 0.30 |
| J7181P | 5 | 0.47 |
| J7184P | 9 | 0.89 |
| J7183-00 | 10 | 0.89 |

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1/2" DRIVE LOCKING EXTENSIONS

- › Solid one-piece design helps prevent the locking components from becoming loose or disengaged.
- › Patented locking feature locks sockets to the extension with exceptional force.
- › Knurled shank provides a slip-resistant grip when hand-turning the extension.

| Product # | Overall Length (in) | Weight (lbs) |
|--------------|---------------------|--------------|
| J7503 | 3 | 0.34 |
| J7505 | 5 | 0.57 |
| J7510 | 10 | 1.04 |








1/2" DRIVE RETAINING RINGS

- › Retaining Rings are used to help secure sockets onto drive tools.
- › They are not intended to bear any load.
- › The rotational forces are between the drive tool and the socket.
- › One-piece construction, no loose parts.



| Product # | Description | For Groove Dia. (in) | Diameter (in) | Height (in) | Weight (lbs) |
|-----------------|----------------------------------|----------------------|---------------|-------------|--------------|
| JRR50080 | Retaining Ring, 1/2" DR 800 GRV | 51/64 | 15/16 | 1/8 | 0.01 |
| JRR50087 | Retaining Ring, 1/2" DR 870 GRV | 7/8 | 1 | 1/8 | 0.01 |
| JRR50095 | Retaining Ring, 1/2" DR 950 GRV | 61/64 | 1-1/16 | 1/8 | 0.01 |
| JRR50105 | Retaining Ring, 1/2" DR 1050 GRV | 1-1/16 | 1-3/16 | 1/8 | 0.01 |
| JRR50115 | Retaining Ring, 1/2" DR 1150 GRV | 1-5/32 | 1-1/4 | 1/8 | 0.01 |
| JRR50130 | Retaining Ring, 1/2" DR 1300 GRV | 1-5/16 | 1-7/16 | 1/8 | 0.01 |
| JRR50145 | Retaining Ring, 1/2" DR 1450 GRV | 1-7/16 | 1-9/16 | 1/8 | 0.01 |
| JRR50160 | Retaining Ring, 1/2" DR 1600 GRV | 1-19/32 | 1-3/4 | 1/8 | 0.01 |



 6 POINT
  8 POINT
  12 POINT
  SPL SPLINE
  HEX HEX
  FULL POLISH
  SATIN
  BLACK OXIDE
  INSULATED

IMPACT SOCKETS

3/4" DRIVE IMPACT SOCKETS

- › Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- › Stamped size for easy reference.
- › Side locking hole.

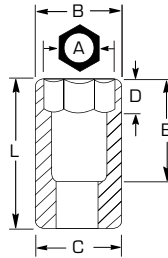


- › Radius-corner socket design
- › Engages flats for better grip
- › Improves the ability to turn worn or rounded fasteners

3/4" DRIVE IMPACT SOCKETS

| INCH | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) | Crush Retaining Ring | O-Ring | Retaining Pin |
|---------|--------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|----------------------|---------|---------------|
| 9/16 | J07509 | J07509T | 1 | 1-5/8 | 23/64 | 15/16 | 1-7/8 | 0.72 | JRR07523 | J07500R | J07500P |
| 5/8 | J07510 | J07510T | 1-3/32 | 1-5/8 | 25/64 | 15/16 | 1-7/8 | 0.69 | JRR07523 | J07500R | J07500P |
| 11/16 | J07511 | J07511T | 1-5/32 | 1-5/8 | 7/16 | 1 | 1-15/16 | 0.72 | JRR07523 | J07500R | J07500P |
| 3/4 | J07512 | J07512T | 1-15/64 | 1-5/8 | 15/32 | 1 | 1-15/16 | 0.70 | JRR07523 | J07500R | J07500P |
| 13/16 | J07513 | J07513T | 1-5/16 | 1-5/8 | 1/2 | 1 | 1-15/16 | 0.67 | JRR07523 | J07500R | J07500P |
| 7/8 | J07514 | J07514T | 1-1/2 | 1-5/8 | 35/64 | 1-1/16 | 2 | 0.73 | JRR07523 | J07500R | J07500P |
| 15/16 | J07515 | J07515T | 1-5/8 | 1-5/8 | 37/64 | 1-1/16 | 2 | 0.78 | JRR07523 | J07500R | J07500P |
| 1 | J07516 | J07516T | 1-5/8 | 1-5/8 | 5/8 | 1-1/8 | 2-1/16 | 0.73 | JRR07523 | J07500R | J07500P |
| 1-1/16 | J07517 | J07517T | 1-5/8 | 1-5/8 | 21/32 | 1-1/8 | 2-1/16 | 0.81 | JRR07523 | J07500R | J07500P |
| 1-1/8 | J07518 | J07518T | 1-3/4 | 1-3/4 | 45/64 | 1-1/4 | 2-3/16 | 0.91 | JRR07526 | J07500R | J07500P |
| 1-3/16 | J07519 | J07519T | 1-7/8 | 1-3/4 | 47/64 | 1-1/4 | 2-3/16 | 1.02 | JRR07526 | J07500R | J07500P |
| 1-1/4 | J07520 | J07520T | 2 | 1-3/4 | 3/4 | 1-1/4 | 2-3/16 | 1.10 | JRR07526 | J07500R | J07500P |
| 1-5/16 | J07521 | J07521T | 2-1/8 | 1-3/4 | 27/32 | 1-1/4 | 2-3/16 | 1.19 | JRR07526 | J07500R | J07500P |
| 1-3/8 | J07522 | J07522T | 2-1/8 | 1-3/4 | 13/16 | 1-3/16 | 2-1/4 | 1.18 | JRR07526 | J07500R | J07500P |
| 1-7/16 | J07523 | J07523T | 2-1/4 | 1-3/4 | 7/8 | 1-3/8 | 2-5/16 | 1.29 | JRR07526 | J07500R | J07500P |
| 1-1/2 | J07524 | J07524T | 2-3/8 | 1-3/4 | 1 | 1-7/16 | 2-3/8 | 1.43 | JRR07526 | J07500R | J07500P |
| 1-9/16 | J07525 | J07525T | 2-3/8 | 1-3/4 | 1 | 1-1/2 | 2-7/16 | 1.57 | JRR07526 | J07500R | J07500P |
| 1-5/8 | J07526 | J07526T | 2-3/8 | 1-3/4 | 1 | 1-1/2 | 2-7/16 | 1.60 | JRR07526 | J07500R | J07500P |
| 1-11/16 | J07527 | J07527T | 2-39/64 | 1-3/4 | 1-1/8 | 1-11/16 | 2-5/8 | 1.78 | JRR07526 | J07500R | J07500P |
| 1-3/4 | J07528 | J07528T | 2-39/64 | 1-3/4 | 1-1/8 | 1-11/16 | 2-5/8 | 1.83 | JRR07526 | J07500R | J07500P |
| 1-13/16 | J07529 | J07529T | 2-3/4 | 1-3/4 | 1-1/8 | 1-11/16 | 2-5/8 | 1.92 | JRR07526 | J07500R | J07500P |
| 1-7/8 | J07530 | J07530T | 2-3/4 | 1-3/4 | 1-1/4 | 1-7/8 | 2-13/16 | 2.19 | JRR07526 | J07500R | J07500P |
| 1-15/16 | J07531 | J07531T | 2-7/8 | 1-3/4 | 1-1/4 | 1-7/8 | 2-13/16 | 2.28 | JRR07526 | J07500R | J07500P |
| 2 | J07532 | J07532T | 3 | 1-3/4 | 1-1/4 | 1-7/8 | 2-13/16 | 2.30 | JRR07526 | J07500R | J07500P |
| 2-1/16 | J07533 | J07533T | 3 | 1-3/4 | 1-3/8 | 2-5/32 | 3-3/32 | 2.66 | JRR07526 | J07500R | J07500P |
| 2-1/8 | J07534 | J07534T | 3-1/8 | 1-3/4 | 1-3/8 | 2-5/32 | 3-3/32 | 2.79 | JRR07526 | J07500R | J07500P |
| 2-3/16 | J07535 | J07535T | 3-1/4 | 1-3/4 | 1-3/8 | 2-3/16 | 3-1/8 | 3.25 | JRR07526 | J07500R | J07500P |
| 2-1/4 | J07536 | J07536T | 3-5/16 | 1-3/4 | 1-1/2 | 2-5/16 | 3-1/4 | 3.17 | JRR07526 | J07500R | J07500P |
| 2-5/16 | J07537 | - | 3-9/32 | 1-3/4 | 1-1/2 | 1-15/16 | 3-5/16 | 3.21 | JRR07526 | J07500R | J07500P |
| 2-3/8 | J07538 | J07538T | 3-1/2 | 1-3/4 | 1-1/2 | 2-7/16 | 3-3/8 | 3.45 | JRR07526 | J07500R | J07500P |

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IMPACT SOCKETS

3/4" DRIVE IMPACT SOCKETS (CONT'D)



- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners



| MM | 6 | 12 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Clearence Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) | Crush Retaining Ring | O-Ring | Retaining Pin |
|----|---------|----------|-----------------------------------|-------------------------------------|--------------------|--------------------------|-------------------------|--------------|----------------------|---------|---------------|
| 17 | J07517M | J07517MT | 1-5/32 | 1-5/8 | 27/64 | 63/64 | 1-59/64 | 0.68 | JRR07523 | J07500R | J07500P |
| 19 | J07519M | J07519MT | 1-13/64 | 1-5/8 | 15/32 | 63/64 | 1-59/64 | 0.70 | JRR07523 | J07500R | J07500P |
| 20 | J07520M | J07520MT | 1-19/64 | 1-5/8 | 9/16 | 63/64 | 1-59/64 | 0.70 | JRR07523 | J07500R | J07500P |
| 21 | J07521M | J07521MT | 1-23/64 | 1-5/8 | 5/8 | 59/64 | 1-59/64 | 0.70 | JRR07523 | J07500R | J07500P |
| 22 | J07522M | J07522MT | 1-27/64 | 1-5/8 | 11/16 | 1-1/16 | 2 | 0.79 | JRR07523 | J07500R | J07500P |
| 23 | J07523M | J07523MT | 1-5/8 | 1-5/8 | 11/16 | 1-1/16 | 2 | 0.80 | JRR07523 | J07500R | J07500P |
| 24 | J07524M | J07524MT | 1-5/8 | 1-5/8 | 19/32 | 1-1/16 | 2 | 0.73 | JRR07523 | J07500R | J07500P |
| 25 | J07525M | J07525MT | 1-5/8 | 1-5/8 | 11/16 | 1-1/16 | 2 | 0.76 | JRR07523 | J07500R | J07500P |
| 26 | J07526M | J07526MT | 1-5/8 | 1-5/8 | 3/4 | 1-1/8 | 2-1/16 | 0.77 | JRR07523 | J07500R | J07500P |
| 27 | J07527M | J07527MT | 1-5/8 | 1-5/8 | 13/16 | 1-1/8 | 2-1/16 | 0.74 | JRR07523 | J07500R | J07500P |
| 28 | J07528M | J07528MT | 1-5/8 | 1-5/8 | 45/64 | 1-1/8 | 2-1/16 | 0.72 | JRR07523 | J07500R | J07500P |
| 29 | J07529M | J07529MT | 45.4 | 1-5/8 | 19.7 | 1-1/8 | 2-3/16 | 1.01 | JRR07523 | J07500R | J07500P |
| 30 | J07530M | J07530MT | 1-7/8 | 1-3/4 | 59/64 | 1-7/32 | 2-3/16 | 1.01 | JRR07526 | J07500R | J07500P |
| 31 | J07531M | J07531MT | 1-7/8 | 1-3/4 | 7/8 | 1-1/8 | 2-3/16 | 0.99 | JRR07526 | J07500R | J07500P |
| 32 | J07532M | J07532MT | 2 | 1-3/4 | 7/8 | 1-9/64 | 2-3/16 | 1.13 | JRR07526 | J07500R | J07500P |
| 33 | J07533M | J07533MT | 2 | 1-3/4 | 7/8 | 1-3/16 | 2-3/16 | 1.08 | JRR07526 | J07500R | J07500P |
| 34 | J07534M | J07534MT | 2-1/8 | 1-3/4 | 15/16 | 1-3/16 | 2-1/4 | 1.18 | JRR07526 | J07500R | J07500P |
| 35 | J07535M | J07535MT | 2-1/8 | 1-3/4 | 15/16 | 1-5/16 | 2-1/4 | 1.18 | JRR07526 | J07500R | J07500P |
| 36 | J07536M | J07536MT | 2-1/4 | 1-3/4 | 15/16 | 1-9/32 | 2-5/16 | 1.32 | JRR07526 | J07500R | J07500P |
| 38 | J07538M | J07538MT | 2-3/8 | 1-3/4 | 1 | 1-21/64 | 2-3/8 | 1.56 | JRR07526 | J07500R | J07500P |
| 40 | J07540M | J07540MT | 2-1/2 | 1-3/4 | 1-1/32 | 1-17/64 | 2-1/2 | 1.64 | JRR07526 | J07500R | J07500P |
| 41 | J07541M | J07541MT | 2-1/2 | 1-3/4 | 1-1/16 | 1-31/64 | 2-5/8 | 1.76 | JRR07526 | J07500R | J07500P |
| 42 | J07542M | J07542MT | 2-1/2 | 1-3/4 | 1-1/8 | 1-45/64 | 2-3/4 | 1.87 | JRR07526 | J07500R | J07500P |
| 43 | J07543M | J07543MT | 2-9/16 | 1-3/4 | 1-1/8 | 1-45/64 | 2-3/4 | 1.93 | JRR07526 | J07500R | J07500P |
| 46 | J07546M | J07546MT | 2-3/4 | 1-3/4 | 1-1/4 | 1-45/64 | 2-7/8 | 2.10 | JRR07526 | J07500R | J07500P |
| 50 | J07550M | J07550MT | 2-15/16 | 1-3/4 | 1-1/4 | 1-49/64 | 3-1/8 | 2.44 | JRR07526 | J07500R | J07500P |

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3/4" DRIVE IMPACT SOCKETS



IMPACT SOCKETS

3/4" DRIVE DEEP IMPACT SOCKETS

- ▶ Proto® 6 Point Impact Sockets are ideal for use on stubborn or damaged fasteners, and also on fasteners made from soft materials.
- ▶ Stamped size for easy reference.
- ▶ Side locking hole.



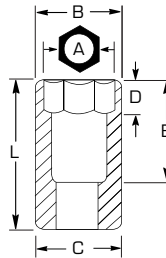
- ▶ Radius-corner socket design
- ▶ Engages flats for better grip
- ▶ Improves the ability to turn worn or rounded fasteners



3/4" DRIVE IMPACT SOCKETS

| INCH | 6 | Nut End Outside Diameter (in) (B) | Drive End Outside Diameter (in) (C) | Nut Depth (in) (D) | Bolt Clearance Depth (in) (E) | Overall Length (in) (L) | Weight (lbs) | Crush Retaining Ring | O-Ring | Retaining Pin |
|---------|---------|-----------------------------------|-------------------------------------|--------------------|-------------------------------|-------------------------|--------------|----------------------|---------|---------------|
| 9/16 | J07509L | 1 | 1-5/8 | 15/32 | 2-5/16 | 3-1/4 | 1.34 | JRR07523 | J07500R | J07500P |
| 5/8 | J07510L | 1-3/32 | 1-5/8 | 33/64 | 2-5/16 | 3-1/4 | 1.28 | JRR07523 | J07500R | J07500P |
| 11/16 | J07511L | 1-5/32 | 1-5/8 | 9/16 | 2-5/16 | 3-1/4 | 1.34 | JRR07523 | J07500R | J07500P |
| 3/4 | J07512L | 1-1/4 | 1-5/8 | 39/64 | 2-5/16 | 3-1/4 | 1.35 | JRR07523 | J07500R | J07500P |
| 13/16 | J07513L | 1-5/16 | 1-5/8 | 43/64 | 2-5/16 | 3-1/4 | 1.18 | JRR07523 | J07500R | J07500P |
| 7/8 | J07514L | 1-1/2 | 1-5/8 | 23/32 | 2-5/16 | 3-1/4 | 1.23 | JRR07523 | J07500R | J07500P |
| 15/16 | J07515L | 1-5/8 | 1-5/8 | 25/32 | 2-5/16 | 3-1/4 | 1.20 | JRR07523 | J07500R | J07500P |
| 1 | J07516L | 1-5/8 | 1-5/8 | 53/64 | 2-5/16 | 3-1/4 | 1.11 | JRR07523 | J07500R | J07500P |
| 1-1/16 | J07517L | 1-5/8 | 1-5/8 | 7/8 | 2-5/16 | 3-1/4 | 1.20 | JRR07523 | J07500R | J07500P |
| 1-1/8 | J07518L | 1-3/4 | 1-3/4 | 59/64 | 2-5/16 | 3-1/4 | 1.29 | JRR07526 | J07500R | J07500P |
| 1-3/16 | J07519L | 1-7/8 | 1-3/4 | 31/32 | 2-5/16 | 3-1/4 | 1.54 | JRR07526 | J07500R | J07500P |
| 1-1/4 | J07520L | 2 | 1-3/4 | 1 | 2-5/16 | 3-1/4 | 1.89 | JRR07526 | J07500R | J07500P |
| 1-5/16 | J07521L | 2-1/8 | 1-3/4 | 1 | 2-5/16 | 3-1/4 | 1.88 | JRR07526 | J07500R | J07500P |
| 1-3/8 | J07522L | 2-1/8 | 1-3/4 | 1 | 2-5/16 | 3-1/4 | 1.79 | JRR07526 | J07500R | J07500P |
| 1-7/16 | J07523L | 2-1/4 | 1-3/4 | 1-1/16 | 2-7/16 | 3-1/2 | 2.00 | JRR07526 | J07500R | J07500P |
| 1-1/2 | J07524L | 2-3/8 | 1-3/4 | 1-1/16 | 2-7/16 | 3-1/2 | 2.25 | JRR07526 | J07500R | J07500P |
| 1-9/16 | J07525L | 2-3/8 | 1-3/4 | 1 | 2-3/8 | 3-13/16 | 2.43 | JRR07526 | J07500R | J07500P |
| 1-5/8 | J07526L | 2-3/8 | 1-3/4 | 2-1/4 | 2-5/8 | 3-13/16 | 2.57 | JRR07526 | J07500R | J07500P |
| 1-11/16 | J07527L | 2-39/64 | 1-3/4 | 2-1/4 | 2-5/8 | 3-7/8 | 2.69 | JRR07526 | J07500R | J07500P |
| 1-3/4 | J07528L | 2-39/64 | 1-3/4 | 2-1/4 | 2-5/8 | 3-7/8 | 2.84 | JRR07526 | J07500R | J07500P |
| 1-13/16 | J07529L | 2-3/4 | 1-3/4 | 2-1/4 | 2-5/8 | 3-7/8 | 3.09 | JRR07526 | J07500R | J07500P |
| 1-7/8 | J07530L | 2-3/4 | 1-3/4 | 2-3/8 | 3-3/4 | 4-1/16 | 3.19 | JRR07526 | J07500R | J07500P |
| 2 | J07532L | 3 | 1-3/4 | 1-1/2 | 2-3/4 | 4-1/16 | 3.45 | JRR07526 | J07500R | J07500P |

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3/4" DRIVE IMPACT EXTENSIONS

- › Use extensions to gain access to fasteners in locations that would otherwise be difficult to reach.
- › Male square is oriented in-line with female squares for use with fixed head torque wrenches.
- › Full chamfer at drive opening (when applicable) for easy engagement with drive tools.
- › Drive end chamfer and four detents help provide quick positive engagement with drive tool on any of the socket drive walls.
- › Features two thru holes and a groove to accept a PROTO® retaining ring or pin or o-ring to help secure extension to the drive tool anvil.



| Product # | Overall Length (in) | Weight (lbs) |
|---------------|---------------------|--------------|
| J07565 | 5 | 1.48 |
| J07567 | 7 | 1.97 |
| J07568 | 10 | 2.73 |
| J07569 | 13 | 3.12 |

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3/4" DRIVE IMPACT UNIVERSAL JOINT

- › Tight tolerances for snug fit on fastener.
- › Used wherever powered drive tools are used to install or remove fasteners.
- › Designed to withstand the high torque and force associated with impact tools in repetitive application.
- › Features two through holes and a groove to accept a Proto® Retaining Ring or pin and O-ring to help secure the socket to the drive tool anvil.
- › Position at appropriate angle to turn fasteners where obstructions prevent a straight application.
- › Ball and spring design which allows for a 30° working angle.
- › Smooth 360° rotation.



| Product # | Overall Length (in) | Weight (lbs) |
|----------------|---------------------|--------------|
| J07570A | 3-1/2 | 1.40 |




3/4" DRIVE ADAPTERS

- › Use adapters to help increase or decrease drive end size.
- › Do not use hand adapters with power tools.
- › Do not over torque small sockets when using them with adapters on large drive tools.
- › Made of forged steel.
- › Size stamped on tool for easy identification.



| Product # | INCH | Overall Length (in) | Weight (lbs) |
|---------------|-----------------|---------------------|--------------|
| J07655 | 3/4" F x 1" M | 2-1/2 | 0.89 |
| J07656 | 1" F x 3/4" M | 2-7/8 | 1.42 |
| J7656 | 5/8" F x 3/4" M | 1-31/32 | 0.40 |

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IMPACT SOCKETS

3/4" DRIVE IMPACT SOCKET O-RING

- › Black oxide finish.
- › For use with all 3/4" drive impact sockets and attachments.


| Product # | Weight (lbs) |
|----------------|--------------|
| J07500R | 0.01 |




3/4" DRIVE IMPACT SOCKET RETAINING PIN

- › Black oxide finish.
- › For use with all 3/4" drive impact sockets and attachments.

| Product # | Weight (lbs) |
|----------------|--------------|
| J07500P | 0.01 |




3/4" DRIVE RETAINING RINGS

- › Retaining rings are used to help secure sockets onto drive tools.
- › They are not intended to bear any load.
- › The rotational forces are between the drive tool and the socket.
- › The resin crush gauge on the pin helps indicate when a socket is excessively worn and should be replaced.
- › Drive tool and socket should line up when in use and should not pinch the crush gauge.
- › Cracked sockets and/or worn drive tools cause each other to turn excessively in relation to each other. This action pinches the small fin or the crush gauge on these retaining rings. If the crush gauge is pinched, it is an indication that the socket and or the drive tool need to be replaced.
- › One-piece construction, no loose parts. Pin is made of resin which allows the material to compress without breaking.
- › Part numbers are embossed on the rings near the point at which the pin and ring meet.



| Product # | For Groove Dia. (in) | Diameter (in) | Height (in) | Weight (lbs) |
|-----------------|----------------------|---------------|-------------|--------------|
| JRR07520 | 1-1/4 | 1-7/16 | 3/16 | 0.01 |
| JRR07523 | 1-7/16 | 1-5/8 | 3/16 | 0.01 |
| JRR07526 | 1-5/8 | 1-13/16 | 3/16 | 0.01 |
| JRR07528 | 1-3/4 | 1-15/16 | 3/16 | 0.01 |
| JRR07532 | 1-15/16 | 2-3/16 | 3/16 | 0.01 |
| JRR07534 | 2-1/8 | 2-5/16 | 3/16 | 0.01 |
| JRR07536 | 2-1/4 | 2-7/16 | 3/16 | 0.01 |

AIR TOOLS



TITANIUM SERIES AIR IMPACT WRENCHES

- › Titanium housing helps to reduce weight, improve balance and ensure maximum durability.
- › Ergonomically designed handle-forward design improves balance and control, helping to reduce operator fatigue.
- › Robust twin hammer mechanism for efficient energy transfer and long service life.
- › Ambidextrous forward/reverse lever can be actuated with a single hand, even with gloves on.
- › Three position power regulator for forward rotation. Reverse rotation operates at maximum for highest breakaway torque.
- › Feather throttle for maximum operator control.
- › Side-fed, 6-vane air motor for maximum power and efficiency.
- › Machined motor housing reduces number of parts, creating precision alignment, reducing wear, increasing efficiency and simplifying maintenance.
- › 360° rotating air inlet fitting.
- › Titanium exhaust deflector and muffler.



| Product # | Thru Hole Model | Protective Boot | Drive Size (in) | Breakaway Torque (ft-lbs) | Material | Overall Weight (lbs) | Overall Length (in) | Average Air Consumption (cfm) | Blow Rate (bpm) | Free Speed (rpm) |
|-----------|-----------------|-----------------|-----------------|---------------------------|----------|----------------------|---------------------|-------------------------------|-----------------|------------------|
| J138WP | J138WP-TH | J138PB | 3/8 | 525 | Titanium | 2.90 | 6.00 | 4.40 | 1750 | 10500 |
| J150WP-C | J150WP-CTH | J138PB | 1/2 (Compact) | 590 | Titanium | 3.00 | 6.10 | 4.40 | 1750 | 10500 |
| J150WP | J150WP-TH | J150PB | 1/2 | 1260 | Titanium | 4.60 | 7.10 | 5.10 | 1160 | 7225 |
| J175WP | J175WP | J175PB | 3/4 | 1560 | Titanium | 8.40 | 8.90 | 7.10 | 950 | 5300 |

MINI IMPACT WRENCHES

- › Rubber bumpers for durability.
- › Variable speed trigger for optimal speed regulation.
- › Easy-to-use one-hand forward/reverse switch with integrated three position regulator.
- › Comfortable rubber injected overlay grip is resistant to oils and acids.



| Product # | Drive Size (in) | Breakaway Torque (ft-lbs) | Overall Weight (lbs) | Overall Length (in) | Average Air Consumption (cfm) | Blow Rate (bpm) | Free Speed (rpm) |
|-----------|-----------------|---------------------------|----------------------|---------------------|-------------------------------|-----------------|------------------|
| J138WP-M | 3/8 | 445 | 2.90 | 4.4 | 3.00 | 1350 | 6000 |
| J150WP-M | 1/2 | 635 | 2.90 | 4.4 | 4.50 | 1500 | 10000 |

TITANIUM SERIES ANGLE IMPACT WRENCHES

- › Low profile head improves access to tight areas while housing design contains gearing to reduce maintenance issues.
- › Impact mechanism provides high torque with little reaction, improving safety and reducing effort.
- › Feather start trigger and forward/reverse ring for ease of use and increased productivity.
- › Exhaust deflectors for reduced noise.



| Product # | Drive Size (in) | Breakaway Torque (ft-lbs) | Overall Weight (lbs) | Overall Length (in) | Average Air Consumption (cfm) | Blow Rate Forward (bpm) | Blow Rate Reverse (bpm) | Free Speed (rpm) |
|---------------|-----------------|---------------------------|----------------------|---------------------|-------------------------------|-------------------------|-------------------------|------------------|
| J138WA | 3/8 | 170 | 4 | 13-15/16 | 5.0 | 1600 | 1700 | 7200 |
| J150WA | 1/2 | 200 | 4 | 13-15/16 | 5.0 | 1600 | 1700 | 7200 |



TITANIUM SERIES SEALED HEAD AIR RATCHETS

- › Titanium housing helps to reduce weight, improve balance and ensure maximum durability.
- › Low profile head for access into tight areas.
- › Quick release socket mechanism for easy socket changes.
- › Forward/reverse control ring positioned away from ratcheting head for greater usability.
- › Feather start trigger for maximum operator control.
- › 360° directional exhaust.



| Product # | Drive Size (in) | Max. Torque (ft-lbs) | Overall Weight (lbs) | Overall Length (in) | Average Air Consumption (cfm) | Free Speed (rpm) | Vibration Level (m/s ²) | Noise Level (dB(A)) |
|----------------|-----------------|----------------------|----------------------|---------------------|-------------------------------|------------------|-------------------------------------|---------------------|
| J138RSH | 3/8 | 65 | 2.90 | 12.40 | 3.70 | 350 | 5.57 | 89.30 |
| J150RSH | 1/2 | 65 | 2.90 | 12.40 | 3.70 | 350 | 5.57 | 89.30 |



ANGLE IMPACT WRENCHES & SEALED HEAD AIR RATCHET

MINI DIE GRINDER

- › Tool free power adjustment.
- › Improved throttle with lockout for precise control.
- › Comfort rubber grip keeps users hand isolated as unit gets cold from use.
- › 360 degree rotating exhaust allows user to direct air away from body.



| Product # | Type | Motor Power (hP) | Speed (rpm) | Overall Length (in) (L) | Weight (lbs) |
|--------------------|---------------|------------------|-------------|-------------------------|--------------|
| J325AGS | 1/4" Straight | 0.30 | 30,000 | 6.30 | 1.00 |
| J325AGAH90 | 1/4" 90° | 0.30 | 23,000 | 6.50 | 1.20 |
| J325AGAH120 | 1/4" 120° | 0.30 | 24,000 | 7.50 | 1.20 |
| J325AGSE | 1/4" Extended | 0.30 | 28,000 | 10.30 | 1.50 |



Straight



90°



120°



Extended

DIE GRINDERS

MEDIUM DIE GRINDER

- › Tool free power adjustment.
- › Improved throttle with lockout for precise control.
- › Comfort rubber grip keeps users hand isolated as unit gets cold from use.
- › 360 degree rotating exhaust allows user to direct air away from body.



| Product # | Type | Motor Power (hP) | Speed (rpm) | Overall Length (in) (L) | Weight (lbs) |
|-------------------|---------------|------------------|-------------|-------------------------|--------------|
| J525AGS | 1/4" Straight | 0.50 | 25,000 | 7.00 | 1.50 |
| J525AGAH90 | 1/4" 90° | 0.50 | 18,500 | 6.90 | 1.70 |
| J525AGSE | 1/4" Extended | 0.50 | 23,000 | 10.50 | 2.20 |





WRENCHES



WRENCHES


FULL POLISH REVERSIBLE RATCHETING COMBINATION WRENCHES - SPLINE

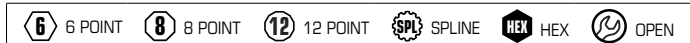
- › Anti-Slip Design (ASD) open end.
- › 15° angled offset box end helps keep shank clear of obstructions.
- › Offset open end offers 10-12° turning angle
- › Smooth transition from head to shank.
- › Industrial strength I-Beam shank provides broad bearing surface helping improve comfort and helping reduce hand fatigue.
- › Protected switch lever helps prevent accidental reversal.
- › Compact ratcheting head improves access.
- › 72 teeth provide 5° ratcheting.



REVERSIBLE RATCHETING WRENCHES

| INCH | SPL | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|--------|---------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 1/4 | JSCV08A | 5/16 | 35/64 | 5/32 | 35/64 | 1/4 | 4-59/64 | 0.05 |
| 9/32 | JSCV09A | 5/16 | 39/64 | 11/64 | 43/64 | 1/4 | 5-5/32 | 0.07 |
| 5/16 | JSCV10A | 25/64 | 11/16 | 11/64 | 43/64 | 1/4 | 5-27/64 | 0.08 |
| 11/32 | JSCV11A | 13/32 | 25/32 | 9/32 | 3/4 | 17/64 | 5-43/64 | 0.10 |
| 3/8 | JSCV12A | 29/64 | 27/32 | 13/64 | 25/32 | 9/32 | 5-29/32 | 0.12 |
| 7/16 | JSCV14A | 1/2 | 15/16 | 5/16 | 55/64 | 19/64 | 6-29/32 | 0.16 |
| 1/2 | JSCV16A | 39/64 | 1-5/64 | 1/4 | 1 | 11/32 | 7-29/32 | 0.24 |
| 9/16 | JSCV18A | 11/16 | 1-13/64 | 3/8 | 1-5/64 | 23/64 | 8-49/64 | 0.30 |
| 5/8 | JSCV20A | 3/4 | 1-21/64 | 13/32 | 1-3/16 | 25/64 | 9-33/64 | 0.40 |
| 11/16 | JSCV22A | 53/64 | 1-7/16 | 5/16 | 1-1/4 | 13/32 | 10-17/64 | 0.49 |
| 3/4 | JSCV24A | 29/32 | 1-37/64 | 11/32 | 1-21/64 | 7/16 | 11-3/64 | 0.60 |
| 13/16 | JSCV26A | 31/32 | 1-23/32 | 17/32 | 1-37/64 | 33/64 | 11-13/16 | 0.80 |
| 7/8 | JSCV28A | 1-3/64 | 1-7/8 | 17/32 | 1-37/64 | 33/64 | 12-35/64 | 0.86 |
| 15/16 | JSCV30A | 1-1/8 | 1-31/32 | 19/32 | 1-53/64 | 37/64 | 13-5/16 | 1.09 |
| 1 | JSCV32A | 1-13/64 | 2-3/32 | 19/32 | 1-53/64 | 37/64 | 14-1/16 | 1.17 |
| 1-1/16 | JSCV34A | 1-9/32 | 2-7/32 | 5/8 | 2-3/64 | 39/64 | 14-15/16 | 1.44 |
| 1-1/8 | JSCV36A | 1-23/64 | 2-11/32 | 11/16 | 2-9/32 | 43/64 | 15-7/8 | 1.85 |
| 1-1/4 | JSCV40A | 1-1/2 | 2-19/32 | 35/64 | 2-15/32 | 11/16 | 16-59/64 | 2.29 |

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WRENCHES

Versatile ratcheting spline drive is reversible.



Manufactured in Dallas.



Patented I-Beam removes weight and adds strength.



Open end is offset 13° more swing in tight places.

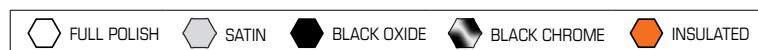


| MM | SPL | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|----|----------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 6 | JSCVM06A | 5/16 | 35/64 | 5/32 | 35/64 | 1/4 | 4-59/64 | 0.05 |
| 7 | JSCVM07A | 5/16 | 39/64 | 11/64 | 43/64 | 1/4 | 5-5/32 | 0.07 |
| 8 | JSCVM08A | 25/64 | 11/16 | 11/64 | 43/64 | 1/4 | 5-27/64 | 0.08 |
| 9 | JSCVM09A | 13/32 | 25/32 | 9/32 | 3/4 | 17/64 | 5-43/64 | 0.10 |
| 10 | JSCVM10A | 29/64 | 27/32 | 13/64 | 25/32 | 9/32 | 5-29/32 | 0.12 |
| 11 | JSCVM11A | 1/2 | 15/16 | 5/16 | 55/64 | 19/64 | 6-29/32 | 0.16 |
| 12 | JSCVM12A | 35/64 | 1-1/64 | 11/32 | 29/32 | 21/64 | 7-23/32 | 0.20 |
| 13 | JSCVM13A | 39/64 | 1-5/64 | 1/4 | 1 | 11/32 | 7-29/32 | 0.24 |
| 14 | JSCVM14A | 11/16 | 1-13/64 | 3/8 | 1-5/64 | 23/64 | 8-49/64 | 0.30 |
| 15 | JSCVM15A | 23/32 | 1-17/64 | 9/32 | 1-7/65 | 3/8 | 9-9/64 | 0.34 |
| 16 | JSCVM16A | 3/4 | 1-21/64 | 13/32 | 1-3/16 | 25/64 | 9-33/64 | 0.40 |
| 17 | JSCVM17A | 53/64 | 1-7/16 | 5/16 | 1-1/4 | 13/32 | 10-17/64 | 0.49 |
| 18 | JSCVM18A | 55/64 | 1-33/64 | 7/16 | 1-9/32 | 27/64 | 10-11/16 | 0.55 |
| 19 | JSCVM19A | 29/32 | 1-37/64 | 11/32 | 1-21/64 | 7/16 | 11-3/64 | 0.60 |
| 21 | JSCVM21A | 31/32 | 1-23/32 | 17/32 | 1-37/64 | 33/64 | 11-13/16 | 0.80 |
| 22 | JSCVM22A | 1-3/64 | 1-7/8 | 17/32 | 1-53/64 | 33/64 | 12-35/64 | 0.86 |
| 24 | JSCVM24A | 1-1/8 | 1-31/32 | 19/32 | 1-53/64 | 37/64 | 13-5/16 | 1.09 |
| 27 | JSCVM27A | 1-9/32 | 2-7/32 | 5/8 | 2-3/64 | 39/64 | 14-15/16 | 1.44 |
| 30 | JSCVM30A | 1-23/64 | 2-11/32 | 11/16 | 2-9/32 | 43/64 | 15-7/8 | 1.85 |
| 32 | JSCVM32A | 1-1/2 | 2-19/32 | 35/64 | 2-15/32 | 11/16 | 16-59/64 | 2.29 |

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REVERSIBLE RATCHETING WRENCHES



WRENCHES

18 PIECE FULL POLISH REVERSIBLE RATCHETING COMBINATION WRENCH SET - SPLINE

Product #: **JSCV-18SA**

|  SPL | INCH | Point Size | Overall Length (in) |
|---------------------------------------------------------------------------------------|-----------|------------|---------------------|
| JSCV08A | 1/4 | Spline | 4-59/64 |
| JSCV09A | 9/32 | Spline | 5-5/32 |
| JSCV10A | 5/16 | Spline | 5-27/64 |
| JSCV11A | 11/32 | Spline | 5-43/64 |
| JSCV12A | 3/8 | Spline | 5-29/32 |
| JSCV14A | 7/16 | Spline | 6-29/32 |
| JSCV16A | 1/2 | Spline | 7-29/32 |
| JSCV18A | 9/16 | Spline | 8-49/64 |
| JSCV20A | 5/8 | Spline | 9-33/64 |
| JSCV22A | 11/16 | Spline | 10-17/64 |
| JSCV24A | 3/4 | Spline | 11-3/64 |
| JSCV26A | 13/16 | Spline | 11-13/16 |
| JSCV28A | 7/8 | Spline | 12-35/64 |
| JSCV30A | 15/16 | Spline | 13-5/16 |
| JSCV32A | 1 | Spline | 14-1/16 |
| JSCV34A | 1-1/16 | Spline | 14-15/16 |
| JSCV36A | 1-1/8 | Spline | 15-7/8 |
| JSCV40A | 1-1/4 | Spline | 16-59/64 |
| J25TR57C | Tool Roll | | |

Weight (lbs): 13.51

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- › Full polish finish resists chipping and rust.
- › Box end is countersunk for easy application to the fastener.
- › Spline design was created for use with specialty spline bolts which are used when weight and size of bolt heads must be minimized.
- › The high contact surface area which is away from fastener points enables turning of highly rounded fasteners.



REVERSIBLE RATCHETING WRENCH SETS

11 PIECE FULL POLISH REVERSIBLE RATCHETING COMBINATION WRENCH SET - SPLINE

Product #: **JSCV-11SA**

|  SPL | INCH | Point Size | Overall Length (in) |
|-----------------------------------------------------------------------------------------|-----------|------------|---------------------|
| JSCV08A | 1/4 | Spline | 4-59/64 |
| JSCV09A | 9/32 | Spline | 5-5/32 |
| JSCV10A | 5/16 | Spline | 5-27/64 |
| JSCV11A | 11/32 | Spline | 5-43/64 |
| JSCV12A | 3/8 | Spline | 5-29/32 |
| JSCV14A | 7/16 | Spline | 6-29/32 |
| JSCV16A | 1/2 | Spline | 7-29/32 |
| JSCV18A | 9/16 | Spline | 8-49/64 |
| JSCV20A | 5/8 | Spline | 9-33/64 |
| JSCV22A | 11/16 | Spline | 10-17/64 |
| JSCV24A | 3/4 | Spline | 11-3/64 |
| J25TR58C | Tool Roll | | |


Weight (lbs): 3.07

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20 PIECE FULL POLISH METRIC REVERSIBLE RATCHETING COMBINATION WRENCH SET - SPLINE

Product #: **JSCVM-20SA**

| Contents |  | Point Size | Overall Length (in) |
|----------|-----------------------------------------------------------------------------------|------------|---------------------|
| JSCVM06A | 6 | Spline | 4-59/64 |
| JSCVM07A | 7 | Spline | 5-5/32 |
| JSCVM08A | 8 | Spline | 5-27/64 |
| JSCVM09A | 9 | Spline | 5-43/64 |
| JSCVM10A | 10 | Spline | 5-29/32 |
| JSCVM11A | 11 | Spline | 6-29/32 |
| JSCVM12A | 12 | Spline | 7-23/32 |
| JSCVM13A | 13 | Spline | 7-29/32 |
| JSCVM14A | 14 | Spline | 8-49/64 |
| JSCVM15A | 15 | Spline | 9-9/64 |
| JSCVM16A | 16 | Spline | 9-33/64 |
| JSCVM17A | 17 | Spline | 10-17/64 |
| JSCVM18A | 18 | Spline | 10-11/16 |
| JSCVM19A | 19 | Spline | 11-3/64 |
| JSCVM21A | 21 | Spline | 11-13/16 |
| JSCVM22A | 22 | Spline | 12-35/64 |
| JSCVM24A | 24 | Spline | 13-5/16 |
| JSCVM27A | 27 | Spline | 14-15/16 |
| JSCVM30A | 30 | Spline | 15-7/8 |
| JSCVM32A | 32 | Spline | 16-59/64 |
| J25TR59C | Tool Roll | | |


Weight (lbs): 13.74

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14 PIECE FULL POLISH METRIC REVERSIBLE RATCHETING COMBINATION WRENCH SET - SPLINE

Product #: **JSCVM-14SA**

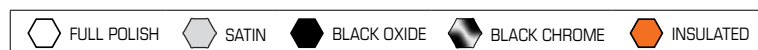
| Contents |  | Point Size | Overall Length (in) |
|----------|-------------------------------------------------------------------------------------|------------|---------------------|
| JSCVM06A | 6 | Spline | 4-59/64 |
| JSCVM07A | 7 | Spline | 5-5/32 |
| JSCVM08A | 8 | Spline | 5-27/64 |
| JSCVM09A | 9 | Spline | 5-43/64 |
| JSCVM10A | 10 | Spline | 5-29/32 |
| JSCVM11A | 11 | Spline | 6-29/32 |
| JSCVM12A | 12 | Spline | 7-23/32 |
| JSCVM13A | 13 | Spline | 7-29/32 |
| JSCVM14A | 14 | Spline | 8-49/64 |
| JSCVM15A | 15 | Spline | 9-9/64 |
| JSCVM16A | 16 | Spline | 9-33/64 |
| JSCVM17A | 17 | Spline | 10-17/64 |
| JSCVM18A | 18 | Spline | 10-11/16 |
| JSCVM19A | 19 | Spline | 11-3/64 |
| J25TR60 | Tool Roll | | |

Weight (lbs): 4.48

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REVERSIBLE RATCHETING WRENCH SETS



WRENCHES

REVERSIBLE RATCHETING COMBINATION WRENCHES

- › Spline wrenches can be used on 6, 12 point, spline and Torx® fasteners.
- › The chrome-vanadium switch lever allows for easy changes in turning direction which helps improve speed.
- › 15° angled offset box end helps keep shank clear of obstructions.
- › Anti-Slip Design (ASD) open end.
- › Black chrome finish is corrosion-resistant and visually distinctive.
- › Full polish finish allows for easy cleanup.
- › Box end is countersunk for easy application to the fastener.



REVERSIBLE RATCHETING WRENCHES

| INCH | SPL | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|--------|--------|---------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 7/32 | JSCV07 | JSCV07T | 9/16 | 1/8 | 35/64 | 1/8 | 5 | 0.06 |
| 1/4 | JSCV08 | JSCV08T | 9/16 | 1/8 | 35/64 | 1/8 | 5 | 0.06 |
| 9/32 | JSCV09 | JSCV09T | 11/16 | 1/8 | 21/32 | 1/8 | 5-1/2 | 0.07 |
| 5/16 | JSCV10 | JSCV10T | 11/16 | 1/8 | 21/32 | 1/8 | 5-1/2 | 0.07 |
| 11/32 | SCV11 | JSCV11T | 3/4 | 1/8 | 23/32 | 1/8 | 5-15/16 | 0.09 |
| 3/8 | JSCV12 | JSCV12T | 13/16 | 1/8 | 25/32 | 1/8 | 6-1/4 | 0.11 |
| 7/16 | JSCV14 | JSCV14T | 15/16 | 1/8 | 55/64 | 1/8 | 6-1/2 | 0.14 |
| 1/2 | JSCV16 | JSCV16T | 1-1/16 | 3/16 | 31/32 | 3/16 | 7 | 0.20 |
| 9/16 | JSCV18 | JSCV18T | 1-1/8 | 3/16 | 1-1/16 | 3/16 | 7-1/2 | 0.22 |
| 5/8 | JSCV20 | JSCV20T | 1-5/16 | 3/16 | 1-3/16 | 3/16 | 8-3/16 | 0.33 |
| 11/16 | JSCV22 | JSCV22T | 1-3/8 | 3/16 | 1-1/4 | 3/16 | 8-7/8 | 0.37 |
| 3/4 | JSCV24 | JSCV24T | 1-9/16 | 1/4 | 1-21/64 | 1/4 | 9-3/4 | 0.48 |
| 13/16 | JSCV26 | JSCV26T | 1-13/16 | 1/4 | 1-37/64 | 1/4 | 11-7/16 | 0.77 |
| 7/8 | JSCV28 | JSCV28T | 1-13/16 | 1/4 | 1-37/64 | 1/4 | 11-7/16 | 0.73 |
| 15/16 | JSCV30 | JSCV30T | 2-1/16 | 1/4 | 1-13/16 | 1/4 | 12-3/4 | 1.02 |
| 1 | JSCV32 | JSCV32T | 2-1/16 | 1/4 | 1-13/16 | 1/4 | 12-3/4 | 1.00 |
| 1-1/16 | JSCV34 | JSCV34T | 2-1/4 | 5/16 | 2-1/16 | 5/16 | 14-1/8 | 1.45 |
| 1-1/8 | JSCV36 | JSCV36T | 2-5/16 | 5/16 | 2-19/64 | 5/16 | 15-7/8 | 1.96 |
| 1-1/4 | JSCV40 | JSCV40T | 2-1/2 | 5/16 | 2-29/64 | 5/16 | 16-3/4 | 2.30 |
| 1-1/2 | JSCV48 | JSCV48T | 2-13/16 | 3/8 | 2-39/64 | 3/8 | 19-5/16 | 3.09 |


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Torx® is a trademark of Acument Intellectual Properties, LLC



WRENCHES

REVERSIBLE RATCHETING COMBINATION WRENCHES (CONT'D)

| MM |  | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|----|-----------------------------------------------------------------------------------|----------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 6 | JSCVM06 | JSCVM06T | 9/16 | 1/8 | 35/64 | 1/8 | 5 | 0.06 |
| 7 | JSCVM07 | JSCVM07T | 11/16 | 1/8 | 21/32 | 1/8 | 5-1/2 | 0.07 |
| 8 | JSCVM08 | JSCVM08T | 11/16 | 1/8 | 21/32 | 1/8 | 5-1/2 | 0.07 |
| 9 | JSCVM09 | JSCVM09T | 3/4 | 1/8 | 23/32 | 1/8 | 5-15/16 | 0.09 |
| 10 | JSCVM10 | JSCVM10T | 13/16 | 1/8 | 25/32 | 1/8 | 6-1/4 | 0.11 |
| 11 | JSCVM11 | JSCVM11T | 15/16 | 1/8 | 55/64 | 1/8 | 6-9/16 | 0.14 |
| 12 | JSCVM12 | JSCVM12T | 1 | 3/16 | 57/64 | 3/16 | 6-3/4 | 0.17 |
| 13 | JSCVM13 | JSCVM13T | 1-11/16 | 3/16 | 31/32 | 3/16 | 7 | 0.20 |
| 14 | JSCVM14 | JSCVM14T | 1-1/8 | 3/16 | 1-1/16 | 3/16 | 7-1/2 | 0.24 |
| 15 | JSCVM15 | JSCVM15T | 1-1/4 | 3/16 | 1-7/64 | 3/16 | 7-7/8 | 0.28 |
| 16 | JSCVM16 | JSCVM16T | 1-5/16 | 3/16 | 1-3/16 | 3/16 | 8-3/16 | 0.33 |
| 17 | JSCVM17 | JSCVM17T | 1-3/8 | 3/16 | 1-1/4 | 3/16 | 8-7/8 | 0.39 |
| 18 | JSCVM18 | JSCVM18T | 1-1/2 | 3/16 | 1-9/32 | 3/16 | 9-5/16 | 0.43 |
| 19 | JSCVM19 | JSCVM19T | 1-9/16 | 1/4 | 1-21/64 | 1/4 | 9-3/4 | 0.50 |
| 21 | JSCVM21 | JSCVM21T | 1-13/16 | 1/4 | 1-37/64 | 1/4 | 11-7/16 | 0.76 |
| 22 | JSCVM22 | JSCVM22T | 1-13/16 | 1/4 | 1-37/64 | 1/4 | 11-7/16 | 0.76 |
| 24 | JSCVM24 | JSCVM24T | 2-1/16 | 1/4 | 1-13/16 | 1/4 | 12-3/4 | 1.06 |
| 27 | JSCVM27 | JSCVM27T | 2-1/4 | 5/16 | 2-1/16 | 5/16 | 14-1/8 | 1.42 |
| 30 | JSCVM30 | JSCVM30T | 2-5/16 | 5/16 | 2-19/64 | 5/16 | 15-7/8 | 1.89 |
| 32 | JSCVM32 | JSCVM32T | 2-1/2 | 5/16 | 2-29/64 | 5/16 | 16-3/4 | 2.32 |
| 34 | JSCVM34 | JSCVM34T | 2-1/2 | 3/8 | 2-29/64 | 3/8 | 18-1/8 | 2.65 |
| 36 | JSCVM36 | JSCVM36T | 2-13/16 | 3/8 | 2-39/64 | 3/8 | 19-5/16 | 3.09 |


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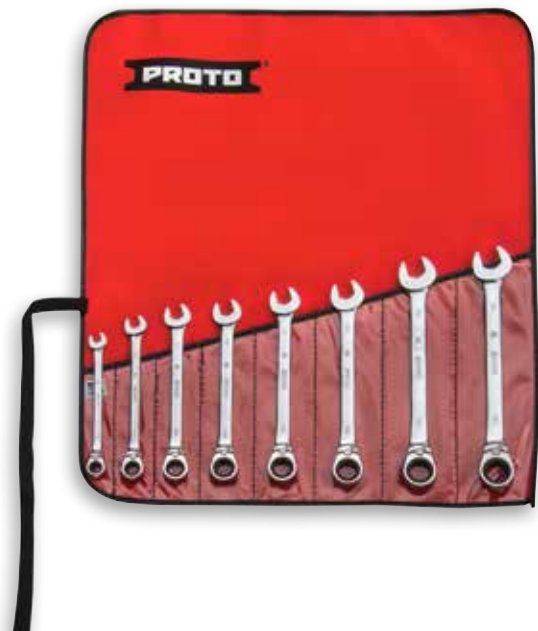
8 PIECE FULL POLISH REVERSIBLE RATCHETING WRENCH SET - 12 POINT

Product #: JSCVMT-8S






| 12 | MM | Point Size | Overall Length (in) |
|----------|-----------|------------|---------------------|
| JSCVM08T | 8 | 12 | 5-1/2 |
| JSCVM10T | 10 | 12 | 6-1/4 |
| JSCVM12T | 12 | 12 | 6-3/4 |
| JSCVM13T | 13 | 12 | 7 |
| JSCVM14T | 14 | 12 | 7-1/2 |
| JSCVM15T | 15 | 12 | 7-7/8 |
| JSCVM17T | 17 | 12 | 8-7/8 |
| JSCVM18T | 18 | 12 | 9-5/16 |
| J25TR61C | Tool Roll | | |

Weight (lbs): 2.15

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REVERSIBLE RATCHETING WRENCH SETS

| | | | | |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  FULL POLISH |  SATIN |  BLACK OXIDE |  BLACK CHROME |  INSULATED |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|

WRENCHES

20 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SETS



9 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SETS



REVERSIBLE RATCHETING WRENCH SETS

| 12 | SPL | | INCH | Overall Length (in) |
|-----------|------------|--|-------------|----------------------------|
| JSCV07T | JSCV07 | | 7/32 | 5 |
| JSCV08T | JSCV08 | | 1/4 | 5 |
| JSCV09T | JSCV09 | | 9/32 | 5-1/2 |
| JSCV10T | JSCV10 | | 5/16 | 5-1/2 |
| JSCV11T | JSCV11 | | 11/32 | 5-15/16 |
| JSCV12T | JSCV12 | | 3/8 | 6-1/4 |
| JSCV14T | JSCV14 | | 7/16 | 6-1/2 |
| JSCV16T | JSCV16 | | 1/2 | 7 |
| JSCV18T | JSCV18 | | 9/16 | 7-1/2 |
| JSCV20T | JSCV20 | | 5/8 | 8-3/16 |
| JSCV22T | JSCV22 | | 11/16 | 8-7/8 |
| JSCV24T | JSCV24 | | 3/4 | 9-3/4 |
| JSCV26T | JSCV26 | | 13/16 | 11-7/16 |
| JSCV28T | JSCV28 | | 7/8 | 11-7/16 |
| JSCV30T | JSCV30 | | 15/16 | 12-3/4 |
| JSCV32T | JSCV32 | | 1 | 12-3/4 |
| JSCV34T | JSCV34 | | 1-1/16 | 14-1/8 |
| JSCV36T | JSCV36 | | 1-1/8 | 15-7/8 |
| JSCV40T | JSCV40 | | 1-1/4 | 16-3/4 |
| JSCV48T | JSCV48 | | 1-1/2 | 19-5/16 |
| J25TR78C | JSCV20SP | | Tool Roll | |







Weight (lbs): 16.20

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| 12 | SPL | | INCH | Overall Length (in) |
|-----------|------------|--|-------------|----------------------------|
| JSCV09T | JSCV09 | | 9/32 | 5-1/2 |
| JSCV10T | JSCV10 | | 5/16 | 5-1/2 |
| JSCV12T | JSCV12 | | 3/8 | 6-1/4 |
| JSCV14T | JSCV14 | | 7/16 | 6-1/2 |
| JSCV16T | JSCV16 | | 1/2 | 7 |
| JSCV18T | JSCV18 | | 9/16 | 7-1/2 |
| JSCV20T | JSCV20 | | 5/8 | 8-3/16 |
| JSCV22T | JSCV22 | | 11/16 | 8-7/8 |
| JSCV24T | JSCV24 | | 3/4 | 9-3/4 |
| JSCV9SP | JSCV9SP | | Tool Roll | |

Weight (lbs): 1.90

ASME B107.100-2010 

 6 POINT
  8 POINT
  12 POINT
  SPLINE
  HEX
  OPEN

22 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SETS



13 PIECE REVERSIBLE RATCHETING COMBINATION WRENCH SETS



12

JSCVMT-22S

SPL

JSCVM-22S

MM

Overall
Length (in)

| | | | |
|----------|-----------|-----------|---------|
| JSCVM06T | JSCVM06 | 6 | 5 |
| JSCVM07T | JSCVM07 | 7 | 5-1/2 |
| JSCVM08T | JSCVM08 | 8 | 5-1/2 |
| JSCVM09T | JSCVM09 | 9 | 5-15/16 |
| JSCVM10T | JSCVM10 | 10 | 6-1/4 |
| JSCVM11T | JSCVM11 | 11 | 6-9/16 |
| JSCVM12T | JSCVM12 | 12 | 6-3/4 |
| JSCVM13T | JSCVM13 | 13 | 7 |
| JSCVM14T | JSCVM14 | 14 | 7-1/2 |
| JSCVM15T | JSCVM15 | 15 | 7-7/8 |
| JSCVM16T | JSCVM16 | 16 | 8-3/16 |
| JSCVM17T | JSCVM17 | 17 | 8-7/8 |
| JSCVM18T | JSCVM18 | 18 | 9-5/16 |
| JSCVM19T | JSCVM19 | 19 | 9-3/4 |
| JSCVM21T | JSCVM21 | 21 | 11-7/16 |
| JSCVM22T | JSCVM22 | 22 | 11-7/16 |
| JSCVM24T | JSCVM24 | 24 | 12-3/4 |
| JSCVM27T | JSCVM27 | 27 | 14-1/8 |
| JSCVM30T | JSCVM30 | 30 | 15-7/8 |
| JSCVM32T | JSCVM32 | 32 | 16-3/4 |
| JSCVM34T | JSCVM34 | 34 | 18-1/8 |
| JSCVM36T | JSCVM36 | 36 | 19-5/16 |
| J25TR80C | JSCVM22SP | Tool Roll | |

Weight (lbs): 17.10

ASME B107.100-2010



FULL POLISH



SATIN



BLACK OXIDE



BLACK CHROME



INSULATED

12

JSCVMT-13S

SPL

JSCVM-13S

MM

Overall
Length (in)

| | | | |
|----------|-----------|-----------|---------|
| JSCVM07T | JSCVM07 | 7 | 5-1/2 |
| JSCVM08T | JSCVM08 | 8 | 5-1/2 |
| JSCVM09T | JSCVM09 | 9 | 5-15/16 |
| JSCVM10T | JSCVM10 | 10 | 6-1/4 |
| JSCVM11T | JSCVM11 | 11 | 6-9/16 |
| JSCVM12T | JSCVM12 | 12 | 6-3/4 |
| JSCVM13T | JSCVM13 | 13 | 7 |
| JSCVM14T | JSCVM14 | 14 | 7-1/2 |
| JSCVM15T | JSCVM15 | 15 | 7-7/8 |
| JSCVM16T | JSCVM16 | 16 | 8-3/16 |
| JSCVM17T | JSCVM17 | 17 | 8-7/8 |
| JSCVM18T | JSCVM18 | 18 | 9-5/16 |
| JSCVM19T | JSCVM19 | 19 | 9-3/4 |
| J25TR81C | JSCVM13SP | Tool Roll | |

Weight (lbs): 3.02

ASME B107.100-2010



REVERSIBLE RATCHETING WRENCH SETS



WARNING: WORK SAFELY WITH TOOLS. WEAR SAFETY GOGGLES.

+1.800.800.TOOL · Fax: +1.800.828.7809 · www.protoindustrial.com



WRENCHES

COMBINATION WRENCHES

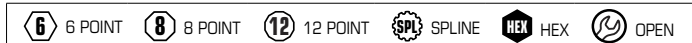


- › Satin and Black Oxide finish meets ASME B107.100-2010 only.
- › Anti-Slip Design (ASD) open end.
- › Fractional sizes 11/32" and smaller and sizes 1-5/16" and larger do not have the ASD feature.
- › Box ends incorporate the TorquePlus™ system.
- › Box end is countersunk for easy application to the fastener.

COMBINATION WRENCHES

| INCH | 6 | 6 | 12 | 12 | 12 | Throat Depth (in) (B) | Outside Head Width (in) (C) | Head Thickness (in) (D) | Outside Head Width (in) (C') | Head Thickness (in) (D') | Length (in) | Overall Length (in) | Weight (lbs) |
|---------|-------------|-----------|-------------|----------|------------|-----------------------|-----------------------------|-------------------------|------------------------------|--------------------------|-------------|---------------------|--------------|
| 1/4 | J1208H-T500 | J1208HA | J1208-T500* | J1208A | J1208BA* | 19/64 | 39/64 | 1/4 | 27/64 | 15/64 | 4-7/8 | 0.04 | |
| 9/32 | - | - | J1209-T500* | J1209A | - | 23/64 | 41/64 | 3/16 | 29/64 | 7/32 | 5-5/32 | 0.06 | |
| 5/16 | J1210H-T500 | J1210HA | J1210-T500* | J1210A | J1210BA* | 3/8 | 45/64 | 9/32 | 33/64 | 17/64 | 5-3/8 | 0.08 | |
| 11/32 | J1211H-T500 | J1211HA | J1211-T500* | J1211A | J1211BA* | 13/32 | 25/32 | 3/16 | 17/32 | 7/32 | 5-5/8 | 0.08 | |
| 3/8 | J1212H-T500 | J1212HASD | J1212-T500* | J1212ASD | J1212BASD* | 13/32 | 13/16 | 3/16 | 39/64 | 5/16 | 6 | 0.11 | |
| 7/16 | J1214H-T500 | J1214HASD | J1214-T500* | J1214ASD | J1214BASD* | 17/32 | 15/16 | 7/32 | 43/64 | 17/64 | 6-1/4 | 0.14 | |
| 1/2 | J1216H-T500 | J1216HASD | J1216-T500* | J1216ASD | J1216BASD* | 39/64 | 1-5/16 | 1/4 | 49/64 | 11/32 | 8 | 0.18 | |
| 9/16 | J1218H-T500 | J1218HASD | J1218-T500* | J1218ASD | J1218BASD* | 11/16 | 1-3/16 | 3/8 | 3/4 | 23/64 | 8-7/8 | 0.21 | |
| 5/8 | J1220H-T500 | J1220HASD | J1220-T500* | J1220ASD | J1220BASD* | 3/4 | 1-21/64 | 19/64 | 55/64 | 13/32 | 8-5/8 | 0.29 | |
| 11/16 | J1222H-T500 | J1222HASD | J1222-T500* | J1222ASD | J1222BASD* | 13/16 | 1-29/64 | 5/16 | 61/64 | 7/16 | 9-13/32 | 0.35 | |
| 3/4 | J1224H-T500 | J1224HASD | J1224-T500* | J1224ASD | J1224BASD* | 57/64 | 1-37/64 | 11/32 | 1-3/32 | 15/32 | 10-1/8 | 0.41 | |
| 13/16 | J1226H-T500 | J1226HASD | J1226-T500* | J1226ASD | J1226BASD* | 31/32 | 1-11/16 | 23/64 | 1-11/64 | 1/2 | 11-7/8 | 0.54 | |
| 7/8 | J1228H-T500 | J1228HASD | J1228-T500* | J1228ASD | J1228BASD* | 1-1/16 | 1-13/16 | 17/32 | 1-1/4 | 33/64 | 12-1/2 | 0.65 | |
| 15/16 | J1230H-T500 | J1230HASD | J1230-T500* | J1230ASD | J1230BASD* | 1-1/8 | 1-29/32 | 19/32 | 1-27/64 | 37/64 | 13-1/4 | 0.74 | |
| 1 | J1232H-T500 | J1232HASD | J1232-T500* | J1232ASD | J1232BASD* | 1-13/64 | 2-1/64 | 19/32 | 1-13/32 | 47/64 | 12-7/8 | 0.95 | |
| 1-1/16 | J1234H-T500 | J1234HASD | J1234-T500* | J1234ASD | J1234BASD* | 1-9/32 | 2-9/64 | 5/8 | 1-31/64 | 39/64 | 15-1/4 | 1.13 | |
| 1-1/8 | J1236H-T500 | J1236HASD | J1236-T500* | J1236ASD | J1236BASD* | 1-23/64 | 2-17/64 | 21/32 | 1-21/32 | 41/64 | 14-7/8 | 1.38 | |
| 1-3/16 | J1238H-T500 | J1238HASD | J1238-T500* | J1238ASD | J1238BASD* | 1 23/64 | 2 25/64 | 3/4 | 1 21/32 | 23/64 | 15-7/8 | 1.54 | |
| 1-1/4 | J1240H-T500 | J1240HASD | J1240-T500* | J1240ASD | J1240BASD* | 1-1/2 | 2-33/64 | 23/32 | 1-3/4 | 47/64 | 16-7/8 | 1.89 | |
| 1-5/16 | - | - | J1242-T500 | J1242 | J1242B | 1-37/64 | 2-41/64 | 3/4 | 1-27/32 | 3/4 | 17-5/8 | 2.15 | |
| 1-3/8 | - | - | J1244-T500 | J1244 | J1244B | 1-21/32 | 2-49/64 | 35/64 | 1-15/16 | 25/32 | 18-1/2 | 2.34 | |
| 1-7/16 | - | - | J1246-T500 | J1246 | J1246B | 1-47/64 | 2-57/64 | 13/16 | 2-3/64 | 51/64 | 19-3/8 | 2.67 | |
| 1-1/2 | - | - | J1248-T500 | J1248 | J1248B | 1-51/64 | 3-1/64 | 27/32 | 2-1/8 | 53/64 | 20-1/4 | 3.18 | |
| 1-9/16 | - | - | J1250-T500 | J1250 | J1250B | 1.795 | 5-63/64 | 39/64 | 2-9/64 | 13/16 | 20-5/16 | 3.18 | |
| 1-5/8 | - | - | J1252-T500 | J1252 | J1252B | 2.015 | 3-25/64 | 1/16 | 2.4235 | 29/32 | 23 | 4.68 | |
| 1-11/16 | - | - | - | J1254 | J1254B | 1-63/64 | 3-25/64 | 21/32 | 2-13/32 | 29/32 | 23 | 4.74 | |
| 1-3/4 | - | - | - | J1256 | J1256B | 2-11/64 | 3-41/64 | 45/64 | 2-39/64 | 31/32 | 25 | 5.64 | |
| 1-13/16 | - | - | - | J1258 | J1258B | 2-11/64 | 3-41/64 | 45/64 | 2-39/64 | 31/32 | 25 | 5.64 | |
| 1-7/8 | - | - | - | J1260 | J1260B | 2-25/64 | 4-1/64 | 49/64 | 2-57/64 | 1-1/16 | 28 | 7.46 | |
| 2 | - | - | - | J1264 | J1264B | 2-25/64 | 4-1/64 | 49/64 | 2-57/64 | 11/16 | 28 | 7.35 | |
| 2-1/16 | - | - | - | J1266 | - | 2-45/64 | 4-33/64 | 27/32 | 3-1/4 | 13/16 | 29-1/2 | 9.88 | |
| 2-1/8 | - | - | - | J1268 | - | 2-45/64 | 4-33/64 | 27/32 | 3-1/4 | 13/16 | 29-1/2 | 9.74 | |
| 2-3/16 | - | - | - | J1270 | - | 2-45/64 | 4-33/64 | 27/32 | 3-1/4 | 1-3/16 | 29-1/2 | 9.45 | |
| 2-1/4 | - | - | - | J1272 | - | 2-45/64 | 4-33/64 | 27/32 | 3-1/4 | 1-3/16 | 29-1/2 | 8.25 | |
| 2-3/8 | - | - | - | J1276 | - | 2-55/64 | 5 | 31/32 | 3-5/8 | 1-5/16 | 31-1/2 | 13.12 | |
| 2-1/2 | - | - | - | J1280 | - | 3 | 5 | 31/32 | 3-5/8 | 1-5/16 | 31-1/2 | 12.49 | |
| 2-9/16 | - | - | - | J1282 | - | 2-1/2 | 4-1/2 | 1 | 3-5/8 | 1-1/2 | 29-3/4 | 13.00 | |
| 2-5/8 | - | - | - | J1284 | - | 2-5/8 | 4-3/4 | 1 | 3-3/4 | 1-11/16 | 29-3/4 | 13.00 | |
| 2-3/4 | - | - | - | J1288 | - | 2-9/16 | 4-3/4 | 1 | 3-3/4 | 1-11/16 | 29-3/4 | 13.00 | |
| 2-13/16 | - | - | - | - | J1290 | 2-15/16 | 5-1/2 | 1-1/8 | 4-1/4 | 1-1/2 | 34 | 18.00 | |
| 2-7/8 | - | - | - | - | J1292 | 2-7/8 | 5-1/2 | 1-1/8 | 4-3/4 | 1-7/16 | 34 | 18.00 | |
| 2-15/16 | - | - | - | - | J1294 | 2-15/16 | 5-1/2 | 1-1/8 | 4-3/4 | 1-1/2 | 34 | 18.00 | |
| 3 | - | - | - | - | J1296 | 2-15/16 | 5-1/2 | 1-1/8 | 4-3/4 | 1-1/2 | 34 | 18.00 | |
| 3-1/8 | - | - | - | - | J12100 | 2-7/8 | 5-1/2 | 1-1/8 | 4-3/4 | 1-1/2 | 34 | 18.00 | |
| 3-1/4 | - | - | - | - | J12104 | 4 | 7 | 1-11/16 | 5-1/2 | 2 | 37 | 35.00 | |
| 3-1/2 | - | - | - | - | J12112 | 3-7/8 | 7 | 1-5/8 | 5-7/8 | 2-1/8 | 37 | 35.00 | |
| 3-3/4 | - | - | - | - | J12120 | 3-3/4 | 7 | 1-3/4 | 6-1/8 | 2-1/4 | 37 | 35.00 | |
| 3-7/8 | - | - | - | - | J12124 | 3-3/4 | 7 | 1-5/8 | 6-1/8 | 2-1/4 | 37 | 35.00 | |

*SAE AS954G ASME B107.100-2010

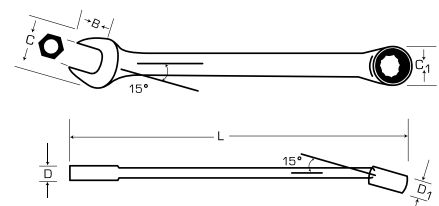


METRIC COMBINATION WRENCHES

- ▶ Metric sizes 9mm and smaller and sizes 36 mm and larger do not have the ASD feature.
- ▶ Satin and Black Oxide finish meets ASME B107.100-2010 only.

| MM | 6 | 6 | 12 | 12 | 12 | Throat Depth (in) (B) | Outside Head Width (in) (C) | Head Thickness (in) (D) | Outside Head Width (in) (C1) | Head Thickness (in) (D1) | Length (in) | Overall Length (in) | Weight (lbs) |
|----|--------------|------------|--------------|-----------|-------------|-----------------------|-----------------------------|-------------------------|------------------------------|--------------------------|-------------|---------------------|--------------|
| 6 | J1206MH-T500 | J1206MHA | J1206M-T500* | J1206MA | J1206MBA* | 19/64 | 35/64 | 5/32 | 25/64 | 5/32 | 4-29/32 | 4-29/32 | 0.05 |
| 7 | J1207MH-T500 | J1207MHA | J1207M-T500* | J1207MA | J1207MBA* | 5/16 | 19/32 | 1/4 | 13/32 | 15/64 | 5-5/32 | 5-5/32 | 0.06 |
| 8 | J1208MH-T500 | J1208MHA | J1208M-T500* | J1208MA | J1208MBA* | 25/64 | 11/16 | 9/32 | 1/2 | 17/64 | 5-13/32 | 5-13/32 | 0.07 |
| 9 | J1209MH-T500 | J1209MHA | J1209M-T500* | J1209MA | J1209MBA* | 13/32 | 3/4 | 9/32 | 35/64 | 17/64 | 5-21/32 | 5-21/32 | 0.08 |
| 10 | J1210MH-T500 | J1210MHASD | J1210M-T500* | J1210MASD | J1210MBASD* | 31/64 | 7/8 | 7/32 | 21/32 | 5/16 | 5-29/32 | 5-29/32 | 0.11 |
| 11 | J1211MH-T500 | J1211MHASD | J1211M-T500* | J1211MASD | J1211MBASD* | 33/64 | 59/64 | 11/32 | 11/16 | 21/64 | 6-1/4 | 6-1/4 | 0.15 |
| 12 | J1212MH-T500 | J1212MHASD | J1212M-T500* | J1212MASD | J1212MBASD* | 9/16 | 1 | 1/4 | 47/64 | 11/32 | 7-45/64 | 7-45/64 | 0.18 |
| 13 | J1213MH-T500 | J1213MHASD | J1213M-T500* | J1213MASD | J1213MBASD* | 39/64 | 1-1/32 | 1/4 | 25/32 | 11/32 | 7-29/32 | 7-29/32 | 0.21 |
| 14 | J1214MH-T500 | J1214MHASD | J1214M-T500* | J1214MASD | J1214MBASD* | 11/16 | 1-3/16 | 3/8 | 55/64 | 23/64 | 8-13/16 | 8-13/16 | 0.29 |
| 15 | J1215MH-T500 | J1215MHASD | J1215M-T500* | J1215MASD | J1215MBASD* | 3/4 | 1-1/4 | 3/8 | 55/64 | 23/64 | 8-5/8 | 8-5/8 | 0.25 |
| 16 | J1216MH-T500 | J1216MHASD | J1216M-T500* | J1216MASD | J1216MBASD* | 3/4 | 1-21/64 | 5/16 | 15/16 | 13/32 | 9-35/64 | 9-35/64 | 0.26 |
| 17 | J1217MH-T500 | J1217MHASD | J1217M-T500* | J1217MASD | J1217MBASD* | 53/64 | 1-25/64 | 21/64 | 59/64 | 7/16 | 9-13/32 | 9-13/32 | 0.38 |
| 18 | J1218MH-T500 | J1218MHASD | J1218M-T500* | J1218MASD | J1218MBASD* | 55/64 | 1-33/64 | 15/32 | 1-1/64 | 29/64 | 10-1/8 | 10-1/8 | 0.41 |
| 19 | J1219MH-T500 | J1219MHASD | J1219M-T500* | J1219MASD | J1219MBASD* | 29/32 | 1-37/64 | 11/32 | 1-7/64 | 15/32 | 10-1/2 | 10-1/2 | 0.46 |
| 20 | - | - | J1220M-T500* | J1220MASD | J1220MBASD* | 63/64 | 1-11/16 | 1/2 | 1-3/16 | 31/64 | 11-27/64 | 11-27/64 | 0.55 |
| 21 | - | - | J1221M-T500* | J1221MASD | J1221MBASD* | 63/64 | 1-11/16 | 1/2 | 1-3/16 | 31/64 | 11-13/16 | 11-13/16 | 0.54 |
| 22 | - | - | J1222M-T500* | J1222MASD | J1222MBASD* | 1-3/64 | 1-25/32 | 3/8 | 1-17/64 | 1/2 | 12-17/32 | 12-17/32 | 0.62 |
| 23 | - | - | J1223M-T500* | J1223MASD | J1223MBASD* | 1-1/8 | 1-57/64 | 9/16 | 1-11/32 | 35/64 | 12-59/64 | 12-59/64 | 0.77 |
| 24 | - | - | J1224M-T500* | J1224MASD | J1224MBASD* | 1-1/8 | 1-57/64 | 9/16 | 1-11/32 | 37/64 | 12-7/8 | 12-7/8 | 0.77 |
| 25 | - | - | J1225M-T500* | J1225MASD | J1225MBASD* | 1-13/64 | 2 | 27/64 | 1-27/64 | 37/64 | 12-7/8 | 12-7/8 | 0.85 |
| 26 | - | - | J1226M-T500* | J1226MASD | J1226MBASD* | 1-13/64 | 2-1/64 | 27/64 | 1-27/64 | 19/32 | 14-41/64 | 14-41/64 | 0.97 |
| 27 | - | - | J1227M-T500* | J1227MASD | J1227MBASD* | 1-7/32 | 2-9/64 | 5/8 | 1-31/64 | 21/32 | 14-7/8 | 14-7/8 | 1.17 |
| 28 | - | - | J1228M-T500* | J1228MASD | J1228MBASD* | 1-23/64 | 2-17/64 | 21/32 | 1-21/32 | 21/32 | 14-7/8 | 14-7/8 | 1.37 |
| 29 | - | - | J1229M-T500* | J1229MASD | - | 1-23/64 | 2-17/64 | 21/32 | 1-49/64 | 21/32 | 14-7/8 | 14-7/8 | 1.39 |
| 30 | - | - | J1230M-T500* | J1230MASD | J1230MBASD* | 1-23/64 | 2-17/64 | 21/32 | 2-3/64 | 47/64 | 15-55/64 | 15-55/64 | 1.41 |
| 32 | - | - | J1232M-T500* | J1232MASD | J1232MBASD* | 1-1/2 | 2-33/64 | 23/32 | 2-27/64 | 47/64 | 16-59/64 | 16-59/64 | 1.82 |
| 34 | - | - | J1234M-T500 | - | - | 1-9/32 | 2-9/64 | 39/64 | 1-31/64 | 3/4 | 15-1/4 | 15-1/4 | 1.13 |
| 36 | - | - | J1236M-T500 | J1236M | - | 1-23/64 | 2-17/64 | 41/64 | 1-21/32 | 41/64 | 15-7/8 | 15-7/8 | 1.38 |
| 41 | - | - | - | J1241M | - | 2-1/64 | 3-25/64 | 15/16 | 2-27/64 | 59/64 | 23 | 23 | 4.34 |
| 46 | - | - | - | J1246M | - | 2-11/64 | 3-41/64 | 43/64 | 2-39/64 | 31/32 | 25 | 25 | 5.50 |
| 50 | - | - | - | J1250M | - | 2-25/64 | 4-1/64 | 47/64 | 2-57/64 | 1-1/16 | 28 | 28 | 6.97 |
| 55 | - | - | - | J1255M | - | 2-9/16 | 4-1/4 | 1 | 3-1/4 | 1-3/16 | 28-3/4 | 28-3/4 | 10.00 |
| 60 | - | - | - | J1260M | - | 2-13/32 | 4-1/2 | 1 | 3-5/8 | 1-1/2 | 29-3/4 | 29-3/4 | 13.00 |
| 65 | - | - | - | J1265M | - | 2-3/8 | 4-1/2 | 1 | 3-5/8 | 1-1/2 | 29-3/4 | 29-3/4 | 13.00 |
| 70 | - | - | - | J1270M | - | 2-9/16 | 4-3/4 | 1 | 3-3/4 | 1-5/8 | 29-3/4 | 29-3/4 | 13.00 |
| 75 | - | - | - | - | J1275M | 2-15/16 | 5-1/2 | 1-1/8 | 4-3/4 | 1-1/2 | 34 | 34 | 18.00 |
| 80 | - | - | - | - | J1280M | 2-7/8 | 5-1/2 | 1-1/8 | 4-3/4 | 1-9/16 | 34 | 34 | 18.00 |

*SAE AS955 ASME B107.100-2010 



| | | | | |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  FULL POLISH |  SATIN |  BLACK OXIDE |  BLACK CHROME |  INSULATED |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|

WRENCHES

15 PIECE COMBINATION ASD WRENCH SETS - 12 POINT

| 12 | 12 | INCH | Point Size | Overall Length (in) |
|---------------------|------------------|-------------|-------------------|----------------------------|
| J1200F-T500* | J1200FASD | | | |
| J1210-T500 | J1210A | 5/16 | 12 | 5-3/8 |
| J1212-T500 | J1212ASD | 3/8 | 12 | 6 |
| J1214-T500 | J1214ASD | 7/16 | 12 | 7 |
| J1216-T500 | J1216ASD | 1/2 | 12 | 8 |
| J1218-T500 | J1218ASD | 9/16 | 12 | 8-7/8 |
| J1220-T500 | J1220ASD | 5/8 | 12 | 9-1/2 |
| J1222-T500 | J1222ASD | 11/16 | 12 | 10-1/4 |
| J1224-T500 | J1224ASD | 3/4 | 12 | 11 |
| J1226-T500 | J1226ASD | 13/16 | 12 | 11-7/8 |
| J1228-T500 | J1228ASD | 7/8 | 12 | 12-1/2 |
| J1230-T500 | J1230ASD | 15/16 | 12 | 13-1/4 |
| J1232-T500 | J1232ASD | 1 | 12 | 14 |
| J1234-T500 | J1234ASD | 1-1/16 | 12 | 15-1/4 |
| J1236-T500 | J1236ASD | 1-1/8 | 12 | 15-7/8 |
| J1240-T500 | J1240ASD | 1-1/4 | 12 | 16-7/8 |
| J25TR34C | J25TR34C | Tool Roll | | |

Weight (lbs): 9.75 *SAE AS954G ASME B107.100-2010 




COMBINATION WRENCH SETS

14 PIECE BLACK OXIDE COMBINATION ASD WRENCH SET - 12 POINT

Product #: J1200FBASD

- ▶ Non-reflective black oxide finish for use where non-plated products are required.

| 12 | INCH | Point Size | Overall Length (in) |
|-----------|-------------|-------------------|----------------------------|
| J1212BASD | 3/8 | 12 | 6 |
| J1214BASD | 7/16 | 12 | 7 |
| J1216BASD | 1/2 | 12 | 8-7/8 |
| J1218BASD | 9/16 | 12 | 8-7/8 |
| J1220BASD | 5/8 | 12 | 9-1/2 |
| J1222BASD | 11/16 | 12 | 10-1/4 |
| J1224BASD | 3/4 | 12 | 11 |
| J1226BASD | 13/16 | 12 | 11-7/8 |
| J1228BASD | 7/8 | 12 | 12-1/2 |
| J1230BASD | 15/16 | 12 | 13-1/4 |
| J1232BASD | 1 | 12 | 14 |
| J1234BASD | 1-1/16 | 12 | 15-1/4 |
| J1236BASD | 1-1/8 | 12 | 15-7/8 |
| J1240BASD | 1-1/4 | 12 | 16-7/8 |
| J25TR41C | Tool Roll | | |

Weight (lbs): 9.70 SAE AS954G ASME B107.100-2010 



 6 POINT
  8 POINT
  12 POINT
  SPLINE
  HEX
  OPEN

WRENCHES

11 PIECE COMBINATION ASD WRENCH SETS - 12 POINT



12

J1200H11T5*

12

J1200GASD11

INCH

Point Size

Overall Length (in)

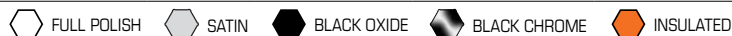
| | | INCH | Point Size | Overall Length (in) |
|------------|-----------|-------------|-------------------|----------------------------|
| - | J1208A | 1/4 | 12 | 4-7/8 |
| J1212-T500 | J1212ASD | 3/8 | 12 | 6 |
| J1214-T500 | J1214ASD | 7/16 | 12 | 7 |
| J1216-T500 | J1216ASD | 1/2 | 12 | 8 |
| J1218-T500 | J1218ASD | 9/16 | 12 | 8-7/8 |
| J1220-T500 | J1220ASD | 5/8 | 12 | 9-1/2 |
| J1222-T500 | J1222ASD | 11/16 | 12 | 10-1/4 |
| J1224-T500 | J1224ASD | 3/4 | 12 | 11 |
| J1226-T500 | J1226ASD | 13/16 | 12 | 11-7/8 |
| J1228-T500 | J1228ASD | 7/8 | 12 | 12-1/2 |
| J1230-T500 | J1230ASD | 15/16 | 12 | 13-1/4 |
| J1232-T500 | - | 1 | 12 | 14 |
| - | Tool Roll | | | |

Weight (lbs): 12.50

*SAE AS954G ASME B107.100-2010



COMBINATION WRENCH SETS



WRENCHES

10 PIECE COMBINATION ASD WRENCH SETS



J1200GHASD-T500



J1200GASD

6

J1200GHASDT500

6

J1200GHASD

12

J1200GASD

INCH

Overall Length (in)

| | | | | |
|----------------|-----------|----------|-----------|--------|
| J1214HASD-T500 | J1214HASD | J1214ASD | 7/16 | 7 |
| J1216HASD-T500 | J1216HASD | J1216ASD | 1/2 | 8 |
| J1218HASD-T500 | J1218HASD | J1218ASD | 9/16 | 8-7/8 |
| J1220HASD-T500 | J1220HASD | J1220ASD | 5/8 | 9-1/2 |
| J1222HASD-T500 | J1222HASD | J1222ASD | 11/16 | 10-1/4 |
| J1224HASD-T500 | J1224HASD | J1224ASD | 3/4 | 11 |
| J1226HASD-T500 | J1226HASD | J1226ASD | 13/16 | 11-7/8 |
| J1228HASD-T500 | J1228HASD | J1228ASD | 7/8 | 12-1/2 |
| J1230HASD-T500 | J1230HASD | J1230ASD | 15/16 | 13-1/4 |
| J1232HASD-T500 | J1232HASD | J1232ASD | 1 | 14 |
| J25TR05C | J25TR05C | J25TR05C | Tool Roll | |

Weight (lbs): 4.88

ASME B107.100-2010



COMBINATION WRENCH SETS

7 PIECE COMBINATION ASD WRENCH SETS - 12 POINT



J1200HASD



J1200HBASD

12

J1200H-T500*

12

J1200HASD

12

J1200HBASD*

INCH

Point Size

Overall Length (in)

| | | | | | |
|------------|----------|-----------|-----------|----|--------|
| J1212-T500 | J1212ASD | J1212BASD | 3/8 | 12 | 6 |
| J1214-T500 | J1214ASD | J1214BASD | 7/16 | 12 | 7 |
| J1216-T500 | J1216ASD | J1216BASD | 1/2 | 12 | 8 |
| J1218-T500 | J1218ASD | J1218BASD | 9/16 | 12 | 8-7/8 |
| J1220-T500 | J1220ASD | J1220BASD | 5/8 | 12 | 9-1/2 |
| J1222-T500 | J1222ASD | J1222BASD | 11/16 | 12 | 10-1/4 |
| J1224-T500 | J1224ASD | J1224BASD | 3/4 | 12 | 11 |
| J25TR33C | J25TR37C | J25TR37C | Tool Roll | | |

Weight (lbs): 2.40

*SAE AS954G ASME B107.100-2010




6 6 POINT
8 8 POINT
12 12 POINT
SPL SPLINE
HEX HEX
OPEN

17 PIECE FULL POLISH METRIC COMBINATION WRENCH SET - 12 POINT

Product #: **J1200RM-T500**


| 12 | MM | Point Size | Overall Length (in) |
|-------------|-----------|-------------------|----------------------------|
| J1207M-T500 | 7 | 12 | 5-5/32 |
| J1208M-T500 | 8 | 12 | 5-13/32 |
| J1209M-T500 | 9 | 12 | 5-21/32 |
| J1210M-T500 | 10 | 12 | 5-29/32 |
| J1211M-T500 | 11 | 12 | 6-29/32 |
| J1212M-T500 | 12 | 12 | 7-45/64 |
| J1213M-T500 | 13 | 12 | 7-29/32 |
| J1214M-T500 | 14 | 12 | 8-13/16 |
| J1215M-T500 | 15 | 12 | 9-5/32 |
| J1216M-T500 | 16 | 12 | 9-35/64 |
| J1217M-T500 | 17 | 12 | 10-9/32 |
| J1218M-T500 | 18 | 12 | 10-11/16 |
| J1219M-T500 | 19 | 12 | 11-1/32 |
| J1220M-T500 | 20 | 12 | 11-27/64 |
| J1221M-T500 | 21 | 12 | 11-13/16 |
| J1222M-T500 | 22 | 12 | 12-17/32 |
| J1224M-T500 | 24 | 12 | 13-5/16 |
| J25TR36C | Tool Roll | | |

Weight (lbs): 6.92 SAE AS955 ASME B107.100-2010 



15 PIECE METRIC COMBINATION ASD WRENCH SETS - 12 POINT






| 12 | 12 | MM | Point Size | Overall Length (in) |
|-----------|------------|-----------|-------------------|----------------------------|
| J1207MA | J1207MBA | 7 | 12 | 5-5/32 |
| J1208MA | J1208MBA | 8 | 12 | 5-13/32 |
| J1209MA | J1209MBA | 9 | 12 | 5-21/32 |
| J1210MASD | J1210MBASD | 10 | 12 | 5-29/32 |
| J1211MASD | J1211MBASD | 11 | 12 | 6-29/32 |
| J1212MASD | J1212MBASD | 12 | 12 | 7-45/64 |
| J1213MASD | J1213MBASD | 13 | 12 | 7-29/32 |
| J1214MASD | J1214MBASD | 14 | 12 | 8-13/16 |
| J1215MASD | J1215MBASD | 15 | 12 | 9-5/32 |
| J1216MASD | J1216MBASD | 16 | 12 | 9-35/64 |
| J1217MASD | J1217MBASD | 17 | 12 | 10-9/32 |
| J1218MASD | J1218MBASD | 18 | 12 | 10-11/16 |
| J1219MASD | J1219MBASD | 19 | 12 | 11-1/32 |
| J1220MASD | J1220MBASD | 20 | 12 | 11-27/64 |
| J1221MASD | J1221MBASD | 21 | 12 | 11-13/16 |
| J25TR41C | J25TR41C | Tool Roll | | |

Weight (lbs): 4.25 SAE AS955 ASME B107.100-2010 



J1200F-MBASD

COMBINATION WRENCH SETS


| | | | | |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  FULL POLISH |  SATIN |  BLACK OXIDE |  BLACK CHROME |  INSULATED |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|

WRENCHES

14 PIECE FULL POLISH METRIC COMBINATION WRENCH SET- 12 POINT

Product #: **J1200HM14T5**

| ⑫ | MM | Point Size | Overall Length (in) |
|-------------|----|------------|---------------------|
| J1207M-T500 | 7 | 12 | 5-5/32 |
| J1208M-T500 | 8 | 12 | 5-13/32 |
| J1209M-T500 | 9 | 12 | 5-21/32 |
| J1210M-T500 | 10 | 12 | 5-29/32 |
| J1211M-T500 | 11 | 12 | 6-29/32 |
| J1212M-T500 | 12 | 12 | 7-45/64 |
| J1213M-T500 | 13 | 12 | 7-29/32 |
| J1214M-T500 | 14 | 12 | 8-13/16 |
| J1215M-T500 | 15 | 12 | 9-5/32 |
| J1216M-T500 | 16 | 12 | 9-35/64 |
| J1217M-T500 | 17 | 12 | 10-9/32 |
| J1218M-T500 | 18 | 12 | 10-11/16 |
| J1219M-T500 | 19 | 12 | 11-1/32 |
| J1220M-T500 | 20 | 12 | 11-27/64 |

Weight (lbs): 3.77 SAE AS955 ASME B107.100-2010 




COMBINATION WRENCH SETS

11 PIECE FULL POLISH METRIC COMBINATION WRENCH SET - 12 POINT

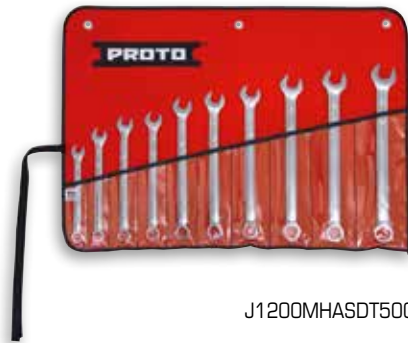
Product #: **J1200HM11T5**

| ⑫ | MM | Point Size | Overall Length (in) |
|-------------|----|------------|---------------------|
| J1207M-T500 | 7 | 12 | 5-5/32 |
| J1209M-T500 | 9 | 12 | 5-21/32 |
| J1210M-T500 | 10 | 12 | 5-29/32 |
| J1211M-T500 | 11 | 12 | 6-29/32 |
| J1212M-T500 | 12 | 12 | 7-45/64 |
| J1213M-T500 | 13 | 12 | 7-29/32 |
| J1214M-T500 | 14 | 12 | 8-13/16 |
| J1215M-T500 | 15 | 12 | 9-5/32 |
| J1217M-T500 | 17 | 12 | 10-9/32 |
| J1218M-T500 | 18 | 12 | 10-11/16 |
| J1219M-T500 | 19 | 12 | 11-1/32 |

Weight (lbs): 2.89 SAE AS955 ASME B107.100-2010 



10 PIECE METRIC COMBINATION ASD WRENCH SETS



J1200MHASDT500



J1200MHASD



J1200K-MASD

6

J1200MHASDT500

6

J1200MHASD

12

J1200K-MASD

MM

Overall Length (in)

| J1210MH-T500 | J1210MHASD | J1210MASD | 10 | 5-29/32 |
|--------------|------------|-----------|-----------|----------|
| J1211MH-T500 | J1211MHASD | J1211MASD | 11 | 6-29/32 |
| J1212MH-T500 | J1212MHASD | J1212MASD | 12 | 7-45/64 |
| J1213MH-T500 | J1213MHASD | J1213MASD | 13 | 7-29/32 |
| J1214MH-T500 | J1214MHASD | J1214MASD | 14 | 8-13/16 |
| J1215MH-T500 | J1215MHASD | J1215MASD | 15 | 9-5/32 |
| J1216MH-T500 | J1216MHASD | J1216MASD | 16 | 9-35/64 |
| J1217MH-T500 | J1217MHASD | J1217MASD | 17 | 10-9/32 |
| J1218MH-T500 | J1218MHASD | J1218MASD | 18 | 10-11/16 |
| J1219MH-T500 | J1219MHASD | J1219MASD | 19 | 11-1/32 |
| J25TR39C | J25TR39C | J25TR39C | Toll Roll | |

Weight (lbs): 2.71

ASME B107.100-2010



9 PIECE METRIC COMBINATION ASD WRENCH SETS - 12 POINT

12

J1200HM-T500*

12

J1200H-MASD

MM

Point Size

Overall Length (in)

| J1207M-T500 | J1207MA | 7 | 12 | 5-5/32 |
|-------------|-----------|-----------|----|---------|
| J1208M-T500 | J1208MA | 8 | 12 | 5-13/32 |
| J1209M-T500 | J1209MA | 9 | 12 | 5-21/32 |
| J1210M-T500 | J1210MASD | 10 | 12 | 5-29/32 |
| J1211M-T500 | J1211MASD | 11 | 12 | 6-29/32 |
| J1212M-T500 | J1212MASD | 12 | 12 | 7-45/64 |
| J1213M-T500 | J1213MASD | 13 | 12 | 7-29/32 |
| J1214M-T500 | J1214MASD | 14 | 12 | 8-13/16 |
| J1215M-T500 | J1215MASD | 15 | 12 | 9-5/32 |
| J25TR35C | J25TR38C | Tool Roll | | |

Weight (lbs): 1.43

*SAE AS955

ASME B107.100-2010



COMBINATION WRENCH SETS



FULL POLISH



SATIN



BLACK OXIDE



BLACK CHROME



INSULATED



WARNING: WORK SAFELY WITH TOOLS. WEAR SAFETY GOGGLES.


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WRENCHES

9 PIECE METRIC COMBINATION WRENCH SETS - 12 POINT

| 12 | 12 | MM | Point Size | Overall Length (in) |
|-------------|------------|----|------------|---------------------|
| J1200M9T5 | J1200MB9 | | | |
| J1210M-T500 | J1210MBASD | 10 | 12 | 5-29/32 |
| J1211M-T500 | J1211MBASD | 11 | 12 | 6-29/32 |
| J1212M-T500 | J1212MBASD | 12 | 12 | 7-45/64 |
| J1213M-T500 | J1213MBASD | 13 | 12 | 7-29/32 |
| J1214M-T500 | J1214MBASD | 14 | 12 | 8-13/16 |
| J1215M-T500 | J1215MBASD | 15 | 12 | 9-5/32 |
| J1216M-T500 | J1216MBASD | 16 | 12 | 9-35/64 |
| J1217M-T500 | J1217MBASD | 17 | 12 | 10-9/32 |
| J1218M-T500 | J1218MBASD | 18 | 12 | 10-11/16 |

Weight (lbs): 2.47 SAE AS955 ASME B107.100-2010 




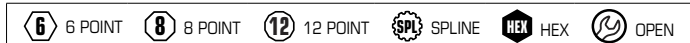
COMBINATION WRENCH SETS

6 PIECE BLACK OXIDE METRIC COMBINATION WRENCH SET - 12 POINT

Product #: J1200MB6

| 12 | MM | Point Size | Overall Length (in) |
|------------|----|------------|---------------------|
| J1210MBASD | 10 | 12 | 5-29/32 |
| J1211MBASD | 11 | 12 | 6-29/32 |
| J1212MBASD | 12 | 12 | 7-45/64 |
| J1213MBASD | 13 | 12 | 7-29/32 |
| J1214MBASD | 14 | 12 | 8-13/16 |
| J1215MBASD | 15 | 12 | 9-5/32 |


Weight (lbs): 2.47 SAE AS955 ASME B107.100-2010 



11 PIECE SHORT COMBINATION WRENCH SETS - 12 POINT

| 12 | 12 | INCH | Point Size | Overall Length (in) |
|-------------------|--------------------|-------------|-------------------|----------------------------|
| J1200ES-11 | J1200ESB-11 | | | |
| J1208ES | J1208ESB | 1/4 | 12 | 3-1/4 |
| J1209ES | J1209ESB | 9/32 | 12 | 3-3/8 |
| J1210ES | J1210ESB | 5/16 | 12 | 3-1/2 |
| J1211ES | J1211ESB | 11/32 | 12 | 3-5/8 |
| J1212ES | J1212ESB | 3/8 | 12 | 3-3/4 |
| J1214ES | J1214ESB | 7/16 | 12 | 3-15/16 |
| J1216ES | J1216ESB | 1/2 | 12 | 4-5/16 |
| J1218ES | J1218ESB | 9/16 | 12 | 4-1/2 |
| J1220ES | J1220ESB | 5/8 | 12 | 4-7/8 |
| J1222ES | J1222ESB | 11/16 | 12 | 5-1/16 |
| J1224ES | J1224ESB | 3/4 | 12 | 5-7/16 |
| J25TR69C | J25TR69C | Tool Roll | | |

Weight (lbs): 1.55

ASME B107.100-2035 

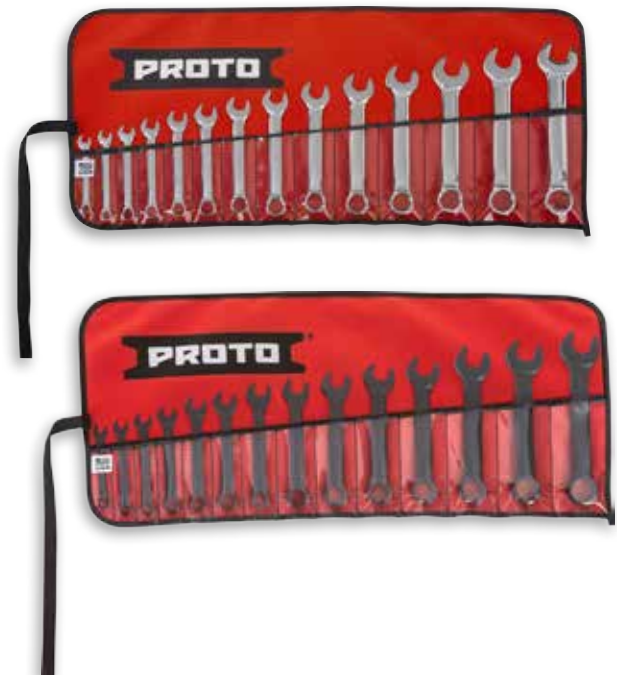


14 PIECE METRIC SHORT COMBINATION WRENCH SETS - 12 POINT






| 12 | 12 | MM | Point Size | Overall Length (in) |
|--------------------|---------------------|-----------|-------------------|----------------------------|
| J1200MES-14 | J1200MESB-14 | | | |
| J1206MES | J1206MESB | 6 | 12 | 3-1/4 |
| J1207MES | J1207MESB | 7 | 12 | 3-3/8 |
| J1208MES | J1208MESB | 8 | 12 | 3-1/2 |
| J1209MES | J1209MESB | 9 | 12 | 3-5/8 |
| J1210MES | J1210MESB | 10 | 12 | 3-3/4 |
| J1211MES | J1211MESB | 11 | 12 | 3-15/16 |
| J1212MES | J1212MESB | 12 | 12 | 4-1/8 |
| J1213MES | J1213MESB | 13 | 12 | 4-5/16 |
| J1214MES | J1214MESB | 14 | 12 | 4-1/2 |
| J1215MES | J1215MESB | 15 | 12 | 4-11/16 |
| J1216MES | J1216MESB | 16 | 12 | 4-7/8 |
| J1217MES | J1217MESB | 17 | 12 | 5-1/16 |
| J1218MES | J1218MESB | 18 | 12 | 5-1/4 |
| J1219MES | J1219MESB | 19 | 12 | 5-7/16 |
| J25TR70C | J25TR70C | Tool Roll | | |

Weight (lbs): 2.14

ASME B107.100-2036 



SHORT COMBINATION WRENCH SETS

| | | | | |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  FULL POLISH |  SATIN |  BLACK OXIDE |  BLACK CHROME |  INSULATED |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|

WRENCHES

SHORT COMBINATION WRENCHES - 12 POINT



- ▶ 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- ▶ The wrench self aligns with the fastener.
- ▶ Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- ▶ The box end is countersunk for easy application to the fastener.
- ▶ 15° angled offset helps keep shank clear of obstructions.
- ▶ Anti-Slip Design (ASD) open end.
- ▶ Box ends incorporate the TorquePlus™ system.



SHORT COMBINATION WRENCHES

| INCH | 12 | 12 | Throat Depth 1 (in) (B) | Outside Head Width 1 (in) (C) | Head Thickness 1 (in) (D) | Outside Head Width 2 (in) (C1) | Head Thickness 2 (in) (D1) | Overall Length (in) | Weight (lbs) |
|--------|---------|----------|-------------------------|-------------------------------|---------------------------|--------------------------------|----------------------------|---------------------|--------------|
| 1/4 | J1208ES | J1208ESB | 19/64 | 19/32 | 11/64 | 7/16 | 3/16 | 3-1/4 | 0.03 |
| 9/32 | J1209ES | J1209ESB | 19/64 | 41/64 | 3/16 | 29/64 | 7/32 | 3-3/8 | 0.04 |
| 5/16 | J1210ES | J1210ESB | 3/8 | 47/64 | 1/4 | 33/64 | 15/64 | 3-1/2 | 0.04 |
| 11/32 | J1211ES | J1211ESB | 13/32 | 13/16 | 13/64 | 9/16 | 1/4 | 3-5/8 | 0.05 |
| 3/8 | J1212ES | J1212ESB | 7/16 | 7/8 | 7/32 | 39/64 | 9/32 | 3-3/4 | 0.07 |
| 7/16 | J1214ES | J1214ESB | 31/64 | 63/64 | 5/16 | 43/64 | 19/64 | 3-15/16 | 0.08 |
| 1/2 | J1216ES | J1216ESB | 37/64 | 1-7/64 | 3/8 | 51/64 | 23/64 | 4-5/16 | 0.12 |
| 9/16 | J1218ES | J1218ESB | 43/64 | 1-1/4 | 19/64 | 57/64 | 3/8 | 4-1/2 | 0.15 |
| 5/8 | J1220ES | J1220ESB | 47/64 | 1-23/64 | 7/16 | 63/64 | 27/64 | 4-7/8 | 0.20 |
| 11/16 | J1222ES | J1222ESB | 13/16 | 1-31/64 | 15/32 | 1-3/64 | 29/64 | 5-1/16 | 0.23 |
| 3/4 | J1224ES | J1224ESB | 57/64 | 1-5/8 | 1/2 | 1-1/8 | 31/64 | 5-7/16 | 0.29 |
| 13/16 | J1226S° | - | 61/64 | 1-45/64 | 23/64 | 1-13/64 | 33/64 | 7-45/64 | 0.44 |
| 7/8 | J1228S° | - | 1-3/64 | 1-27/32 | 23/64 | 1-17/64 | 35/64 | 8 | 0.52 |
| 15/16 | J1230S° | - | 1-3/32 | 2.00 | 4.00 | 1-11/32 | 35/64 | 8-19/64 | 0.63 |
| 1 | J1232S° | - | 1-13/64 | 2-3/32 | 7/16 | 1-29/64 | 5/8 | 8-13/32 | 0.73 |
| 1-1/16 | J1234S° | - | 1-17/64 | 2-13/64 | 15/32 | 1-19/32 | 41/64 | 6-19/32 | 0.86 |
| 1-1/8 | J1236S° | - | 1-21/64 | 2-19/64 | 1/2 | 1-5/8 | 23/32 | 8-29/32 | 0.98 |
| 1-3/16 | J1238S° | - | 1-11/32 | 2-19/64 | 1/2 | 1-5/8 | 23/32 | 8-29/32 | 1.00 |
| 1-1/4 | J1240S° | - | 1-1/2 | 2-19/32 | 1/2 | 1-51/64 | 23/32 | 9-45/64 | 1.30 |

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| MM | 12 | 12 | Throat Depth 1 (in) (B) | Outside Head Width 1 (in) (C) | Head Thickness 1 (in) (D) | Outside Head Width 2 (in) (C1) | Head Thickness 2 (in) (D1) | Overall Length (in) | Weight (lbs) |
|----|----------|-----------|-------------------------|-------------------------------|---------------------------|--------------------------------|----------------------------|---------------------|--------------|
| 6 | J1206MES | J1206MESB | 19/64 | 19/32 | 11/64 | 7/16 | 3/16 | 3-1/4 | 0.03 |
| 7 | J1207MES | J1207MESB | 19/64 | 41/64 | 3/16 | 29/64 | 7/32 | 3-3/8 | 0.04 |
| 8 | J1208MES | J1208MESB | 3/8 | 47/64 | 1/4 | 33/64 | 15/64 | 3-1/2 | 0.04 |
| 9 | J1209MES | J1209MESB | 13/32 | 13/16 | 13/64 | 9/16 | 1/4 | 3-5/8 | 0.05 |
| 10 | J1210MES | J1210MESB | 7/16 | 7/8 | 7/32 | 39/64 | 9/32 | 3-3/4 | 0.07 |
| 11 | J1211MES | J1211MESB | 31/64 | 63/64 | 5/16 | 43/64 | 19/64 | 3-15/16 | 0.08 |
| 12 | J1212MES | J1212MESB | 17/32 | 1-1/16 | 11/32 | 47/64 | 21/64 | 4-1/8 | 0.10 |
| 13 | J1213MES | J1213MESB | 37/64 | 1-7/64 | 3/8 | 51/64 | 23/64 | 4-5/16 | 0.12 |
| 14 | J1214MES | J1214MESB | 43/64 | 1-1/4 | 19/64 | 57/64 | 3/8 | 4-1/2 | 0.15 |
| 15 | J1215MES | J1215MESB | 45/64 | 1-5/16 | 13/32 | 29/32 | 25/64 | 4-11/16 | 0.17 |
| 16 | J1216MES | J1216MESB | 47/64 | 1-23/64 | 7/16 | 63/64 | 27/64 | 4-7/8 | 0.20 |
| 17 | J1217MES | J1217MESB | 13/16 | 1-31/64 | 15/32 | 1-3/64 | 29/64 | 5-1/16 | 0.24 |
| 18 | J1218MES | J1218MESB | 27/32 | 1-35/64 | 11/32 | 1-5/64 | 15/32 | 5-1/4 | 0.27 |
| 19 | J1219MES | J1219MESB | 57/64 | 1-5/8 | 1/2 | 1-1/8 | 31/64 | 5-7/16 | 0.29 |
| 20 | J1220MS | - | 15/16 | 1-41/64 | 11/32 | 1-5/32 | 31/64 | 7-35/64 | 0.42 |
| 21 | J1221MS | - | 61/64 | 1-45/64 | 11/32 | 1-11/64 | 1/2 | 7-45/64 | 0.45 |
| 22 | J1222MS | - | 1-3/64 | 1-27/32 | 23/64 | 1-17/64 | 17/32 | 7-29/32 | 0.52 |
| 23 | J1223MS | - | 1-3/32 | 2.00 | 13/32 | 1-11/32 | 35/64 | 8-19/64 | 0.63 |
| 24 | J1224MS | - | 1-3/32 | 2.00 | 13/32 | 1-11/32 | 35/64 | 8-19/64 | 0.63 |
| 25 | J1225MS | - | 1-13/64 | 2-3/32 | 27/64 | 1-7/16 | 5/8 | 8-13/32 | 0.73 |
| 27 | J1227MS | - | 1-17/64 | 2-13/64 | 29/64 | 1-19/32 | 41/64 | 8-19/32 | 0.88 |
| 30 | J1230MS | - | 1-5/16 | 2-19/64 | 1/2 | 1-5/8 | 23/32 | 8-29/32 | 0.94 |
| 32 | J1232MS | - | 1-31/64 | 2-19/32 | 35/64 | 1-51/64 | 23/32 | 9-45/64 | 1.30 |

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SHORT SATIN COMBINATION WRENCHES - 6 POINT

- › Satin finish provides corrosion resistance and a slip-resistance grip
- › 6 point box end allows for large wrench to fastener contact area which helps prevent rounding of the fastener
- › Compact shank design and short length for access in confined spaces
- › 15° angled offset box end helps keep shank clear of obstructions
- › Standard open end.



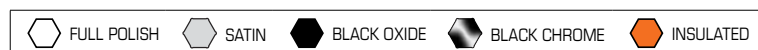
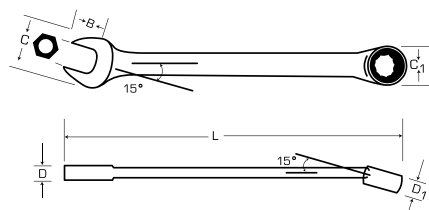
| INCH | 6 | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------|----------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 1/8 | J1204EFS | 3/16 | 23/64 | 7/64 | 19/64 | 7/64 | 2-29/32 | 0.01 |
| 5/32 | J1205EFS | 7/32 | 27/64 | 9/64 | 5/16 | 9/64 | 2-29/32 | 0.01 |
| 3/16 | J1206EFS | 15/64 | 35/64 | 9/64 | 3/8 | 9/64 | 3-3/32 | 0.02 |
| 7/32 | J1207EFS | 17/64 | 9/16 | 9/64 | 13/32 | 9/64 | 3-3/32 | 0.02 |
| 1/4 | J1208EFS | 19/64 | 19/32 | 11/64 | 31/64 | 11/64 | 3-9/64 | 0.03 |
| 9/32 | J1209EFS | 21/64 | 19/32 | 11/64 | 1/2 | 11/64 | 3-13/32 | 0.04 |
| 5/16 | J1210EFS | 25/64 | 3/4 | 3/16 | 37/64 | 3/16 | 3-7/16 | 0.04 |
| 11/32 | J1211EFS | 13/32 | 3/4 | 3/16 | 19/32 | 3/16 | 3-1/2 | 0.05 |
| 3/8 | J1212EFS | 7/16 | 27/32 | 13/64 | 39/64 | 13/64 | 4-19/64 | 0.07 |

SATIN COMBINATION FLEX HEAD WRENCHES - 12 POINT

- › Satin finish provides corrosion resistance and a slip resistant grip.
- › 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- › Use the swiveling box end to break or cinch bolts in difficult locations.
- › Heat-treated alloy steels produce a shank with high leverage.
- › Box ends incorporate the TorquePlus™ system.



| INCH | 12 | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Overall Length (in) | Weight (lbs) |
|-------|-----------|---------------------|---------------------------|-----------------------|---------------------|--------------|
| 3/8 | J1270-12A | 27/64 | 55/64 | 15/64 | 6 | 0.14 |
| 7/16 | J1270-14A | 1/2 | 1 | 1/4 | 6-7/8 | 0.20 |
| 1/2 | J1270-16A | 37/64 | 1-3/32 | 9/32 | 7-3/4 | 0.25 |
| 9/16 | J1270-18A | 21/32 | 1-15/64 | 5/16 | 8-5/8 | 0.36 |
| 5/8 | J1270-20A | 23/32 | 1-23/32 | 21/64 | 9-1/2 | 0.46 |
| 11/16 | J1270-22A | 51/64 | 1-1/2 | 11/32 | 10-3/8 | 0.58 |
| 3/4 | J1270-24A | 7/8 | 1-41/64 | 23/64 | 11-1/4 | 0.46 |
| 7/8 | J1270-28A | 1-1/64 | 1-27/32 | 13/32 | 13 | 0.93 |



SHORT & FLEX HEAD COMBINATION WRENCHES

WRENCHES

OFFSET REVERSIBLE RATCHETING DOUBLE BOX WRENCHES

- › 25° offset box end helps keep shank clear of obstructions.
- › Built in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- › Shorter length for access to confined work spaces.
- › 6 point box end allows larger wrench to fastener contact area which helps prevent rounding of the fastener.
- › 12 point box end allows for fine indexing.
- › Fits 4, 6 and 12 point fasteners.
- › Reversing switch lever allows for easy changes in turning direction which helps improve speed.
- › The wrench self-aligns with the fastener.



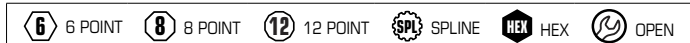
OFFSET RATCHETING DOUBLE BOX WRENCHES

| INCH | 6 | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------------|---------|---------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 7/32 x 9/32 | - | J1179T | 19/32 | 3/8 | 43/64 | 3/8 | 4-1/4 | 0.15 |
| 1/4 x 5/16 | J1181-A | J1181T | 19/32 | 3/8 | 41/64 | 3/8 | 4-1/4 | 0.15 |
| 3/8 x 7/16 | J1182-A | J1182T | 25/32 | 3/8 | 7/8 | 3/8 | 5-7/16 | 0.21 |
| 1/2 x 9/16 | J1183-A | J1183T | 1 | 1/2 | 1-9/64 | 1/2 | 6-3/4 | 0.43 |
| 5/8 x 11/16 | - | J1184-A | 1-19/64 | 1/2 | 1-7/16 | 1/2 | 8 | 0.58 |
| 5/8 x 3/4 | - | J1186 | 1-19/64 | 1/2 | 1-7/16 | 1/2 | 8 | 0.58 |
| 3/4 x 7/8 | - | J1185-A | 1-13/32 | 1/2 | 1-9/16 | 1/2 | 9-1/8 | 0.77 |

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| MM | 6 | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|---------|-----------|----------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 7 x 8 | J1181M-A | - | 19/32 | 3/8 | 4-5/16 | 3/8 | 4-19/64 | 0.13 |
| 9 x 10 | J1182M-A | - | 25/32 | 3/8 | 5-17/32 | 3/8 | 5-33/64 | 0.22 |
| 11 x 13 | J1183MA-A | - | 1-1/64 | 1/2 | 1-5/32 | 1/2 | 6-17/32 | 0.32 |
| 12 x 14 | J1184MA-A | - | 1-1/64 | 1/2 | 1-5/32 | 1/2 | 6-17/32 | 0.32 |
| 15 x 17 | - | J1185M-A | 1-19/64 | 1/2 | 7-27/32 | 1/2 | 7-53/64 | 0.46 |
| 16 x 18 | - | J1186M-A | 1-19/64 | 1/2 | 7-27/32 | 1/2 | 7-53/64 | 0.46 |
| 19 x 21 | - | J1187M-A | 1-13/32 | 1/2 | 8-23/32 | 1/2 | 8-45/64 | 0.52 |

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RATCHETING DOUBLE BOX WRENCHES

- › Built in retaining ring in each ratchet wheel adds speed and convenience for greater accessibility.
- › Shorter length for access to confined workspaces.
- › The wrench self-aligns with the fastener.
- › 6 point box end allows for large wrench to fastener contact area which helps prevent fastener rounding.
- › 12 point box end allows for fine indexing.
- › Fits 4, 6 and 12 point fasteners.



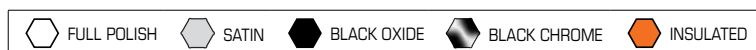
| INCH | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|---------------|-----------------|----------------------------------|------------------------------|----------------------------------|------------------------------|----------------------------|---------------------|
| 1/4 x 5/16 | J1191T-A | 9/32 | 3/8 | 5/8 | 3/8 | 4-1/2 | 0.12 |
| 3/8 x 7/16 | J1192T-A | 3/4 | 3/8 | 7/8 | 3/8 | 5-1/2 | 0.17 |
| 1/2 x 9/16 | J1193T-A | 1 | 1/2 | 1-1/8 | 1/2 | 6-7/8 | 0.29 |
| 5/8 x 11/16 | J1194-A | 1-19/64 | 1/2 | 1-7/16 | 1/2 | 8-1/8 | 0.44 |
| 3/4 x 7/8 | J1195-A | 1-13/32 | 1/2 | 1-37/64 | 1/2 | 9-1/4 | 0.52 |
| 5/8 x 3/4 | J1196-A | 1-19/64 | 1/2 | 1-7/16 | 1/2 | 8-1/8 | 0.47 |
| 13/16 x 15/16 | J1197-A | 1-13/32 | 1/2 | 1-37/64 | 1/2 | 9-1/4 | 0.52 |
| 1 x 1-1/16 | J1198 | 1-29/32 | 9/16 | 2-1/4 | 9/16 | 15 | 0.56 |
| 1-1/8 x 1-1/4 | J1199 | 1-29/32 | 9/16 | 2-1/4 | 9/16 | 15 | 0.60 |

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| MM | 6 | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-----------|------------------|-----------------|----------------------------------|------------------------------|----------------------------------|------------------------------|----------------------------|---------------------|
| 7 x 8 | J1191M-A | - | 19/32 | 3/8 | 4-5/16 | 3/8 | 4-19/64 | 0.12 |
| 9 x 10 | J1192M-A | - | 25/32 | 3/8 | 5-17/32 | 3/8 | 5-33/64 | 0.17 |
| 11 x 13 | J1193MA-A | - | 1-1/64 | 1/2 | 1-5/32 | 1/2 | 6-13/16 | 0.31 |
| 12 x 14 | J1194MA-A | - | 1-1/64 | 1/2 | 1-5/32 | 1/2 | 9-1/4 | 0.39 |
| 15 x 17 | - | J1195M-A | 1-19/64 | 1/2 | 8-1/8 | 1/2 | 8-7/64 | 0.48 |
| 16 x 18 | - | J1196M | 1-19/64 | 1/2 | 8-1/8 | 1/2 | 8-7/64 | 0.48 |
| 19 x 21 | - | J1197M | 1-13/32 | 1/2 | 9-1/4 | 1/2 | 9-15/64 | 0.55 |

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RATCHETING DOUBLE BOX WRENCHES



WRENCHES

MODIFIED OFFSET DOUBLE BOX WRENCHES - 12 POINT



- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.



| INCH | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------------|--------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 3/8 x 7/16 | J1012A | 21/32 | 5/16 | 37/64 | 19/64 | 7-3/4 | 0.11 |
| 1/2 x 9/16 | J1016A | 53/64 | 23/64 | 3/4 | 11/32 | 8-7/8 | 0.20 |
| 5/8 x 11/16 | J1020A | 1 | 29/64 | 29/32 | 13/32 | 10-19/32 | 0.52 |
| 3/4 x 13/16 | J1024A | 1.2 | 33/64 | 1 | 1/2 | 12-13/64 | 0.75 |
| 7/8 x 15/16 | J1028A | 1.3 | 9/16 | 1-13/64 | 17/32 | 13-19/32 | 1.01 |

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OFFSET DOUBLE BOX WRENCHES

DEEP OFFSET DOUBLE BOX WRENCHES - 12 POINT

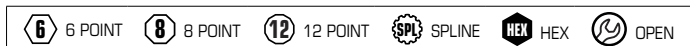


- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- 60° deep offset helps improve access to deeply recessed fasteners.
- Offset handle helps keep knuckles clear of obstruction to help save time.
- Box ends feature the TorquePlus™ design.



| INCH | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-----------------|------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 1/4" x 5/16" | J8179-T500 | 13/32 | 7/32 | 15/32 | 1/4 | 6-19/32 | 0.11 |
| 3/8" x 7/16" | J8180-T500 | 19/32 | 19/64 | 41/64 | 5/16 | 7-1/2 | 0.18 |
| 1/2" x 9/16" | J8181-T500 | 47/64 | 11/32 | 13/16 | 13/32 | 8-51/64 | 0.33 |
| 9/16" x 5/8" | J8182-T500 | 29/32 | 13/32 | 1 | 7/16 | 9-3/4 | 0.51 |
| 11/16" x 13/16" | J8183-T500 | 1 | 29/64 | 1-5/32 | 33/64 | 10-51/64 | 0.71 |
| 3/4" x 7/8" | J8184-T500 | 1-1/16 | 1/2 | 1-1/4 | 35/64 | 11-1/2 | 0.90 |
| 15/16" x 1" | J8185-T500 | 1-11/32 | 9/16 | 1-7/16 | 19/32 | 14.000 | 1.30 |

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15 DEGREE DOUBLE BOX WRENCHES - 12 POINT

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- 12 point box end allows for fine indexing, helping to improve speed and access. Fits 4, 6 and 12 point fasteners.
- Offset box end allows access to recessed fasteners and keeps hands clear of obstructions.
- Box ends feature TorquePlus™ design.



| INCH | 12 | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-----------------|----------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 1/4" x 5/16" | J110810L | 13/32 | 15/64 | 31/64 | 1/4 | 8-3/32 | 0.10 |
| 5/16" x 3/8" | J111012L | 1/2 | 9/32 | 37/64 | 21/64 | 8-27/32 | 0.16 |
| 3/8" x 7/16" | J111214L | 37/64 | 21/64 | 21/32 | 11/32 | 9-27/32 | 0.23 |
| 7/16" x 1/2" | J111416L | 21/32 | 23/64 | 3/4 | 3/8 | 10-45/64 | 0.29 |
| 1/2" x 9/16" | J111618L | 3/4 | 3/8 | 53/64 | 13/32 | 11-35/64 | 0.40 |
| 9/16" x 5/8" | J111820L | 53/64 | 13/32 | 29/32 | 15/32 | 12-31/64 | 0.56 |
| 11/16" x 3/4" | J112224L | 1 | 1/2 | 1-3/32 | 17/32 | 14-11/32 | 0.77 |
| 13/16" x 15/16" | J112630L | 1-11/64 | 35/64 | 1-23/64 | 37/64 | 16-3/32 | 1.22 |
| 7/8" x 1" | J112832L | 1-17/64 | 9/16 | 1-29/64 | 19/32 | 17-3/32 | 1.47 |

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15 DEGREE LONG DOUBLE BOX WRENCHES - SPLINE



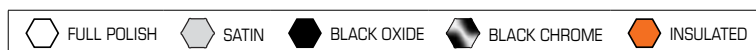
- Spline fasteners help tighten high strength bolts to high torque loads.
- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.



| INCH | SPL | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-----------------|------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 1/4" x 5/16" | J110810SPL | 13/32 | 15/64 | 31/64 | 1/4 | 8-3/32 | 0.10 |
| 3/8" x 7/16" | J111214SPL | 37/64 | 21/64 | 21/32 | 11/32 | 9-27/32 | 0.23 |
| 1/2" x 9/16" | J111618SPL | 3/4 | 3/8 | 53/64 | 13/32 | 11-35/64 | 0.39 |
| 9/16" x 5/8" | J111820SPL | 53/64 | 13/32 | 29/32 | 15/32 | 12-31/64 | 0.55 |
| 11/16" x 3/4" | J112224SPL | 1 | 1/2 | 1-3/32 | 17/32 | 14-11/32 | 0.76 |
| 13/16" x 15/16" | J112630SPL | 1-11/64 | 35/64 | 1-23/64 | 37/64 | 16-3/32 | 1.20 |
| 7/8" x 1" | J112832SPL | 1-17/64 | 9/16 | 1-29/64 | 19/32 | 17-3/32 | 1.45 |

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15 DEGREE DOUBLE BOX WRENCHES



WRENCHES

OPEN END WRENCHES

- ▶ 15° angle heads.
- ▶ Special heat-treated alloy steel permits slim shanks for strength and durability.
- ▶ Standard open end configuration.



OPEN END WRENCHES

| INCH | | | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------------------|-------|--------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 3/16 x 1/4 | J3016 | - | 17/64 | 1/2 | 5/32 | 7/16 | 5/32 | 3-7/8 | 0.04 |
| 1/4 x 5/16 | J3018 | - | 3/8 | 21/32 | 3/16 | 4-1/2 | 5/32 | 4-31/64 | 0.07 |
| 5/16 x 3/8 | J3020 | J3020B | 7/16 | 25/32 | 7/32 | 41/64 | 13/64 | 5-1/8 | 0.09 |
| 3/8 x 7/16 | J3021 | J3021B | 23/64 | 29/32 | 7/22 | 25/32 | 7/32 | 5-3/4 | 0.12 |
| 7/16 x 1/2 | J3025 | J3025B | 19/32 | 1-1/32 | 1/4 | 29/32 | 1/4 | 6-3/8 | 0.19 |
| 1/2 x 9/16 | J3026 | J3026B | 43/64 | 1-3/16 | 9/32 | 1-1/32 | 17/64 | 7 | 0.23 |
| 9/16 x 5/8 | J3030 | J3030B | 3/4 | 1-17/64 | 9/32 | 1-5/32 | 9/32 | 7-5/8 | 0.28 |
| 5/8 x 3/4 | J3031 | J3031B | 29/32 | 1-37/64 | 5/16 | 1-5/32 | 5/16 | 8-9/16 | 0.39 |
| 5/8 x 11/16 | J3034 | - | 53/64 | 117/160 | 5/16 | 1-9/32 | 5/16 | 8-1/4 | 0.35 |
| 11/16 x 3/4 | J3035 | J3035B | 29/32 | 1-37/64 | 11/32 | 1-13/32 | 21/64 | 8-7/8 | 0.47 |
| 11/16 x 25/32 | J3037 | - | 57/64 | 1-37/64 | 11/32 | 1-13/32 | 21/64 | 8-7/8 | 0.46 |
| 3/4 x 7/8 | J3039 | J3039B | 1-1/16 | 1-25/32 | 11/32 | 1-37/64 | 11/32 | 9-1/2 | 0.60 |
| 13/16 x 7/8 | J3040 | J3040B | 1-3/64 | 1-25/32 | 3/8 | 1-21/32 | 23/64 | 10-1/8 | 0.62 |
| 15/16 x 1 | J3045 | J3045B | 1-13/64 | 2-1/64 | 13/32 | 1-29/32 | 13/32 | 11-1/2 | 0.92 |
| 1-1/16 x 1-1/8 | J3050 | J3050B | 1-23/64 | 2-17/64 | 15/32 | 2-5/32 | 29/64 | 12-5/8 | 1.24 |
| 1-1/16 x 1-1/4 | J3051 | J3051B | 1-31/64 | 2-33/64 | 15/32 | 2-5/32 | 15/32 | 13-9/16 | 1.47 |
| 1-1/4 x 1-5/16 | J3055 | J3055B | 1-9/16 | 2-21/32 | 17/32 | 2-33/64 | 33/64 | 14-1/2 | 1.87 |
| 1-3/8 x 1-7/16 | J3060 | J3060B | 1-23/32 | 2-57/64 | 9/16 | 2-23/32 | 35/64 | 15-3/4 | 2.59 |
| 1-1/2 x 1-5/8 | J3070 | J3070B | 1-15/16 | 3-17/64 | 5/8 | 2-61/64 | 39/64 | 17 | 3.31 |
| 1-11/16 x 1-13/16 | J3075 | - | 2-3/16 | 3-41/64 | 23/32 | 3-25/64 | 45/64 | 18-1/2 | 4.71 |
| 1-7/8 x 2 | J3080 | - | 2-3/8 | 4-1/32 | 23/32 | 3-41/64 | 45/64 | 20 | 6.38 |

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| MM | | | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|---------|--------|--|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 6 x 7 | J30607 | | 3/8 | 41/64 | 3/16 | 1/2 | 11/64 | 4-1/2 | 0.06 |
| 8 x 9 | J30809 | | 7/16 | 25/32 | 3/16 | 21/32 | 3/16 | 5-1/8 | 0.09 |
| 10 x 11 | J31011 | | 17/32 | 29/32 | 7/32 | 25/32 | 7/32 | 5-3/4 | 0.13 |
| 12 x 13 | J31213 | | 19/32 | 1-1/32 | 1/4 | 29/32 | 1/4 | 6-3/8 | 0.17 |
| 14 x 15 | J31415 | | 3/4 | 1-9/32 | 9/32 | 1-9/64 | 9/32 | 7-19/32 | 0.30 |
| 16 x 17 | J31617 | | 57/64 | 1-13/32 | 5/16 | 8-1/4 | 19/64 | 8-15/64 | 0.33 |
| 18 x 19 | J31819 | | 29/32 | 1-37/64 | 11/32 | 8-7/8 | 21/64 | 8-55/64 | 0.48 |
| 20 x 22 | J32022 | | 1-3/64 | 1-13/16 | 11/32 | 9-1/2 | 11/32 | 9-31/64 | 0.58 |
| 21 x 23 | J32123 | | 1-3/64 | 1-25/32 | 3/8 | 1-21/32 | 23/64 | 10-1/8 | 0.61 |
| 24 x 26 | J32426 | | 1-13/64 | 2-1/64 | 13/32 | 1-29/32 | 13/32 | 11-3/8 | 0.88 |

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EXTRA THIN SATIN OPEN END WRENCHES

- ▶ Satin finish provides corrosion resistance and a slip resistant grip.
- ▶ Ultra-thin profile and long handle produce improved access to hard-to-reach fasteners.
- ▶ Use when high leverage or distance from a hot assembly is required.
- ▶ Opening is designed to cover tappets, screws and lock nuts without excessive overhang which improves access.



| INCH | | | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------------|-------|--|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 7/16 x 1/2 | J3425 | | 19/32 | 1-3/32 | 3/16 | 1-1/64 | 11/64 | 10 | 0.16 |
| 1/2 x 9/16 | J3426 | | 43/64 | 1-13/64 | 3/16 | 1-9/64 | 11/64 | 10 | 0.16 |
| 9/16 x 5/8 | J3430 | | 47/64 | 1-21/64 | 3/16 | 1-1/4 | 11/64 | 10 | 0.21 |
| 11/16 x 3/4 | J3435 | | 57/64 | 1-7/16 | 7/32 | 1-11/32 | 13/64 | 10 | 0.26 |
| 13/16 x 7/8 | J3440 | | 1-1/32 | 1-49/64 | 7/32 | 1-11/16 | 13/64 | 10 | 0.33 |

6 POINT
 8 POINT
 12 POINT
 SPL SPLINE
 HEX
 OPEN

FULL POLISH ANGLE OPEN END WRENCHES

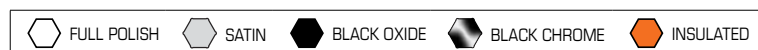
- ▶ Double nickel strike for rust resistance and prolonged life.
- ▶ 15° and 60° angle heads combined with the same size opening on both ends allow wrench to be used in four different turning angles for greater access in tight work areas.



| INCH | | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|---------|-------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 3/8 | J3112 | 13/32 | 3/4 | 7/32 | 3/4 | 13/64 | 4-3/4 | 0.06 |
| 7/16 | J3114 | 15/32 | 7/8 | 7/32 | 7/8 | 13/64 | 5 | 0.08 |
| 1/2 | J3116 | 35/64 | 1 | 1/4 | 1 | 15/64 | 5-1/4 | 0.10 |
| 9/16 | J3118 | 39/64 | 1-7/64 | 1/4 | 1-7/64 | 15/64 | 5-5/8 | 0.14 |
| 5/8 | J3120 | 21/32 | 1-7/32 | 9/32 | 1-7/32 | 17/64 | 6 | 0.17 |
| 11/16 | J3122 | 23/32 | 1-21/64 | 9/32 | 1-21/64 | 17/64 | 6-1/2 | 0.21 |
| 3/4 | J3124 | 25/32 | 1-7/16 | 9/32 | 1-7/16 | 9/32 | 7 | 0.26 |
| 13/16 | J3126 | 27/32 | 1-9/16 | 5/16 | 1-9/16 | 19/64 | 7-1/2 | 0.50 |
| 7/8 | J3128 | 57/64 | 1-21/32 | 5/16 | 1-21/32 | 5/16 | 8 | 0.61 |
| 15/16 | J3130 | 31/32 | 1-25/32 | 11/32 | 1-25/32 | 21/64 | 8-3/4 | 0.71 |
| 1 | J3132 | 1-1/32 | 1-59/64 | 11/32 | 1-59/64 | 11/32 | 9-1/2 | 0.88 |
| 1-1/16 | J3134 | 1-1/16 | 2-1/64 | 3/8 | 2-1/64 | 23/64 | 10-1/4 | 1.04 |
| 1-1/8 | J3136 | 1-1/8 | 2-1/8 | 3/8 | 2-1/8 | 3/8 | 11 | 1.20 |
| 1-3/16 | J3138 | 1-1/4 | 2-17/64 | 13/32 | 2-17/64 | 13/32 | 11-47/64 | 0.86 |
| 1-1/4 | J3140 | 1-1/4 | 2-11/32 | 13/32 | 2-11/32 | 13/32 | 12-1/4 | 1.47 |
| 1-5/16 | J3142 | 1-5/16 | 2-29/64 | 7/16 | 2-29/64 | 27/64 | 13-1/8 | 1.87 |
| 1-3/8 | J3144 | 1-13/32 | 2-37/64 | 7/16 | 2-37/64 | 7/16 | 13-3/4 | 2.17 |
| 1-7/16 | J3146 | 1-13/32 | 2-5/8 | 15/32 | 2-5/8 | 29/64 | 14 | 2.48 |
| 1-1/2 | J3148 | 1-31/64 | 2-3/4 | 15/32 | 2-3/4 | 15/32 | 14-1/2 | 2.77 |
| 1-5/8 | J3152 | 1-43/64 | 3-1/64 | 1/2 | 3-1/64 | 1/2 | 15 | 3.07 |
| 1-3/4 | J3156 | 1-31/32 | 3-31/64 | 17/32 | 3-31/64 | 33/64 | 17 | 3.81 |
| 1-13/16 | J3158 | 1-63/64 | 3-31/64 | 17/32 | 3-31/64 | 33/64 | 18-3/8 | 4.56 |
| 1-7/8 | J3160 | 2-7/32 | 3-29/32 | 21/32 | 3-29/32 | 21/32 | 19-3/4 | 5.24 |
| 2 | J3164 | 2-9/32 | 3-29/32 | 21/32 | 3-29/32 | 21/32 | 21-1/4 | 5.92 |

ANGLE OPEN END WRENCHES

| MM | | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|----|--------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 9 | J3109M | 13/32 | 49/64 | 7/32 | 49/64 | 13/64 | 4-3/4 | 0.06 |
| 10 | J3110M | 7/16 | 13/16 | 7/32 | 13/16 | 13/64 | 4-7/8 | 0.07 |
| 11 | J3111M | 15/32 | 7/8 | 7/32 | 7/8 | 7/32 | 5 | 0.08 |
| 12 | J3112M | 1/2 | 59/64 | 1/4 | 59/64 | 15/64 | 5-1/4 | 0.10 |
| 13 | J3113M | 17/32 | 63/64 | 1/4 | 63/64 | 15/64 | 5-1/2 | 0.13 |
| 14 | J3114M | 39/64 | 1-7/64 | 1/4 | 1-7/64 | 1/4 | 5-5/8 | 0.14 |
| 15 | J3115M | 5/8 | 1-5/32 | 9/32 | 1-5/32 | 17/64 | 5-15/16 | 0.16 |
| 16 | J3116M | 21/32 | 1-7/32 | 9/32 | 1-7/32 | 17/64 | 6-1/8 | 0.19 |
| 17 | J3117M | 47/64 | 1-11/32 | 9/32 | 1-11/32 | 9/32 | 6-1/2 | 0.21 |
| 18 | J3118M | 23/32 | 1-11/32 | 9/32 | 1-11/32 | 9/32 | 6-3/4 | 0.24 |
| 19 | J3119M | 25/32 | 1-7/16 | 9/32 | 1-7/16 | 9/32 | 7 | 0.26 |




WRENCHES

SHORT SATIN ANGLE OPEN END WRENCHES

- › Satin finish provides corrosion resistance and a slip resistant grip.
- › 15° and 75° angle heads allow wrench to be used in four different turning angles for greater access in tight work spaces.
- › Compact shank design and short length for access in confined spaces.
- › Standard open end configuration.



| INCH |  | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------|-----------------------------------------------------------------------------------|---------------------|---------------------------|-----------------------|---------------------------|-----------------------|---------------------|--------------|
| 7/32 | J3314 | 11/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.03 |
| 15/64 | J3315 | 11/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.03 |
| 1/4 | J3316 | 11/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.03 |
| 9/32 | J3318 | 3/16 | 19/32 | 5/32 | 19/32 | 5/32 | 3-1/2 | 0.04 |
| 5/16 | J3320 | 3/16 | 19/32 | 5/32 | 19/32 | 5/32 | 3-1/2 | 0.04 |
| 11/32 | J3322 | 1/4 | 3/4 | 5/32 | 3/4 | 5/32 | 3-3/4 | 0.05 |
| 3/8 | J3324 | 1/4 | 3/4 | 5/32 | 3/4 | 5/32 | 3-3/4 | 0.05 |
| 7/16 | J3328 | 11/32 | 1 | 3/16 | 1 | 11/64 | 4-7/16 | 0.08 |
| 1/2 | J3332 | 11/32 | 1 | 3/16 | 1 | 11/64 | 4-7/16 | 0.08 |
| 9/16 | J3336 | 13/32 | 1-5/32 | 3/16 | 1-5/32 | 3/16 | 5-3/4 | 0.10 |
| 5/8 | J3340 | 13/32 | 1-5/32 | 3/16 | 1-5/32 | 3/16 | 5-3/4 | 0.10 |





SATIN DOUBLE END FLARE NUT WRENCHES



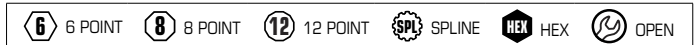
- › Satin finish provides corrosion resistance and a slip resistant grip.
- › Flare nut box ends incorporate the TorquePlus™ system.



| INCH |  |  | Mouth Width 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Mouth Width 2 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|---------------------------|-----------------------|--------------------|---------------------------|-----------------------|---------------------|--------------|
| 3/8 x 7/16 | J3764 | J3764T | 19/64 | 51/64 | 11/32 | 23/64 | 57/64 | 3/8 | 6-1/4 | 0.18 |
| 1/2 x 9/16 | J3768 | J3768T | 25/64 | 31/32 | 3/8 | 13/32 | 1-1/16 | 7/16 | 7-1/2 | 0.27 |
| 5/8 x 11/16 | J3772 | J3772T | 33/64 | 1-7/64 | 1/2 | 37/64 | 1-13/64 | 31/64 | 8-3/4 | 0.38 |
| 3/4 x 7/8 | J3776H | - | 9/16 | 1-15/64 | 1/2 | 21/32 | 1-13/32 | 9/16 | 9-1/2 | 0.61 |

12pt - SAE AS4167C ASME B107-100-2010 


DOUBLE END FLARE NUT & SHORT ANGLE OPEN END WRENCHES



IGNITION WRENCHES

- › Satin finish provides corrosion resistance and a slip resistant grip.
- › 15° and 60° angle heads.
- › Standard open end configuration.

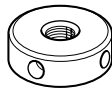


| INCH |  | Throat Depth 1 (in) | Outside Head Width 1 (in) | Head Thickness 1 (in) | Outside Head Width 2 (in) | Head Thickness 2 (in) | Overall Length (in) | Weight (lbs) |
|---------------|-----------------------------------------------------------------------------------|----------------------------|----------------------------------|------------------------------|----------------------------------|------------------------------|----------------------------|---------------------|
| 13/64 x 15/64 | J3210 | 15/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.02 |
| 15/64 x 13/64 | J3211 | 15/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.02 |
| 7/32 x 1/4 | J3215 | 15/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.02 |
| 1/4 x 7/32 | J3216 | 15/64 | 1/2 | 1/8 | 1/2 | 7/64 | 3 | 0.02 |
| 9/32 x 5/16 | J3220 | 5/16 | 19/32 | 5/32 | 19/32 | 5/32 | 3-1/2 | 0.03 |
| 5/16 x 9/32 | J3221 | 5/16 | 19/32 | 5/32 | 19/32 | 5/32 | 3-1/2 | 0.03 |
| 11/32 x 3/8 | J3225 | 3/8 | 3/4 | 5/32 | 47/64 | 5/32 | 3-3/4 | 0.05 |
| 3/8 x 11/32 | J3226 | 3/8 | 3/4 | 5/32 | 3/4 | 5/32 | 3-3/4 | 0.05 |

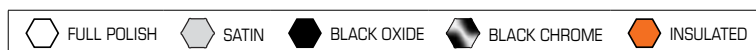


ADJUSTABLE PIN SPANNER WRENCHES

- › Non-reflective black oxide finish for use where non-plated products are required.
- › Precision machined pins provide engagement with side holes or slots.
- › Used to tighten side slot nuts on collars, lock nuts and bearings.




| Product # | Capacity Range | Pin Diameter (in) | Pin Length (in) | Hook Thickness (in) | Overall Length (in) | Weight (lbs) |
|------------------|-----------------------|--------------------------|------------------------|----------------------------|----------------------------|---------------------|
| JC491 | 3/4 to 2 | 1/8 | 1/8 | 11/32 | 6-3/8 | 0.23 |
| JC492 | 3/4 to 2 | 3/16 | 5/32 | 11/32 | 6-3/8 | 0.23 |
| JC494 | 1-1/4 to 3 | 3/16 | 3/16 | 13/32 | 8-1/8 | 0.42 |
| JC495 | 1-1/4 to 3 | 1/4 | 7/32 | 13/32 | 8-1/8 | 0.42 |
| JC497 | 2 to 4-3/4 | 1/4 | 1/4 | 15/32 | 11-3/8 | 0.99 |
| JC499 | 4-1/2 to 6-1/4 | 3/8 | 1/4 | 15/32 | 12-1/8 | 1.08 |



WRENCHES

AEROSPACE ADJUSTABLE WRENCHES

- › Wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- › Extra wide jaw capacity.
- › Square jaw opening provides strength and tight fit.



|  | Maximum Opening (in) | Overall Length (in) | Weight (lbs) |
|-----------------------------------------------------------------------------------|----------------------|---------------------|--------------|
| J704A | 1-1/2 | 4-21/64 | 0.15 |
| J706A | 1-31/32 | 6-13/64 | 0.32 |
| J708A | 2-7/16 | 8-7/64 | 0.59 |
| J710A | 2-53/64 | 10-3/64 | 0.99 |
| J712A | 3-17/64 | 12-3/64 | 1.50 |
| J715A | 4-1/4 | 15-1/16 | 2.65 |
| J718A | 4-15/16 | 18-1/8 | 3.75 |


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CLIK-STOP® ADJUSTABLE WRENCHES

- › Satin finish provides corrosion resistance and a slip resistant grip.
- › Extra wide jaw capacity.
- › Square jaw opening provides strength and tight fit.
- › Clik-Stop® locking design holds the moving jaw of an adjustable wrench in place when the wrench is in use.




|  |  | Maximum Opening (in) | Overall Length (in) | Weight (lbs) |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------|---------------------|--------------|
| J704L | J704SL | 11/16 | 4 | 0.13 |
| J706L | J706SL | 15/16 | 6 | 0.34 |
| J708L | J708SL | 1-1/8 | 8 | 0.57 |
| J710L | J710SL | 1-5/16 | 10 | 0.95 |
| J712L | J712SL | 1-1/2 | 12 | 1.54 |
| J715L | J715SL | 1-11/16 | 15 | 3.13 |
| J718L | J718SL | 2-1/16 | 18 | 5.73 |
| J724L | - | 2-7/16 | 24 | 8.84 |


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ADJUSTABLE WRENCHES

- › Satin finish provides corrosion resistance and a slip resistant grip.
- › Extra wide jaw capacity.
- › Square jaw opening provides strength and tight fit.
- › Rugged I-beam style handle and reinforced stress areas; radius corner design.

|  |  | Cushion Grip  | Maximum Opening (in) | Overall Length (in) | Weight (lbs) |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------|---------------------|--------------|
| J704 | J704S | J704G | 11/16 | 4 | 0.17 |
| J706 | J706S | J706G | 15/16 | 6 | 0.28 |
| J708 | J708S | J708G | 1-1/8 | 8 | 0.58 |
| J710 | J710S | J710G | 1-5/16 | 10 | 0.90 |
| J712 | J712S | J712G | 1-1/2 | 12 | 1.58 |
| J715 | J715S | - | 1-11/16 | 15 | 3.00 |
| J718 | J718S | - | 2-1/16 | 18 | 4.26 |
| J724 | J724S | - | 2-7/16 | 24 | 6.41 |

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 6 POINT
  8 POINT
  12 POINT
  SPLINE
  HEX
  OPEN

ADJUSTABLE TORQUE WRENCHES

PRECISION TORQUE



PRECISION TORQUE

PRECISION 90 TORQUE WRENCHES

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading the torque wrenches.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.
- 90 tooth count head allows for 4 degree arc swing.
- Small, pear head design for access in tight, hard-to-reach work areas.
- Low profile reversing lever design for quick, one hand operation.



| Product # | Drive Size (in) | Torque Range (in-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case |
|-----------|-----------------|-----------------------|-----------------|-----------------|---------------------|--------------|--------------|
| J6060HTC | 1/4 | 10-50 | 1/2 | 1-1/8 | 11-3/8 | 2.60 | J6006PBF |
| J6062HTC | 1/4 | 40-200 | 1/2 | 1-1/8 | 11-3/8 | 2.60 | J6006PBF |
| J6064HTC | 3/8 | 40-200 | 1/2 | 1-1/8 | 11-3/8 | 2.70 | J6006PBF |



FIXED HEAD MICROMETER TORQUE WRENCHES - IN-LBS

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing a three click test at 20%, 60%, and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.
- Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).



| C Series | CXCERT Series | Drive Size (in) | Torque Range (in-lbs) | Increments (in-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case |
|----------|---------------|-----------------|-----------------------|---------------------|-----------------|-----------------|---------------------|--------------|--------------|
| J6061C | J6061CXCERT | 1/4 | 40-200 | 1 | 25/32 | 3/4 | 11-45/64 | 2.60 | J6006PBF |
| J6063C | J6063CXCERT | 3/8 | 40-200 | 1 | 25/32 | 7/8 | 11-45/64 | 2.60 | J6006PBF |
| J6065C | J6065CXCERT | 3/8 | 200-1000 | 5 | 55/64 | 7/8 | 15-13/64 | 3.00 | J6006PBF |

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FIXED HEAD MICROMETER TORQUE WRENCHES - FT-LBS

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% in clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing a three click test at 20%, 60%, and 100% of maximum instrument capacity.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



| Product # | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case |
|-----------|-----------------|-----------------------|---------------------|-----------------|-----------------|---------------------|--------------|--------------|
| J6005C | 3/8 | 16-80 | 0.50 | 55/64 | 7/8 | 15-13/54 | 3.00 | J6006PBF |
| J6013C | 1/2 | 50-250 | 1 | 1-1/8 | 1-7/32 | 26-23/32 | 5.90 | J6014PBF |
| J6015C | 1/2 | 30-150 | 1 | 1-1/8 | 1-7/32 | 21-1/8 | 5.00 | J6014PBF |
| J6017B | 3/4 | 120-600 | 2 | 1-7/8 | 1-7/8 | 41-11/64 | 15.50 | J6007PB |

SAE AS28431B ASME B107.300-2010 

RATCHETING HEAD MICROMETER TORQUE WRENCHES - IN-LBS

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing a three click test at 20%, 60%, and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.
- Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).



| C Series | CXCERT Series | Drive Size (in) | Torque Range (in-lbs) | Increments (in-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case | Repair Kit |
|----------|---------------|-----------------|-----------------------|---------------------|-----------------|-----------------|---------------------|--------------|--------------|------------|
| J6060A | - | 1/4 | 10-50 | 1 | 1-1/16 | 7/8 | 9-1/2 | 1.20 | J6006PBF | J6062RK |
| J6062C | J6062CXCERT | 1/4 | 40-200 | 1 | 1-1/32 | 3/4 | 11-7/8 | 2.60 | J6006PBF | J6062RK |
| J6064C | J6064CXCERT | 3/8 | 40-200 | 1 | 1-1/32 | 7/8 | 11-7/8 | 2.60 | J6006PBF | J6064RK |
| J6066C | J6066CXCERT | 3/8 | 200-1000 | 5 | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6068C | - | 1/2 | 360-1800 | 10 | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6072C | J6072CXCERT | 1/2 | 600-3000 | 10 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |

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RATCHETING HEAD MICROMETER TORQUE WRENCHES - FT-LBS

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% clockwise direction and +/- 6% and counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing a three click test at 20%, 60%, and 100% of maximum instrument capacity.
- Manufactured to meet precision/highly accurate applications such as military and aerospace.
- Certification documents are traceable to N.I.S.T. (National Institute of Technology) (CXCERT only).



| C Series | CXCERT Series | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case | Repair Kit |
|----------|---------------|-----------------|-----------------------|---------------------|-----------------|-----------------|---------------------|--------------|--------------|------------|
| J6006C | J6006CXCERT | 3/8 | 16-80 | 0.50 | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6012C | - | 3/8 | 20-100 | 0.50 | 1-7/16 | 1-1/64 | 17 | 3.30 | J6006PBF | J6006RK |
| J6008C | J6008CXCERT | 1/2 | 16-80 | 0.50 | 1-7/16 | 1-7/32 | 15-1/2 | 3.00 | J6006PBF | J6008RK |
| J6016C | J6016CXCERT | 1/2 | 30-150 | 1 | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6014C | J6014CXCERT | 1/2 | 50-250 | 1 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6018AB | J6018CXCERT | 3/4 | 60-300 | 2 | 2-5/8 | 2-1/16 | 32-23/32 | 14.00 | J6007PB | J6018RK |
| J6020AB | J6020CXCERT | 3/4 | 120-600 | 2 | 2-5/8 | 2-1/16 | 41-9/16 | 15.50 | J6007PB | J6018RK |
| J6022B* | - | 1 | 140-700 | 2 | 2-5/8 | 2-5/16 | 46-27/32 | 20.50 | J6007PB | J6022RK |

*SAE AS28431A ASME B107.300-2010

RATCHETING HEAD MICROMETER TORQUE WRENCHES - NM

- Full polish wrenches meet and exceed stringent aerospace specification AS4984A which requires tools to have a thicker nickel-chrome coating for greater corrosion-resistance.
- Calibrated to +/- 4% clockwise direction and +/- 6% counter clockwise direction at 20% to 100% of full scale.
- Calibration is accomplished by mechanical loading of each wrench in a horizontal position and performing a three click test at 20%, 60%, and 100% of maximum instrument capacity.
- Manufactured to meet standard industrial torque applications, general industry, heavy equipment, and maintenance.



| Product # | Drive Size (in) | Torque Range (Nm) | Increments (Nm) | Torque Range (ft-lbs) | Increments (ft-lbs) | Head Width (in) | Head Depth (in) | Overall Length (in) | Weight (lbs) | Storage Case | Repair Kit |
|-----------|-----------------|-------------------|-----------------|-----------------------|---------------------|-----------------|-----------------|---------------------|--------------|--------------|------------|
| J6006MC | 3/8 | 16-80 | 0.5 | - | - | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6006NMC* | 3/8 | 16-80 | 0.5 | 11.1-62.7 | 0.5 | 1-7/16 | 1-1/64 | 15-1/2 | 3.00 | J6006PBF | J6006RK |
| J6016MC | 1/2 | 40-200 | 1 | - | - | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6016NMC* | 1/2 | 40-200 | 1 | 33.2-151.2 | 1 | 1-7/8 | 1-13/32 | 21-1/2 | 5.00 | J6014PBF | J6014RK |
| J6014MC | 1/2 | 70-350 | 1 | - | - | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6014NMC* | 1/2 | 70-350 | 1 | 55.3-261.8 | 1 | 1-7/8 | 1-13/32 | 27-1/8 | 5.90 | J6014PBF | J6014RK |
| J6020NM | 3/4 | 160-800 | 4 | - | - | 2-5/8 | 2-1/16 | 41-9/16 | 15.50 | J6007PB | J6018RK |

*Dual increment indicators

ASME B107.300-2010



PRECISION TORQUE

ELECTRONIC TORQUE WRENCHES - FT-LBS

- › LCD screen with visual alert lights and audible tone.
- › Measuring units: Nm, ft-lb, in-lb, and kg-cm.
- › Accurate to +/-2% CW and +/- 3% CCW of torque reading at 20% to 100%.
- › Operation modes include Peak or Follow mode.
- › 9 presets available.
- › 36-tooth ratcheting head.
- › Data memory size of 50.
- › Includes blow mold case, 2x AA batteries and calibration certificate.



| Product # | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Torque Range (in-lbs) | Increments (in-lbs) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) | Battery Type |
|-----------|-----------------|-----------------------|---------------------|-----------------------|---------------------|------------|-------------|---------------------|--------------|--------------|
| J6012E | 3/8 | 5-99 | 0.10 | 60-1188 | 1 | 1-41/34 | 1-41/64 | 16-19/64 | 4.30 | AA |
| J6014E | 1/2 | 12.5-250 | 0.10 | 150-3000 | 1 | 1-41/34 | 1-41/64 | 25-19/32 | 6.40 | AA |

ASME B107.28

ELECTRONIC FLEX HEAD TORQUE WRENCHES - FT-LBS

- › LCD screen with visual alert lights and audible tone.
- › Measuring units: Nm, ft-lb, in-lb, and kg-cm.
- › Accurate to +/-2% CW and +/- 3% CCW of torque reading at 20% to 100%.
- › Operation modes include Peak or Follow mode.
- › 9 presets available.
- › 36-tooth ratcheting flex head.
- › Data memory size of 50.
- › Includes blow mold case, 2x AA batteries and calibration certificate.



| Product # | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Torque Range (in-lbs) | Increments (in-lbs) | Overall Length (in) | Weight (lbs) | Battery Type |
|-----------|-----------------|-----------------------|---------------------|-----------------------|---------------------|---------------------|--------------|--------------|
| J6061EFX | 1/4 | 1.1-22 | 0.01 | 12-264 | 0.10 | 15-19/32 | 4.00 | AA |
| J6012EFX | 3/8 | 5-99 | 0.10 | 60-1188 | 1 | 16-45/64 | 4.10 | AA |
| J6014EFX | 1/2 | 12.5-250 | 0.10 | 150-3000 | 1 | 25-51/64 | 6.40 | AA |

ASME B107.28

ELECTRONIC ANGLE TORQUE WRENCH - FT-LBS

- › LCD screen with visual alert lights and audible tone.
- › Measuring units: Nm, ft-lb, in-lb, and kg-cm.
- › Accurate (J6012EA) to +/-2% CW and +/- 3% CCW and (J6020EA) +/- 2.5% CW and +/- 3.5% CCW of torque reading at 20% to 100%.
- › Angle Accuracy: +/- 2° (rotating 90° at speed of 30° per second).
- › Operation modes include Peak or Follow mode.
- › 9 presets available.
- › 36-tooth ratcheting head (J6012EA) and 48-tooth ratcheting head (J6020EA).
- › Data memory size of 50.
- › Includes blow mold case, 2x AA batteries and calibration certificate.



| Product # | Drive Size (in) | Torque Range (ft-lbs) | Increments (ft-lbs) | Torque Range (in-lbs) | Increments (in-lbs) | Overall Length (in) | Weight (lbs) | Battery Type |
|-----------|-----------------|-----------------------|---------------------|-----------------------|---------------------|---------------------|--------------|--------------|
| J6012EA | 3/8 | 5-99 | 0.1 | 60-1188 | 1 | 48-1/32 | 4.10 | AA |
| J6020EA | 3/4 | 30-600 | 0.1 | 360-7200 | 1 | 16-47/64 | 12.10 | AA |

ASME B107.28

ELECTRONIC TORQUE WRENCHES

PRECISION TORQUE

ELECTRONIC TORQUE TESTERS

- › Digital torque tester with LCD screen and audible beeps.
- › Main power with adapter.
- › Accurate to +/- 1% CW / +/- 3% CCW.
- › Measuring Units: ft-lbs, in-lbs, and Nm.
- › Operation modes include Peak, Hold and Dial modes.
- › Include blow mold case with AC/DC adapter and calibration certificate.



| Product # | Drive Size (in) | Drive Size (mm) | Torque Range (ft-lbs) | Torque Range (in-lbs) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
|-----------|-----------------|-----------------|-----------------------|-----------------------|------------|-------------|---------------------|--------------|
| J6470E | 1/4 | - | - | 5-50 | 5-19/32 | 3-1/2 | 6-13/32 | 10.50 |
| J6472E | 3/8 | - | - | 25-250 | 5-19/32 | 3-1/2 | 6-13/32 | 11.00 |
| J6474E | 3/8 | - | 5-50 | - | 5-19/32 | 3-1/2 | 6-13/32 | 11.00 |
| J6476E | 1/2 | - | 25-250 | - | 5-19/32 | 3-1/2 | 6-13/32 | 11.00 |
| J6478E | - | 27 | 60-600 | - | 5-19/32 | 3-1/2 | 6-13/32 | 11.60 |

ELECTRONIC TORQUE TESTERS




PRECISION TORQUE

TORQUE SCREWDRIVERS

- › Calibrated to ± 4% of torque reading, clockwise at 20% to 100% of full scale.
- › 1/4" Square to 1/4" Hex Adapter included for use with insert bits.
- › Industrial heavy duty design.
- › Aircraft grade aluminum.
- › Aircraft quality spring.
- › Positive self locking lock ring.
- › Floating three point reaction for repeatability.
- › Laser marked easy-to-read scale.
- › N.I.S.T. (National Institute of Standards and Technology) traceable certification supplied with J6104ACERT and J610EACERT.



| Product # | Certified Series | Drive Size (in) | Torque Range (in-lbs) | Increments (in-lbs) | Torque Range (in-oz) | Increments (in-oz) | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
|-----------|------------------|-----------------|-----------------------|---------------------|----------------------|--------------------|------------|-------------|---------------------|--------------|
| J6104A | J6104ACERT | 1/4 | - | - | 20-100 | 2 | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 |
| J6106A | J6106ACERT | 1/4 | 7-36 | 1 | - | - | 1-1/4 | 1-1/4 | 6-1/2 | 1.00 |

ASME B107.600 


TORQUE SCREWDRIVERS, WRENCH HEADS & ADAPTERS

OPEN END TORQUE WRENCH HEADS - H4 TANG

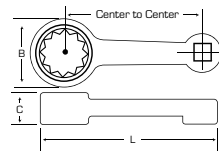
- › Open end is angled to 15° to help keep shank clear of obstructions helping to improve access.



| Product # | INCH | MM | Width (in) | Height (in) | Overall Length (in) | Weight (lbs) |
|-----------|------|----|------------|-------------|---------------------|--------------|
| JH4-12 | 3/8 | - | 27/32 | 7/16 | 3-1/16 | 0.08 |
| JH4-14 | 7/16 | - | 15/16 | 7/16 | 3-1/32 | 0.09 |
| JH4-16 | 1/2 | - | 1-1/16 | 7/16 | 3-3/32 | 0.11 |
| JH4-18 | 9/16 | - | 1-7/32 | 7/16 | 3-5/32 | 0.13 |
| JH4-10M | - | 10 | 27/32 | 7/16 | 3-1/16 | 0.08 |
| JH4-11M | - | 11 | 15/16 | 7/16 | 3-1/32 | 0.09 |
| JH4-12M | - | 12 | 1-1/32 | 7/16 | 3-1/16 | 0.10 |
| JH4-13M | - | 13 | 1-1/16 | 7/16 | 3-3/32 | 0.11 |
| JH4-14M | - | 14 | 1-7/32 | 7/16 | 3-5/32 | 0.13 |

Must be used with wrenches: JH4-250, JH4-150PS, JH4-50FPS 

3/8" DRIVE TORQUE ADAPTERS - 12 POINT

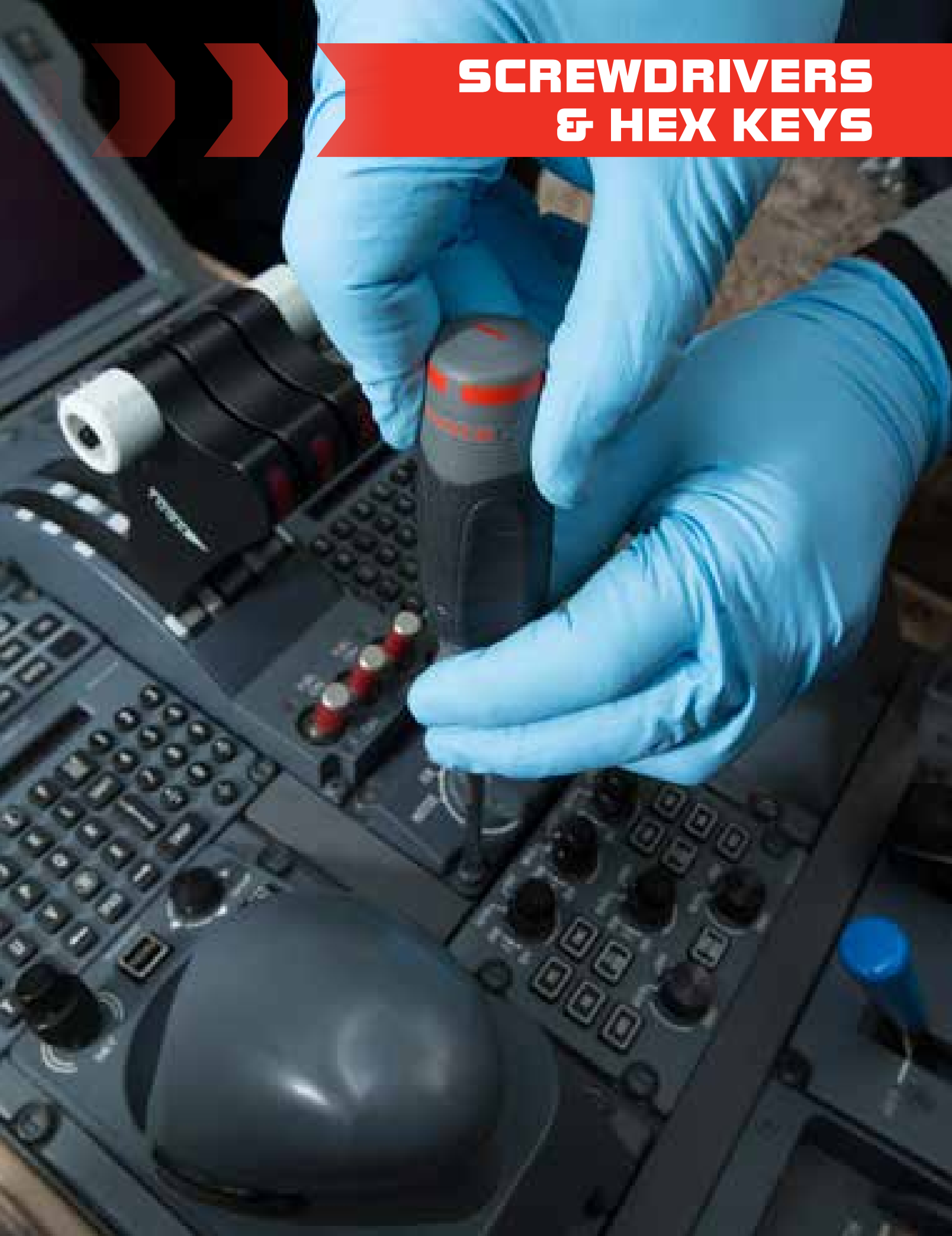


| Product # | Size (in) | Drive Size (in) | Head Width (in) (B) | Head Depth (in) (C) | Overall Length (in) (L) | Weight (lbs) |
|-----------|-----------|-----------------|---------------------|---------------------|-------------------------|--------------|
| J5112 | 3/8 | 3/8 | 9/16 | 17/64 | 2-11/16 | 0.08 |
| J5114 | 7/16 | 3/8 | 21/32 | 19/64 | 2-47/64 | 0.10 |
| J5116 | 1/2 | 3/8 | 47/64 | 21/64 | 2-25/32 | 0.10 |
| J5118 | 9/16 | 3/8 | 13/16 | 23/64 | 2-13/16 | 0.12 |
| J5120 | 5/8 | 3/8 | 29/32 | 25/64 | 2-55/64 | 0.12 |
| J5122 | 11/16 | 3/8 | 1 | 27/64 | 2-29/32 | 0.12 |
| J5124 | 3/4 | 3/8 | 1-5/64 | 29/64 | 2-61/64 | 0.12 |





SCREWDRIVERS & HEX KEYS



SCREWDRIVERS


DURATEK™ 8 PIECE COMBINATION SCREWDRIVER SET – FULL POLISH

Product #: J1208SCP



| Contents | Description | Tip Size | Tips | Shank Length (in) | Shank Type | Overall Length (in) | Weight (lbs) |
|------------|----------------------------------------------------------|----------|----------|-------------------|------------|---------------------|--------------|
| JK14112R | Screwdriver, Slotted Keystone Round Stubby 1/4" x 1-1/2" | 1/4 | Keystone | 1-1/2 | Round | 3-1/2 | 0.12 |
| JKB31603RP | Screwdriver, Slotted Keystone Round 3/16" x 3" | 3/16 | Keystone | 3 | Round | 7-1/4 | 0.16 |
| JKB1404RP | Screwdriver, Slotted Keystone Round 1/4" x 4" | 1/4 | Keystone | 4 | Round | 8-1/2 | 0.26 |
| JKB51606RP | Screwdriver, Slotted Keystone Round 5/16" x 6" | 5/16 | Keystone | 6 | Round | 10-3/4 | 0.39 |
| JKB3808RP | Screwdriver, Slotted Keystone Round 3/8" x 8" | 3/8 | Keystone | 8 | Round | 13 | 0.57 |
| JPO2112R | Screwdriver, Phillips Round Stubby # 2 x 1-1/2" | #2 | Phillips | 1-1/2 | Round | 3-1/2 | 0.12 |
| JPB0103RP | Screwdriver, Phillips Round # 1 x 3" | #1 | Phillips | 3 | Round | 6-1/4 | 0.18 |
| JPB0204RP | Screwdriver, Phillips Round # 2 x 4" | #2 | Phillips | 4 | Round | 8-1/2 | 0.27 |

Weight (lbs): 2.35

ASME B107.600 

DURATEK™ SCREWDRIVER SETS


DURATEK™ 6 PIECE COMBINATION SCREWDRIVER SET - FULL POLISH

Product #: J1206SCP



| Contents | Description | Tip Size | Tips | Shank Length (in) | Shank Type | Overall Length (in) | Weight (lbs) |
|------------|------------------------------------------------|----------|----------|-------------------|------------|---------------------|--------------|
| JKB31603RP | Screwdriver, Slotted Keystone Round 3/16" x 3" | 3/16 | Keystone | 3 | Round | 7-1/4 | 0.16 |
| JKB1404RP | Screwdriver, Slotted Keystone Round 1/4" x 4" | 1/4 | Keystone | 4 | Round | 8-1/2 | 0.26 |
| JKB51606RP | Screwdriver, Slotted Keystone Round 5/16" x 6" | 5/16 | Keystone | 6 | Round | 10-3/4 | 0.39 |
| JPB0103RP | Screwdriver, Phillips Round # 1 x 3" | #1 | Phillips | 3 | Round | 6-1/4 | 0.18 |
| JPB0204RP | Screwdriver, Phillips Round # 2 x 4" | #2 | Phillips | 4 | Round | 8-1/2 | 0.27 |
| JPB0306RP | Screwdriver, Phillips Round # 3 x 6" | #3 | Phillips | 6 | Round | 10-3/4 | 0.40 |

Weight (lbs): 1.89

ASME B107.600 

SCREWDRIVERS

DURATEK™ 8 PIECE LONG COMBINATION SCREWDRIVER SET

Product #: J1208SCL



| Contents | Description | Tip Size | Tips | Shank Length (in) | Shank Type | Overall Length (in) | Weight (lbs) |
|----------|-----------------------------------------------|----------|----------|-------------------|------------|---------------------|--------------|
| JC31606R | Screwdriver, Slotted Cabinet Round 3/16" x 6" | 3/16 | Cabinet | 6 | Round | 9 | 0.20 |
| JC1410R | Screwdriver, Slotted Cabinet Round 1/4" x 10" | 1/4 | Cabinet | 10 | Round | 14 | 0.34 |
| JC1412R | Screwdriver, Slotted Cabinet Round 1/4" x 12" | 1/4 | Cabinet | 12 | Round | 16 | 0.39 |
| JC1416R | Screwdriver, Slotted Cabinet Round 1/4" x 16" | 1/4 | Cabinet | 16 | Round | 20 | 0.39 |
| JP0108R | Screwdriver, Phillips Round # 1 x 8" | #1 | Phillips | 8 | Round | 11-3/4 | 0.22 |
| JP0208R | Screwdriver, Phillips Round # 2 x 8" | #2 | Phillips | 8 | Round | 12 | 0.31 |
| JP0212R | Screwdriver, Phillips Round # 2 x 12" | #2 | Phillips | 12 | Round | 16 | 0.40 |
| JP0216R | Screwdriver, Phillips Round # 2 x 16" | #2 | Phillips | 16 | Round | 20 | 0.39 |

Weight (lbs): 2.49

ASME B107.600



DURATEK™ SCREWDRIVER SETS

SCREWDRIVERS

DURATEK™ PERFORMANCE GRIP SCREWDRIVERS



DURATEK™ SCREWDRIVERS

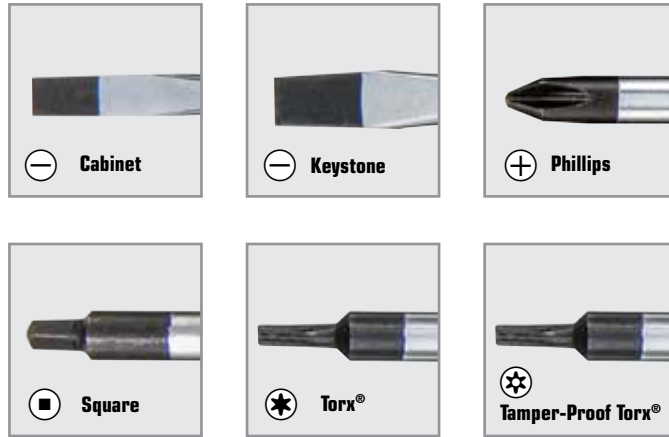
| Product # | Tip Size | Tips | Shank Length (in) | Shank Type | Bolster | Overall Length (in) | Weight (lbs) |
|------------|----------|----------|-------------------|------------|---------|---------------------|--------------|
| JCP1802R | 1/8 | Cabinet | 2 | Round | – | 4 | 0.08 |
| JCP1803R | 1/8 | Cabinet | 3 | Round | – | 5 | 0.09 |
| JCP1804R | 1/8 | Cabinet | 4 | Round | – | 6 | 0.09 |
| JCP1806R | 1/8 | Cabinet | 6 | Round | – | 8 | 0.10 |
| JCP1808R | 1/8 | Cabinet | 8 | Round | – | 10 | 0.09 |
| JCP31603R | 3/16 | Cabinet | 3 | Round | – | 6-5/16 | 0.10 |
| JC31603R | 3/16 | Cabinet | 3 | Round | – | 6 | 0.17 |
| JC31604R | 3/16 | Cabinet | 4 | Round | – | 7 | 0.18 |
| JC31605R | 3/16 | Cabinet | 5 | Round | – | 8 | 0.17 |
| JC31606R | 3/16 | Cabinet | 6 | Round | – | 9 | 0.20 |
| JC31608R | 3/16 | Cabinet | 8 | Round | – | 11 | 0.19 |
| JC31610R | 3/16 | Cabinet | 10 | Round | – | 13 | 0.24 |
| JC31612R | 3/16 | Cabinet | 12 | Round | – | 15 | 0.27 |
| JC1410R | 1/4 | Cabinet | 10 | Round | – | 14 | 0.34 |
| JC1412R | 1/4 | Cabinet | 12 | Round | – | 16 | 0.39 |
| JC1416R | 1/4 | Cabinet | 16 | Round | – | 20 | 0.39 |
| JKB31603RP | 3/16 | Keystone | 3 | Round | Yes | 7-1/4 | 0.16 |
| JK31604S | 3/16 | Keystone | 4 | Square | – | 7 | 0.19 |
| JK14112R | 1/4 | Keystone | 1-1/2 | Round | – | 3-1/2 | 0.12 |
| JK1404S | 1/4 | Keystone | 4 | Square | – | 8 | 0.27 |
| JK1404R | 1/4 | Keystone | 4 | Round | – | 8 | 0.25 |
| JKB1404RP | 1/4 | Keystone | 4 | Round | Yes | 8-1/2 | 0.26 |
| JK1406R | 1/4 | Keystone | 6 | Round | – | 10 | 0.29 |
| JK1424R | 1/4 | Keystone | 24 | Round | – | 28-1/2 | 0.51 |
| JK51604R | 5/16 | Keystone | 4 | Round | – | 8-3/8 | 0.33 |
| JK51606S | 5/16 | Keystone | 6 | Square | – | 10 | 0.41 |
| JKB51606RP | 5/16 | Keystone | 6 | Round | Yes | 10-3/4 | 0.39 |
| JK51606R | 5/16 | Keystone | 6 | Round | – | 10-3/8 | 0.37 |
| JK51608R | 5/16 | Keystone | 8 | Round | – | 12-3/8 | 0.41 |
| JKB3808RP | 3/8 | Keystone | 8 | Round | Yes | 13 | 0.57 |
| JK3808R | 3/8 | Keystone | 8 | Round | – | 13 | 0.54 |
| JK3808S | 3/8 | Keystone | 8 | Square | – | 13 | 0.60 |
| JK3810R | 3/8 | Keystone | 10 | Round | – | 11 | 0.62 |
| JK3812R | 3/8 | Keystone | 12 | Round | – | 17 | 0.69 |
| JK3812S | 3/8 | Keystone | 12 | Square | – | 17 | 0.77 |

ASME B107.600 


Torx® is a trademark of Acument Intellectual Properties, LLC

SCREWDRIVERS

DURATEK™ PERFORMANCE GRIP SCREWDRIVERS (CONT'D)



| Product # | Tip Size | Tips | Shank Length (in) | Shank Type | Bolster | Overall Length (in) | Weight (lbs) |
|-----------|----------|--------------------|-------------------|------------|---------|---------------------|--------------|
| JPP0002R | #0 | Phillips | 2 | Round | – | 4-1/2 | 0.08 |
| JPP0003R | #0 | Phillips | 3 | Round | – | 5-3/4 | 0.08 |
| JPP0103R | #1 | Phillips | 3 | Round | – | 6-5/16 | 0.10 |
| JPB0103RP | #1 | Phillips | 3 | Round | Yes | 6-1/4 | 0.18 |
| JP0103R | #1 | Phillips | 3 | Round | – | 6-3/4 | 0.17 |
| JP0108R | #1 | Phillips | 8 | Round | – | 11-3/4 | 0.22 |
| JP02112R | #2 | Phillips | 1-1/2 | Round | – | 3-1/2 | 0.12 |
| JPB0204RP | #2 | Phillips | 4 | Round | Yes | 8-1/2 | 0.27 |
| JP0204R | #2 | Phillips | 4 | Round | – | 8 | 0.26 |
| JP0208R | #2 | Phillips | 8 | Round | – | 12 | 0.31 |
| JP0212R | #2 | Phillips | 12 | Round | Yes | 16 | 0.40 |
| JP0216R | #2 | Phillips | 16 | Round | Yes | 20 | 0.39 |
| JP0224R | #2 | Phillips | 24 | Round | – | 28-1/2 | 0.50 |
| JPB0306RP | #3 | Phillips | 6 | Round | Yes | 10-3/4 | 0.40 |
| JP0306R | #3 | Phillips | 6 | Round | – | 10-3/8 | 0.38 |
| JP0408R | #4 | Phillips | 8 | Round | – | 13 | 0.57 |
| JS0005R | #0 | Square | 5 | Round | – | 9 | 0.19 |
| JS0105R | #1 | Square | 5 | Round | – | 9-1/4 | 0.19 |
| JS0205R | #2 | Square | 5 | Round | – | 9-1/4 | 0.19 |
| JS0305R | #3 | Square | 5 | Round | – | 9-1/4 | 0.19 |
| JT8314R | T8 | Torx® | 3-1/4 | Round | – | 7 | 0.17 |
| JT10314R | T10 | Torx® | 3-1/4 | Round | – | 7 | 0.18 |
| JT15314R | T15 | Torx® | 3-1/4 | Round | – | 7 | 0.18 |
| JT20314R | T20 | Torx® | 3-1/4 | Round | – | 7 | 0.18 |
| JT25314R | T25 | Torx® | 3-1/4 | Round | – | 7 | 0.18 |
| JT2704R | T27 | Torx® | 4 | Round | – | 8-1/2 | 0.26 |
| JT3004R | T30 | Torx® | 4 | Round | – | 8-1/2 | 0.26 |
| JT4006R | T40 | Torx® | 6 | Round | – | 10-3/4 | 0.38 |
| JT4506R | T45 | Torx® | 6 | Round | – | 10-3/4 | 0.38 |
| JTP8008R | TP8 | Tamper-Proof Torx® | 8 | Round | – | 12-1/4 | 0.17 |
| JTP1008R | TP10 | Tamper-Proof Torx® | 8 | Round | – | 12-1/4 | 0.18 |
| JTP1508R | TP15 | Tamper-Proof Torx® | 8 | Round | – | 12-1/4 | 0.18 |
| JTP2008R | TP20 | Tamper-Proof Torx® | 8 | Round | – | 12-1/4 | 0.18 |
| JTP2508R | TP25 | Tamper-Proof Torx® | 8 | Round | – | 12-1/4 | 0.18 |
| JTP2708R | TP27 | Tamper-Proof Torx® | 8 | Round | – | 12-1/2 | 0.26 |
| JTP3008R | TP30 | Tamper-Proof Torx® | 8 | Round | – | 12-1/2 | 0.26 |

ASME B107.600 

DURATEK™ SCREWDRIVERS

SCREWDRIVERS


13 PIECE HEX KEY SET

Product #: **J4980**

- ▶ Molded plastic holder included.

| Contents | INCH | Long Arm Length (in) | Short Arm Length (in) |
|----------|-------------|----------------------|-----------------------|
| J46103 | 0.050 | 1-11/16 | 1/2 |
| J46104 | 1/16 | 1-3/4 | 9/16 |
| J46105 | 5/64 | 1-7/8 | 5/8 |
| J46106 | 3/32 | 2 | 11/16 |
| J46107 | 7/64 | 2-1/8 | 23/32 |
| J46108 | 1/8 | 2-1/4 | 3/4 |
| J46109 | 9/64 | 2-3/8 | 13/16 |
| J46110 | 5/32 | 2-1/2 | 27/32 |
| J46112 | 3/16 | 2-3/4 | 15/16 |
| J46114 | 7/32 | 3 | 1 |
| J46116 | 1/4 | 3-1/4 | 1-1/8 |
| J46120 | 5/16 | 3-3/4 | 1-1/4 |
| J46124 | 3/8 | 4-1/4 | 1-3/8 |

Weight (lbs): 0.60

ASME B18.3-2012 




9 PIECE HEX KEY SET - METRIC

Product #: **J4984**

- ▶ Molded plastic holder included.

| Contents | MM | Long Arm Length (in) | Short Arm Length (in) |
|----------|-----------|----------------------|-----------------------|
| J46306 | 1.5 | 1-47/64 | 33/64 |
| J46308 | 2 | 1-59/64 | 5/8 |
| J46310 | 2.5 | 2-11/64 | 45/64 |
| J46312 | 3 | 2-7/16 | 3/4 |
| J46314 | 4 | 2-43/64 | 15/16 |
| J46316 | 5 | 3-5/64 | 1-1/16 |
| J46318 | 6 | 3-15/32 | 1-7/32 |
| J46320 | 8 | 3-55/64 | 1-3/8 |
| J46322 | 10 | 4-19/64 | 1-17/32 |

Weight (lbs): 0.54

ASME B18.3.2M 




9 PIECE ROUND HEAD HEX KEY SET - METRIC

Product #: **J4996**

- ▶ Ball end can tighten or loosen screws at angles up to 25°.
- ▶ Molded plastic holder included.

| MM | Long Arm Length (in) | Short Arm Length (in) |
|-----------|----------------------|-----------------------|
| 1.5 | 3-3/64 | 1/2 |
| 2 | 3-1/4 | 39/64 |
| 2.5 | 3-1/2 | 45/64 |
| 3 | 3-7/8 | 47/64 |
| 4 | 4-11/32 | 55/64 |
| 5 | 4-45/64 | 1-1/16 |
| 6 | 5-7/16 | 1-7/32 |
| 8 | 6-1/64 | 1-3/8 |
| 10 | 6-11/16 | 1-17/32 |

Weight (lbs): 1.70

ASME B18.3-2012 



HEX KEY SETS


STANDARD HEX KEYS

- › Heat-treated for durability.
- › Rust resistant black oxide finish.



| Product # | INCH | MM | Long Arm Length (in) | Short Arm Length (in) | Weight (lbs) |
|-----------|-------|-----|----------------------|-----------------------|--------------|
| J46101 | 0.028 | – | 1-1/4 | 1/8 | 0.01 |
| J46102 | 0.035 | – | 1-1/4 | 3/16 | 0.01 |
| J46103 | 0.050 | – | 1-11/16 | 1/2 | 0.01 |
| J46104 | 1/16 | – | 1-3/4 | 9/16 | 0.01 |
| J46105 | 5/64 | – | 1-7/8 | 5/8 | 0.01 |
| J46106 | 3/32 | – | 2 | 11/16 | 0.01 |
| J46107 | 7/64 | – | 2-1/8 | 23/32 | 0.01 |
| J46108 | 1/8 | – | 2-1/4 | 3/4 | 0.01 |
| J46109 | 9/64 | – | 2-3/8 | 13/16 | 0.02 |
| J46110 | 5/32 | – | 2-1/2 | 27/32 | 0.02 |
| J46112 | 3/16 | – | 2-3/4 | 15/16 | 0.03 |
| J46114 | 7/32 | – | 3 | 1 | 0.05 |
| J46116 | 1/4 | – | 3-1/4 | 1-1/8 | 0.07 |
| J46120 | 5/16 | – | 3-3/4 | 1-1/4 | 0.10 |
| J46124 | 3/8 | – | 4-1/4 | 1-3/8 | 0.19 |
| J46128 | 7/16 | – | 4-3/4 | 1-1/2 | 0.31 |
| J46132 | 1/2 | – | 5-1/4 | 1-5/8 | 0.31 |
| J46136 | 9/16 | – | 5-3/4 | 1-3/4 | 0.31 |
| J46140 | 5/8 | – | 6-1/4 | 1-7/8 | 0.58 |
| J46300 | – | 0.7 | 1-7/32 | 15/64 | 0.01 |
| J46302 | – | 0.9 | 1-7/32 | 23/64 | 0.01 |
| J46304 | – | 1.3 | 1-39/64 | 33/64 | 0.01 |
| J46306 | – | 1.5 | 1-47/64 | 33/64 | 0.01 |
| J46308 | – | 2 | 1-59/64 | 5/8 | 0.01 |
| J46310 | – | 2.5 | 2-11/64 | 45/64 | 0.01 |
| J46312 | – | 3 | 2-7/16 | 3/4 | 0.01 |
| J46314 | – | 4 | 2-43/64 | 15/16 | 0.01 |
| J46316 | – | 5 | 3-5/64 | 1-1/16 | 0.04 |
| J46318 | – | 6 | 3-15/32 | 1-7/32 | 0.07 |
| J46320 | – | 8 | 3-55/64 | 1-3/8 | 0.13 |
| J46322 | – | 10 | 4-19/64 | 1-17/32 | 0.23 |
| J46324 | – | 12 | 4-51/64 | 1-47/64 | 0.36 |
| J46326 | – | 14 | 5-23/64 | 2-11/64 | 0.57 |
| J46328 | – | 17 | 6-9/64 | 2-13/32 | 0.95 |

HEX KEYS

ASME B18.3-2012 


SCREWDRIVERS

LONG HEX KEYS

- › Heat-treated for durability.
- › Rust resistant black oxide finish.



| Product # | INCH | Long Arm Length (in) | Short Arm Length (in) | Weight (lbs) |
|-----------|------|----------------------|-----------------------|--------------|
| J46203 | .050 | 2-7/8 | 1/2 | 0.01 |
| J46204 | 1/16 | 3 | 9/16 | 0.01 |
| J46205 | 5/64 | 3-3/16 | 5/8 | 0.01 |
| J46206 | 3/32 | 3-3/8 | 11/16 | 0.01 |
| J46207 | 7/64 | 3-9/16 | 23/32 | 0.01 |
| J46208 | 1/8 | 3-3/4 | 3/4 | 0.02 |
| J46209 | 9/64 | 3-15/16 | 13/16 | 0.03 |
| J46210 | 5/32 | 4-1/8 | 27/32 | 0.03 |
| J46212 | 3/16 | 4-1/2 | 15/16 | 0.05 |
| J46214 | 7/32 | 4-7/8 | 1 | 0.07 |
| J46216 | 1/4 | 5-1/4 | 1-1/8 | 0.10 |
| J46220 | 5/16 | 6 | 1-1/4 | 0.17 |
| J46224 | 3/8 | 6-3/4 | 1-3/8 | 0.28 |
| J46228 | 7/16 | 7-1/2 | 1-1/2 | 0.45 |
| J46232 | 1/2 | 8-1/4 | 1-5/8 | 0.61 |

ASME B18.3-2012 

HEX KEYS

T-HANDLE HEX KEYS

- › T-handle design for greater torque.
- › Cushion grip handle provides added comfort.
- › Hex size printed on handle for easy size identification.

| Product # | INCH | Handle Length (in) | Length (in) | Weight (lbs) |
|-----------|------|--------------------|-------------|--------------|
| J46405 | 5/64 | 3 | 6 | 0.11 |
| J46406 | 3/32 | 3 | 6 | 0.11 |
| J46407 | 7/64 | 3 | 6 | 0.11 |
| J46408 | 1/8 | 3 | 6 | 0.14 |
| J46409 | 9/64 | 3 | 6 | 0.14 |
| J46410 | 5/32 | 3 | 6 | 0.32 |
| J46412 | 3/16 | 4 | 6 | 0.32 |
| J46414 | 7/32 | 4 | 6 | 0.63 |
| J46416 | 1/4 | 4 | 6 | 0.82 |
| J46420 | 5/16 | 6 | 6 | 0.89 |
| J46424 | 3/8 | 6 | 6 | 0.90 |



PLIERS & CLAMPING



PLIERS & CLAMPING

HEAVY-DUTY DIAGONAL CUTTING PLIERS

- › Induction hardened cutting edge.
- › Powerful leverage cuts heavy wire with ease.
- › Plastisol grips for added comfort.



| Product # | Overall Length (in) (L) | Jaw Length (in) (A) | Jaw Width (in) (B) | Jaw Thickness (in) (C) | Weight (lbs) |
|-----------|-------------------------|---------------------|--------------------|------------------------|--------------|
| J209G | 7-5/16 | 2-5/32 | 7/8 | 1/2 | 0.58 |
| J210G | 8-1/2 | 3/4 | 1-7/32 | 15/32 | 0.64 |


ASME B107.600 

LINEMAN'S PLIERS - HIGH LEVERAGE

- › Jaws have offset rivet for increased leverage.
- › Designed for cutting No. 8 and other large wires.
- › Diamond serrated jaws.
- › Plastisol grips for added comfort.



| Product # | Overall Length (in) (L) | Jaw Length (in) (A) | Jaw Width (in) (B) | Jaw Thickness (in) (C) | Weight (lbs) |
|-----------|-------------------------|---------------------|--------------------|------------------------|--------------|
| J269G | 9-1/4 | 1-3/16 | 1-3/32 | 5/8 | 1.10 |

ASME B107.600 


PLIERS

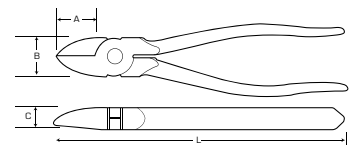
SOFT JAW - CANNON PLUG PLIERS

- › Capacity of 3/4" to 2-1/2".
- › Four position pivot design provides greater concentricity.
- › Replaceable urethane padded jaws protect work piece from marking or scratching.
- › Plastisol grips for added comfort.



| Product # | Overall Length (in) (L) | Max. Opening (in) | Replacement Item | Weight (lbs) |
|-----------|-------------------------|-------------------|------------------|--------------|
| J253G | 9-1/2 | 2-1/2 | 253GRK | 0.54 |

ASME B107.600 




PLIERS & CLAMPING

LOCKING SHEET METAL TOOL

- › Wide jaw profile to allow powerful grip on large thin surfaces.
- › Clamps, forms, bends, and crimps sheet metal.



| Product # | Jaw Length (in) (A) | Jaw Width (in) (B) | Overall Length (in) (L) | Height (in) | Weight (lbs) |
|---------------|---------------------|--------------------|-------------------------|-------------|--------------|
| J260XL | 1-3/4 | 3-11/64 | 8 | 2-1/4 | 1.14 |

ASME B107.600 

LOCKING C-CLAMPS WITH SWIVEL PADS

- › Knurled swivel pads - allow non-slip, no damage parallel clamping even on tapered surfaces.
- › J269XL - small in size for delicate and fine work and ideal for electronics.
- › Safely clamps delicate surfaces - wood, plastic and soft materials.



| Product # | Throat Height (in) | Throat Depth (in) | Jaw Width (in) | Height (in) | Overall Length (in) (L) | Weight (lbs) |
|---------------|--------------------|-------------------|----------------|-------------|-------------------------|--------------|
| J269XL | 2-15/32 | 2-21/32 | 3/4 | 3-1/2 | 7 | 0.56 |
| J270XL | 3-7/8 | 4-5/8 | 1-1/8 | 5-11/16 | 11-55/64 | 2.10 |
| J271XL | 4-21/64 | 7 | 1-1/8 | 6-15/32 | 14-1/8 | 2.90 |
| J272XL | 4-19/64 | 11-23/64 | 1-1/8 | 6-17/32 | 14-1/8 | 3.43 |
| J273XL | 4-1/4 | 17-5/8 | 1-1/8 | 6-31/64 | 24-7/8 | 4.14 |

ASME B107.600

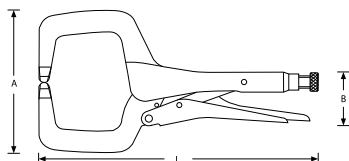
LOCKING ALUMINUM ALLOY C-CLAMPS

- › Modern ergonomic clamps with aircraft aluminum alloy jaws for professional welding and metal work.
- › Lightweight for comfort and ease of handling for the intensive user.
- › Spatter resistant material to ensure good working order and helps avoid tiresome cleaning.
- › Heat-treated die cast jaws to ensure resist and durability.



| Product # | Throat Height (in) | Throat Depth (in) | Jaw Width (in) | Height (in) | Overall Length (in) (L) | Weight (lbs) |
|---------------|--------------------|-------------------|----------------|-------------|-------------------------|--------------|
| J274XL | 4-3/64 | 4-19/64 | 4-55/64 | 5-7/8 | 11-5/32 | 1.40 |
| J275XL | 7-3/16 | 6-3/4 | 3/4 | 9-13/32 | 13-1/16 | 1.96 |

ASME B107.600



LOCKING PLIERS


PLIERS & CLAMPING

SAFETY WIRE TWISTER REVERSIBLE & AUTOMATIC PLIERS

- › Reversible safety wire pliers provide right and left twist capability often eliminating the need for a second pliers.
- › Automatic spring return feature speeds operation and reduces fatigue.
- › Meet SAE Aerospace Standard AS 567 Twister Requirements.
- › Provides all of the features of standard Proto® Safety Wire Pliers.



| Product # | Wire Size (in) | Overall Length (in) (L) | Weight (lbs) |
|-----------|----------------|-------------------------|--------------|
| J196 | 0.020 - 0.041 | 8-3/4 | 0.64 |
| J197 | 0.020 - 0.060 | 11 | 0.88 |
| J198 | 0.020 - 0.060 | 12-1/2 | 0.91 |


ASME B107.600 

WIRE STRIPPER - CUTTER

- › Strips 10-30 AWG - American Wire Gauge.
- › Wire cutter.
- › Pliers nose for pulling and looping wire.
- › Spring return and convenient handle lock.
- › Plastisol grips for added comfort.



| Product # | Overall Length (in) (L) | Wire Sizes | Weight (lbs) |
|-----------|-------------------------|--------------------------------|--------------|
| J297 | 6-1/16 | 10, 12, 14, 16, 18, and 20 AWG | 0.21 |
| J296 | 6-1/16 | 22, 24, 26, 28, and 30 AWG | 0.21 |

ASME B107.600 

WIRE STRIPPER - PLIERS

- › Strips 10-22 AWG - American Wire Gauge.
- › Crimps insulated and non-insulated terminals for 10-22 AWG wire.
- › Crimps non-insulated 7 mm and 8 mm auto ignition wire.
- › Cuts screw/bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32, 10-24 and copper wire.
- › Extended length curved cutter to handle heavier wire with less force.
- › Pliers nose designed to grip, bend, and pull wire.
- › Plastisol grips for added comfort.



| Product # | Overall Length (in) (L) | Weight (lbs) |
|-----------|-------------------------|--------------|
| J298 | 8-1/4 | 0.50 |

ASME B107.600 

6 PIECE CONVERTIBLE RETAINING RING PLIERS SET


Product #: J360A

- › Convenient blow-molded carrying case includes storage for space rings.
- › Ring range: External (Shaft) 1/4" - 3-11/32"; Internal (Bore) 3/8" - 3".



| Contents | Tip Size | Tip Angle | Length (in) | Shaft Dia. (in) (External) | Bore Dia. (in) (Internal) | Weight (lbs) |
|----------|----------|-----------|-------------|----------------------------|---------------------------|--------------|
| J399 | 0.038 | 0° | 5-7/8 | 1/4 - 43/64 | 3/8 - 9/16 | 0.15 |
| J371 | 0.038 | 90° | 5-11/16 | 1/2 - 25/32 | 3/8 - 9/16 | 0.16 |
| J372 | 0.047 | 0° | 5-7/8 | 11/16 - 7/8 | 5/8 - 1 | 0.16 |
| J374 | 0.047 | 90° | 5-11/16 | 13/16 - 1 | 5/8 - 1 | 0.16 |
| J385 | 0.070 | 0° | 7-1/2 | 15/16 - 1-7/16 | 1-1/16 - 13/4 | 0.29 |
| J376 | 0.070 | 90° | 7-1/8 | 1 - 1/16, 2 | 1-7/16 - 2 | 0.31 |

Weight (lbs): 2.10

ASME B107.600 

SAFETY WIRE TWISTERS, WIRE STRIPPERS & RETAINING RING PLIERS

C-CLAMPS - STANDARD SERVICE DEEP THROAT FULL LENGTH SCREW

- › Standard service, deep throat style is the most versatile and popular.
- › Hot forged for strength and hard use.
- › Forcing screw has heavy rolled Acme thread allowing the screw to turn easily under pressure and is less susceptible to damage.
- › Forcing screw has a sliding T-handle and an impact resistant pad.



| Product # | Opening Range (in) (C) | Throat Depth (in) (T) | Thread Diameter (in) (D) | Minimum Test Load (lbs) | Weight (lbs) |
|-------------|------------------------|-----------------------|--------------------------|-------------------------|--------------|
| J402 | 0-2 | 2 | 1/2 | 3500 | 1.30 |
| J403 | 0-3 | 2-3/8 | 1/2 | 3500 | 2.00 |
| J404 | 0-4 | 2-3/4 | 3/4 | 6500 | 3.50 |
| J406 | 0-6 | 3-5/8 | 3/4 | 6600 | 5.00 |
| J408 | 0-8 | 4-1/2 | 3/4 | 6900 | 7.00 |
| J410 | 0-10 | 5-3/8 | 3/4 | 8000 | 10.50 |
| J412 | 0-12 | 5-3/4 | 7/8 | 9500 | 15.50 |


ASME B107.600 

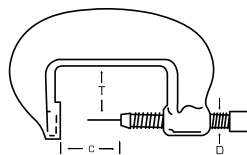
C-CLAMPS - STANDARD SERVICE DEEP THROAT SPATTER RESISTANT FULL LENGTH SCREW

- › Forcing screw and pad are plated with copper to resist welding spatter.
- › Hot forged for strength and hard use.
- › Forcing screw has heavy rolled Acme thread allowing the screw to turn easily under pressure and is less susceptible to damage.
- › Forcing screw has a sliding T-handle and an impact resistant pad.



| Product # | Opening Range (in) (C) | Throat Depth (in) (T) | Thread Diameter (in) (D) | Minimum Test Load (lbs) | Weight (lbs) |
|--------------|------------------------|-----------------------|--------------------------|-------------------------|--------------|
| J402S | 0-2 | 2 | 1/2 | 3300 | 1.30 |
| J403S | 0-3 | 2-3/8 | 1/2 | 3500 | 2.00 |
| J404S | 0-4 | 2-3/4 | 3/4 | 4100 | 3.50 |
| J406S | 0-6 | 3-5/8 | 3/4 | 5400 | 5.00 |
| J408S | 0-8 | 4-1/2 | 3/4 | 5900 | 7.00 |
| J410S | 0-10 | 5-3/8 | 3/4 | 6200 | 10.50 |
| J412S | 0-12 | 5-3/4 | 7/8 | 9300 | 15.50 |

ASME B107.600 

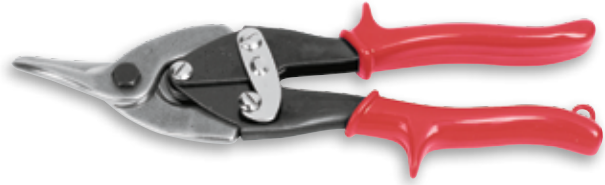


C-CLAMPS

PLIERS & CLAMPING

AVIATION SNIPS

- › Available in straight, left, or right models.
- › Compound leverage multiplies handle pressure and increases control for intricate cutting.
- › Serrated blades for maximum grip of the material being cut.
- › Color coded vinyl grips.



| Product # | Cuts | Handle Color | Blade Length (in) | Overall Length (in) | Weight (lbs) |
|--------------|----------|--------------|-------------------|---------------------|--------------|
| J303L | Left | Red | 1-3/8 | 10 | 0.94 |
| J303R | Right | Green | 1-3/8 | 10 | 0.94 |
| J303S | Straight | Yellow | 1-3/8 | 10 | 0.94 |

ASME B107.600 

CIRCULAR CUTTING DUCKBILL SNIPS

- › Duckbill snips are designed for circle and odd shaped radius cutting.
- › Plastisol grips for added comfort.

| Product # | Blade Length (in) | Overall Length (in) | Weight (lbs) |
|-------------|-------------------|---------------------|--------------|
| J307 | 1-1/2 | 7 | 0.45 |
| J310 | 2 | 10 | 0.95 |
| J312 | 2-3/4 | 12-3/4 | 1.61 |

ASME B107.600 



STRAIGHT CUTTING SNIPS

- › Designed for all straight cutting including inside and outside corners.
- › Plastisol grips for added comfort.

| Product # | Blade Length (in) | Overall Length (in) | Weight (lbs) |
|-------------|-------------------|---------------------|--------------|
| J317 | 1-1/2 | 7 | 0.48 |
| J320 | 2 | 10 | 0.93 |
| J322 | 2-3/4 | 12-3/4 | 1.64 |

ASME B107.600 



SNIPS

STRIKING & PRYING



STRIKING & PRYING

DEAD BLOW COMPO-CAST® COMBO FACE HAMMERS

- › Top welded handle-to-head assembly adds extra durability and safety.
- › Hot urethane Uni-Cast construction outlasts all other soft face striking tools. Urethane composition provides shape-retaining faces even after repeated striking on hard surfaces and sharp edges.
- › Handle is reinforced with solid steel shaft for greater strength safety.
- › Top of head molded with a flat surface.
- › Dual head design (Standard Dead Blow and Slim-line heads).
- › Comfortable dual molded grip.



Top of head molded with flat surface.




Dual head design (standard dead blow and slim-line heads).



Double flange butt handle.



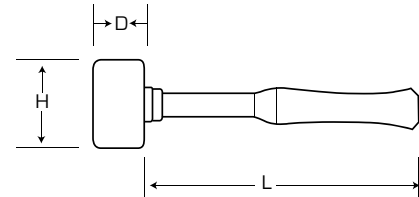
| Product # | Head Weight (oz) | Face Dia. (in) (D) | Head Length (in) (H) | Overall Length (in) (L) | Weight (lbs) |
|-----------|------------------|---------------------|----------------------|-------------------------|--------------|
| J57-530 | 15 | 1" x 1-1/4" | 3-3/4 | 10-2/5 | 0.90 |
| J57-531 | 21 | 1-1/4" x 1-35/64" | 4-1/2 | 11-13/20 | 1.40 |
| J57-532 | 28 | 1-11/32" x 1-45/64" | 5-7/50 | 13-1/4 | 1.80 |
| J57-533 | 48 | 1-45/64" x 2-3/32" | 5-4/5 | 14-1/4 | 2.95 |
| J57-534 | 56 | 1-61/64" x 2-13/32" | 6-1/5 | 15-19/20 | 3.70 |

ASME B107.54 


COMPO-CAST® & SOFT FACE HAMMERS

SOFT FACE HAMMER - MEDIUM/TOUGH TIPS

- › Two mar-resistant plastic tips, one medium, and one tough.
- › Tips are screw-on and replaced easily.
- › Fiberglass handle with ergonomic, non-slip grip.



| Product # | Face Dia. (in) (D) | Head Length (in) (H) | Overall Length (in) (L) | Weight (lbs) |
|-----------|--------------------|----------------------|-------------------------|--------------|
| J1360 | 1-3/16 | 2-3/4 | 13-21/64 | 0.81 |
| J1362 | 1-11/32 | 2-3/16 | 13-15/32 | 1.05 |
| J1364 | 1-11/16 | 4-11/16 | 14-53/64 | 2.06 |

ASME B107.54 




SOFT FACE HAMMER - MEDIUM/HARD TIPS

- › Each hammer comes with one medium and one hard tip installed.
- › Fiberglass handle with ergonomic, non-slip grip.



| Product # | Face Dia. (in) (D) | Head Length (in) (H) | Tip Series | Overall Length (in) (L) | Weight (lbs) |
|-----------|--------------------|----------------------|------------------|-------------------------|--------------|
| JSF105HM | 1 | 2 | SF10 Series Tips | 13 | 0.60 |
| JSF150HM | 1-1/2 | 2-3/8 | SF15 Series Tips | 13-1/2 | 0.79 |
| JSF200HM | 2 | 2-1/2 | SF20 Series Tips | 14 | 1.43 |
| JSF205HM | 2 | 2-1/2 | SF20 Series Tips | 14 | 2.06 |


ASME B107.54 

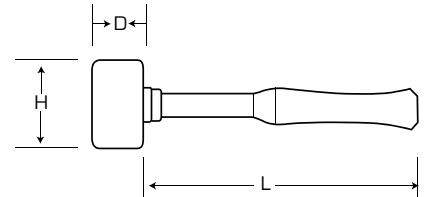
STRIKING & PRYING

BALL PEIN HAMMERS - INDUSTRIAL WOOD HANDLE

- › Tough drop-forged head with Rim-Tempered™ hardened face and pein.
- › Face, chamfer, cheeks and pein are polished and have a protective coating of clear lacquer.
- › Hardwood handles have contoured shape with red lacquer grip.

| Product # | Head Weight (oz) | Overall Length (in) (L) | Weight (lbs) |
|-----------|------------------|-------------------------|--------------|
| J1304PD | 4 | 11 | 0.45 |
| J1308PD | 8 | 12 | 0.83 |
| J1312PD | 12 | 13 | 1.14 |
| J1316PD | 16 | 14-1/2 | 1.45 |
| J1324PD | 24 | 15 | 2.00 |
| J1332PD | 32 | 15-7/8 | 2.42 |
| J1340PD | 40 | 16-3/8 | 2.84 |


ASME B107.53M 



BALL PEIN HAMMERS - INDUSTRIAL FIBERGLASS HANDLE

- › Well-balanced professional hammer with hardened drop-forged head bonded to strong, lightweight fiberglass handle. Exclusive Rim-Tempered™ process minimizes chipping from off-center strikes.
- › Molded jacket over the fiberglass handle provides maximum overstrike protection.

| Product # | Head Weight (oz) | Overall Length (in) (L) | Weight (lbs) |
|-----------|------------------|-------------------------|--------------|
| J1312PGD | 12 | 13 | 1.31 |
| J1316PGD | 16 | 13 | 1.54 |
| J1324PGD | 24 | 14-3/16 | 2.18 |
| J1332PGD | 32 | 15-1/4 | 2.62 |


ASME B107.53M 



RUBBER MALLET

- › Soft but tough, flake-resistant Neoprene head prevents damage.
- › Hickory handle.

| Product # | Face Dia. (in) (D) | Head Length (in) (H) | Overall Length (in) (L) | Weight (lbs) |
|-----------|--------------------|----------------------|-------------------------|--------------|
| J1368 | 2-1/4 | 4 | 13-1/2 | 1.43 |


ASME B107.54 



DEAD BLOW HAMMERS

- › Spark-resistant for safe use near combustible materials.
- › Head contains steel shot to help prevent rebound and vibration.
- › Fiberglass handle.

| Product # | Head Weight (lbs) | Face Dia. (in) (D) | Head Length (in) (H) | Overall Length (in) (L) | Weight (lbs) |
|-----------|-------------------|--------------------|----------------------|-------------------------|--------------|
| J1429DB | 1 | 1-5/8 | 4 | 11-59/64 | 1.25 |
| J1430DB | 2 | 2 | 4-3/8 | 12-11/16 | 1.65 |
| J1432DB | 3 | 2-1/2 | 4-5/8 | 14 | 2.60 |
| J1431DB | 4 | 2-7/8 | 5 | 14-9/64 | 3.09 |

ASME B107.54 



BALL PEIN & HARD FACE HAMMERS

STRIKING & PRYING

5 PIECE LONG DRIVE PIN PUNCH SET

Product #: **J48005LS2**

- › Reverse taper to help prevent binding.
- › Made from S2 steel and specially heat-treated for greater strength and durability.
- › Modified parabolic striking end to help reduce mushrooming and chipping.
- › Black oxide finish to help prevent rust corrosion; extending tool life and performance.
- › A polished identification panel on one of the flats is marked with the tool number and size in a black inlay.



| Contents | Description | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) |
|-----------|----------------------------------|--------------------|----------------------|-------------------------|
| J48532LS2 | Punch, Pin Super Duty Long 5/32" | 5/32 | 3/8 | 8 |
| J48316LS2 | Punch, Pin Super Duty Long 3/16" | 3/16 | 3/8 | 8 |
| J48732LS2 | Punch, Pin Super Duty Long 7/32" | 7/32 | 7/16 | 8 |
| J48014LS2 | Punch, Pin Super Duty Long 1/4" | 1/4 | 1/2 | 8 |
| J48516LS2 | Punch, Pin Super Duty Long 5/16" | 5/16 | 1/2 | 8 |
| J25TR30C | Tool Roll, 5 Pockets | | | |

Weight (lbs): 0.90

ASME B107.48



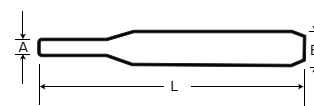
PUNCHES

SUPER-DUTY LONG DRIVE PIN PUNCHES

- › Reverse taper to help prevent binding.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|------------------|--------------------|----------------------|-------------------------|--------------|
| J48532LS2 | 5/32 | 3/8 | 8 | 0.14 |
| J48316LS2 | 3/16 | 3/8 | 8 | 0.15 |
| J48732LS2 | 7/32 | 7/16 | 8 | 0.20 |
| J48014LS2 | 1/4 | 1/2 | 8 | 0.30 |
| J48516LS2 | 5/16 | 1/2 | 8 | 0.41 |

ASME B107.48



7 PIECE PIN PUNCH SET

Product #: J47A

- › Two-piece design allows the tip to be hard for durability while allowing it to be produced straight to help prevent binding.
- › Reverse taper to help prevent binding.
- › Made from S2 steel and specially heat-treated for greater strength and durability.
- › Modified parabolic striking end to help reduce mushrooming and chipping.
- › Black oxide finish to help prevent rust corrosion; extending tool life and performance.
- › A polished identification panel on one of the flats is marked with the tool number and size in a black inlay.



| Contents | Description | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) |
|--------------|----------------------|--------------------|----------------------|-------------------------|
| J471/4X1/16 | Punch, Pin 1/16" | 1/16 | 1/4 | 4-3/8 |
| J471/4X3/32 | Punch, Pin 3/32" | 3/32 | 1/4 | 4-3/4 |
| J475/16X1/8 | Punch, Pin 1/8" | 1/8 | 5/16 | 5-3/16 |
| J475/16X5/32 | Punch, Pin 5/32" | 5/32 | 5/16 | 5-9/16 |
| J473/8X3/16 | Punch, Pin 3/16" | 3/16 | 3/8 | 5-7/8 |
| J477/16X7/32 | Punch, Pin 7/32" | 7/32 | 3/8 | 6-3/8 |
| J471/2X1/4 | Punch, Pin 1/4" | 1/4 | 3/8 | 6-3/4 |
| J25TR31C | Tool Roll, 7 Pockets | | | |

Weight (lbs): 1.15

ASME B107.48

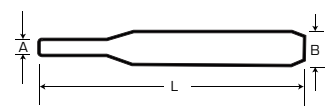


SUPER-DUTY DRIVE PIN PUNCHES

- › One-piece design for strength and durability.
- › Reverse taper to help prevent binding.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|---------------|--------------------|----------------------|-------------------------|--------------|
| J48116 | 1/16 | 1/4 | 4-1/8 | 0.05 |
| J48332 | 3/32 | 1/4 | 4-1/2 | 0.07 |
| J48018 | 1/8 | 5/16 | 4-3/4 | 0.09 |
| J48532 | 5/32 | 5/16 | 5 | 0.01 |
| J48316 | 3/16 | 3/8 | 5-1/4 | 0.15 |
| J48732 | 7/32 | 7/16 | 5-1/2 | 0.22 |
| J48014 | 1/4 | 7/16 | 5-3/4 | 0.29 |
| J48516 | 5/16 | 1/2 | 6-1/4 | 0.35 |
| J48038 | 3/8 | 5/8 | 6-1/2 | 0.53 |

ASME B107.48




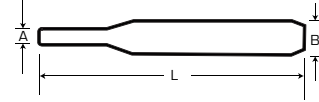
STRIKING & PRYING

DRIFT PUNCHES

- › Application: to align holes in two or more pieces of metal through which a bolt or screw is to be inserted.
- › Application: for installing and removing pins and shafts.
- › One-piece design for strength and durability.
- › Reverse taper to help prevent binding.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|-----------|--------------------|----------------------|-------------------------|--------------|
| J961/4S2 | 3/32 | 1/4 | 10 | 0.12 |
| J965/16S2 | 1/8 | 5/16 | 10 | 0.19 |
| J963/8S2 | 3/16 | 3/8 | 10 | 0.28 |
| J967/16S2 | 7/32 | 7/16 | 10 | 0.37 |
| J961/2S2 | 1/4 | 1/2 | 10 | 0.49 |
| J965/8S2 | 5/16 | 5/8 | 10 | 0.70 |
| J963/4S2 | 3/8 | 3/4 | 10 | 1.02 |

ASME B107.48 



7 PIECE ROLL PIN PUNCH SET


Product #: J49007S2

- › Made from S2 steel and specially heat-treated for greater strength and durability.
- › One-piece design for strength and durability.
- › Reverse taper to help prevent binding.
- › Modified parabolic striking end to help reduce mushrooming and chipping.
- › Black oxide finish to help prevent rust corrosion; extending tool life and performance.
- › A polished identification panel on one of the flats is marked with the tool number and size in a black inlay.
- › Set offers a wide range of sizes to handle a variety of jobs.
- › Includes a pouch for convenient storage solution.



| Contents | Description | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) |
|----------|-----------------------|--------------------|----------------------|-------------------------|
| J49116S2 | Punch, Roll Pin 1/16" | 1/16 | 1/4 | 3-3/4 |
| J49332S2 | Punch, Roll Pin 3/32" | 3/32 | 1/4 | 4-1/4 |
| J49018S2 | Punch, Roll Pin 1/8" | 1/8 | 5/16 | 4-3/4 |
| J49532S2 | Punch, Roll Pin 5/32" | 5/32 | 5/16 | 5-1/4 |
| J49316S2 | Punch, Roll Pin 3/16" | 3/16 | 3/8 | 5-7/16 |
| J49732S2 | Punch, Roll Pin 7/32" | 7/32 | 3/8 | 5-7/8 |
| J49014S2 | Punch, Roll Pin 1/4" | 1/4 | 7/16 | 6-7/16 |
| J25TR31C | Tool Roll, 7 Pockets | | | |

Weight (lbs): 0.77

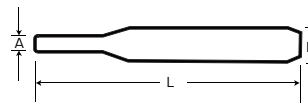
ASME B107.48 

ROLL PIN PUNCHES

- › One-piece design for strength and durability.
- › Reverse taper to help prevent binding.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|-----------------|--------------------|----------------------|-------------------------|--------------|
| J49116S2 | 1/16 | 1/4 | 3-3/4 | 0.04 |
| J49332S2 | 3/32 | 1/4 | 4-1/4 | 0.08 |
| J49018S2 | 1/8 | 5/16 | 4-3/4 | 0.08 |
| J49532S2 | 5/32 | 5/16 | 5-1/4 | 0.08 |
| J49316S2 | 3/16 | 3/8 | 5-7/16 | 0.10 |
| J49732S2 | 7/32 | 3/8 | 5-7/8 | 0.16 |
| J49014S2 | 1/4 | 7/16 | 6-7/16 | 0.16 |
| J49038S2 | 3/8 | 1/2 | 7-1/2 | 0.32 |
| J49012S2 | 1/2 | 5/8 | 7-1/2 | 0.52 |


ASME B107.48 



STARTING PUNCHES

- › Similar to drift punches, but with wider points and heavier, shorter body.
- › Application: to align holes in two or more pieces of metal through which a bolt or screw is to be inserted.
- › Application: for installing and removing pins and shafts.
- › One-piece design for strength and durability.
- › Reverse taper to help prevent binding.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|------------------|--------------------|----------------------|-------------------------|--------------|
| J503/16S2 | 1/16 | 1/4 | 4-1/8 | 0.03 |
| J501/4S2 | 3/32 | 1/4 | 5 | 0.06 |
| J505/16S2 | 1/8 | 5/16 | 5-1/8 | 0.10 |
| J503/8S2 | 3/16 | 3/8 | 5-5/8 | 0.17 |
| J507/16S2 | 7/32 | 7/16 | 6 | 0.24 |
| J501/2S2 | 1/4 | 1/2 | 6-1/2 | 0.33 |


ASME B107.410-2008 



CENTER PUNCHES

- › Application: metal working layout. Provides a broad dent in marking intersecting center lines, hole locations, and pilot drill starting point.
- › One-piece design for strength and durability.

| Product # | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|------------------|----------------------|-------------------------|--------------|
| J411/4S2 | 1/4 | 4-3/4 | 0.05 |
| J415/16S2 | 5/16 | 4-5/8 | 0.09 |
| J413/8S2 | 3/8 | 4-7/8 | 0.14 |
| J417/16S2 | 7/16 | 5-1/4 | 0.19 |
| J411/2S2 | 1/2 | 5-5/8 | 0.29 |
| J415/8S2 | 5/8 | 6-1/4 | 0.45 |

ASME B107.410-2008 




PUNCHES

STRIKING & PRYING

BRASS DRIFT PUNCHES

- › Spark-resistant, mar-resistant.
- › Designed to help prevent damage to the object being struck.
- › Modified parabolic striking end to help reduce mushrooming and chipping.

| Product # | Tip Width (in) (A) | Overall Length (in) (L) | Weight (lbs) |
|----------------|--------------------|-------------------------|--------------|
| J9638B | 3/8 | 6 | 0.20 |
| J9612B | 1/2 | 7 | 0.40 |
| J49920 | 1/2 | 7-7/8 | 0.46 |
| J9634B | 3/4 | 8 | 1.05 |
| J9634HB | 3/4 | 12 | 1.60 |

ASME B107.48 




3 PIECE BRASS HEAVY-DUTY PUNCH SET

Product #: **J9633HB**

- › Spark-resistant, mar-resistant.
- › Designed to help prevent damage to the object being struck.
- › Modified parabolic striking end to help reduce mushrooming and chipping.
- › Includes a pouch for convenient storage solution.

| Contents | Description | Tip Width (in) (A) | Overall Length (in) (L) |
|----------|----------------------------------|--------------------|-------------------------|
| J9638HB | Punch, Brass Line-up 3/8" x 10" | 3/8 | 10 |
| J96716HB | Punch, Brass Line-up 7/16" x 14" | 7/16 | 14 |
| J9634HB | Punch, Brass Drift 3/4" x 12" | 3/4 | 12 |
| J25TR54C | Tool Roll | | |

Weight (lbs): 4.10

ASME B107.48 




PUNCHES

BRASS LINE-UP PUNCHES

- › Spark-resistant, mar-resistant.
- › Designed to help prevent damage to the object being struck.
- › Modified parabolic striking end to help reduce mushrooming and chipping.

| Product # | Tip Width (in) (A) | Overall Length (in) (L) | Weight (lbs) |
|-----------------|--------------------|-------------------------|--------------|
| J9638HB | 3/8 | 10 | 1.00 |
| J96716HB | 7/16 | 14 | 1.50 |

ASME B107.48 



BRASS PIN PUNCHES

- › Spark-resistant, mar-resistant.
- › Designed to help prevent damage to the object being struck.
- › Modified parabolic striking end to help reduce mushrooming and chipping.

| Product # | Tip Width (in) (A) | Overall Length (in) (L) | Weight (lbs) |
|-----------------|--------------------|-------------------------|--------------|
| J471X8B | 1/8 | 4 | 0.10 |
| J473X16B | 3/16 | 4 | 0.10 |
| J475X16B | 5/16 | 4 | 0.18 |
| J471X4B | 1/4 | 4 | 0.18 |
| J473X8B | 3/8 | 6 | 0.31 |

ASME B107.48 




PIVOT HEAD PRY BARS

- › Special handle for secure grip, even with greasy hands.
- › Improved access and leverage over fixed head pry bars.
- › Flush quick-release selector for easy lock and release of pry head.
- › 11-position head with 165 degree range of motion.



| Product # | Tip Width (in) | Overall Length (in) | Weight (lbs) | Repair Kit Part # | Foot Replacement # |
|--------------|----------------|---------------------|--------------|-------------------|--------------------|
| J2162 | 9/16 | 8 | 2 | J2162RK | J2162FT |
| J2164 | 3/4 | 12 | 4 | J2164RK | J2162FT |
| J2166 | 3/4 | 16 | 4 | J2164RK | J2162FT |
| J2168 | 1 | 24 | 6 | J2168RK | J2168FT |
| J2170 | 1 | 36 | 7 | J2168RK | J2168FT |

ASME B107.52 

ROLLING HEAD BARS

- › Pry and aligning bar with a long pointed taper and 90° rolling head for leverage.

| Product # | Tip Width (in) (A) | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|--------------|--------------------|----------------------|-------------------------|--------------|
| J2126 | 1/2 | 1/2 | 12 | 1.30 |
| J2130 | 5/8 | 5/8 | 16 | 2.40 |
| J2134 | 7/8 | 3/4 | 21 | 2.35 |


ASME B107.52 

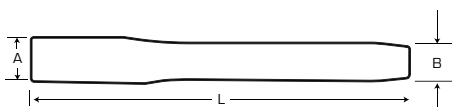


ALIGNING PRY BARS

- › For prying, positioning, and aligning applications.

| Product # | Tip Width (in) (A) | Overall Length (in) (L) | Weight (lbs) |
|--------------|--------------------|-------------------------|--------------|
| J2116 | 1/2 | 16 | 0.77 |
| J2120 | 5/8 | 18 | 1.23 |
| J2124 | 3/4 | 24 | 2.36 |
| J2125 | 7/8 | 30 | 3.72 |
| J2127 | 7/8 | 38 | 4.80 |
| J2128 | 1 | 42 | 7.30 |
| J2129 | 1-1/4 | 60 | 14.36 |

ASME B107.52 



PRY BARS

STRIKING & PRYING

4 PIECE LARGE HANDLE PRY BAR SET


Product #: **J2156S**

- ▶ Impact resistant, extruded Acetate handles are four-sided with broad but shallow flutes.
- ▶ Resistant to most harsh chemicals (including hydraulic fluids used in the aerospace industry).
- ▶ Four-sided handle design helps prevent "roll away" from the work surface and is comfortable and easy to hold.
- ▶ High alloy steel shanks are heat treated their entire length and black oxide treated for added strength and durability.



| Contents | Description | Tip Width (in) (A) | Overall Length (in) (L) |
|----------|---------------------------|--------------------|-------------------------|
| J2140 | Pry Bar, Large Handle 14" | 5/8 | 14-1/2 |
| J2142 | Pry Bar, Large Handle 18" | 5/8 | 17-1/2 |
| J2146 | Pry Bar, Large Handle 28" | 3/4 | 28 |
| J2148 | Pry Bar, Large Handle 32" | 3/4 | 31-7/8 |

Weight (lbs): 5.54


ASME B107.52 

PRY BARS

- ▶ Large four-sided handle for a better grip and added comfort.



| Product # | Tip Width (in) (A) | Overall Length (in) (L) | Weight (lbs) |
|--------------|--------------------|-------------------------|--------------|
| J2140 | 5/8 | 14-1/2 | 0.92 |
| J2142 | 5/8 | 17-1/2 | 1.08 |
| J2150 | 5/8 | 36 | 4.50 |
| J2152 | 5/8 | 42 | 4.75 |
| J2146 | 3/4 | 28 | 1.37 |
| J2148 | 3/4 | 31-7/8 | 2.17 |

ASME B107.52 

4 PIECE STANDARD PICK SET


Product #: **J2384S**

- ▶ High alloy steel 1/4" shanks are heat treated their entire length and black oxide treated for added strength and durability.



| Contents | Description | Shank Width (in) (B) | Overall Length (in) (L) |
|----------|-------------------------|----------------------|-------------------------|
| J2380 | Pick, 45 Degree Hook | 1/4 | 10-7/8 |
| J2381 | Pick, Cotter Pin Puller | 1/4 | 10-3/8 |
| J2382 | Pick, 90 Degree Hook | 1/4 | 10-3/4 |
| J2383 | Pick, Curved Hook | 1/4 | 10 |
| J25TR55C | Tool Roll, 4 Pockets | | |

Weight (lbs): 1.00


ASME B107.52 

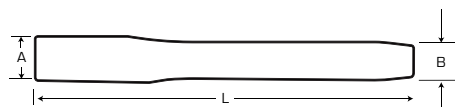
STANDARD PICKS

- ▶ High alloy steel 1/4" shanks are heat treated their entire length and black oxide treated for added strength and durability.



| Product # | Style | Shank Width (in) (B) | Overall Length (in) (L) | Weight (lbs) |
|--------------|--------|----------------------|-------------------------|--------------|
| J2380 | 45° | 1/4 | 10-7/8 | 0.25 |
| J2381 | Cotter | 1/4 | 10-3/8 | 0.25 |
| J2382 | 90° | 1/4 | 10-3/4 | 0.25 |
| J2383 | Curved | 1/4 | 10 | 0.25 |

ASME B107.52 





SPECIALITY

SPECIALITY

25 BLADE LONG FEELER GAUGE SET

Product #: J000TL

- › 1/2" x 12" blades in steel holder.
- › Sizes: .0015", .002", .003", .004", .005", .006", .007", .008", .009", .010", .011", .012", .013", .014", .015", .016", .017", .018", .019", .020", .021", .025", .027", .030", .040".
- › Blades etched with both decimal size and metric equivalent.
- › Weight (lbs): 0.72

INCH 



LONG BLADE FEELER GAUGES

| Product # | Blade Thickness (in) | Weight (lbs) |
|-----------|----------------------|--------------|
| J0015L | 0.0015 | 0.01 |
| J002L | 0.002 | 0.01 |
| J003L | 0.003 | 0.03 |
| J004L | 0.004 | 0.01 |
| J005L | 0.005 | 0.01 |
| J006L | 0.006 | 0.02 |
| J008L | 0.008 | 0.02 |
| J010L | 0.010 | 0.02 |
| J015L | 0.015 | 0.03 |





FEELER GAUGES & RETRIEVING TOOLS

SPARK PLUG GAP GAUGE SET

Product #: J000K

- › Spark plug electrode bender and eight bent wire gauges in sizes .020", .022", .025", .027", .028", .030", .035", .040".
- › Gauges marked with both decimal size and metric equivalent.
- › Weight (lbs): 0.07

INCH 



POCKET MAGNETIC RETRIEVING TOOLS

- › J2375 includes versatile telescoping handle and all-angle ball joint.
- › J2376A has an aluminum head that contains a neodymium magnet that can lift up to 1-1/2 lbs, all angle ball joint, and a pocket clip.

| Product # | Overall Length (in) | Weight (lbs) |
|-----------|---------------------|--------------|
| J2375 | 16-3/4 to 26-3/4 | 0.40 |
| J2376A | 8 | 0.08 |





J2375



J2376A

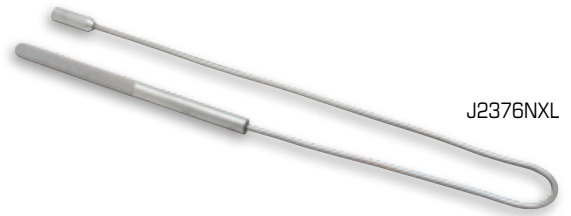
LONG REACH MAGNETIC PICKUP TOOLS

- › Magnetic tips help retrieve small objects from hard-to-reach places.

| Product # | Type | Overall Length (in) | Max. Lift (lbs) | Weight (oz) |
|-----------------|----------|---------------------|-----------------|-------------|
| J2375XL | – | 5.5 - 25.5 | 1.50 | 1.20 |
| J2376NXL | Flexible | 21.56 | 1.50 | 1.20 |
| J2376XL | – | 7.25 - 33.75 | 3.50 | 2.80 |
| J2377XL | Flexible | 29 | 5 | 4.30 |
| J2378XL | – | 8.25 - 30.25 | 5 | 1.90 |
| J2379XL | – | 8.25 - 30.25 | 16 | 3.90 |



J2375XL



J2376NXL

INSPECTION MIRRORS

- › Versatile all-angle ball joint.
- › Features telescoping handle (J2372 and J2373).
- › With pocket clip (J2373).



J2374



J2371



J2373

| Product # | Mirror Shape | Mirror Size (L x W in) | Mirror Diameter (in) | Overall Length (in) | Weight (lbs) |
|--------------|--------------|------------------------|----------------------|---------------------|--------------|
| J2370 | Circular | – | 7/8 | 7-1/2 | 0.08 |
| J2374 | Circular | – | 1-1/4 | 8 | 0.09 |
| J2372 | Circular | – | 2-1/4 | 10 to 14 | 0.25 |
| J2371 | Oval | 1 x 2 | – | 8-3/4 | 0.08 |
| J2373 | Rectangular | 2-1/8 x 3-1/2 | – | 11-1/4 to 15-1/2 | 0.30 |



LONG REACH INSPECTION MIRRORS



| Product # | Mirror Shape | Mirror Diameter (in) | Overall Length (in) | Weight (oz) | Replacement Mirror |
|----------------|--------------|----------------------|---------------------|-------------|--------------------|
| J2370XL | Circular | 7/8 | 8.5 - 30.25 | 1.30 | J2370XLR |
| J2372XL | Circular | 2-1/4 | 6.5 - 36.375 | 3.80 | J2372XLR |
| J2374XL | Circular | 1-1/4 | 6.5 - 35 | 3.80 | J2374XLR |
| J2382XL | Circular | 3-1/4 | 6.5 - 29.5 | 4.50 | J2382XLR |
| J2383XL | Circular | 1-1/4 | 5.75 - 27.25 | 1.50 | J2374XLR |
| J2373XL | Rectangular | 2-9/16 X 3-3/4 | 6.75 - 29.75 | 4.00 | J2373XLR |



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Does not cover the following categories of products: universal sockets, universal joints, thin-wall impact sockets, adapters, and retaining rings.

Does not cover damage due to ordinary wear and tear.

Does not extend to any claim for incidental, consequential, or special damages. Some states do not allow the exclusion of limitation of incidental or consequential damages, so this exclusion may not apply to you.

PROTO® makes no representations beyond those contained in this Lifetime Warranty.

Employees and agents of PROTO® have no authority to make representations of any sort beyond those contained in this Lifetime Warranty.

EXCLUSIVE REMEDY AND CLAIM PROCEDURE

Distributors of record must act as a return agent.

The exclusive remedy under this Lifetime Warranty for products determined to be deficient in materials or workmanship by PROTO® is repair or replacement with a reconditioned tool of equal value by PROTO®.

The selected remedy is at the sale discretion of PROTO®. In no event shall PROTO® be responsible for more than the original purchase price of the product.





SAFETY OBSESSED

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