

AVIATION TOOLS



PREPARING FOR TAKE-OFF STARTS WITH TECHS

You stand for something bigger than any plane you work on. And while we didn't place that responsibility in your hands, we do provide the tools to do the job right. Every time. At Snap-on®, we strictly adhere to all aerospace engineering standards, and we understand the demands professionals place on their tools. That's why we provide the right tools for the right jobs – to make your job easier, and provide the solutions you need. Our range of products is second to none, including custom-made applications, ergonomic designs, and more. And the innovation doesn't stop there – in fact at Snap-on®, it never stops.

BEFORE IT'S WHEELS-UP, IT'S THUMBS-UP.

ENGINEERING ADVANTAGE

Because technicians place great value on quality, performance, reliability and durability, Snap-on® builds those qualities into every hand tool we make. For tools that stay in service longer, generate greater productivity, and make income soar, reach for Snap-on® hand tools.

POWER ADVANTAGE

Snap-on® tools deliver not only power, but performance. The comfort, reliability and durability of Snap-on® power tools sets us apart from the rest, and sets you up for successfully completed jobs. Every time. Looking for a powerful partner in the hangar? You've come to the right place.

SPECIALTY ADVANTAGE

The most extensive line of specialty tools in the business is designed to precise heat treatment specifications, and built to perform beyond industry inspection standards. And if you don't find what you need, we'll create a custom tool solution to meet your specific needs. For the best airframe maintenance and repair tools, see the specialists: Snap-on®.

PRECISION ADVANTAGE

When tightening fasteners means securing aircraft safety, you need the industry leader: the one who gives you more ways to turn fasteners than anyone else and the precision advantage found only in our tools. And when it comes to tool selection and torqueing options, no one gives you more solutions than Snap-on®.

SAFETY ADVANTAGE

In an industry that requires absolute attention to detail, you should demand a tool company that provides just that. Snap-on® develops the tools and equipment for precise and accurate inspections, leaving no stone – or wing panel – unturned.

CONTROL ADVANTAGE

Snap-on's integrated tool control systems help keep track of your entire inventory. From tethered tools that reduce potentially catastrophic FOD, to our industry-leading Level 5 Total Asset Management System™, our programs give you the control advantage that let you safeguard what matters.



AVIATION TOOL SETS

Military Aviation Tool Sets

Over 30 years of experience and tens of thousands of kits – all custom tailored to suit your needs. Snap-on® continues to set the bar for maximum productivity and flight safety.

No one offers you more. More selection. More sets. More experts to assist you. More understanding of your needs. Whether you need one kit or one thousand kits, Snap-on® can provide the kit you need for any application.



Contact your Snap-on® Industrial sales representative who will be glad to help you select the right tools, tool sets and tool control to meet your specific needs.



Army Kits:
Power Plant
Technical Inspection
General Mechanical
Sheet Metal
Electrical
Hydraulic
Powertrain
Small Arms

USAF Kits:
APG CTK
APG Launch CTK
Custom TDY CTK
Engine CTK
E7E CTK
C130 Mobility

Army Aviation Kits:
AH6, AH7 Crew Chief
Airframe
Blackhawk Phase
Chinook Crew Chief
Crew Chief
Electronics
Engine Shop
Hydraulics Shop
Prop and Rotor

Marine Kits:
Marine Common 1

Navy Kits:
LM2500 Contents

See page N006 for complete details about the Snap-on® All Weather Mobile Tool Chest

Acronym	Full Nomenclature
TAMS/APG	Technical Aircraft Maintenance Specialists/ Air Power Generation
AVIONICS	Radar, Instruments, Communications, Navigation, Flight Controls and Electronic Counter Measurers
WEAPONS	Conventional Munitions and Maintenance
APG TDY KIT	Air Plane General Temporary Duty Maintenance
ARMAMENT	Gun, Pylon, and Launcher Maintenance
PHASE Dock Box	Chronological Inspection and Maintenance
ENGINE BOX	Power Plant, Start Systems and Gear Box Maintenance
DEMO TEAM	F-16/F-15/F-22 Demonstration Minor maintenance Launch and Recover Kit
CANN DOCK BOX	Cannibalization Dock Box
JEIM	Jet Engine Intermediate Maintenance
E&E Box	Electric and Environmental Control Systems
POD Box	Electronic Counter Measurer
Weapons Line Kit	Weapons

Acronym	Full Nomenclature
SPEC BOX	Radar, Instruments, Communications, Navigation, Flight Controls and Electronic Counter Measurers
AGE	Aerospace Ground Equipment
PMEL	Precision Measurement Equipment Laboratory
TRANS	Transportation Vehicle Maintenance
E&E In Shop	Electric and Environmental Control Systems
R&R/ RECOVERY	Repair and Reclamation
EGRESS	Ejection Seat Maintenance
Sheet Metal	Structural Repair
LO BARN	LOW Observance Coating Maintenance
Fuel Shop	Fuel System Maintenance
TM	Trailer Maintenance
PGM	Precision Guidance Munitions
Conventional	Conventional Air to Ground Munitions

Commercial Aviation Tool Sets

Our OEM and commercial aviation customers agree: Snap-on® is the world leader in custom kits. Whether you're managing a small operation or large fleet, Snap-on® can deliver a kitting solution to increase productivity and flight safety; no one offers more. The following is a partial list of the many kits that have been developed with our customers for specific commercial aviation requirements.

For a complete listing of all available kits, or to develop a custom kit, contact your Snap-on® Industrial representative.

Boeing®:

- A-Check Mechanical – All Aircraft**
- A-Check Electrical – All Aircraft**
- B-C-D-Check General Mechanical – All**
- B-C-D Check Electrical – All Aircraft**
- Boeing® and Airbus® General Mechanic**
- Engine Change Kits**
- Sheet Metal Kits**
- Flight Line (FOD bag)**
- B737 General Mechanic**

Airbus®:

- A-Check Mechanical – All Aircraft**
- A-Check Electrical – All Aircraft**
- B-C-D-Check General Mechanical – All**
- A350 General Mechanic Kit**
- A380 Torque Tool & Accessories Kit**
- A380 Bolter Kit**
- A380 Structure Kit**
- A380 Drillers Kit**
- A319, A340, & B737 A-Check General Mechanic**
- A319, A340, & B737 to B767 A-B-Check General Mechanic Kit**
- A319, A340, & B737 to B767 Electrical**
- Engine Change Kit**
- Flight Line (FOD bag)**



OEM and airline-determined kits:

- BAE Systems®**
- Beechcraft®**
- Bombardier®**
- Cessna®**
- Embraer®**
- Falcon®**
- Fokker®**
- Gulfstream®**
- Lear®**

Helicopter:

- Agusta®**
- Bell®**
- Boeing®**
- Eurocopter®**
- Robinson®**

Propulsion:

- GE®**
- Pratt & Whitney®**
- Rolls Royce®**

From OEM assembly to flight line maintenance, Snap-on® has your solution.

Contact your Snap-on® Industrial sales representative who will be glad to help you select the right tools, tool sets and tool control to meet your specific needs.



• Must wear eye protection
• Airframe tooling can cause flying chips

AOG MOBILE MAINTENANCE KITS

SOLUTIONS FOR AVIATION FOREIGN OBJECT DAMAGE PREVENTION

These flight engineer/AMT mobile tool kits are built for tool control, organization and visibility, which makes it simple for fast auditing for IS-BAO, SMS and flight safety. Easy to carry and stow, these sets are available in two versions for improved productivity: the 7-drawer, all-weather hard case to protect against the elements or a soft-sided bag to prevent damage to aircraft interior.

AOG Medium Mobile Tool Kit

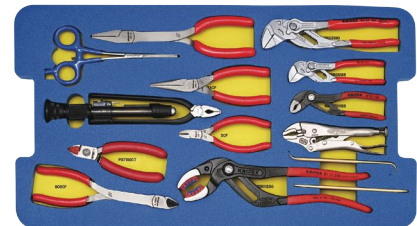
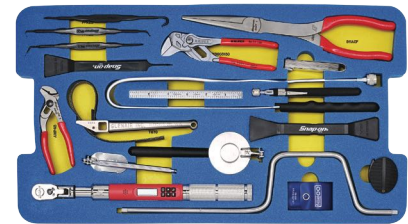
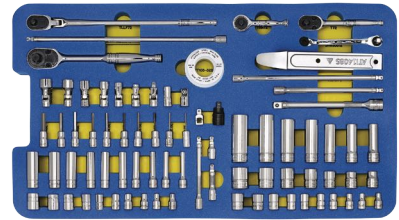
AOGMHC with Hard Case

AOGMSC with Soft Case

- Flight engineer/AMT mobile tool kit
- Tool control, organization and visibility
- Simple and fast audit for IS-BAO, SMS, flight safety
- Improved productivity
- Easy to carry and stow
- Hi-visibility hard case contains 5 individual foam tool pallets with 170+ tools and only weighs a total of 40 lb
- Soft-side bag contains 4 individual foam tool pallets and prevents damage to aircraft interior

Removable foam pallets for easy deployment to worksite

Note: Tool layout and foam is slightly different for soft case



Telescoping Handle for easy transport



AOGMSC



AOGMHC

Easy to Maneuver with integrated wheels

Set cabinetry and components are subject to change and may not be exactly as illustrated.

AOG Large Mobile Tool Kit

AOGLHC with Hard Case

AOGLSC with Soft Case

- Flight engineer/AMT mobile tool kit
- Tool control, organization and visibility
- Simple and fast audit for IS-BAO, SMS, flight safety
- Improved productivity
- 7-drawer all-weather Hi-vis case protects against the elements
- Soft side bag contains 5 individual foam tool pallets preventing damage to aircraft interior

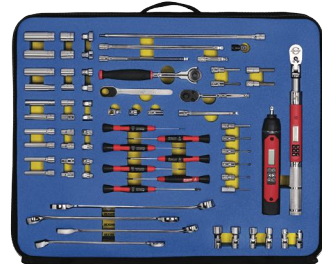
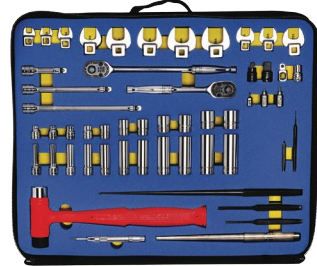


AOGLSC



Removable foam pallets for easy deployment to worksite (soft case)

Note: Tool layout and foam is slightly different for hard case



Telescoping Handle for easy transport

Fold-flat top creates a convenient work surface



Easy to Maneuver with integrated wheels

Fully-Extendable Drawers For easy access (hard case)

AOGLHC



• Must wear eye protection
• Read safety precautions on pages W1 to W4

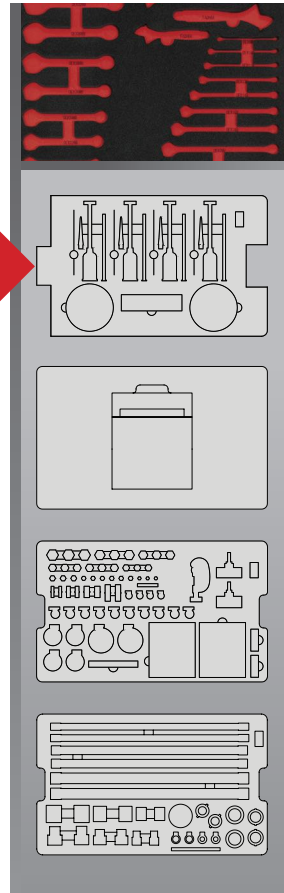
TOOL SETS & CUSTOM KITTING



T-BDAR2010

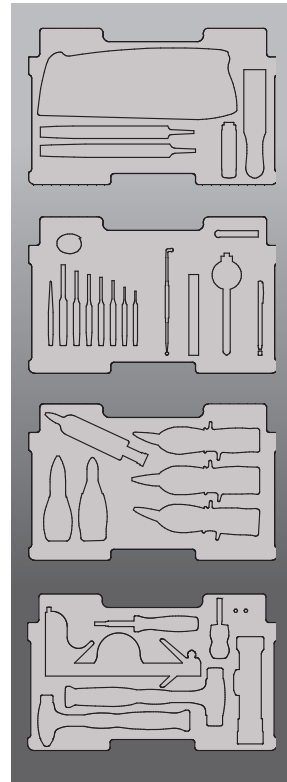
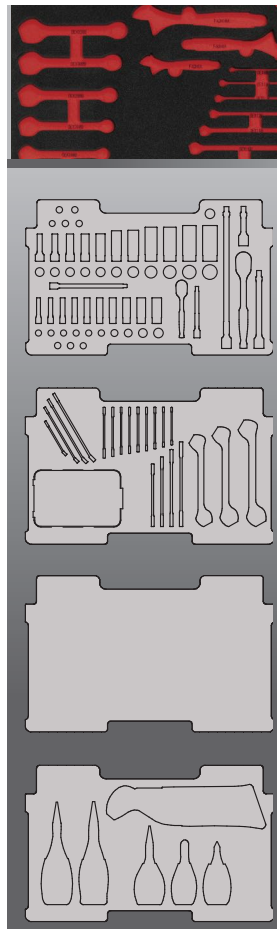
**Helicopter Damage Assessment & Repair Kit
T-BDAR2010**

- UH-60 Peculiar Ground Support Equipment Deployment Support Kit
- Low-Pressure Fluid Line Kit Components in a Pelican® 1650 case with foam inserts
- Kit offers maximum durability and mobility and can be deployable by a single maintainer
- Each removable pallet has customized foam inserts for tool control
- 60 lbs. Fully loaded; 24.03 lbs. empty
- Pelican® case exterior dimensions - 31.59" x 20.47" x 12.45"; Interior dimensions - 28.57" x 17.52" x 10.62"
- Pelican® 1650 case has an open cell core with solid wall design making it strong, light-weight, watertight, crush-proof and dust-proof
- Pelican® 1650 case has a comfortable rubber over-molded handle and stainless steel hardware with padlock protectors
- NSN 4920-01-531-1497



**Aircraft Maintenance Kit with Portable Chest
KMC18AVTK**

- Use to work on nearly any aircraft system
- Easy to carry and stow
- Case is chemical resistant, dustproof, watertight, and has a pressure equalization valve
- Ideal for flightline maintenance
- Exceeds U.S. Air Force operating instructions



Set cabinetry and components are subject to change and may not be exactly as illustrated.



Aviation MRO Pro Roll Cab with Foam (Pre-Assembled)

Contains a variety of essential aviation hand tools necessary for a wide range of aircraft maintenance tasks and procedures

ATKPLUSBAYB (Black Roll Cab)

ATKPLUSBLAYB (Bue Roll Cab)

ATKPLUSRAYB (Red Roll Cab)

- Features SAE tools specifically designed for aviation maintenance, repair, and operations
- Includes new KTL1022A 54" Roll Cab
- Roll cab comes pre-assembled with included tool set and foam

Roll Cab

Built to accommodate this aviation tool set is the 54" Master Series roll cab (KTL1022A). It features 10 heavy duty double ball bearing slide drawers including 3 full length drawers at the top where you need organization the most. The extra deep bottom left drawer ships empty for future tool storage needs. Available in 3 colors.



Tool Assortment

This set contains a variety of essential aviation hand tools necessary for a wide range of aircraft maintenance tasks and procedures. It includes 1/4" drive 12-pt SAE and 3/8" drive 12-pt SAE sockets, an assortment of crowfoot wrench heads, torque wrenches, speed wrenches, screwdrivers, combination wrenches,



Tool Control Foam

Keeping track of tool inventory is essential and Snap-on tool control foam is a must. This set comes pre-assembled with pre-cut foam for maximum organization, tool identification, inventory and storage. For more information, contact your Snap-on Industrial Representative.



• Must wear eye protection
 ‡ These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. Read safety precautions on pages W1 to W4

AVIATION TOOL SETS

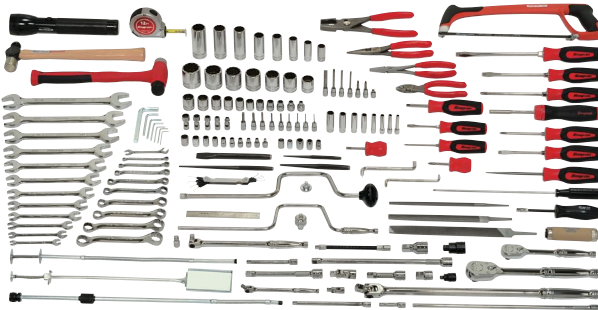


ATKBFL

Basic Flightline Kit with Tote Bag

ATKBFL

- A basic kit to do a wide variety of aircraft light maintenance
- Ideal for a fly away/on board service kit



ATKIFL

Intermediate Flightline or Hangar Kit

ATKIFLB

- Ideal for A and B checks
- Complete kit includes tools, foam and tool storage

ATKIFL

Intermediate Flightline or Hangar Kit, Tools Only

KRA2007FPB0

26" Seven-Drawer Single Bank Heritage Series Roll Cab

FOAMIFL

Black over Yellow Foam for Intermediate Flightline or Hangar Kit



KRA2007FPB0

Set cabinetry and components are subject to change and may not be exactly as illustrated.

Master Flightline or Hangar Kit

ATKMFLB Master Flightline or Hangar Kit

- Complete set includes tools, foam, and storage
- Covers a wide variety of maintenance activities with room for customization

ATKMFL

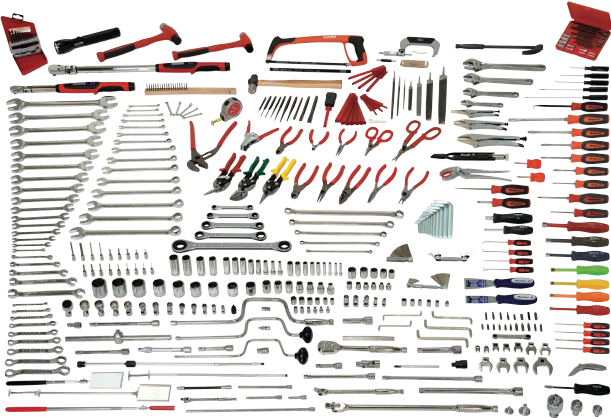
Master Flightline or Hangar Kit, Tools Only

KRL722BPBO

**54" 11-Drawer
Double-Bank Masters
Series Roll Cab**

FOAMMFL

**Black over Yellow
Foam for Master
Flightline or Hangar Kit**



ATKMFL

All Purpose Mechanic's Kit

ATKAPMB

- Supports a broad range of maintenance requirements with additional space to support the addition of our Master Mechanic Add-on set below or customize to your specific needs
- Complete kit includes tools, foam, and tool storage

ATKAPM

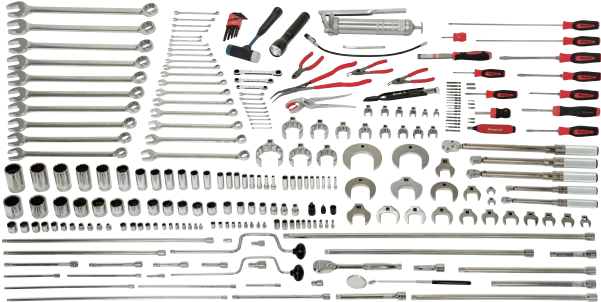
All Purpose Mechanic's Kit, Tools Only

KRA2411PBO

**55" 11-Drawer Double-Bank
Classic Series Roll Cab**

FOAMAPM

**Black over Yellow Foam for All
Purpose Mechanic's Kit**



ATKAPM

KRA2411PBO



- Must wear eye protection
- Read safety precautions on pages W1 to W4

AVIATION TOOL SETS



ATKMMAO

Master Mechanic Add-on Kit

ATKMMAOFOAM Master Mechanic Add-on, Tools and Foam Set

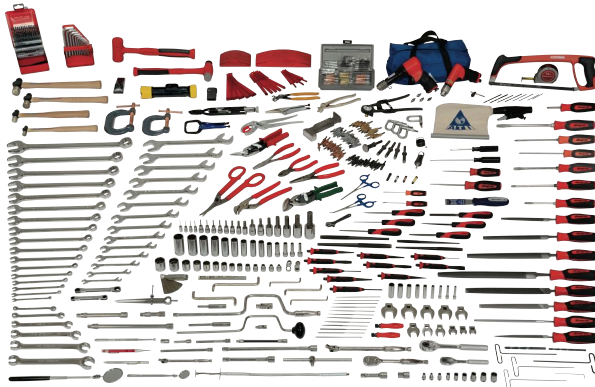
- Tools and Foam Set to be added to **ATKAPMB**
- Expands your capabilities of the **ATKAPMB** to cover a wider range of maintenance requirements

ATKMMAO

Master Mechanic Add-on, Tools Only

FOAMMMAO

Black over Yellow Foam for Master Mechanic Add-on Kit



ATKAO

Aircraft Overhaul Kit

ATKAOB

- Complete set includes tools, foam, and storage
- Designed to cover a wide range of heavy maintenance overhaul requirements

ATKAO

Aviation Overhaul Kit, Tools Only

KRA4107FPBO

40" Seven-Drawer Single Bank Heritage Series Roll Cab

FOAMAO

Black over Yellow Foam for Aviation Overhaul Kit



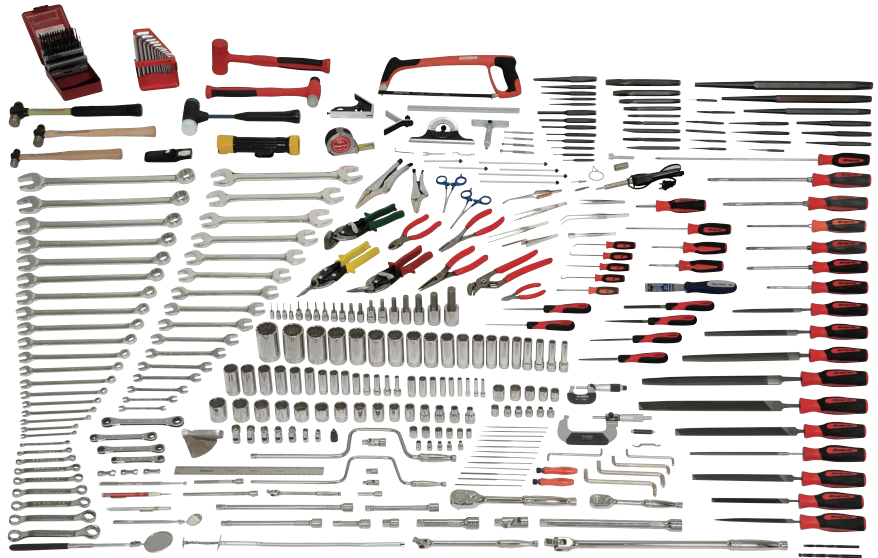
Set cabinetry and components are subject to change and may not be exactly as illustrated.

KRA4107FPBO

b2b.snapon.com 1.877.740.1900



KRA4107FPB0



ATKEO

Engine Overhaul Kit

ATKEOB

- Complete set includes tools, foam, and storage
- Comprehensive selection to cover powerplant maintenance and overhaul

ATKEO

Engine Overhaul Kit, Tools Only

KRA4107FPB0

40" Seven-Drawer Single Bank Heritage Series Roll Cab

FOAMEO

Black Over Yellow Foam for Engine Overhaul Kit



KRSC33PB0



ATKBSM

Sheet Metal Kit

ATKBSM Tools Only

- Selection supports drilling, sheet holding, riveting, cutting and more
- Optional roll cart KRSC33PB0 is ideal to store and organize your sheet metal tools



- Must wear eye protection
- Read safety precautions on pages W1 to W2

TOOL MANAGEMENT & SAFETY

Aviation Dog Boxes

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

Interchangeable Handles

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

Deluxe Wagon-Style Handle

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

Hinged And Foldable Top

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

Removable Chassis

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

Rubber Wheels

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



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

*Designed to be pulled by hand

Already own a Snap-on® tool box? Add a rolling-chassis to create your own dog box.

DB18CHASSIS: 18" Chassis with interchangeable hard and soft handles

DB24CHASSIS: 24" Chassis with interchangeable hard and soft handles

DB26CHASSIS: 26" Chassis hard handle only

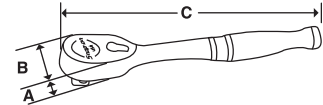
FOD Hand Tools



T72FOD

FOD (Foreign Object Damage) Ratchets

- Designed to help prevent foreign object damage in sensitive work environments
- Cover plate and reverse lever permanently affixed to ratchet head with rivets to prevent chance of small parts of debris



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	B	C
T72FOD	1/4	1/4" Drive Standard Handle Foreign Object Damage Ratchet	72	5°	7/16	15/16	4-11/16
GT72FOD	1/4	Industrial Finish Standard Handle	72	5°	7/16	15/16	4-11/16
TL72FOD	1/4	Chrome Finish Long Handle	72	5°	7/16	15/16	6-1/2
GTL72FOD	1/4	Industrial Finish Long Handle	72	5°	7/16	15/16	6-1/2
GFL80FOD	3/8	Long Industrial Handle Foreign Object Damage Ratchet	80	4.5°	9/16	1-1/4	10-5/16
GS80AFOD	1/2	Industrial Finish Standard Handle	80	4.5°	3/4	1-5/8	10-5/16
S80AFOD	1/2	1/2" Drive Technology Standard Handle Foreign Object Damage Ratchet	80	4.5°	3/4	1-5/8	10-5/16
GSL80AFOD	1/2	Foreign Object Damage Industrial Long Handle Ratchet	80	4.5°	3/4	1-5/8	15
F80FOD	3/8	3/8" Dr. Standard Handle Foreign Object Damage Ratchet	80	4.5°	9/16	1-1/4	7-7/16



No one offers more FOD and FME solutions than Snap-on® Industrial!

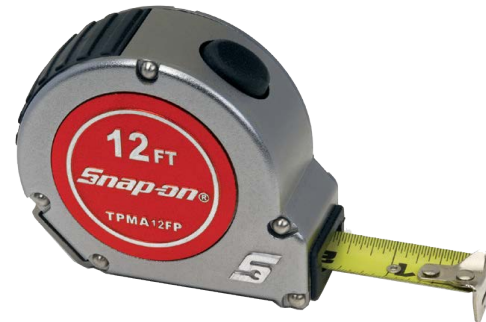


Snap-on® Industrial FOD ratchets feature rivets instead of screws for maximum FOD and FME program conformance.

FOD (Foreign Object Damage) 12' Tape Measure

TPMA12FP

- Recessed rivets for FOD prevention
- Clasp on rear of case for use with universal tether
- 3/4" x 12' tape
- Inch scale with 16" stud markings



TPMA12FP

Round Nylon-Framed Stainless Steel Mirror

- Uses a FOD free ball & socket configuration allowing 360° rotation to prevent chance of small parts debris
- 6-1/2" to 33" telescoping stainless steel handle
- Soft vinyl grip
- 7" collapsed, 36-1/4" extended overall length

Stock No.	Diameter
SET309N2STE	2-1/4"
SET306N2STE	1-1/4"



SET306N2STE

FOD (Foreign Object Damage) Mirror

UIM225HD

- 2-1/4" diameter mirror
- 6-1/2" long collapsed
- 35" maximum extended length
- Designed in conjunction with a major aircraft manufacturer
- Extension shaft has been modified to reduce the chance of the sections pulling apart



UIM225HD

- Must wear eye protection
- Do not open multiple drawers
- Images may be shown without actual warning labels
- ‡ These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See PROP65 pages for details.
- Read safety precautions on pages W1 to W4



AVIATION SPECIALTY TOOLS

Dissipates Electro-Static Discharge

Standard plastic-handled tools tend to charge build up that can harm electronics. ESD Safe tools use a modified plastic to dissipate electro-static.



126CNSERESD

Electro-Static Discharge-Safe Precision Pliers

- Snap-on® Electronic Pliers deliver the quality and versatility so vital to the intricate world of Electronics
- Innovative technology produces exact, precision forgings – plier halves are hot forged and then ground (vs. milled) to achieve an accurate fit every time
- Lap joint with screw allows perfect control of the holding torque, assuring the user of sufficient threads
- Special nut design provides greater accessibility than standard screw joints

ESD-Safe Holding Precision Pliers

Stock No.	Description	Image	Ideal Use
126CNSERESD	ESD Plier Chain Nose Serrated		Finely honed serrations allow extra "bite" for handling tricky materials. Top serrations cross bottom ones to prevent objects from falling into a groove.
126CNSMESD	ESD Plier Chain Nose Smooth		Finely milled and polished just enough to retain grip on wire.
114BNESD	ESD Plier Bent Nose		Classic variation of the chain nose, with a 60° bend at the tips that is ideal for positioning components.
79SNESD	ESD Plier Snipe Nose		Shorter version of the chain nose, with the best gripping strength. Used where power and torsion are paramount for the application.
79RNESD	ESD Plier Round Nose		Jaws taper from 7mm to 1.0mm at the tips. Handy for closing loops and the finest wire work.
79FNESD	ESD Plier Flat Nose		For holding flat geometries.



63THESD

ESD-Safe Cutting Precision Pliers

Stock No.	Description	Cut	Image	Ideal Use
63THESD	ESD Plier Tapered - 5/8"	Flush		Largest tapered cutting head in the series. Delivers a flush cut that leaves a narrow and short peak along the "pinch" line, decreasing the surface area at the cut.
50TRESD	ESD Plier Tapered and Relieved	Flush		Smallest head style that tapers on both sides with a cutaway underside for maximum accessibility but a slightly smaller cutting capacity.
50THESD	ESD Plier Tapered - 1/2"	Flush		Utilizes a head shaped along diagonal lines, allowing easier access without reducing the cutting range.
39OHFESD	ESD Plier Oval Head Flush	Flush		Combining strength and flexibility, the oval head can withstand and distribute the impact of cutting and can be utilized in a myriad of applications where a flush cut is needed.
39OHESD	ESD Plier Oval Head Micro Bevel	Micro Bevel		Combining strength and flexibility, the oval head can withstand and distribute the impact of cutting and can be utilized in a myriad of applications where a low profile cut for improved wire connectivity is needed.
39THESD	ESD Plier Tapered 25/64"	Flush		Utilizes a head shaped along diagonal lines, allowing easier access without reducing the cutting range.
31ECESD	ESD Plier End Cut	Flush		Angle shape is ideal for use in confined spaces. Delivers a flush cut that leaves a narrow and short peak along the "pinch" line, decreasing the surface area at the cut.



SGDET70ESD



SGDEL40ESD

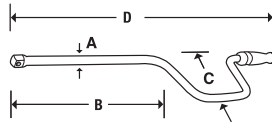
Electro-Static Discharge-Safe Screwdriver Sets

- Both the black grip and red plastic barrel have conductive additives to ensure that the tool safely dissipates electrostatic charges
- Rotating handle mechanism ideal for precise, detailed electronics work
- Blacktips prevent chipping of chrome, reducing potential contamination
- Includes protective carrying case

Stock No.	Description
SGDEL40ESD	Long Handle Combo Set
SGDE70ESD	7 pc Electronic Miniature Screwdriver Set
SGDEH70ESD	Hex Set
SGDET70ESD	Torx® Set

1/2" Drive 32-7/8" Deep Throw Speeder Drive Handle

- This loading tool is used on military aircraft
- Used to manually fold wings and lower landing gear

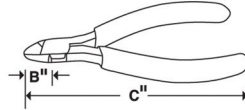


Size	Stock No.	A	B	C	D
1/2"	N8323	1/2	18-1/16	8-1/2	32-7/8



Cushion Throat Diagonal Cutters

- Urethane insert in jaws captures cut off material, reducing likelihood of FOD

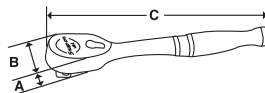


Stock No.	Description	B	C
388ACFCT	High Leverage Cutter	1-1/16	8-5/16
84CFCTA	Standard Diagonal	3/8	4-3/4
86ACFCT	Standard Diagonal	3/4	6-5/16
87ACFCT	Standard Diagonal	13/16	7-3/8
P8715OCT	Standard Diagonal	17/32	5-3/16



Hi-Lok® Ratchets with Dual 80° Ratchet Technology

- Dual 80° Ratchet Technology features dual pawls and a 72 tooth gear providing for more power in less lateral space
- Six teeth in full contact with gear to provide strength and durability
- A mere 5° ratcheting arc
- Sealed head keeps dirt and other contaminants out of the head mechanism
- For use with standard or Hi-Lok® sockets



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	B	C	Repair Kit
FCY72	3/8	Hi-Lok® Compact Head Ratchet	72	5°	7/16	15/16	4-5/8	RKRFCY72
TFY72	1/4	Standard Handle Hi-Lok® Flex Head	72	5°	7/16	15/16	6-1/4	RKRT841JT
TY72	1/4	Standard Handle Hi-Lok®	72	5°	7/16	15/16	4-5/8	RKRTY72



Reversible Wire Twister

- Simple operation with a one-handed locking function
- Spring loaded handles automatically open when lock is released
- Reversible trigger makes it easy to switch between right and left applications with one hand
- Jaw tips designed for precision work and hard to reach areas
- Designed to hold clipped wire, reducing the likelihood of F.O.D. (foreign object damage)
- Ergonomic handle reduces user fatigue

Stock No.	Description	Wire Capacity, inches	Overall Length, inches	Wire Retainer
WTG10A	Reversible Wire Twister	.031-.039	10-1/2	Yes
WTG8A	Reversible Wire Twister	.015-.031	8	Yes



- Must wear eye protection
- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Read safety precautions on pages W1 to W4

AVIATION SPECIALTY TOOLS



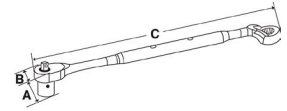
LH100

These two tools are used in case of hydraulic failure to lower landing gear and flaps

One of each tool is required to be on board a C-130 aircraft before it can leave the ground

**Ratchet Spline Boxsocket Assembly
LH100**

- Extended-reach 1/2" drive ratchet with a pinned spline socket on one end and a box end spline wrench on the other



Stock No.	A	B	C
LH100	3/4"	1-5/8"	30"

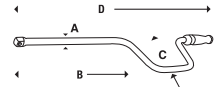
Snap-on® is registered in the CCR at: www.ccr.dlis.dla.mil In the CCR: DUNS #806095217, cage #55719, Tax ID 36-4070294



755121-1

**Deep Throw Speeder with 1/2" Drive Ratchet Adaptor
755121-1**

- 1/2" driver deep throw speeder with pinned universal and ratchet adaptor



Stock No.	A	B	C	D
755121-1	3/4	13-5/8	11-1/4	23-7/8

Snap-on® is registered in the CCR at: www.ccr.dlis.dla.mil In the CCR: DUNS #806095217, cage #55719, Tax ID 36-4070294

Ultra Low-Profile Screwdrivers

- Super-flat, low-profile design fits in tight areas
- Measures 108 mm in length and tapers from 16 mm at the base to 11 mm at head
- Tether hole in the handle to prevent FOD

Stock No.	Description
SSF1	Flat Tip
SSFP1	#1 Phillips® Tip
SSFP2	#2 Phillips® Tip



SSF1



SSFP2



SSFP1



209TFES



207TFEL

Spline Sockets

Spline Wrenching Tools

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress and allow the application of high torque to reduce the risk of damage to the fastener or the tool. Chrome tools comply with AS954, Military Spec. MS-33787 and MIL-W-8982. The unique spline wrenching configuration can also be used on ordinary six- and 12-point fasteners with an advantage similar to the Snap-on® Flank Drive® wrenching system.

Stock No.	207TFEL	209TFES
Description	7pc - 1/4" and 3/8" Drive Deep Spline Socket Set	9pc - 1/4" and 3/8" Drive Shallow Spline Socket Set
1/4" Drive Hex Sockets Included	TEL7B (#7), TEL8B (#8), TEL10B (#10)	TEL7B (#7), TEL8B (#8), TEL9B (#9), TEL10B (#10)
3/8" Drive Hex Sockets Included	FEL120B (#12), FEL140B (#14), FEL180B (#18), FEL200B (#20)	FEL120B (#12), FEL140B (#14), FEL160B (#16), FEL180B (#18), FEL200B (#20)
Complies with AS954	Yes	Yes
Complies with Military Spec MS-33787	Yes	Yes
Complies with MIL-W-8982	Yes	Yes
Finish	Chrome	Chrome
Material	Special Alloy Steel	Special Alloy Steel
Heat Treated for Strength and Durability	Yes	Yes



TES10B



FES200B

Shallow, inches, 1/4" Drive

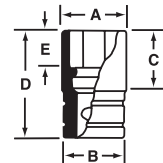
Stock No.	A	B	C	D	E		
#7	7/32	TES7B	11/32	7/16	15/32	15/16	7/32
#8	1/4	TES8B	3/8	7/16	15/32	15/16	9/32
#9	9/32	TES9B	7/16	7/16	—	15/16	—
#10	5/16	TES10B	15/32	15/32	—	15/16	11/32
#12	3/8	TES12B	35/64	35/64	19/32	59/64	23/64
#14	7/16	TES14B	5/8	39/64	23/32	1-3/64	7/16



TEL10B



FEL200B



Deep, inches, 1/4" Drive

Stock No.	A	B	C	D	E		
#7	7/32	TEL7B	11/32	7/16	1-17/32	2	7/32
#8	1/4	TEL8B	3/8	7/16	1-17/32	2	9/32
#10	5/16	TEL10B	15/32	15/32	1-17/32	2	11/32

Shallow, inches, 3/8" Drive

Stock No.	A	B	C	D	E		
#12	3/8	FES120B	17/32	21/32	15/32	1-1/16	11/32
#14	7/16	FES140B	5/8	11/16	1/2	1-3/32	7/16
#16	1/2	FES160B	23/32	23/32	—	1-3/32	—
#18	9/16	FES180B	13/16	13/16	—	1-3/32	15/32
#20	5/8	FES200B	7/8	7/8	—	2-3/8	9/16

Deep, inches, 3/8" Drive

Stock No.	A	B	C	D	E		
#12	3/8	FEL120B	17/32	21/32	1-17/32	2-1/8	11/32
#14	7/16	FEL140B	5/8	11/16	1-17/32	2-1/8	7/16
#18	9/16	FEL180B	13/16	13/16	—	2-3/8	15/32
#20	5/8	FEL200B	7/8	7/8	—	2-3/8	9/16

209TFES 9 pc Combination Drive SAE Shallow Spline Socket Set

- Includes 1/4" drive TES7B–TES10B and 3/8" drive FES120B–FES200B Shallow Spline Sockets (9 pc) (#7–20, 7/32–5/8") in magnetic socket tray

207TFEL 7 pc Combination Drive SAE Deep Spline Socket Set

- Includes 1/4" drive TEL7B–TEL10B and 3/8" drive FEL120B–FEL200B Deep Spline Sockets (7 pc) (#7–20, 7/32–5/8") in magnetic socket tray



- Must wear eye protection
- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

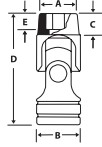
RATCHETING WRENCHES

Universal, inches, chrome (1/4")

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary 6 and 12 point fasteners with an advantage similar to the Snap-on® Flank Drive® wrenching system.



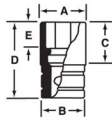
TDHU101B



		A	B	C	D	E
5/16	TDHU101B	15/32	1/2	1/2	1-11/32	1/4
3/8	TDHU121B	17/32	1/2	7/16	1-7/16	5/16
1/4	TDHU81B	13/32	1/2	3/8	1-7/32	1/4



TEL10B



Deep, inches, chrome (1/4")

		A	B	C	D	E
#10	TEL10B	15/32	15/32	1-17/32	2	11/32
#7	TEL7B	11/32	7/16	1-17/32	2	7/32
#8	TEL8B	3/8	7/16	1-17/32	2	9/32



207TFEL

7 pc Combination Drive SAE Deep Spline Socket Set

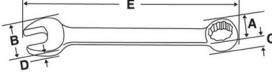
207TFEL

- Includes 1/4" drive TEL7B–TEL10B and 3/8" drive FEL120B–FEL200B Deep Spline Sockets (7 pc) (#7–20, 7/32–5/8") in magnetic socket tray



SOSR10

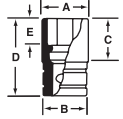
Spline 0° Degree Offset Combination Wrenches



	Stock No.	A	B	C	D	E
7/32 (#7)	SOSR7	5/8	17/32	1/4	5/32	4-27/32
1/4 (#8)	SOSR8	5/8	17/32	1/4	5/32	4-27/32
9/32 (#9)	SOSR9	21/32	11/16	1/4	3/16	5-25/32
5/16 (#10)	SOSR10	21/32	11/16	1/4	3/16	5-25/32
11/32 (#11)	SOSR11	23/32	3/4	9/32	3/16	6-1/4
3/8 (#12)	SOSR12	3/4	27/32	9/32	7/32	6-3/4
7/16 (#14)	SOSR14	27/32	15/16	5/16	7/32	7-7/32
1/2 (#16)	SOSR16	15/16	1-1/16	11/32	1/4	8-5/32
9/16 (#18)	SOSR18	1-1/32	1-5/32	11/32	1/4	8-5/8
5/8 (#20)	SOSR20	1-1/8	1-5/16	3/8	9/32	9-9/16
11/16 (#22)	SOSR22	1-3/16	1-3/8	13/32	5/16	10-1/32
3/4 (#24)	SOSR24	1-9/32	1-9/16	7/16	11/32	10-31/32
13/16 (#26)	SOSR26	1-9/16	1-23/32	1/2	3/8	12-11/32
7/8 (#28)	SOSR28	1-9/16	1-13/16	1/2	13/32	12-15/16
15/16 (#30)	SOSR30	1-13/16	1-15/16	9/16	13/32	14-1/8
1 (#32)	SOSR32	1-13/16	2-1/32	9/16	7/16	14-23/32



TES10B



Shallow, inches, chrome (1/4")

		A	B	C	D	E
#10	TES10B	15/32	15/32	—	15/16	11/32
#7	TES7B	11/32	7/16	15/32	15/16	7/32
#8	TES8B	3/8	7/16	15/32	15/16	9/32
#9	TES9B	7/16	7/16	—	15/16	—



209TFES

9 pc Combination Drive SAE Shallow Spline Socket Set

209TFES

- Includes 1/4" drive TES7B–TES10B and 3/8" drive FES120B–FES200B Shallow Spline Sockets (9 pc) (#7–20, 7/32–5/8") in magnetic socket tray



SOSRR12

Spline Reversible Ratchet Combination Wrench Set

SOSRR707

Patented ratcheting mechanism utilizes Snap-on® Dual 80® technology, combining dual pawls with a thin-walled, box-end design for smooth operation and more torque transfer in less lateral space.

- Flank-Drive® gear features an 80-tooth profile and is cold formed from the same steel as Snap-on® sockets, delivering up to 40% more cycle life and strength equivalent to traditional combination wrenches
- Flank-Drive® Plus wrenching profile on open end "bites" into the fastener, preventing slipping and rounding of the fasteners, while providing up to 62% more turning power and strength

Set Includes:

	Stock No.	A	B	C	D	E
3/8 (#12)	SOSRR12	3/4	27/32	9/32	7/32	7-1/32
7/16 (#14)	SOSRR14	27/32	15/16	5/16	7/32	7-21/32
1/2 (#16)	SOSRR16	15/16	1-1/16	11/32	1/4	8-11/16
9/16 (#18)	SOSRR18	1-1/32	1-5/32	11/32	1/4	9-1/4
5/8 (#20)	SOSRR20	1-1/8	1-5/16	3/8	9/32	10-9/32
11/16 (#22)	SOSRR22	1-3/16	1-3/8	13/32	5/16	10-7/8
3/4 (#24)	SOSRR24	1-9/32	1-9/16	7/16	11/32	12



ControlTech® Aluminum Electronic Torque Wrenches

Snap-on® ControlTech® Aluminum Electronic Torque Wrenches are lightweight, durable and powerful, making them an essential tool for aviation and aerospace. At just one pound, the weight is comparable to mechanical micrometer torque wrenches, yet they provide instant data on the exact torque applied - something mechanical wrenches can't do. The lightweight design reduces fatigue and enables more precise torque application across multiple fasteners.

Professional Strength in Lightweight Aluminum

The lightweight, hard anodized aluminum body is designed to stand up to industrial use and each Snap-on® ControlTech® Industrial Electronic Torque Wrench is backed by an Industry-leading 2 year warranty.

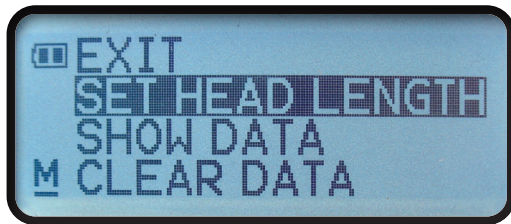
Torque and Angle Combo Mode

The patent-pending Torque and Angle combo mode provides the most accurate and fastest way to achieve torque plus angle in a single motion. Control torque accuracy to +/-2% clockwise, +/-3% counterclockwise. Control angle accuracy to +/-1% of reading and +/-1 degree.



LED Indicator Lights

Dual side LED indicator lights with configurable settings provide operational guidance.



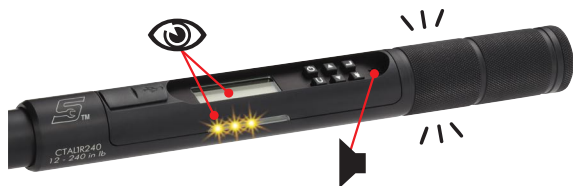
Built-In Calibration Factor

Patent Pending* built in calibration factor to use with interchangeable heads and torque adapters eliminates the need to perform manual calculations (use with interchangeable heads and torque adapters).



Dual 80® Technology

Provides precise yet strong ratchet function with minimal ratcheting arc and very little lost motion, allowing you to ratchet in tighter areas (Available model CTAL1R240).



Multi-Sensory Indicators

Snap-on® ControlTech® Industrial Torque Wrenches are ideal for any working condition thanks to audible, tactile and visual indicators. The easy-to-read LCD screen, LED indicator lights, audible beep and handle vibration work together to signal when torque is within the targeted range.

Convenience & Control

Snap-on® Control Tech® Industrial Electronic Torque Wrenches are fully programmable for reliable, consistent, repeatable torque application. Every model features a large, backlit LCD screen for better visibility in a variety of working conditions and a high storage memory capacity for 1,500 readings.



- Must wear eye protection
- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

INDUSTRIAL TORQUE WRENCHES

ControlTech®



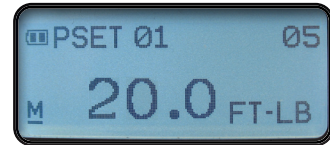
Convenient Data Download

USB plug and play technology allows data download without additional software. Simply connect the included USB cord to the electronic torque wrench and a PC to drag and drop data for an audit proof trail and process control

DATE/TIME	MIN TARGET TORQUE	MAX TARGET	PEAK TORQUE	MIN TARGET	MAX TARGET	PEAK ANGLE	TORQUE UNITS	TORQUE STATUS	ANGLE STATUS	MODE COUNT
1/1/2013 16:38	20	30	20.3	0	0	0	FT-LB	OK	OK	3
1/1/2013 16:38	20	30	20.55	0	0	0	FT-LB	OK	OK	2
1/1/2013 16:38	20	30	20.55	0	0	0	FT-LB	OK	OK	1
1/1/2013 6:39	0	0	25.09	45	60	46	FT-LB	OK	OK	1
1/1/2013 16:39	0	0	26.62	45	60	46	FT-LB	OK	OK	2
1/1/2013 16:39	0	0	26.57	45	60	46	FT-LB	OK	OK	3
1/1/2013 16:41	0	0	23.32	50	65	52	FT-LB	OK	OK	3
1/1/2013 16:41	0	0	19.98	50	65	51	FT-LB	OK	OK	2
1/1/2013 16:41	0	0	22.18	50	65	52	FT-LB	OK	OK	1
1/1/2013 16:50	25	35	28.29	50	65	57	FT-LB	OK	OK	3
1/1/2013 16:51	25	35	27.76	50	65	52	FT-LB	OK	OK	2
1/1/2013 16:51	25	35	28.15	50	65	54	FT-LB	OK	OK	1
1/1/2013 16:52	19	22	23.69	0	0	0	FT-LB	HIGH	OK	1
1/1/2013 16:54	0	0	26.73	43	49	53	FT-LB	OK	HIGH	1



Stock No.	CTECHL1240A	CTECHL1J240A	CTECHL1R240A
Description	Industrial Electronic Torque, Angle & Memory Wrench 1/4" Square Drive	Industrial Electronic Torque, Angle & Memory Wrench 1/4" Fixed Head Ratchet	Industrial Electronic Torque, Angle & Memory Wrench; Interchangeable Head, J Shank
Square Drive, inches	1/4	—	1/4
Head Type	Fixed Head	Interchangeable	Sealed Fixed Head
Gear Teeth	—	—	72
Gear Action	—	—	5°
Shank Diameter, inches	—	J (0.425")	—
Torque Range, in-lb	12–240	12–240	12–240
Torque Range, ft-lb	1.0–20.0	1.0–20.0	1.0–20.0
Torque Range, N•m	1.4–27.2	1.4–27.2	1.4–27.2
Torque Accuracy	±2% Clockwise; ±3% Counterclockwise	±2% Clockwise; ±3% Counterclockwise	±2% Clockwise; ±3% Counterclockwise
Angle Range	0–360°	0–360°	0–360°
Angle Accuracy	±1% of Reading ±1° at Angular Velocity > 10°/Sec < 180°/Sec	±1% of Reading ±1° at Angular Velocity > 10°/Sec < 180°/Sec	±1% of Reading ±1° at Angular Velocity > 10°/Sec < 180°/Sec
Dual 80°	—	—	Yes
Storage Capacity	1,500 readings	1,500 readings	1,500 readings
Number of Presets	50	50	50
Languages	English, Spanish, French, German	English, Spanish, French, German	English, Spanish, French, German
Operating/Storage Temperature	0 to 130° F (-18 to 54° C)	0 to 130° F (-18 to 54° C)	0 to 130° F (-18 to 54° C)
Rugged and Lightweight 6061-T6 Aerospace Aluminum Body	Yes	Yes	Yes
Housing Color	Black Anodized	Black Anodized	Black Anodized
Batteries	(3) AAA required / (3) AAA Lithium Included	(3) AA required / (3) AA Lithium Included	(3) AAA required / (3) AAA Lithium Included
Weight, lb (kg)	1.1 (0.49)	1.0 (0.45)	1.2 (0.54)
Head Depth (A)/Width (B)	3/4" (A)/3/4" (B)	3/4" (A)/7/8" (B)	-
Length, inches (mm)	12.4 (315)	12.5 (316)	14.1 (358)
Storage Case	Yes	Yes	Yes
Warranty	2 Year	2 Year	2 Year
Repair Kit	—	—	—



CTECHL1J240A

Fully Programmable

50 memory presets with a batch count up to 99. Presets can be locked to prevent inadvertent changes or tampering.

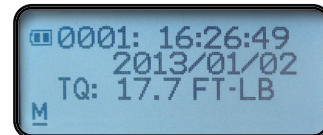
Sequence Programming

Allows you to program different torque applications in sequence and lock in job mode to ensure the operator follows sequence without error.



Calibration Due Indicator

Using a patent-pending* time based calibration technology, the Snap-on® ControlTech® Industrial Torque Wrench alerts you when calibration is needed.



CTECHL1J240A

Reliable Data Trail

Time stamped data trail for quality control, job auditing, and torque verification.

Complies with ISO 9000-2003 and ASME B107.300-2010 (B107.28) Standards for Electronic Torque Instruments
 *Wrench length specification does not include the length of interchangeable heads.

ControlTech® Micro Electronic Torque Wrench

The Control Tech™ Micro Electronic Torque Wrench boasts all of the same, great features you come to expect from the CTech line of wrenches, but in a smaller, more compact scale. It provides an instant readout of the exact torque applied, enabling a more precise torque application across multiple fasteners. Every model features a large, backlit LCD screen for better visibility in a variety of working conditions and a high capacity memory for storage of 1,500 readings.

- Easy battery replacement with new one-piece end cap/battery holder design
- One AA Lithium battery yields 40 hours of continuous use (also accepts Alkaline or NiMH re-chargeable - Not included)



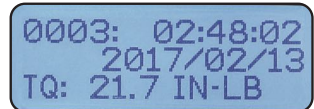
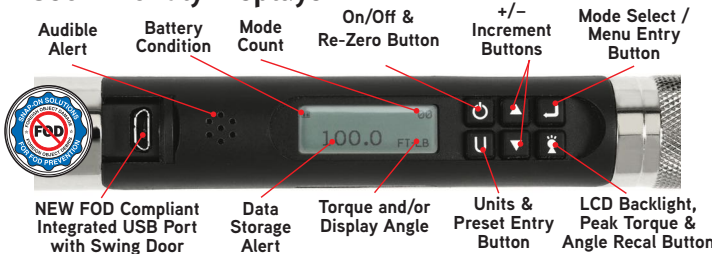
Stock No.	Square Drive, inches	Torque Range, in-lb	Torque Range, ft-lb	Torque Range, N•m	Angle Range
CTECHANM30	N/A	13.3–265.5	1.11–22.13	1.5–30	0–360°
CTECHJM300	N/A	15-300	1.25-25	1.7-34	0-360°
CTECH1MR240	1/4	12–240	1–20	1.36–27.12	0–360°
CTECH2MR240	3/8	12–240	1–20	1.36–27.12	0–360°
CTECH1MR100	1/4	5–100	0.42–8.33	0.57–11.30	0–360°
CTECH2MR100	3/8"	5-100	0.42 - 8.33	0.57 - 11.30	0–360°
CTECH2MR1200	3/8	60–1,200	5–100	6.8–135.6	0–360°



Built-In Calibration Factor

- Eliminates the need to perform manual calculations (use with interchangeable heads and torque adapters)

User-Friendly Displays



Reliable Data Trail

- Time-stamped data trail for quality control, job auditing and torque verification



Multi-Sensory Indicators

- Ideal for any working condition thanks to audible, tactile and visual indicators
- The easy-to-read LCD screen, LED indicator lights, audible beep and handle vibration work together to signal when torque is within the targeted range



Approaching Target Target Achieved Over Torque

LED Indicator Lights

- Dual-side LED indicator lights with configurable settings provide operational guidance
- Click-types can easily be overtorqued by as much as 20% because the user doesn't stop pulling the wrench the instant it clicks. Digital wrenches have yellow/green/red lights that tell the user when to stop pulling

Convenient Data Download

- USB plug and play technology allows data download without additional software for an audit proof trail and process control



Dual 80® Technology

- Precise yet strong ratchet function with minimal ratcheting arc and very little lost motion

Durability

- Rugged all-steel body is designed to stand up to industrial use
- Industry-leading 2 year warranty

Shorter, Slimmer, Lightweight Design Factor!

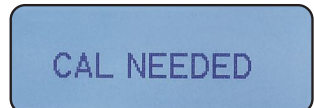
- Features a compact body and low profile head
- Perfect for restricted access areas where normal torque wrenches can't fit

Torque & Angle Combo Mode

- The most accurate and fastest way to achieve torque plus angle in a single motion
- Improved Torque accuracy:
 - +/-4% CW +/-6% CCW (5 to 19% of full scale)
 - +/-2% CW +/-3% CCW (20 to 100% of full scale)
- Angle range 0 - 360°

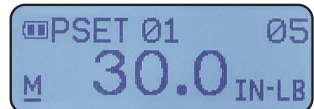
Multi-Lingual Display

- Programmable to display commands and settings in English, Spanish, French or German, Italian, Dutch, Portuguese



Calibration Due Indicator

- Alerts you when calibration is needed



Fully Programmable

- 50 memory presets with a batch count of 99
- Presets can be locked to prevent inadvertent changes or tampering

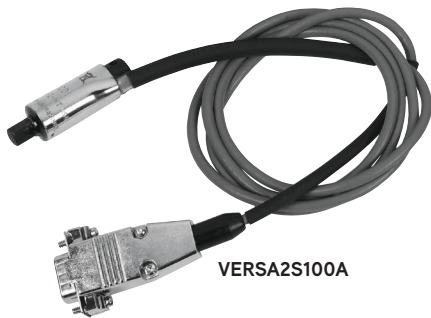
Sequence Programming

- Program different torque applications in sequence and lock-in job mode to ensure the operator follows sequence without error
- Custom password



- Must wear eye protection
- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

VERSATORQ®2



Versatorq® 2 System Torque Acquisition Meters

VERSATORQ2

The Snap-on® VERSATORQ® 2 portable ATEX®/UL® certified electronic torque analyzer displays torque readings from sensors that attach between sockets and drivers. This highly versatile torque analyzer and data acquisition system can be used with various sockets, extensions, universal joints, and ratcheting drivers. Sensors, purchased separately, are available in eight ranges from 2 to 20 in. oz. to 150 to 1,500 ft. lbs. and provide readings with an accuracy of 1 or 2% (dependent on the transducer)

- Now "intrinsically safe" for use in hazardous environments (ATEX®, UL®, ULC, and CE compliant) Hazardous locations Class I, Zone 2, AEx ic IIA T6; Class I Zone 2 Ex ic IIA T6; -25°C ≤ Tamb ≤ +40° C
- Ideal for applying torque (CW and CCW) in confined spaces with tight access and job requiring repetitive torque applications
- Accuracy rating ±1% of reading (1- to 100% of sensor range); ±2% with VERSA1S10A and VERSA1S20A
- Trade Mode displays applied torque value, and Peak Mode displays the highest torque value
- Non-volatile flash memory retains data for ten years or more
- Plug-n-Play mini USB for easy data download, no client software needed
- Customer calibration supports ASME® and ISO®
- Includes carrying case **PB57A**, mini USB cable **USBATOMINIB**, belt clip **276-61** and batteries
- VERSATORQ® 2 sensors (sold separately) enable accurate torque application using a standard ratchet or breaker bar of any length, with data readout and storage on the cable-connected VERSATORQ® 2 meter
- VERSATORQ® 2 sensors available from 2 in. oz. up to 1,500 ft. lbs. with readings in seven popular measurement scales

Versatorq® 2 Sensors

- Enable accurate torque application using a standard ratchet or breaker bar of any length, with data readout and storage on the cable-connected Versatorq® 2 meter
- Available from 2 in-oz. up to 1,500 ft-lb with readings in seven popular measurement scales

Stock No.	VERSATORQ2
Display	4 Digit with Alpha and Numerical Function Flags
Display Capacity*	4 Digits
Accuracy	±1% of Reading (10–100% of Sensor Range) (±2% with VERSA1S10A and VERSA1S20A Sensors)
Units of Measure	in-oz, in-lb, ft-lb, n•m, cN•m, kg•cm, kg•m
Operating Temperature	40–110 °F (23–42 °C)
Storage Temperature	-2–122 °F (-20–22 °C)
Humidity	Up to 90% Non-Condensing
Dimensions	3" W x 2-1/2" D x 6" L

*VERSATORQ® display ignores torque input less than .5% of full scale in track mode and 2.0% of full scale in peak mode.

Stock No.	Cable Length, inches	Range	Sensor Diameter, inches	Sensor Length, inches	Square Drive, inches
VERSA1S10A	48	1–10 in-lb	.7	2.9	1/4
VERSA1S200A	48	20–200 in-lb	.9	2.1	1/4
VERSA1S20A	48	2–20 in-oz	.5	2.9	1/4
VERSA1S50A	48	5–50 in-lb	.9	2.1	1/4
VERSA2S100A	48	10–100 ft-lb	1.2	2.4	3/8
VERSA3S250A	48	25–250 ft-lb	1.4	2.6	1/2
VERSA4S600A	96	60–600 ft-lb	2.0	3.9	3/4
VERSA5S1500A	92	150-1,500 ft-lb	2.4	4.4	1

*Knurled handles allow for fingertip control

**Diameter does not include side-mounted connector

NOTE: Original Versatorq® Sensors (without "A" suffix in the stock number) are compatible with the Versatorq® 2 meter, but the sensors require calibration. Reference the Versatorq® 2 instruction manual for the sensor ranges and resolutions in different units of torque measurement.

Commitment to Quality and Standards

Snap-on® is committed to meeting ANSI and global product standards, and often goes beyond them. Whether it's Snap-on® products or partner products, every tool we sell goes through rigorous testing for performance, quality, ergonomics, durability and safety. Done at our own corporate test facility in Kenosha, we pledge to meet or exceed the highest standards in the industry. At Snap-on®, we:

- Are active participants in the creation of ANSI and other industry standards
- Hold regular meetings with government and industry bodies to review and update current and developing technologies
- Offer unique and proprietary products designed to go beyond the scope of ANSI and other standards

The Snap-on® Flank Drive® Advantage



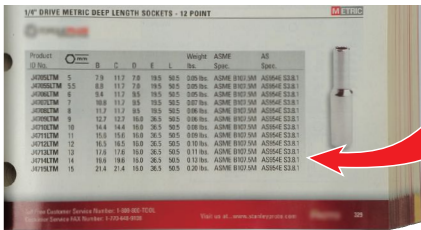
Conventional 12-point wrench and the contact it makes on the corner of a nut or bolt. The corner can round off under high loads causing the wrench to slip.



A Snap-on® Flank Drive® wrench moves the contact away from the corners with a radius, then provides flat-to-flat contact for up to 20% more turning power.

AS954 Specification References Explained

318 Snap-on® 12 point sockets, universal sockets, wrenches, and torque adaptors noted in our catalog completely meet the AS954 standard.



Competition implies meeting AS954 (Aerospace Standard) specification in their catalog. But they only reference ONE subsection of the standard.

AS954 Sub Sections	Sub Section Description	Snap-on®	Competition
3.2	Material	X	
3.4.1 (sockets only)	Drive end dimensions	X	
3.4.1.1 (sockets only)	Internal drive opening	X	
3.4.1.1.1 (sockets only)	Detent	X	
3.4.2 (sockets only)	Tang engagement	X	
3.5	Hardness	X	
3.6	Plating	X	
3.6.1	Surface Finish	X	
3.6.3	Surface Condition	X	
3.7	Proof Load Test	X	
3.7.3.1	Cyclic Load test	X	
3.7.3.2	Fragmentation Test	X	
3.8.1	Wrench Design	X	X*
3.8.3	Wrench Opening Tolerance	X	
3.8.4.1 (sockets only)	Through hole clearance	X	
3.8.4.2 (sockets only)	Bolt Clearance Hole	X	
3.11	Workmanship	X	
3.11.1	Foreign Object Damage	X	

* as shown in competitor's catalog



- Must wear eye protection
- Do not exceed rated torque
- Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
- Read safety precautions on pages W1 to W4

AEROSPACE HAND TOOLS

1/4" Drive



GT72

1/4" Drive Ratchets and Accessories

Snap-on® offers over 300 hand tools that conform to Aerospace Standards AS954, AS4283, AS4984, and/or MIL-W-8982. They can be found in their respective locations in the Hand Tools section of this catalog. The Stock No.s and descriptions are shown below, please reference the catalog pages shown for the complete description and specifications of these items

Stock No.	Description
T72	1/4" Drive Technology Standard Handle Ratchet
GT72	1/4" Dr. Standard Handle Industrial Ratchet
TMU8B	1/4" Drive 1-1/8" Friction Ball Universal Joint
TMS4E	1/4" Drive 16" Speeder Drive Handle
TMXK2	1/4" Drive 2" Knurled Extension
TMXK4	1/4" Drive 4" Knurled Extension
TMXK60	1/4" Drive 6" Knurled Extension
TM10G	1/4" Drive 6" Breaker Bar



TMDS10



STMD10



TES10B



TEL10B

1/4" Drive, Semi Deep 12 Pt. Sockets

Stock No.	Size, inches
TMDS6	3/16
TMDS7	7/32
TMDS8	1/4
TMDS9	9/32
TMDS10	5/16
TMDS11	1-1/32
TMDS12	3/8
TMDS14	7/16
TMDS16	1/2
TMDS18	9/16

1/4" Drive, Deep 12 Pt. Sockets

Stock No.	Size, inches
STMD6	3/16
STMD7	7/32
STMD8	1/4
STMD9	9/32
STMD10	5/16
STMD11	1-1/32
STMD12	3/8
STMD14	7/16
STMD16	1/2
STMD18	9/16

1/4" Drive, High Performance/Spline Sockets - Shallow

Stock No.	Spline Size
TES7B	#7
TES8B	#8
TES9B	#9
TES10B	#10
TES12B	#12
TES14B	#14

1/4" Drive, High Performance/Spline Sockets Deep 6 Pt.**

Stock No.	Spline Size
TEL7B	#7
TEL8B	#8
TEL10B	#10



AN85086B



TESU10B



TDHU101B

1/4" Drive, Deep Flare Nut Sockets - 12 Pt.

Stock No.	Size, inches
AN85088B	1/2"
AN85089B	9/16"
AN85086B	3/8"
AN85087B	7/16"

1/4" Drive, High Performance/Spline Sockets Universal **

Stock No.	Spline Size
TESU8B	#8
TESU10B	#10

1/4" Drive, High Performance Sockets- Universal - 12 Pt.

Stock No.	Size, inches
TDHU81B	1/4
TDHU101B	5/16
TDHU121B	3/8

** Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool.

Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on® Flank Drive® wrenching system.



F10LD

3/8" Drive Ratchets and Accessories

Stock No.	Description
F80	3/8" Dr. Sealed Heat Ratchet
FL80	3/8" Drive Technology Long Handle Ratchet
FX1	3/8" Drive 1-1/2" Friction Ball Extension
FXK3	3/8" Drive 3" Knurled Friction Ball Extension
FXK6	3/8" Drive 6" Knurled Friction Ball Extension
FXK8	3/8" Drive 8" Knurled Friction Ball Extension
FX18	3/8" Drive 18" Knurled Friction Ball Extension
FX24A	3/8" Drive 24" Knurled Friction Ball Extension
F10LD	3/8" Drive 9-9/16" Breaker Bar
F4LB	Speeder
F4LBK	3/8" Drive 16-5/8" Speeder with Comfort Knob
FU8A	3/8" Drive 2-1/16" Friction Ball Universal Joint



FRDH101

3/8" Drive, Torque Adaptors 12 Pt.

Stock No.	Size (SAE)
FRDH101	5/16"
FRDH121	3/8"
FRDH141	7/16"
FRDH161	1/2"
FRDH181	9/16"



FES120B

3/8" Drive, High Performance/Spline Sockets - Shallow **

Stock No.	Hex Size, inches	Spline Size
FES120B	3/8	#12
FES140B	7/16	#14
FES160B	1/2	#16
FES180B	9/16	#18
FES200B	5/8	#20



FDS081

3/8" Drive, Semi Deep 12 Pt. Sockets

Stock No.	Size (SAE)
FDS081	1/4"
FDS091	9/32"
FDS101	5/16"
FDS111	11/16"
FDS121	3/8"
FDS141	7/16"
FDS161	1/2"
FDS181	9/16"
FDS201	5/8"
FDS221	11/16"
FDS241	3/4"
FDS251	25/32"
FDS261	13/16"
FDS281	7/8"
FDS301	15/16"



SF081

3/8" Drive, Deep 12 Pt. Sockets

Stock No.	Size, inches
SF081	1/4
SF091	9/32
SF101	5/16
SF111	1-1/32
SF121	3/8"
SF141	7/16"
SF161	1/2"
SF181	9/16"
SF201	5/8"
SF221	11/16"
SF241	3/4"
SF251	25/32
SF261	13/16"
SF281	7/8"
SF301	15/16
SF321	1



FEL120B

3/8" Drive, High Performance/Spline Sockets Deep**

Stock No.	Hex Size, inches	Spline Size
FEL120B	3/8	#12
FEL140B	7/16	#14
FEL160B	1/2	#16
FEL180B	9/16	#18
FEL200B	5/8	#20

FESU120B

3/8" Drive, High Performance/Spline Sockets - Universal**

Stock No.	Hex Size, inches	Spline Size
FESU120B	3/8"	#12
FESU140B	7/16"	#14
FESU160B	1/2"	#16
FESU180B	9/16"	#18



FU18B

3/8" Drive, Universal 12 Pt. Sockets

Stock No.	Size, inches
FU18B	9/16"
FU20B	5/8"
FU22B	11/16"
FU24B	3/4"



AN850810B

3/8" Drive, Deep Flare Nut Crowfoot Wrench

Stock No.	Size (SAE)
AN850810B	5/8"
AN850811B	11/16"
AN850812B	3/4"
AN850813B	13/16"
AN850814B	7/8"
AN850815B	15/16"
AN850816B	1"
AN850817B	1-1/16"



FRES10

3/8" Drive Sockets, Spline Torque Adaptors**

Stock No.	Hex Size, inches	Spline Size
FRES7	7/32	#7
FRES8	1/4	#8
FRES9	9/32	#9
FRES10	5/16	#10
FRES12	3/8	#12
FRES14	7/16	#14
FRES16	1/2	#16
FRES18	9/16	#18
FRES20	5/8	#20
FRES22	11/16	#22
FRES24	3/4	#24

** Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool.

Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on® Flank Drive® wrenching system.



- Must wear eye protection
- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

AEROSPACE HAND TOOLS

1/2" & 3/4" Drive & Wrenches



S4



L122

1/2" Drive Ratchets and Accessories

Stock No.	Description
S80A	1/2" Drive Technology Standard Handle Ratchet
SL80A	1/2" Drive Technology Long Handle Ratchet
SX2	1/2" Dr. Extension, 2"
SXK5	1/2" Drive 5" Extension
SX20	1/2" Dr. 20" Extension
SX36	1/2" Dr. 36" Extension
S4	1/2" Drive 18-7/8" Speeder Drive Handle
S8	1/2" Dr. Universal Joint
SN15B	1/2" Drive 15" Standard Handle Breaker Bar

3/4" Drive Ratchets and Accessories

Stock No.	Description
L872	Sealed Ratchet Head
L872RJ	3/4" Drive 19-1/4" Knurled Locking Button Handle
L32	3/4" Drive 3" Locking Button Extension
L62	3/4" Drive 8" Locking Button Extension
L122	3/4" Drive 16" Locking Button Extension
L82A	3/4" Drive 3-7/8" Friction Ball Universal Joint



SDH121



S121A

1/2" Drive, Semi Deep 12 Pt. Sockets

Stock No.	Size, inches
SDH121	3/8"
SDH141	7/16"
SDH161	1/2"
SDH181	9/16"
SDH201	5/8"
SDH221	11/16"
SDH241	3/4"
SDH251	25/32
SDH261	13/16"
SDH281	7/8"
SDH301	15/16
SDH321	1
SDH341	1-1/16
SDH361	1-1/8
SDH381	1-3/16
SDH401	1-1/4
SDH421	1-5/16

1/2" Drive, Deep 12 Pt. Sockets

Stock No.	Size, inches
S121A	3/8"
S141A	7/16"
S161A	1/2"
S181A	9/16"
S201	5/8"
S221	11/16"
S241	3/4"
S251	25/32
S261	13/16"
S281	7/8"
S301	15/16
S321	1
S341	1-1/16
S361	1-1/8
S381	1-3/16
S401	1-1/4
S421	1-5/16



LES242B



LDH242

3/4" Drive High Performance/Spline - Shallow Sockets**

Stock No.	Spline Size	Hex Size, inches
LES242B	#24	3/4
LES302B	#30	15/16
LES342B	#34	1-1/16
LES362B	#36	1-1/8

3/4" Drive Shallow 12 Pt. Sockets

Stock No.	Size, inches
LDH242	3/4"
LDH262	13/16"
LDH282	7/8"
LDH302	15/16
LDH322	1
LDH342	1-1/16
LDH362	1-1/8
LDH382	1-3/16
LDH402	1-1/4
LDH422A	1-5/16
LDH442	1-3/8"
LDH462	1-7/16
LDH482	1-1/2
LDH502	1-9/16
LDH522	1-5/8"
LDH542	1-11/16
LDH562	1-3/4



AN850818B

1/2" Drive, Deep Flare Nut Crowfoot Wrenches

Stock No.	Size (SAE)
AN850818B	1-1/8"
AN850819B	1-3/16"
AN850820B	1-1/4"
AN850821B	1-5/16"
AN850822B	1-3/8"
AN850823B	1-7/16"
AN850824B	1-1/2"
AN850825B	1-9/16"
AN850826B	1-5/8"
AN850827B	1-11/16"
AN850828B	1-3/4"
AN850829B	1-13/16"
AN850830B	1-7/8"
AN850831B	1-15/16"
AN850832B	2"
AN850834B	2-1/8"
AN850835B	2-3/16"
AN850836B	2-1/4"



SES161B

1/2" Drive, High Performance/Spline Sockets - Shallow**

Stock No.	Hex Size, inches	Spline Size
SES161B	1/2	#16
SES181B	9/16	#18
SES201B	5/8	#20
SES221B	11/16	#22
SES241B	3/4	#24
SES261B	13/16	#26
SES281B	7/8	#28
SES301B	15/16	#30



SRES18

1/2" Drive, Spline Torque Adaptors**

Stock No.	Hex Size, inches	Spline Size
SRES18	9/16	#18
SRES20	5/8	#20
SRES22	11/16	#22
SRES24	3/4	#24
SRES26	13/16	#26
SRES28	7/8	#28

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Conventional 12-point wrench and the contact it makes on the corner of a nut or bolt. The corner can round off under high loads causing the wrench to slip.



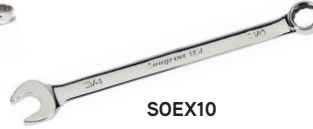
A Snap-on® Flank Drive® wrench moves the contact away from the corners with a radius, then provides flat-to-flat contact for up to 20% more turning power.



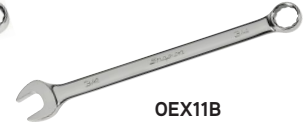
XB1214A



XDH1012B



SOEX10



OEX11B

Box Wrench - Standard Length 12 Point - 10° Offset

Stock No.	Size, inches
XB1214A	3/8-7/16
XB1416A	7/16-1/2
XB1618A	1/2-9/16
XB1820A	9/16-5/8
XB2022A	5/8-11/16
XB2224A	11/16-3/4
XB2426A	3/4-13/16
XB2830A	7/8-15/16
XB3032A	15/16-1

Box Wrench - High Performance - 12 Point - 15° Offset

Stock No.	Size, inches
XDH1012B	5/16-3/8
XDH1214A	3/8-7/16
XDH1416A	7/16-1/2
XDH1618A	1/2-9/16
XDH2226A	11/16-13/16
XDH2528	25/32-7/8
XDH78A	7/32-1/4
XDH810B	1/4-5/16

Flank Drive® Plus Combination Wrenches

Stock No.	Size, inches
SOEX8	1/4"
SOEX10	5/16"
SOEX11	11/32"
SOEX12	3/8"
SOEX14	7/16"
SOEX16	1/2"
SOEX18	9/16"
SOEX20	5/8"
SOEX22	11/16"
SOEX24	3/4"
SOEX26	13/16"
SOEX28	7/8"
SOEX30	15/16"
SOEX32	1"
SOEX34	1-1/16"
SOEX36	1-1/8"
SOEX38	1-3/16"
SOEX40	1-1/4"

Flank Drive® Combination Wrenches

Stock No.	Size, inches
OEX8B	1/4"
OEX10B	5/16"
OEX11B	11/32"
OEX12B	3/8"
OEX14B	7/16"
OEX16B	1/2"
OEX18B	9/16"
OEX20B	5/8"
OEX22B	11/16"
OEX24B	3/4"
OEX26B	13/16"
OEX28B	7/8"
OEX30B	15/16"
OEX32B	1"
OEX34B	1-1/16"
OEX36B	1-1/8"
OEX38B	1-3/16"
OEX40B	1-1/4"



XO1012



XDES1214A

Box Wrench - Standard Length - 12 Point - Deep 60° Offset

Stock No.	Size, inches
XO810	1/4-5/16
XO1012	5/16-3/8
XO1214	3/8-7/16
XO1618	1/2-9/16
XO1820	9/16-5/8
XO2022	5/8-11/16
XO2024	5/8-3/4
XO2226	11/16-13/16
XO2428	3/4-7/8

Box Wrench - High Performance/ Spline - 15° Offset**

Stock No.	Hex Size, inches	Spline Size
XDES1214A	3/8-7/16	#12-#14
XDES1618A	1/2-9/16	#16-#18
XDES1820A	9/16-5/8	#18-#20
XDES2224A	11/16-3/4	#22-#24
XDES810A	1/4-5/16	#8-#10

** Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool.

Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on® Flank Drive® wrenching system.



- Must wear eye protection
- Do not use chrome or industrial finish hand tools with impact drivers
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

Insert Bits

Mplus Insert Bits

- Mplus for greater fracture torque and longer service life, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures
- Stock No. is for individual bits. Bits are available in pack quantity shown

Torq-set 1/4"



Stock No.	Description	Package Quantity
WER066618	1" x #0	10
WER066620	1" x #2	10
WER066622	1" x #3	10
WER066624	1/4" Dr. #4 x 25 mm Torq-Set	10
WER066626	1/4" Dr. #5 x 25 mm Torq-Set	10
WER066628	1/4" Dr. #6 x 25 mm Torq-Set	10
WER066630	1/4" Dr. #8 x 25 mm Torq-Set	10
WER066632	1/4" Dr. #10 x 25 mm Torq-Set	10
WER066633	1" x 1/4"	10
WER066634	1 1/4" x 1/4"	10
WER066635	1 1/4" x 5/16"	10

Torq-set 5/16"



Stock No.	Description	Package Quantity
WER066650	1" x #8	5
WER066652	1" x #10	5
WER066654	1/4 x 32 mm Torq-Set, 5/16" Hex	5
WER066656	5/16 x 32 mm Torq-Set, 5/16 Hex	5
WER066658	1" x 3/8"	5

Torq-set Diamond-coated 1/4"



Stock No.	Description	Package Quantity
WER066640	1" x #6	10
WER066642	1" x #8	10
WER066644	1" x #10	10
WER066646	1 1/4" x 1/4"	10

Torq-set 5/16" Power Bit



WER066704

Stock No.	Description	Package Quantity
WER066700	1 3/8" x #8	5
WER066704	1 3/8" x 1/4"	5

Torq-set 7/16" Power Bit



Stock No.	Description	Package Quantity
WER066740	1 3/8" x 1/4"	5
WER066742	1 3/8" x 5/16"	5
WER066744	1 3/8" x 3/8"	5
WER066746	1 3/8" x 7/16"	5

Torq-set 1/4" Power Bit



Stock No.	Description	Package Quantity
WER066660	2" x #2	10
WER066662	2" x #3	10
WER066664	2" x #4	10
WER066672	2" x #10	10
WER066674	2" x 1/4"	10
WER066678	2 3/4" x #8	5
WER066680	2 3/4" x #10	5
WER066684	3 1/2" x #3	5
WER066685	3 1/2" x #4	5

Torq-set 5/8" Power Bit



Stock No.	Description	Package Quantity
WER066750	1 9/16" x 1/2"	5

"Harpoon" ACR 1/4" Power Bit (Boeing® specification)

- With reduced shaft, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures, ACR (Anti Cam-Out Ribs) prevents bit from slipping out



Stock No.	Description	Package Quantity
WER160895	PH 2 x 2 3/4"	10
WER160901	PH 2 x 2"	10
WER160908	PH 2 x 6"	10

Reduced Tip 1/4" Power Bit (Boeing® specification)

- With reduced shaft, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures



Stock No.	Description	Package Quantity
WER160896	PH 2 x 6"	10
WER160899	PH 2 x 2"	10

Stainless Steel Tools



WER003470

7 Piece Insulated Set with Interchangeable Blades

Stock No.	Description
WER003470	7 Piece KK VDE 60i/ 7 Set



WER059297

Wera®Kraftform® Kompakt 62

Stock No.	Description
WER059297	33 Piece Tamperproof Bitholding Screwdriver Set



WER347108

18 pc Insulated Set with Interchangeable Blades

Stock No.	Description
WER347108	18 Piece KK VDE 70i/62i/ 68i/ 18 Set



WER022720



WER022721

Hex Key Sets

Stock No.	Description
WER022720	3950 PKL/9 Hex Key Set, Metric, Stainless
WER022721	950 PKL/9 SZ Hex Key Set, Imperial, BlackLaser



WER032060

Screwdriver Sets

Stock No.	Description
WER022728	6 piece VDE Screwdriver Set - Slotted & Pozidriv®
WER032060	6 piece Screwdriver Set - Slotted & Phillips®

Bits & Fastener Tools



ZEPTS21210

Torq-Set® Insert Bits – 1/4" Hex Shank

Stock No.	Overall Length	Screw Size
ZEPTS212-0	1"	0
ZEPTS212-8	1"	8
ZEPTS2121	1"	1
ZEPTS2121/4	1"	.25
ZEPTS21210	1"	10
ZEPTS2122	1"	2
ZEPTS2123	1"	3
ZEPTS2124	1"	4
ZEPTS2125	1"	5
ZEPTS2126	1"	6



ZEPTS1700

Torq-Set® Power Bits – 1/4" Hex Shank

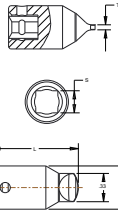
Stock No.	Overall Length	Screw Size
ZEPTS1700	1.25"	0
ZEPTS1701	1.25"	1
ZEPTS1702	1.25"	2
ZEPTS1703	1.25"	3
ZEPTS1704	1.25"	4
ZEPTS1705	1.25"	5
ZEPTS1706	1.25"	6
ZEPTS1708	1.25"	8
ZEPTS17010	1.25"	10

Hi-Torq® Driver Bits

- Manufactured using the highest quality, high carbon steel
- Heat-treated to exacting standards to provide a maximum amount of torque to the fastener with a minimum of slippage or breakage
- Designed for high torque fastener installation and removal utilizing a square drive and detent pin drive system



ZEPZHTS-2



ZEPZKLS-2

Kwik-Lok® Temporary Kit

- Designed to hold multiple pieces of material together temporarily during the assembly process via predrilled, undersize, holes
 - Highest quality materials to ensure proper material holding and long life
- Kit Includes:** (1) pair of Kwik-Lok® Pliers, (10) each temporary fasteners for hole sizes 3/32", 1/8", 5/32", 3/16" and 1/4" with a 0-1/2" grip range and a convenient plastic carrying case

Stock No.	Drive Size	Recess	Nom. Screw Size	D1	T	D	L
ZEPZHTS1	1/4"	1	3, 4, 5, 6	.274"	0.49"	1/2"	1"
ZEPZHTS-2	1/4"	2	8	.295"	.059"	1/2"	1"
ZEPZHTS-3	1/4"	3	10	.377"	.059"	1/2"	1"
ZEPZHTS-4	1/4"	4	1/4	.502"	.073"	1/2"	1-1/4"
ZEPZHTS-5	3/8"	5	5/16	.629"	.079"	3/4"	1-1/4"
ZEPZHTS-6	3/8"	6	3/8	.745"	.095"	3/4"	1-5/8"
ZEPZHTS-7	1/2"	7	7/16	.884"	.112"	1"	1-5/8"
ZEPZHTS-8	1/2"	8	1/2	.995"	.142"	1"	1"

* Conforms to MS33750



ZEPQCK-4040

Frangible Collar Hi-Lok® Tools

- Designed to install and remove frangible collar (castle nut) style Hi-Lok® fasteners
- Utilizing a two piece ratcheting tool, socket and pin combination system, they both hold the fastener body in place and rotate the collar to its predetermined torque shear load, breaking off the collar
- Utilizes the two piece ratchet system with a hex pin and a specialized socket containing eccentric rollers which, when rotated in the reverse rotation, cam into the body of the round collar allowing it to be rotated off the fastener body for removal

Kit Includes: Hex Tip Pin sizes 1/16", 5/64", 3/32" and 1/8" Socket Hex sizes 7/32", 1/4", 9/32", 5/16", 11/32", 3/8" and 7/16" Removal Sockets in ranges of .235-.255, .245-.265, .255-.275, .265-.285, .275-.295, .285-.305, .295-.315, .305-.325, .315-.355, .325-.345, .335-.355, .355-.375, .375-.395, and .395-.415



ZEP4000KIT

Jo-Bolt Blind Fastener Tools

- Utilizes a specialized thread drive pin assembly to tighten and secure the fastened assembly from one side, unlike a pull type or pintail blind fastener
- Uses two types of nose pieces – a flush nose with a taper and indexing groove and a protruding nose, with a standard hex socket configuration
- Drivers utilize a two flat drive system and work with both the flush and protruding style noses to install these specialized fasteners

Kit Includes: (1) each HW300 Ratchet tool assembly (1) each LFVLG-1 Grip gauge Fastener drivers in sizes -5, -6, -8, -10 and -12 Flush noses in sizes -5, -6, -8, -10 and -12; Reduced flush noses in sizes -5, -6, -8, -10 and -12; Protruding noses in sizes -5, -6, -8, -10 and -12; Millable noses in sizes -5, -6, and -8 and a black plastic case with foam insert to hold tools in place

Threaded Drills, Adaptors and Drill Stops



ATI339EC

Chuck-Three Jaw

ATI339EC

- Capacity 1/16" to 1/4"
- Internal three jaws are inverted, with the heavier portion of the jaws at the face to maximize chucking power
- Used in angle attachments with 1/4"-28 threaded spindles
- Provides additional flexibility by allowing the use of straight shank tools in threaded shank spindles

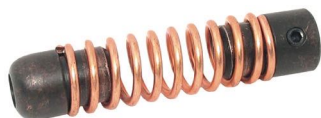


ATI503-40

Threaded Shank Drill Adaptor

- Enables use of straight shank drill bits with threaded output angle drill attachments
- Retains drill bit with set screw
- 1/4"-28 threaded shank

Stock No.	Drill Size
ATI503-10	#10
ATI503-11	#11
ATI503-20	#20
ATI503-21	#21
ATI503-30	#30
ATI503-40	#40
ATI503-72	1/4
ATI503-73	5/16



ATI570-1/4

Drill Stops

- Controls hole depth and prevents chuck jaws from contacting drilled surface
- Unit locks onto drill bit with a set screw

Stock No.	Drill Size
ATI570-1/4	1/4
ATI570-10	#10
ATI570-11	#11
ATI570-12	#12
ATI570-16	#16
ATI570-20	#20
ATI570-21	#21
ATI570-27	#27
ATI570-30	#30
ATI570-40	#40
ATI570-5/16	5/16
ATI570-50	#50
ATI5707/32	7/32



Threaded Shank Drill Collets

- Enables use of straight shank drill bits with threaded output angle drill attachments
- 1/4"-28 threaded shank

Stock No.	Drill Size
ATI503C-1/4	1/4
ATI503C-1/8	1/8
ATI503C-10	#10
ATI503C-11	#11
ATI503C-12	#12
ATI503C-16	#16
ATI503C-19	#19
ATI503C-20	#20
ATI503C-21	#21
ATI503C-3/16	3/16
ATI503C-3/32	3/32
ATI503C-30	#30
ATI503C-40	#40
ATI503C-5/32	5/32
ATI503C-7/32	7/32
ATI503C-F	F



ATI503C-7/32

Threaded Shank Drill Bits

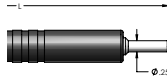
- Made from HSS
- 1/4"-28 threaded shank

Stock No.	Drill Size	Length
ATI503C-1/4	1/4	2.13
ATI503C-1/8	1/8	2.13
ATI503C-10	#10	1.25
ATI503C-11	#11	1.25
ATI503C-12	#12	1.25
ATI503C-16	#16	1.25
ATI503C-19	#19	1.25
ATI503C-20	#20	1.25
ATI503C-21	#21	1.25
ATI503C-3/16	3/16	1.25
ATI503C-3/32	3/32	1.25
ATI503C-30	#30	1.25
ATI503C-40	#40	1.00
ATI503C-5/32	5/32	1.25
ATI503C-7/32	7/32	1.25
ATI503C-F	F	1.25



• Must wear eye protection
• Read safety precautions on pages W1 to W4

Angle Drills and Attachments

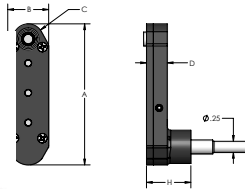


Angle Drill Attachments

- Used for drilling holes in tight access areas
- Heavy duty gears and bearings
- 1/4" shank for easy connection to drill motors
- Rated for 4500 RPM

Stock No.	Type	Duty	Output Spindle	Length inches	Head Height inches	Head Diameter inches
ATI300B	90° Direct Drive	Standard	1/4"-28	6.00	1.625	0.813
ATI301B	45° Direct Drive	Standard	1/4"-28	6.69	1.000	0.813
ATI302B	90° Flex Drive	Standard	1/4"-28	30.00	1.625	0.813
ATI303B	45° Flex Drive	Standard	1/4"-28	30.00	1.000	0.813
ATI326A	90° Direct Drive	Light	10-32	6.88	0.813	0.500
ATI326B	90° Direct Drive	Light	1/4"-28	6.88	0.813	0.500
ATI327A-24	90° Flex Drive	Light	10-32	24.00	0.813	0.500
ATI327B-12	90° Flex Drive	Light	1/4"-28	12.00	0.813	0.500
ATI327B-24	90° Flex Drive	Light	1/4"-28	24.00	0.813	0.500
ATI336A	90° Direct Drive	Heavy	CHUCK	6.25	1.438	1.000
ATI336B	90° Direct Drive	Heavy	1/4"-28	6.25	1.438	1.000
ATI337A	360° Direct Drive	Heavy	CHUCK	6.00	1.438	1.000
ATI337B	360° Direct Drive	Heavy	1/4"-28	6.00	1.438	1.000
ATI338A	90° Flex Drive	Heavy	CHUCK	30.00	1.438	1.000
ATI338B	90° Flex Drive	Heavy	1/4"-28	30.00	1.438	1.000
ATI339A	360° Flex Drive	Heavy	CHUCK	30.00	1.438	1.000
ATI339B	360° Flex Drive	Heavy	1/4"-28	30.00	1.438	1.000

Angle Drills and Attachments



Offset Angle Drills

- Offset drive enables drilling in tight access areas
- 1/4" round shank

Stock No.	Type	Speed	Spindle	Height (H) inches	Length (A), inches	Width (B) inches	Thickness (D) inches	Radius C
ATI313A	Straight Offset	6,000	10-32	4.31	4.35	0.875	0.290	0.42
ATI313B	Straight Offset	6,000	1/4"-28	4.31	4.35	0.875	0.290	0.42
ATI313LA	30° Left Hand Offset	6,000	10-32	4.31	4.00	0.875	0.290	0.42
ATI313LB	30° Left Hand Offset	6,000	1/4"-28	4.31	4.00	0.875	0.290	0.42
ATI313RA	30° Right-Hand Offset	6,000	10-32	4.31	4.00	0.875	0.290	0.42
ATI313RB	30° Right-Hand Offset	6,000	1/4"-28	4.31	4.00	0.875	0.290	0.42
ATI331A	Straight Offset	6,000	10-32	4.38	4.19	0.921	0.438	0.44
ATI331B	Straight Offset	6,000	1/4"-28	1.50	4.19	0.921	0.438	0.44
ATI332A	Straight Offset	4,200	10-32	1.50	3.17	0.920	0.370	0.34
ATI332B	Straight Offset	4,200	1/4"-28	1.50	3.17	0.920	0.370	0.34
ATI332SC	Straight Offset	4,200	1/4"-28	1.50	3.17	0.920	0.320	0.31
ATI333B	Straight Offset, Reversed	4,200	1/4"-28	1.50	3.18	0.960	0.500	0.32

Drill Guides, Housings and Bushings

Drill Guide Housings

- Maintains tool perpendicular to flat or curved surfaces
- Used with drills, taps or reamers
- Case hardened bushings are interchangeable in housings
- Housings provide ample relief for chips under the bushing
- Guide assemblies consist of housing with bushing installed
- Threaded interface allows interchangeability of bushings and housings

Drill Guide Housings		
Stock No.	Description	Bushing Reference
ATI589AA	Threaded drill guide housing; Drill sizes #40 (.098)–5/16" (.3125)	ATI589AB-series 1/2"-13
ATI589CA	Threaded drill guide housing new configuration is larger allowing easier access to change bushings while providing better hand protection and larger grip area; Drill sizes 1/4" (.250)–9/16" (.5625)	ATI589CB-series 3/4"-16
ATI589CAM	Threaded drill guide housing; Drill sizes 1/4" (.250)–9/16" (.5625)	ATI589CB-series 3/4"-16
ATI589DA	Flange lock drill guide housing; Drill sizes #80 (.0135)–#10 (.1935)	Slip Renewable 5/16" OD x 3/4" Long
ATI589EA	Flange lock drill guide housing; Drill sizes #28 (.1405)–11/32" (.3438)	Slip Renewable 1/2" OD x 3/4" Long

Drill Guide Assemblies and Bushings			
Stock No.	Drill Bushing Stock No.	Drill Size	Bushing Size
ATI589A-098	ATI589AB098	#40	1/2"-13
ATI589A-1285	ATI589AB1285	#30	1/2"-13
ATI589A-1562	ATI589AB1562	5/32"	1/2"-13
ATI589A-159	ATI589AB159	#21	1/2"-13
ATI589A-1875	ATI589AB1875	3/16"	1/2"-13
ATI589A-1935	ATI589AB1935	#10	1/2"-13
ATI589A161	ATI589AB-161	#20	1/2"-13
ATI589A2187	ATI589AB2187	7/32"	1/2"-13

Special drill bushing sizes available upon request



ATI590DBK



ATI589A-098

Drill Brushing Kit		
Stock No.	Description	Bushing Size
ATI590DBK	Three Guide Housings and nine drill bushings, sizes #40, #30, 5/32", #21, 3/16", #10, 7/32", 1/4"	1/2"-13

Drill Guide Assemblies and Bushings			
Stock No.	Drill Bushing Stock No.	Drill Size	Bushing Size
ATI589A250	ATI589AB250	1/4" or E	1/2"-13
ATI589A257	ATI589AB-257	F	1/2"-13
ATI589C-.500	ATI589CB500	1/2"	3/4"-16
ATI589C-2812	ATI589CB2812	9/32"	3/4"-16
ATI589C-3437	ATI589CB3437	11/32"	3/4"-16
ATI589C-375	ATI589CB375	3/8"	3/4"-16
ATI589C-4375	ATI589CB4375	7/16"	3/4"-16
ATI589C.3125	ATI589CB3125	5/16"	3/4"-16

Special drill bushing sizes available upon request



ATI532-61

Strap Duplicator Set

- Provide an accurate method for duplicating hidden holes in overlapping sheets
- Standard pilots are used when sheets can be pried apart. Inverted pilots are used when sheets cannot be separated. Spring loaded center punch allows for marking in limited access for drilling latter

Position pilot in hole to be duplicated then drill through bushing. Back side of pilot is relieved to allow drill to pass through 1st sheet only; straps are spring steel, bushings, pilots and center punch are hardened drill rod assuring accurate hole duplication. Tools are identified with Stock No. and drill size. Working length is shown, maximum distance from edge of sheet to hole. Back side of strap is beveled to aid in prying sheets apart.

Drill Size	Type	Length Stock No.	
		6-1/4"	13-1/4"
#40	Bushing, Standard Pilot	ATI532-61	ATI532C-61
#30	Bushing, Standard Pilot	ATI532-62	ATI532C-62
#21	Bushing, Standard Pilot	ATI532-63	ATI532C-63
#10	Bushing, Standard Pilot	ATI532-65	ATI532C-65
1/4"	Bushing, Standard Pilot	ATI532-68	ATI532C-68
#40	Bushing, Inverted Pilot	ATI532A-61	ATI532D-61
#30	Bushing, Inverted Pilot	ATI532A-62	ATI532D-62
#21	Bushing, Inverted Pilot	ATI532A-63	ATI532D-63
#10	Bushing, Inverted Pilot	ATI532A-65	ATI532D-65
1/4"	Bushing, Inverted Pilot	ATI532A-68	ATI532D-68

Drill Size	Type	Stock No.
#40	Spring Loaded Center Punch	ATI500-51
#30	Spring Loaded Center Punch	ATI500-52
#21	Spring Loaded Center Punch	ATI500-53
#10	Spring Loaded Center Punch	ATI50055

Strap Duplicators Sets		
ATI532/A/SET	10 pc Set Standard and Inverted Pilot; Includes 6-1/4" Bushing, Inverted and Standard Pilots	Includes Items In Blue



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4



AT1521A



AT1407-4

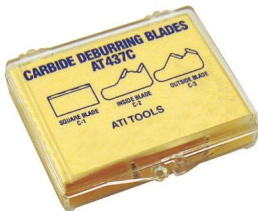


AT1521C

Speed Driver, Deburring Tools and Cutters

- “Speed Driver” an ATI original, with swivel handle and unique offset shaft allows for rapid, uniform and safe deburring of drilled holes

Stock No.	Description
AT1407-4	Countersink Cutter, 100-degree cutting angle, 3-flute, 3/8" body, 1/4"-28 threaded shank. Can be used in any drill attachment that accepts 1/4"-28 threaded shank cutters
AT1521A	Speed driver, used with AT1521C deburring cutter. Tool has a taper lock spindle and only accepts this cutter
AT1521B	Speed driver, used with AT1407-4 deburr/countersink cutter. Accepts any 1/4"-28 threaded shank cutters.
AT1521C	Deburring Cutter, 100-Degree Cutting Angle, 3-Flute, 3/8" Body, 7/32" Shank Diameter



Carbide Deburring Blade

- Carbide deburring blades last longer than HSS and perform better on harder materials
- 3pc. kit features all 3 blade styles

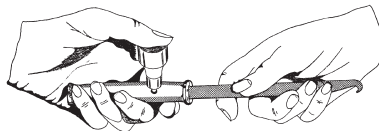
3 pc Kit	Square Blade	Inside Blade	Outside Blade
AT1437C	AT1437C-1	AT1437C-2	AT1437C-3



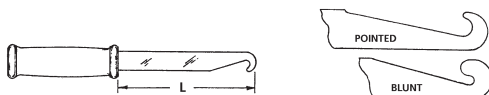
AT1512



ATISP200-1



ATISP200



ATISP20004



AT1514

Chip Chasers

- Designed to remove chips that accumulate between sheet stock after drilling rivet holes
- Blades are made from clock spring steel

Stock No.	Description
AT1511	Chip Chaser-Bright Plastic Molded Handle Blunt Hook, 2-3/4" Length Blade
AT1512	Chip Chaser-Bright Plastic Molded Handle Blunt Hook, 5-7/8" Length Blade

Chip Chaser Assemblies

Stock No.	Description
ATISP200-1	Chip Chaser Assembly-Cast Aluminum Handle Accepts Replaceable Blades. Blunt Hook, 5-7/8" Length Blade
ATISP200-2	Chip Chaser Assembly-Cast Aluminum Handle Accepts Replaceable Blades. Blunt Hook, 5-7/8" Length Blade
ATISP200-3	Chip Chaser Assembly-Cast Aluminum Handle Accepts Replaceable Blades. Point Hook, 2-3/4" Length Blade

Chip Chaser Components

Stock No.	Description
ATISP200	Chip Chaser Handle Only Accepts Replaceable Blades Listed Below
ATISP20002	Replaceable Blade Point Hook, 5-7/8" Length Blade
ATISP20003	Replaceable Blade Blunt Hook, 5-7/8" Length Blade
ATISP20004	Replaceable Blade Point Hook, 2-3/4" Length Blade

Sheet Metal Edge Breaker

- Quickly removes burrs and sharp edges from aluminum sheet stock

Stock No.	Description
AT1514	Hardened tip, safety shield and plastic handle works well on aluminum sheet stock

Nut Plate Drill Jigs

One Lug – Single Wing

- Used for accurate drilling of rivet holes for nut plate fasteners
- Flexible handle provides clearance for hand during use
- Hardened steel head for durability

Stock No.	Type	A Spacing	C Pilot Diameter	D Drill Size
ATI518G	SWS	0.344	0.139	#40
ATI518H	SWS	0.344	0.164	#40
ATI518K	SWS	0.344	0.248	#40
ATI518PB	SWM	0.218	0.139	#40
ATI518PC	SWM	0.234	0.164	#40
ATI518PD	SWM	0.250	0.191	#40
ATI518PE	SWM	0.281	0.248	#40
ATI518RF	SWS	0.500	0.256	#40
ATI518RM	SWS	0.344	0.188	#40
ATI518RO	SWS	0.500	0.248	#40
ATI518RP	SWS	0.500	0.311	#30
ATI518J	SWS	0.344	0.191	#40

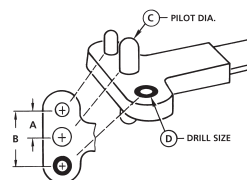
Special sizes available upon request

Two Lug – Double Wing

Stock No.	Type	A Spacing	B Spacing	C Pilot Diameter	D Drill Size
ATI518A	DWS	0.344	0.688	0.139	#40
ATI518AD	DWM	0.250	0.500	0.218	#40
ATI518AE	DWM	0.281	0.562	0.281	#40
ATI518B	DWS	0.344	0.688	0.164	#40
ATI518C	DWS	0.344	0.688	0.191	#40
ATI518D	DWS	0.500	1.000	0.248	#40
ATI518E	DWS	0.500	1.000	0.312	#30
ATI518F	DWS	0.500	1.000	0.372	#30
ATI518GL	DWS	0.344	0.688	0.218	#40
ATI518HO	DWS	0.375	0.750	0.248	#40
ATI518KD	DWS	0.344	0.688	0.192	#40
ATI518KL	DWS	0.344	0.688	0.188	#40
ATI518KN	DWS	0.500	1.000	0.311	#30
ATI518KU	DWS	0.344	0.688	0.256	#40
ATI518N	DWS	0.500	1.000	0.688	#30
ATI518NA	DWM	0.203	0.406	0.112	#40
ATI518NB	DWM	0.218	0.436	0.139	#40
ATI518NC	DWM	0.234	0.468	0.164	#40
ATI518ND	DWM	0.250	0.500	0.191	#40
ATI518NE	DWM	0.287	0.562	0.284	#40
ATI518NJ	DWM	0.250	0.500	0.188	#40

Corner Wing

Stock No.	Type	A Spacing	C Pilot Diameter	D Drill Size
ATI518-ML	CWS	0.344	0.188	#40
ATI518S	CWS	0.344	0.164	#40
ATI518SC	CWM	0.234	0.164	#40
ATI518SD	CWM	0.250	0.191	#40
ATI518T	CWS	0.344	0.191	#40
ATI518U	CWS	0.500	0.248	#40



Duplicating Punch Kit

ATI507KT

- Accurately transfer hole location from one sheet to another
 - Locating diameter and the punch tip are ground after heat treat ensuring they are concentric for accurate hole transfers
 - Manufactured from oil-hardened drill rod hardened to Rc 58-60
 - Kit box provides safe storage and size chart on the inner lid allows for quickly determining the tool needed
- Kit Includes:** Fourteen 3-1/2" OAL punches, sizes 3/32", #40, 1/8", #30, 5/32", #19, 3/16", #10, 7/32", 1/4", 5/16", 3/8", 7/16" and 1/2"

Miniature Anchornut

Stock No.	Type	A Spacing	B Spacing	C Pilot Diameter	D Drill Size
ATI518TA	SLM	0.250	0.219	0.191	#40
ATI518TB	SLM	0.281	0.219	0.248	#40



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Hole Saws and Arbors



ATI413-2



ATI474-15

Hole Saws

- Manufactured from high speed tool steel
- Heat treated and ground to precise tolerances
- Design allows for resharpening of tool
- Use with ATI415 Hole Saw Arbors

Fine Tooth			Coarse Tooth			Coarse Tooth			Coarse Tooth		
Stock No.	Diameter, inches	Thread	Stock No.	Diameter, inches	Thread	Stock No.	Diameter, inches	Thread	Stock No.	Diameter, inches	Thread
ATI413-1	3/8	5/16"-24	ATI474-1	3/8	5/16"-24	ATI47412X	1-3/32	5/16"-24	ATI474-29	2-1/8	1/2"-20
ATI413-2	7/16	5/16"-24	ATI474-1X	13/32	5/16"-24	ATI474-13	1-1/8	5/16"-24	ATI474-30	2-3/16	1/2"-20
ATI4132X	15/32	5/16"-24	ATI474-2	7/16	5/16"-24	ATI474-14	1-3/16	5/16"-24	ATI474-31	2-1/4	1/2"-20
ATI413-3	1/2	5/16"-24	ATI474-2X	15/32	5/16"-24	ATI47414X	1-7/32	5/16"-24	ATI474-32	2-5/16	1/2"-20
ATI413-4	9/16	5/16"-24	ATI474-3	1/2	5/16"-24	ATI474-15	1 1/4	5/16"-24	ATI474-33	2-3/8	1/2"-20
ATI413-5	5/8	5/16"-24	ATI4743X	17/32	5/16"-24	ATI474-16	1.3125	1/2"-20	ATI47434	2-7/16	1/2"-20
ATI4135X	21/32	5/16"-24	ATI474-4	9/16	5/16"-24	ATI474-17	1.375	1/2"-20	ATI474-35	2-1/2	1/2"-20
ATI4136	11/16	5/16"-24	ATI474-4X	19/32	5/16"-24	ATI474-18	1-7/16	1/2"-20	ATI47436	2-9/16	1/2"-20
ATI413-7	3/4	5/16"-24	ATI474-5	5/8	5/16"-24	ATI474-18X	1 15/32	1/2"-20	ATI474-38	2.6875	1/2"-20
ATI413-8	13/16	5/16"-24	ATI474-5X	21/32	5/16"-24	ATI474-19	1-1/2	1/2"-20	ATI474-39	2-3/4	1/2"-20
ATI413-9	7/8	5/16"-24	ATI474-6	11/16	5/16"-24	ATI474-20	1-9/16	1/2"-20	ATI474-40	2-13/16	1/2"-20
ATI413-11	1	5/16"-24	ATI4746X	23/32	5/16"-24	ATI47420X	1-19/32	1/2"-20	ATI474-41	2-7/8	1/2"-20
ATI413-12	1-1/16	5/16"-24	ATI474-7	3/4	5/16"-24	ATI474-21	1.625	1/2"-20	ATI474-42	2 13/16	1/2"-20
ATI413-13	1-1/8	5/16"-24	ATI474-7X	25/32	5/16"-24	ATI47421X	1-21/32	1/2"-20	ATI474-43	3	1/2"-20
ATI413-15	1-1/4	5/16"-24	ATI474-8	13/16	5/16"-24	ATI474-22	1-11/16	1/2"-20	ATI47444	3-1/16	1/2"-20
ATI41319	1-1/2	1/2"-20	ATI474-9	7/8	5/16"-24	ATI47422X	1-23/32	1/2"-20	ATI474-47	3-1/4	1/2"-20
ATI413-21	1 5/8	1/2"-20	ATI4749X	29/32	5/16"-24	ATI474-23	1-3/4	1/2"-20	ATI474-48X	3 11/32	1/2"-20
ATI41323	1-3/4	1/2"-20	ATI474-10	15/16	5/16"-24	ATI474-24	1-13/16	1/2"-20	ATI47449	3-3/8	1/2"-20
ATI413-27	2	1/2"-20	ATI474-10X	31/32	5/16"-24	ATI474-25	1-7/8	1/2"-20	ATI47454	3-11/16	1/2"-20
ATI413-31	2-1/4	5/16"-24	ATI474-11	1	5/16"-24	ATI474-26	1-15/16	1/2"-20	ATI474-55	3-3/4	1/2"-20
ATI413-47	3 1/4	1/2"-20	ATI47411X	1-1/32	5/16"-24	ATI474-26X	1 31/32	1/2"-20	ATI474-59	4	1/2"-20
ATI413-51	3 1/2	1/2"-20	ATI474-12	1-1/16	5/16"-24	ATI474-27	2	1/2"-20			



ATI415-1

Hole Saw Arbor

- Pilot and shank are ground to ensure tight concentricity
- Use with ATI413 and ATI474 hole saws

Stock No.	Shank Diameter	Pilot Diameter	Thread
ATI415-0	1/4	3/16	5/16"-24
ATI415-1	1/4	1/4	5/16"-24
ATI415-2	1/2	1/4	1/2"-20
ATI415-3	1/2	3/8	1/2"-20
ATI415-10	1/4	1/4	1/2"-20

Counterbores, Pilots and Dimple Dies

Counterbores

- Aircraft style, straight shank counterbores are used to cut flat areas or recesses for bolt heads and nuts
- Use with ATI489 replaceable counterbore pilots
- A set screw ensures pilot stays in the counterbore
- Special corner radius available by request



ATI488C-21

Stock No.	Diameter	Pilot Hole Diameter	Shank Diameter
ATI488C-0	3/16	3/32	1/4
ATI488C-1	1/4	3/32	1/4
ATI488C-2	9/32	3/32	1/4
ATI488C-3	5/16	3/32	1/4
ATI488C-4	11/32	3/32	1/4
ATI488C-5	3/8	1/8	1/4
ATI488C-6	13/32	1/8	1/4
ATI488C-7	7/16	1/8	1/4
ATI488C-8	15/32	1/8	1/4
ATI488C-9	1/2	1/8	1/4
ATI488C-10	17/32	1/8	1/4
ATI488C-11	9/16	1/8	1/4
ATI488C-12	19/32	1/8	1/4
ATI488C-13	5/8	1/8	1/4
ATI488C-14	21/32	3/16	1/4
ATI488C-15	11/16	3/16	1/4
ATI488C-16	23/32	3/16	1/4

Stock No.	Diameter	Pilot Hole Diameter	Shank Diameter
ATI488C-17	3/4	3/16	1/4
ATI488C-18	25/32	3/16	1/4
ATI488C-19	13/16	3/16	1/4
ATI488C-20	27/32	3/16	1/4
ATI488C-21	7/8	3/16	1/4
ATI488C-22	29/32	3/16	1/4
ATI488C-23	15/16	3/16	1/4
ATI488C-24	31/32	3/16	1/4
ATI488C-25	1	3/16	1/4
ATI488C-26	1-1/16	3/16	3/8
ATI488C-27	1-1/8	3/16	3/8
ATI488C-28	1-3/16	3/16	3/8
ATI488C-29	1-1/4	3/16	3/8
ATI488C-30	1-5/16	3/16	3/8
ATI488C-31	1-3/8	3/16	3/8
ATI488C-32	1-1/2	3/16	3/8

Counterbore Pilots

- Use these pilots with ATI488C counterbores
- Match the shank diameter of the pilot to the pilot hole diameter of the counterbore



ATI489B-8

		Pilot Diameter												
		3/32	1/8	5/32	#21	3/16	#10	7/32	1/4	F	9/32	5/16	11/32	3/8
Shank Diameter	3/32	ATI489A-1	ATI489A-2	ATI489A-3	ATI489A-4	ATI489A-5	ATI489A-6	ATI489A-7	ATI489A-8	ATI489A-9	ATI489A-10	ATI489A-11		
	1/8		ATI489B-2	ATI489B-3	ATI489B-4	ATI489B-5	ATI489B-6	ATI489B-7	ATI489B-8		ATI489B-10	ATI489B-11	ATI489B-12	ATI489B-13
	3/16					ATI489C-5	ATI489C-6	ATI489C-7	ATI489C-8	ATI489C-9	ATI489C-10	ATI489C-11	ATI489C-12	ATI489C-13

Dimple Dies

- Dimple dies are made from heat treated tool steel, ground and polished
- For AN426 rivets
- Shank diameter is 3/16" and features a spring clip to keep dies in place during use



ATI206A-6-R



ATI207A-5-R

Rivet Size		3/32			1/8			5/32		
Type		Male	Female	Male & Female	Male	Female	Male & Female	Male	Female	Male & Female
Body Length	1/4	ATI206A-3-P	ATI207A-3-P	ATI207206A3P	ATI206A-4-P	ATI207A-4-P	ATI207206A4P	ATI206A-5-P	ATI207A-5-P	ATI207206A5P
	3/8	ATI206A-3-R	ATI207A-3-R	ATI207206A3R	ATI206A-4-R	ATI207A-4-R	ATI207206A4R	ATI206A-5-R	ATI207A-5-R	ATI207206A5R
	1/2	ATI206A-3-S	ATI207A-3-S	ATI207206A3S	ATI206A-4-S	ATI207A-4-S	ATI207206A4S	ATI206A-5-S	ATI207A-5-S	
	5/8	ATI206A-3-T	ATI207A-3-T							

Rivet Size		3/16			1/4
Type		Male	Female	Male & Female	Male
Body Length	1/4	ATI206A-6-P	ATI207A-6-P	ATI207206A6P	ATI206A-8-P
	3/8	ATI206A-6-R	ATI207A-6-R	ATI207206A6R	ATI206A-8-R
	1/2	ATI206A-6-S	ATI207A-6-S	ATI207206A6S	
	5/8				

Included in 24 Piece Kit

Dimple Die Kit-Cold

ATI206A-24PC

- Die sets designed for cold dimpling applications to form the 100° angle prior to installation of AN426 flush rivets
- 3/16" diameter shank with stainless steel lock ring securing the die sets into the pneumatic or hand squeezer
- Kit box protects the polished surface of the dies, engraved aluminum plate can provide for quick size identification, as well as quickly determining missing tools
- Three different body lengths (1/4", 3/8" and 1/2") are provided for each rivet size

Kit Includes: 12 male, 12 female dimple die combinations for rivet sizes 3/32", 1/8", 5/32" and 3/16"



ATI206A-24PC



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

ATI TOOLS



Microstops

Microstops

- Heavy-duty ball thrust bearing ensures depth repeatability
- Fail-safe design accomplished with an integrated shoulder on the shaft
- Debris filter prevents chips and dust from contaminating bearings
- .0005" depth adjustment, 5/16" shaft travel
- Right-hand threaded lock nut prevents jamming of the adjustment mechanism
- Multiple skirt configuration options
- Multiple shaft configuration options



AT1444



AT1443

cutaway pictures shown

AT1444 Microstops

- For high volume, accurate countersinking in the production environment
- Full ball bearing shaft support for increased life
- Debris filter prevents chips and dust from contaminating bearings

AT1443 Microstops

- For lower volume countersinking in maintenance and home building environments
- Bronze bushing shaft support

Stock No.	Description*
AT1443A2	Model AT1443 + Skirt A + Shaft 2
AT1443S1	Model AT1443 + Skirt S + Shaft 1
AT1444G2	Model AT1444 + Skirt G + Shaft 2
AT1444LA1	Model AT1444 + Skirt LA + Shaft 1

*Ordering Examples: Choose either AT1444 or AT1443, Skirt Option, and Shaft Option.

Skirts:			
	S Straight ¾" Capacity		C Close 5/16" Capacity
	E Straight Cutaway ¾" Capacity		D Bell 1" Capacity
	F Flanged ¾" Capacity		W Flanged Bell 1" Capacity
	G Flanged Cutaway ¾" Capacity		J .532 OD .332 Capacity
	B 2-Legged ¾" Capacity		K .600 OD .400 Capacity
	A Phenolic Insert ¾" Capacity		N Nylon Insert ¾" Capacity
 Extended Skirts: 2-¾" Extension Includes extension shaft			
 H Nylon Flange Insert ¾" Capacity			
 LA 10-32 Female Thread ¼ ID x ¾ OD			
 LB ¼-28 Female Thread 5/16 ID x 7/16 OD			
 LC ¼-28 Female Thread 3/8 ID x ½ OD			
 LD ¼-28 Female Thread 5/8 ID x ¾ OD			

SHAFTS: All shafts feature wrenching flats to aid in removal of cutter after use.

	1 ¼"-28 Female Thread ¼ Round Shank
	2 ¼"-28 Female Thread 3 Chuck Flats Shank
	3 ¼"-28 Female Thread Quick Change Shank
	4 M6 Female Thread ¼ Round Shank
	5 M6 Female Thread 3 Chuck Flats Shank



AT1432A



AT1462H3-1.3

Jumbo Size Microstops

- For production environment countersinking of larger sized holes
- Fail-safe design accomplished with integrated shoulder on shaft
- All shafts feature wrenching flats to aid in removal of cutter after use
- 3/4" shaft travel
- Ball thrust bearing ensures depth repeatability

Stock No.	Shaft Thread	Shaft Support	Adjustment Increment	Cutter Capacity	Shank	OAL
AT1432A	7/16"-20 Female	Bronze Bushing	0.001	1-1/4"	3/8" Round	7"
AT1432B	3/8"-24 Female	Bronze Bushing	0.001	1-1/4"	3/8" Round	7"
AT1462	3/8"-24 Female	Bronze Bushing	0.003	7/8"	3/8" Round	5"
AT1462H3-1.3	3/8"-24 Female	Ball Bearing	0.0005	1-1/4"	3 Chuck Flats	5"
AT1462H3-1.5	3/8"-24 Female	Ball Bearing	0.0005	1-3/8"	3 Chuck Flats	5"
AT1462H7-1.3	7/16"-20 Female	Ball Bearing	0.0005	1-1/4"	3 Chuck Flats	5"
AT1462H7-1.5	7/16"-20 Female	Ball Bearing	0.0005	1-3/8"	3 Chuck Flats	5"

Countersink Cutters

MicroStop Countersink Cages, Stubby

- Designed for close quarter or tight access applications

ATI448 Series

- 3/32" shaft travel
- .001 adjustable depth control

Stock No.	D	L	Shaft	Max. Cutter Dia.
ATI448S1	.560	1.22"	1/4"-28	1/2"
ATI448S3	.560	1.22"	QC	1/2"



ATI448 Series



ATI449 Series

Microstop Countersink Cages, Midget

- Designed for close quarters or tight access applications

ATI449 Series

- 9/32" shaft travel
- .001 adjustable depth control

Stock No.	D	L	Shaft	Max. Cutter Dia.
ATI449S2	.560	1.62"	1/4"-28	1/2"
ATI449S3	.560	1.62"	QC	1/2"

Microstop/Countersink Cutter Kit

ATI590CSK

- Provides countersinking versatility in a convenient and portable kit
- Includes one ball-bearing, .0005 adjustable depth microstop for precise, accurate countersinking
- Includes nine 1/2" diameter, 100° cutters with pilots of #40, #30, #21, #10, 3/32", 1/8", 5/32", 3/16" and 1/4"
- Includes an assortment of popular skirt and nose piece configurations

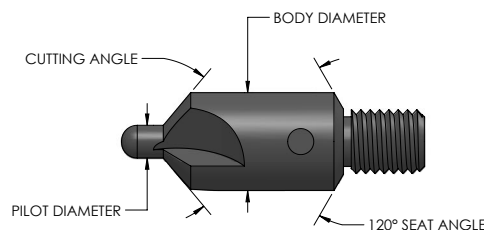


ATI590CSK

Countersink Cutters, Threaded Shank

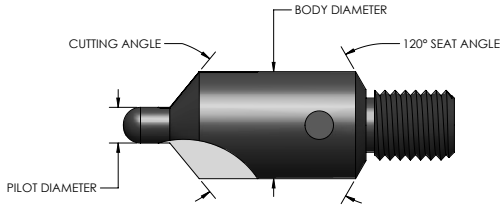
- Manufactured of M2 High-Speed steel
- High-speed steel countersinks ground on-centers to ensure concentricity
- 120° seating angle for standard fit
- Used with ATI443 or ATI444 series Microstops

Integral-Pilot Countersink Cutter, High Speed Steel, 1/4-28 Threads					
3 Flutes, 100° Stock No.	Body Diameter	Pilot Size	2 Flutes, 100° Stock No.	Body Diameter	Pilot Size
ATI420C41/4	3/8"	1/4"	ATI445E4-11	1/2"	#11
ATI420C410	3/8"	#10	ATI445E41/8	1/2"	1/8"
ATI420C413	3/8"	#13	ATI445E410	1/2"	#10
ATI420C418	3/8"	1/8"	ATI445E413	1/2"	#13
ATI420C421	3/8"	#21	ATI445E416	1/2"	#16
ATI420C430	3/8"	#30	ATI445E420	1/2"	#20
ATI420C4316	3/8"	3/16"	ATI445E421	1/2"	#21
ATI420C4332	3/8"	3/32"	ATI445E43/16	1/2"	3/16"
ATI420C440	3/8"	#40	ATI445E43/32	1/2"	3/32"
ATI420C45/32	3/8"	5/32"	ATI445E430	1/2"	#30
ATI420D41/4	7/16"	1/4"	ATI445E440	1/2"	#40
ATI420D41/8	7/16"	1/8"	ATI445E45/32	1/2"	5/32"
ATI420D410	7/16"	#10	ATI445E47/32	1/2"	7/32"
ATI420D413	7/16"	#13	ATI445G41/4	5/8"	1/4"
ATI420D416	7/16"	#16	ATI445G430	5/8"	#30
ATI420D420	7/16"	#20	ATI445G45/16	5/8"	5/16"
ATI420D421	7/16"	#21			
ATI420D43/32	7/16"	3/32"			
ATI420D430	7/16"	#30			
ATI420D440	7/16"	#40			
ATI420D45/32	7/16"	5/32"			
ATI420D47/32	7/16"	7/32"			
ATI420G4-1/4	5/8"	1/4"			
ATI420G43/16	5/8"	3/16"			
ATI420G45/16	5/8"	5/16"			



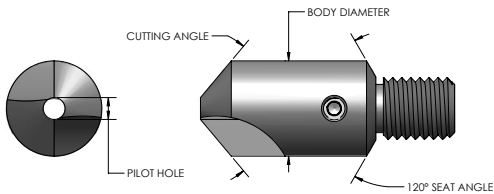
- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Countersink Cutters, HSS and Carbide-tipped



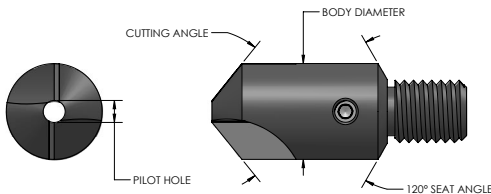
Integral-Pilot Countersink Cutter, Carbide-Tipped, 1/4"-28 Threads

Stock No.	Body Diameter	Pilot Size
ATI445CE4316	1/2"	3/16"
ATI445CE4332	1/2"	3/32"
ATI445CE440N	1/2"	#40
ATI445CE4532	1/2"	5/32"
ATI445CG414	5/8"	1/4"
ATI445CG4516	5/8"	5/16"
ATI445CTE410	1/2"	#10
ATI445CTE414	1/2"	1/4"
ATI445CTE418	1/2"	1/8"
ATI445CTE421	1/2"	#21
ATI445CTE430	1/2"	#30



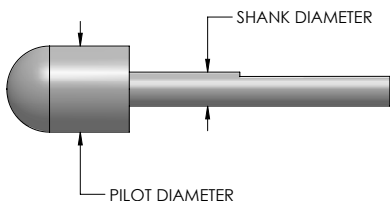
Replaceable-Pilot Countersink Cutter, HSS, 1/4"-28 Threads

Stock No.	Body Diameter	Pilot Hole	Pilot Series
ATI455A-4	1/4"	0.086	ATI484-
ATI455B-4	5/16"	0.086	ATI484-
ATI455C-4	3/8"	0.086	ATI484-
ATI455D-4	7/16"	0.086	ATI484-
ATI455E-4	1/2"	0.086	ATI484-
ATI455G-4	5/8"	0.086	ATI484-



Replaceable-Pilot Countersink Cutter, Carbide-Tipped, 1/4"-28 Threads

Stock No.	Body Diameter	Pilot Hole	Pilot Series
ATI455CTE-4	1/2"	0.125	ATI485-
ATI455CTG-4	5/8"	0.125	ATI485-



Replaceable Pilots

Stock No.	Pilot Diameter	Shank Diameter
ATI484-12	#30	0.086
ATI484-2	#40	0.086
ATI484-21	#21	0.086
ATI484-31	#11	0.086
ATI484-32	#10	0.086
ATI484-56	3/32"	0.086
ATI484-57	1/8"	0.086
ATI484-59	5/32"	0.086
ATI484-61	3/16"	0.086
ATI484-63	7/32"	0.086
ATI484-65	1/4"	0.086
ATI485-57	1/8"	0.125
ATI485-59	5/32"	0.125
ATI485-61	3/16"	0.125
ATI485-65	1/4"	0.125

Pliers and Clamps

Cannon Plug Pliers

- Slip-joint handles
- Serrated, replaceable plastic jaws (ATI508K-4)
- Adjustable grip range from 3/4" to 2-1/2" diameter
- Used to tighten or loosen threaded collars on electrical connectors

ATI508K Cannon Plug Plier

ATI508KG Cannon Plug Pliers with Grips



Camloc Pliers

ATI044P3

- Use on Camloc fasteners, stud series 2000, 2700 and 4002



Sheet Holder Pliers

- Forged steel
- Available with ergonomically designed cushioned grips

Stock No.	Description
ATI508S	For use with ATI542, ATI543, and plier-operated sheet holders and side grip clamps
ATI508SG	ATI508S with high visibility cushioned grips



Spring Tension Clamps

- U-clamp, plier operated
- 70lb. clamping pressure

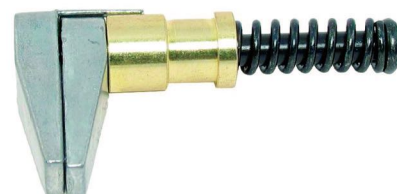
Stock No.	Material Capacity	Reach, inches
ATI542	0-7/16"	2
ATI542S	0-7/16"	2
ATI543	1/4-15/32"	3



Side-Grip Clamps

- Plier operated, spring loaded
- Minimized surface marring
- No over tightening possible
- 60lb. clamping force

Stock No.	Material Capacity	Reach, inches	OAL
ATI550SG	0-3/4"	1	2-7/16"
ATI551SG	0-3/4"	1/2	2-7/16"
ATI552SG	0-1/2"	1	2-3/16"
ATI553SG	0-1/2"	1/2	2-3/16"



- Must wear eye protection
- Plastic coated handles on these pliers and cutters do not protect against electric shock
- Airframe tooling can cause flying chips

ATI TOOLS



Temporary Fasteners



ATI551M



ATI554HNX

Plier Operated Temporary Fasteners

Stock No.	Grip Range	Size	For Drill	Color
ATI551M	0-1/4"	3/32"	#40	Zinc
ATI551MHD	0-1/2"	3/32"	#40	Zinc
ATI552M	0-1/4"	1/8"	#30	Copper
ATI552MHD	0-1/2"	1/8"	#30	Copper
ATI553M	0-1/4"	5/32"	#21	Black
ATI553MHD	0-1/2"	5/32"	#21	Black
ATI554M	0-1/4"	3/16"	#10	Brass
ATI554MHD	0-1/2"	3/16"	#10	Brass
ATI556M	0-1/4"	1/4"	1/4"	Copper
ATI556MHD	0-1/2"	1/4"	1/4"	Copper

Power Operated Temporary Fasteners, Hex Nut

Stock No.	Grip Range	Size	For Drill	Color
ATI551HNX	0-1/2"	3/32"	#40	Zinc
ATI551HNXL	0-1"	3/32"	#40	Zinc
ATI552HNX	0-1/2"	1/8"	#30	Copper
ATI552HNXL	0-1"	1/8"	#30	Copper
ATI553HNX	0-1/2"	5/32"	#21	Black
ATI553HNXL	0-1"	5/32"	#21	Black
ATI554HNX	0-1/2"	3/16"	#10	Brass
ATI554HNXL	0-1"	3/16"	#10	Brass
ATI556HNX	0-1/2"	1/4"	1/4"	Copper
ATI556HNXL	0-1"	1/4"	1/4"	Copper



ATI551WNX



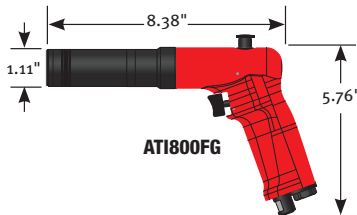
CBXBF18PC

Manually Operated Temporary Fasteners, Wing Nut

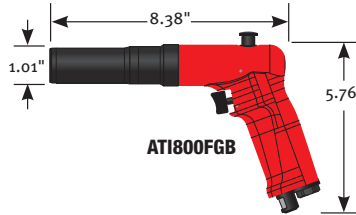
Stock No.	Grip Range	Size	For Drill	Color
ATI551WNX	0-1/2"	3/32"	#40	Zinc
ATI551WNXL	0-1"	3/32"	#40	Zinc
ATI552WNX	0-1/2"	1/8"	#30	Copper
ATI552WNXL	0-1"	1/8"	#30	Copper
ATI553WNX	0-1/2"	5/32"	#21	Black
ATI553WNXL	0-1"	5/32"	#21	Black
ATI554WNX	0-1/2"	3/16"	#10	Brass
ATI554WNXL	0-1"	3/16"	#10	Brass
ATI556WNX	0-1/2"	1/4"	1/4"	Copper
ATI556WNXL	0-1"	1/4"	1/4"	Copper

Power Operated Temporary Fasteners, Cylindrical Body W/ Plastic Cap

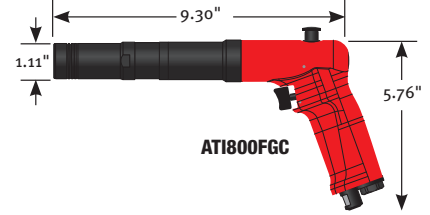
Stock No.	Grip Range	Size	For Drill	Color
CBXBF14PC	0-1/2"	1/4"	1/4"	Copper
CBXBF18PC	0-1/2"	1/8"	#30	Copper
CBXBF316PC	0-1/2"	3/16"	#10	Brass
CBXBF332PC	0-1/2"	3/32"	#40	Zinc
CBXBF532PC	0-1/2"	5/32"	#21	Black
CBXLF14PC	0-1"	1/4"	1/4"	Copper
CBXLF18PC	0-1"	1/8"	#30	Copper
CBXLF316PC	0-1"	3/16"	#10	Brass
CBXLF332PC	0-1"	3/32"	#40	Zinc
CBXLF532PC	0-1"	5/32"	#21	Black



ATI800FG



ATI800FGB



ATI800FGC

ATI Skin Clamp Runners

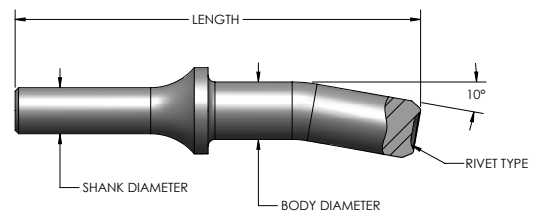
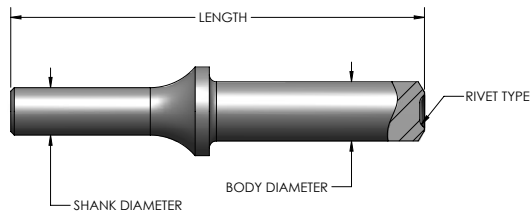
For installing/removing cylindrical body temporary fasteners

- Reduced barrel diameter: 1.01" vs. 1.11" (ATI800FGB model only)
- Air motor stalls at 25 in-lbs. at 90psi (ATI800FG and ATI800FGB)
- Heavy-duty, lightweight and compact
- Push bottom rapid reverse with lock position
- Dual roller clutch carriers for longevity
- Greater torque in reverse eases removal on the installed fastener
- CE certified

ATI800FG ATI® Cylindrical Body Skin Clamp Runner - Standard Barrel

ATI800FGB ATI® Skin Clamp Runner - Reduced Barrel

ATI800FGC ATI® Cylindrical Body Skin Clamp Runner - Long Barrel w/Torque Control Clutch



Standard Straight and Offset Rivet Sets

- Blended radius between cup and chamfer
- Highly polished cup. Free of machine marks or ridges
- Manufactured from high grade, shock-resistant steel

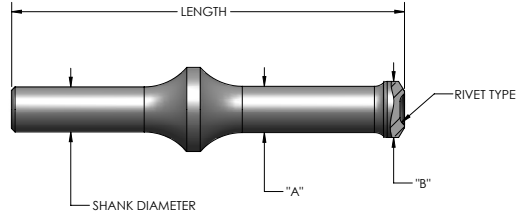
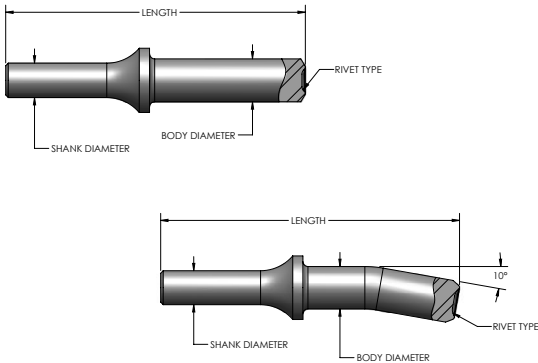
Rivet Size inches	Length inches	AN470 RIVET 0.401 SHANK		
		Straight Type Rivet Set Stock No.	Offset Type Rivet Set Stock No.	Body Diameter, inches
1/16	3-1/2	ATI100A31/16	ATI101A31/16	1/2
	2-1/2	ATI100A2-332	-	1/2
3/32	3-1/2	ATI100A33/32	ATI101A33/32	1/2
	5-1/2	ATI100A53/32	ATI101A53/32	1/2
	7-1/2	ATI100A73/32	ATI101A73/32	1/2
	10-1/2	ATI100A8332	ATI101A8332	1/2
	13-1/2	ATI100A93/32	ATI101A93/32	1/2
	-	-	-	-
1/8	2-1/2	ATI100A218	-	1/2
	3-1/2	ATI100A3-1/8	ATI101A3-1/8	1/2
	5-1/2	ATI100A51/8	ATI101A518	1/2
	7-1/2	ATI100A71/8	ATI100A71/8	1/2
	10-1/2	ATI100A818	ATI101A818	1/2
	13-1/2	ATI100A91/8	ATI101A91/8	1/2
5/32	3-1/2	ATI100A35/32	ATI101A35/32	1/2
	5-1/2	ATI100A55/32	ATI101A5-532	1/2
	7-1/2	ATI100A75/32	ATI101A75/32	1/2
	10-1/2	ATI100A8532	ATI101A8532	1/2
	13-1/2	ATI100A95/32	ATI101A95/32	1/2
3/16	2-1/2	ATI100A2316	-	1/2
	3-1/2	ATI100A33/16	ATI101A3316	1/2
	5-1/2	ATI100A53/16	ATI101A53/16	1/2
	7-1/2	ATI100A73/16	ATI101A73/16	1/2
	10-1/2	ATI100A8316	ATI101A8316	1/2
	13-1/2	ATI100A93/16	ATI101A93/16	1/2
7/32	3-1/2	ATI100A37/32	ATI101A3732	1/2
	5-1/2	ATI100A57/32	ATI101A57/32	1/2
	7-1/2	ATI100A77/32	ATI101A77/32	1/2
1/4	2-1/2	ATI100A214	-	5/8
	3-1/2	ATI100A3-1/4	ATI101A3-1/4	5/8
	5-1/2	ATI100A514	ATI101A514	5/8
FLUSH	3-1/2	ATI100AF-3A	ATI101AF-3A	1/2
	3-1/2	ATI100AF-3B	ATI101AF-3B	5/8
	5-1/2	ATI100AF-5A	ATI101AF-5A	1/2
	5-1/2	ATI100AF-5B	ATI101AF-5B	5/8
	7-1/2	ATI100AF-7A	ATI101AF-7A	1/2
	10-1/2	ATI100AF8A	ATI101AF8A	1/2

Rivet Size inches	Length inches	AN470 RIVET 0.498 SHANK		
		Straight Type Rivet Set Stock No.	Offset Type Rivet Set Stock No.	Body Diameter inches
1/4	3-1/2	ATI100B3-1/4	ATI101B3-1/4	5/8



• Must wear eye protection
• Airframe tooling can cause flying chips

Rivet Sets



Straight Rivet Sets for Modified Universal Head Rivets, .401 Shank

Rivet Size	Length	BACR15FT RIVET		
		Straight Drive Stock No.	Offset Drive Stock No.	Body Diameter
3/32	3-1/2	ATI100A3332F		1/2
3/32	5-1/2	ATI100A5332F		1/2
1/8	3-1/2	ATI100A31/8F	ATI101A31/8F	1/2
1/8	5-1/2		ATI101A518F	1/2
5/32	3-1/2	ATI100A3532F	ATI101A3532F	1/2
		ATI100A5532F	ATI101A5532F	1/2
3/16	2 1/2	ATI100A2316F		1/2
3/16	3-1/2	ATI100A3316F	ATI101A3316F	1/2
3/16	5-1/2	ATI100A5316F	ATI101A5316F	1/2
3/16	7-1/2	ATI100A7316F		1/2
7/32	3-1/2	ATI100A3732F	ATI101A3732F	1/2
1/4	2-1/2	ATI100A21/4F		5/8
1/4	3-1/2	ATI100A31/4F	ATI101A31/4F	5/8
1/4	5-1/2		ATI101A514F	5/8

Straight Rivet Sets for Modified Universal Head Rivets, .401 Shank

Manufactured from H13 material and magnetic particle tested

Rivet Size (in)	Part Number	Reference	BACR15FT RIVET		Length (in)
			A Dimension (in)	B Dimension (in)	
1/8	1112MBC4014	ST1112MB-C401-4	0.280	0.280	3.31
1/8	ST1112BC453	ST1112B-C401-4-53	0.281	0.437	3.31
5/32	1112MBC4015	ST1112MB-C401-5	0.310	0.350	3.31
5/32	1112MBC401A5	1112MBC401A5	0.310	0.310	3.31
5/32	ST1112BC553	ST1112B-C401-5-53	0.312	0.500	3.31
3/16	1112MBC4016	ST1112MB-C401-6	0.340	0.410	3.31
3/16	1112MBC401A6	ST1112MB-C401A-6	0.368	0.340	3.31
3/16	ST1112BC653	ST1112B-C401-6-53	0.344	0.562	3.31
7/32	ST1112MBC7	ST1112MB-C401-7	0.380	0.480	3.31
7/32	1112MBC401A7	ST1112MB-C401A-7	0.406	0.380	3.31
1/4	1112MBC4018	ST1112MB-C401-8	0.410	0.540	3.31
1/4	1112MBC401A8	ST1112MB-C401A-8	0.482	0.410	3.31
1/4	ST1112BC853	ST1112B-C401-8-53	0.406	0.656	3.31



ATI104A-1/8

Standard Gooseneck and Double Offset Rivet Sets

Gooseneck Rivet Set Stock No.	Length, inches	Body Diameter (in)	Double Offset Stock No.	Length, inches	Body Diameter, inches	Rivet Type	Rivet Size (in)	Shank Diameter (in)
ATI104AF	6-5/8	0.69	ATI105AF	5-3/4	1/2	FLUSH	FLUSH	0.401
ATI104A-1/4	6-5/8	0.69	ATI105A-1/4	5-3/4	1/2	AN470	1/4	0.401
ATI104A-1/8	6-5/8	0.69	ATI105A-1/8	5-3/4	1/2	AN470	1/8	0.401
ATI104A-3/16	6-5/8	0.69	ATI105A-3/16	5-3/4	1/2	AN470	3/16	0.401
ATI104A-3/32	6-5/8	0.69	ATI105A-3/32	5-3/4	1/2	AN470	3/32	0.401
ATI104A-5/32	6-5/8	0.69	ATI105A-5/32	5-3/4	1/2	AN470	5/32	0.401

Flush Rivet Sets



ATI106A

Rubber Guard Swivel Flush Set

- Ball swivel type
- Highly polished crowned face with rubber guard
- Designed for ease of handling, with a swivel action for quick alignment

Stock No.	Face Diameter, inches	Length, inches	Shank Diameter inches
ATI106A	1-1/4	3-1/2	0.401
ATI106B	1-1/4	3-1/2	0.498



ATI110CB

Rubber Guarded Flush Rivet Set

- Highly polished crowned face
- Rubber rim guard to prevent slipping and damage to skin surface

Stock No.	Face Diameter inches	Length inches	Shank Diameter inches
ATI110CA	3/4	2-1/2	0.401
ATI110CB	1	2-1/2	0.401
ATI110CC	1-1/4	2-1/2	0.401



ATI112A

Mushroom Type Flush Rivet Set

- Highly polished crowned face
- Mushroomed face to prevent damage in thin sections

Stock No.	Face Diameter inches	Length inches	Shank Diameter inches
ATI112A	1-7/8	3	0.401
ATI112B	1-7/8	3	0.498



ATI121A-3

Offset Flush Rivet Set

- 10° angle offset
- Highly polished crowned face

Stock No.	Face Diameter inches	Length inches	Shank Diameter inches
ATI121A-3	1-1/4	3-1/2	0.401
ATI121A-4	1	5-1/2	0.401
ATI121A-6	1	7-1/2	0.401



ATI107A-1

Flush Set

- Straight flush set
- Crowned face for rapid flush riveting

Stock No.	Face Diameter inches	Length, inches	Shank Diameter inches	Material
ATI107A-1	1	2-3/4	0.401	Steel
ATI107A-2	1-1/4	2-3/4	0.401	Steel
ATI107A-2D	1	3-1/4	0.401	Steel
ATI107A-3	1-1/4	3-1/2	0.401	Steel
ATI107A-4	1	5-1/2	0.401	Steel
ATI107A-6	1	7-1/2	0.401	Steel
ATI107A2DB	1	3-1/4	0.401	Steel w/ Brass Insert
ATI107A2DN	1	3-1/4	0.401	Steel w/ Nylon Insert
ATI119A-1B	3/4	2-1/8	0.401	Steel
ATI119A-2B	1	2-1/8	0.401	Steel
ATI119A-3B	1-1/8	2-1/8	0.401	Steel
ATI119A4B	1-1/4	2-1/8	0.401	Steel
ATI119B-2B	1	2-1/8	0.498	Steel



ATI113A-1

Extra Short Flush Rivet Set

- Extra short for access and strength
- Highly polished crowned face

Stock No.	Face Diameter inches	Length inches	Shank Diameter inches
ATI113A-1	3/4	1-11/16	0.401
ATI113A-2	1	1-13/16	0.401
ATI113A-3	1-1/4	1 13/16	0.401



ATI111BK2

Offset Flush Rivet Set

- Highly polished machined crown
- Replaceable polyurethane rim to prevent slipping and skin damage

Stock No.	Face Diameter inches	Length inches	Shank Diameter inches
ATIST111BK1	3/4	2-1/2	0.401
ATIST111BK2	1	2-1/2	0.401
ATIST111BK3	1-1/4	2-1/2	0.401



• Must wear eye protection
• Airframe tooling can cause flying chips
• Read safety precautions on pages W1 to W4

Knockout Punches

• Premium, shock resistant, heat-treated steel



ATI140A-5



ATI141A33/32

Standard Knockout Punch	Hi-Shear Knock Out Punch	Rivet Size inches	Length inches	Shank Diameter inches
ATI141A33/32	ATI140A-3	3/32	3-1/2	0.401
	ATI140A341/4	3/32	4-1/4	0.401
ATI141A31/8	ATI140A-4	1/8	3-1/2	0.401
	ATI140A441/4	1/8	4-1/4	0.401
ATI141A35/32	ATI140A-5	5/32	3-1/2	0.401
	ATI140A541/4	5/32	4-1/4	0.401
ATI141A33/16	ATI140A-6	3/16	3-1/2	0.401
ATI141B33/16	ATI140B-6	3/16	3-1/2	0.498
	ATI140A641/4	3/16	4-1/4	0.401
ATI141A37/32		7/32	3-1/2	0.401
ATI141A31/4	ATI140A-8	1/4	3-1/2	0.401
ATI141B31/4	ATI140B-8	1/4	3-1/2	0.498
	ATI140A841/4	1/4	4-1/4	0.401
ATI141A35/16	ATI140A-10	5/16	3-1/2	0.401
ATI141B35/16	ATI140B-10	5/16	3-1/2	0.498
ATI141B33/8	ATI140B-12	3/8	3-1/2	0.498
ATI141A33/8	ATI140A-12	3/8	3-1/2	0.401

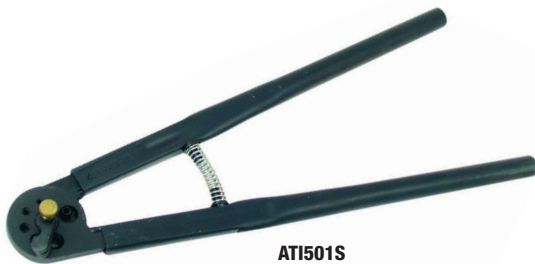


ATI501R

Rivet Cutter - 3/32" - 1/4" - Standard Handles

ATI501R

- Cuts all aluminum rivets from 3/32" to 1/4"
- Adjustable rivet cutting length guide from 1/4" to 3/4", in 1/16" increments



ATI501S

Rivet Cutter - 3/32" - 1/4" - Long Handles

ATI501S

- Cuts all aluminum rivets from 3/32" to 1/4"
- Adjustable rivet cutting length guide from 1/4" to 3/4", in 1/16" increments
- 13" tubular handles for additional leverage

Rivet Squeezer Set



AT1108AP1/4



AT1108AR14



AT1108AT1/8



AT1109AN



AT1109AR

Cupped and Flush Rivet Squeezer Sets

Rivet Size inches	Body Diameter inches	Shank Diameter inches	1/8 Body Length inches	1/4 Body Length inches	3/8 Body Length inches	1/2 Body Length inches	5/8 Body Length inches	3/4 Body Length inches	Rivet Type
3/32	3/8	3/16	AT1108AN3/32	AT1108AP3/32	AT1108AR3/32	AT1108AS3/32	AT1108AT3/32	AT1108AW3/32	AN470
1/8	3/8	3/16	AT1108AN1/8	AT1108AP1/8	AT1108AR1/8	AT1108AS1/8	AT1108AT1/8	AT1108AW1/8	AN470
5/32	1/2	3/16	AT1108AN5/32	AT1108AP5/32	AT1108AR5/32	AT1108AS5/32	AT1108AT5/32	AT1108AW5/32	AN470
1/4	5/8	3/16	AT1108AN1/4	AT1108AP1/4	AT1108AR1/4	AT1108AS1/4	AT1108AT1/4	AT1108AW1/4	AN470
1/4	1/2	3/16	AT1108AN3/16	AT1108AP3/16	AT1108AR3/16	AT1108AS3/16	AT1108AT3/16	AT1108AW3/16	AN470
1/4	5/8	1/4		AT1108BP1/4	AT1108BR1/4	AT1108BS1/4			AN470
1/8	3/8	1/4	AT1108BN1/8	AT1108BP1/8	AT1108BR1/8	AT1108BS1/8	AT1108BT1/8	AT1108BW1/8	AN470
3/32	3/8	1/4	AT1108BN3/32	AT1108BP3/32	AT1108BR3/32	AT1108BS3/32			AN470
3/16	1/2	1/4	AT1108BN3/16	AT1108BP3/16	AT1108BR3/16	AT1108BS3/16	AT1108BT3/16		AN470
5/32	1/2	1/4		AT1108BP5/32	AT1108BR5/32	AT1108BS5/32	AT1108BT5/32		AN470
FLUSH	1/2	3/16	AT1109AN	AT1109AP	AT1109AR	AT1109AS	AT1109AT	AT1109AW	FLUSH
FLUSH	3/8	3/16	AT1109EN	AT1109EP	AT1109ER	AT1109ES	AT1109ET	AT1109EW	FLUSH
FLUSH	1/2	1/4			AT1109BR	AT1109BS	AT1109BT	AT1109BW	FLUSH
5/32	1/2	3/16	AT1108AN532F	AT1108AP532F	AT1108AR532F	AT1108AS532F	AT1108AT532F	AT1108AW532F	BACR15FT
3/16	1/2	3/16	AT1108AN316F	AT1108AP316F	AT1108AR316F	AT1108AS316F	AT1108AT316F	AT1108AW316F	BACR15FT
1/4	5/8	3/16	AT1108AN1/4F	AT1108AP1/4F	AT1108AR1/4F	AT1108AS1/4F	AT1108AT1/4F		BACR15FT

Included in 33 Piece Kit

Included in 16 Piece Kit

Rivet Squeezer Set Kits

AT1108A33PC

- 3/16" diameter shank with lock ring
- Universal (AN470) cup sizes 3/32", 1/8", 5/32", 3/16" and 1/4"
- Body lengths of 1/8", 1/4", 3/8", 1/2" and 5/8"
- Suitable for either hand or pneumatic squeezers
- See chart above for squeezer sets included

AT1108A-16PC

- 3/16" diameter shank with lock ring
- Suitable for either hand or pneumatic squeezers
- Universal (AN470) cup sizes 3/32", 1/8", 5/32", 3/16" and 1/4"
- See chart above for squeezer sets included



AT1108A33PC



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Rivet Squeezers



ATI501A

Alligator Type Hand Rivet Squeezer

ATI501A

- 3/32" to 3/16" rivet capacity
- 2-1/2" reach
- 1-1/8" gap
- 18" handles for ample leverage
- Accepts 3/16" diameter shank rivet squeezer sets and cold dimple dies



ATI502AHE

C-Type Swivel Yoke Hand Rivet Squeezers

- 3/32" to 3/16" Rivet capacity
- 3/8" stroke
- 5/8" ram adjustment to eliminate shims
- 360° swivel yoke can be locked in any position
- Accepts 3/16" diameter shank rivet squeezer sets and cold dimple dies

Stock No.	Reach, inches	Closed Gap inches
ATI502AHD	1-1/2	1-5/8
ATI502AHE	3	1-1/2



ATI502TH1/2

C-Type Fixed Yoke Hand Rivet Squeezers

- 3/32" to 3/16" rivet capacity
- 5/8" ram adjustment to eliminate shims
- Accepts 3/16" diameter shank rivet squeezer sets and cold dimple dies

Stock No.	Reach, inches	Closed Gap inches
ATI502TH1/2	1-1/2	1-1/4
ATI502TH3	3	1-1/4

Pneumatic Alligator Type Rivet Squeezer

- Quiet, simple and easy operation
- Swivel air inlet aids maneuverability



ATI114A



ATI114C

Stock No.	Yoke Style	Cylinder Type	Yoke Reach, inches (mm)	Aluminum Rivet Capacity, inches (mm)	Steel Rivet Capacity, inches (mm)	Overall Length, inches	Weight With Jaws (lb)
ATI114A-3	Alligator	Single	3 (76.2)	3/32 (2.38)	1/16 (1.59)	10-7/8	5
ATI114TA	Alligator	Tandem	1-1/2 (38.10)	3/16 (4.76)	5/32 (3.97)	12	5-1/2
ATI114A	Alligator	Single	1-1/2 (38.10)	1/8 (3.18)	3/32 (2.38)	9-1/4	4
ATI114A214	Alligator	Single	2-1/4 (57.15)	3/32 (2.38)	3/32 (2.38)	10-1/8	4-1/2
ATI114TA-3	Alligator	Tandem	3 (76.2)	5/32 (3.97)	3/32 (2.38)	14	6-1/4
ATI114TA214	Alligator	Tandem	2-1/4 (57.15)	3/32 (4.76)	3/32 (2.38)	13	6

Stock No.	Yoke Style	Cylinder Type	Yoke Reach, inches (mm)	Aluminum Rivet Capacity, inches (mm)	Steel Rivet Capacity, inches (mm)	Overall Length, inches	Weight With Jaws (lb)
ATI114C	C-Type	Single	1-1/2 (38.10)	1/8 (3.18)	1/8 (3.18)	10-5/16	4-1/2

Rivet Hammers and Attachments

Rivet Hammers

- Teasing trigger for precise control
- Air flow control valve to limit output
- Beehive style retaining spring standard

Stock No.	Aluminum Rivet Capacity inches	Steel Rivet Capacity inches	BPM	Length inches	Weight (lb)	Shank Diameter inches
ATIU-2X	5/32	3/32	2,580	6-1/2	2.25	0.401
ATIATC3X	3/16	5/32	2,160	7-1/4	2.25	0.401
ATIATC4X	1/4	3/16	1,740	8-1/4	2.75	0.401
ATIU7X	5/16	1/4	1,140	9-1/4	6.00	0.498
ATIU9X	3/8	5/16	900	11-1/4	5.12	0.498
ATI17-200B	3/16	5/32	2,700	4-1/4	2.62	0.401



Spring Retainer - Quick Change

ATI114C-3

- Utilizes fast thumb release to quick change any rivet set that has safety spring shoulder without removing spring retainer
- Works with 3X and 4X rivet guns
- Accommodates 1/2" and 9/16" body diameters
- Length 1-1/8", body 1/2" to 9/16", shank .401"



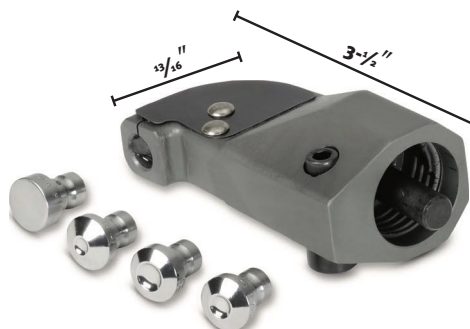
ATI114C-3

90 Degree Rivet Hammer Attachment

- Great for installing up to 3/16" rivets in hard to reach areas
- Uses ATI1757 and ATI1758 series rivet sets

Attachment Kit Stock No.	Attachment Only Stock No.	Shank Diameter	Attachment Thread Pitch (TPI)	Application
ATI595BK	ATI595B	0.401	7	Sioux®; Ingersoll®; Rand®; Jiffy®
ATI595CK	ATI595C	0.401	8	ATI®; Cleco®; Chicago®; Pneumatic®

Stock No.	Rivet Type	Rivet Size inches	Body Length inches	Body Diameter inches	Shank Diameter inches
ATI1757AP1/8	AN470	1/8	1/4	5/8	0.401
ATI1757AP316	AN470	3/16	1/4	5/8	0.401
ATI1757AP332	AN470	3/32	1/4	5/8	0.401
ATI1757AP532	AN470	5/32	1/4	5/8	0.401
ATI1758AP	FLUSH	FLUSH	1/4	5/8	0.401
ATI1758AR	FLUSH	FLUSH	3/8	5/8	0.401
ATI1758AS	FLUSH	FLUSH	1/2	5/8	0.401



ATI595CK



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Sheet-Metal Tool Kits



ATI590RGK-4X
Clear zipper case included



Rivet Gun Kit

- Durable soft sided case
- Air tool regulator and air tool oil
- Four common steel bucking bars
- Two rivet set retainer springs (standard and quick change)
- Pistol grip rivet hammer
- Three flush rivet sets
- Eight AN470 universal rivet sets (straight and offset)

Rivet Tool Kit Stock No.	Rivet Hammer
ATI590RGK-4X	ATIATC4X
ATI590RGK3X	ATIATC3X

Kit Includes:		
1	Rivet Hammer	1 ATI101AF-3A
1	ATI100A33/32	1 ATI107A-2
1	ATI100A3-1/8	1 ATI110CB
1	ATI100A35/32	1 ATI114C-3
1	ATI100A33/16	1 ATI638
1	ATI101A33/32	1 ATI647
1	ATI100A3-1/8	1 ATI670
1	ATI101A35/32	1 ATI681
1	ATI101A3316	1 A-1142 (oil)



ATI590SMKSP1

Sheet Metal Mechanics Set

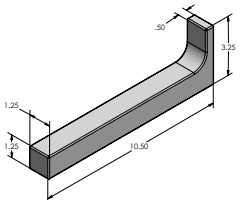
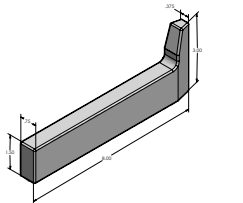
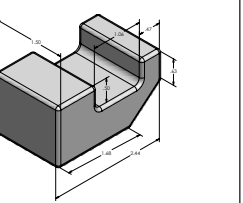
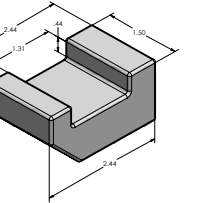
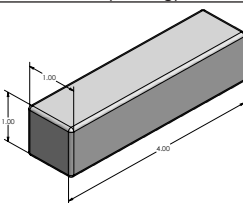
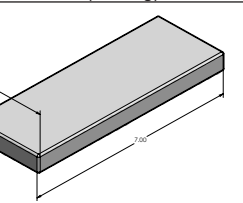
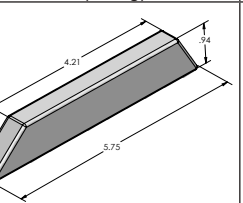
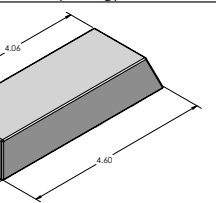
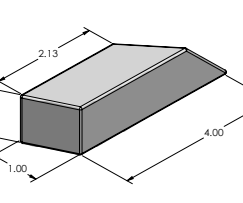
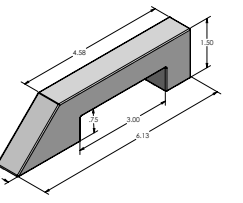
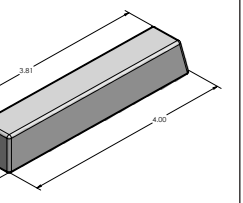
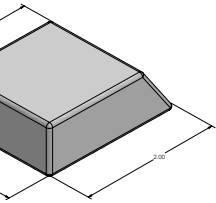
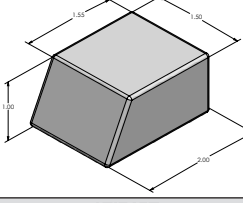
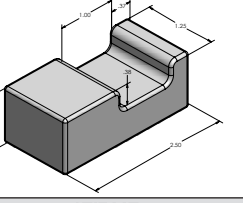
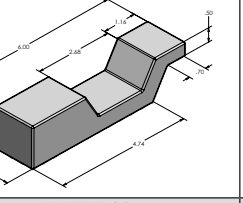
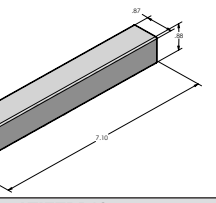
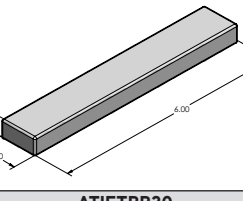
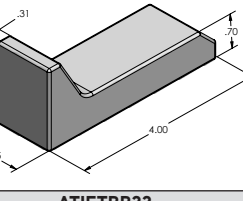
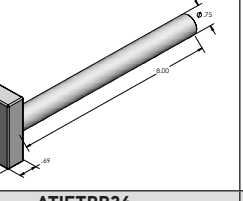
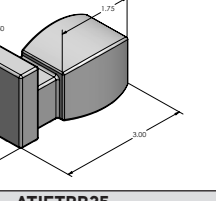
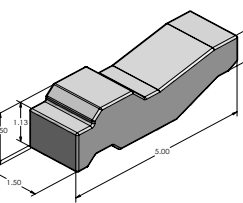
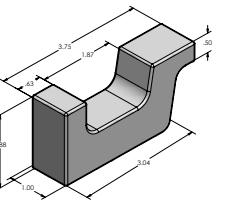
- Four straight AN470 universal rivet sets (3/32", 1/8", 5/32", 3/16")
- One flush rivet set
- Four integral pilot countersinks (#10, #21, #30, #40) pilot sizes
- Microstop-Ball Bearing

- Hand rivet cutter
- Rivet hammer (see chart)
- Four spring tension U-clamps
- 12 Each (3/32", 1/8", 5/32", 3/16") temporary fasteners
- Eight HSS drill bits; jobber length
- SDR4P26N2 drill

Sheet Metal Mechanics Kit Stock No.	Rivet Hammer
ATI590SMKSP1	Sioux® 270A
ATI590SMKSP6	ATI ATIATC4X

Tungsten Bucking Bars

- High-density tungsten absorbs riveting impact
- Reduces vibration and minimizes bucking bar movement during riveting
- Sharp edges are radiused up to 1/16" to prevent skin damage
- Smaller configured design provides enhanced bucking in tight areas

			
ATI613T 8 lb (3.63 kg)	ATI614T 8 lb (3.63 kg)	ATI634T 1.59 lb (.72 kg)	ATI634TX 1.4 lb (.64 kg)
			
ATI729-13T 1.20 lb (.54 kg)	ATI729-3T 1.55 lb (.70 kg)	ATI732T 2.11 lb (.95 kg)	ATI760B-10T 5.5 lb (2.5 kg)
			
ATI760B-10TX 1.92 lb (.87 kg)	ATI760B-2T 2.85 lb (1.30 kg)	ATI760B10TXX 1.25 lb (.57 kg)	ATI764T 1.28 lb (.58 kg)
			
ATI765T 1.74 lb (.78 kg)	ATI766T 1.70 lb (.77 kg)	ATIETBB08 6 lb (2.72 kg)	ATIETBB10 3.85 lb (1.75 kg)
			
ATIETBB20 1.95 lb (.88 kg)	ATIETBB22 2.9 lb (1.32 kg)	ATIETBB24 4.05 lb (1.84 kg)	ATIETBB25 3.15 lb (1.43 kg)
			
ATIETBB37 5.75 lb (2.61 kg)	ATIETBB40 3.05 lb (1.38 kg)		

Visit b2b.snapon.com
for product dimensions.

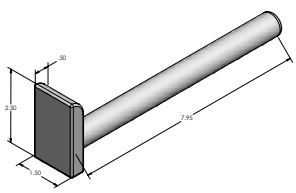
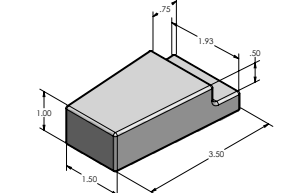
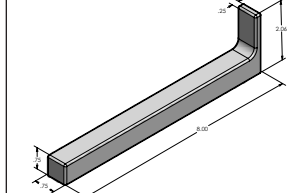
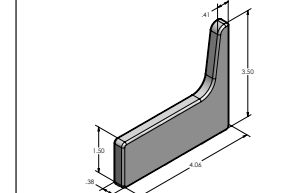
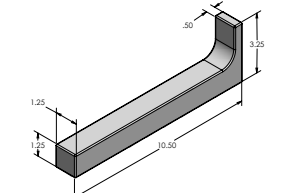
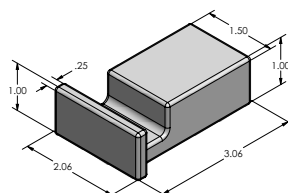
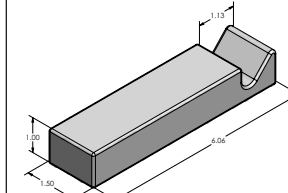
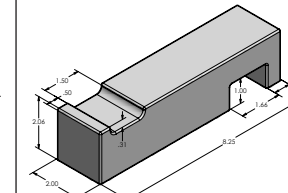
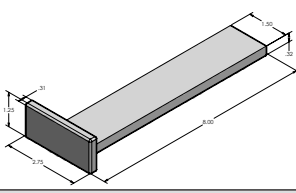
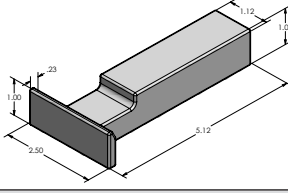
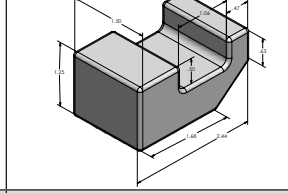
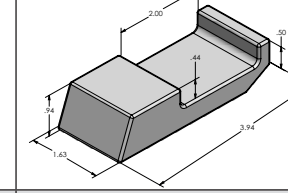
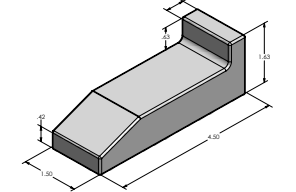
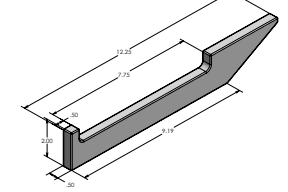
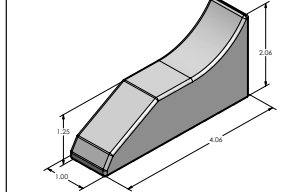
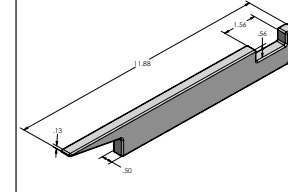
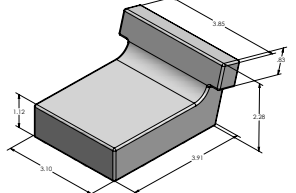
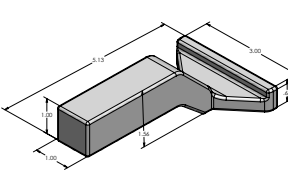
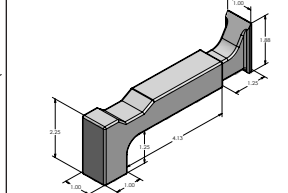
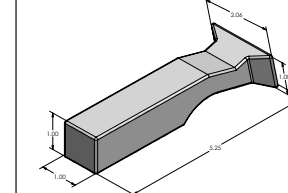


- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Bucking Bars

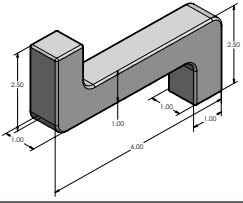
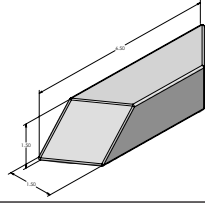
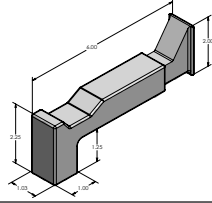
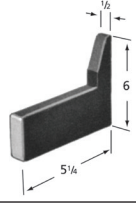
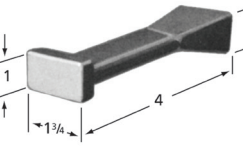
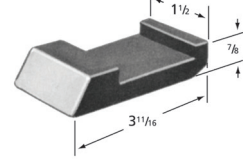
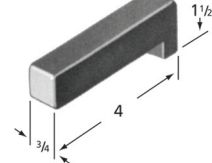
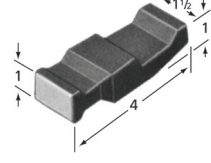
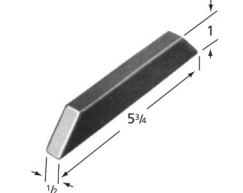
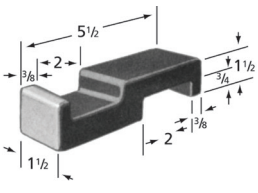
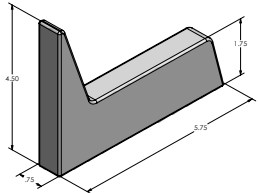
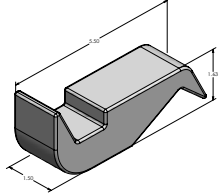
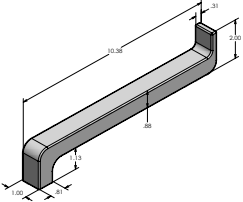
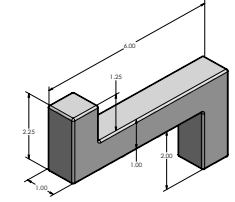
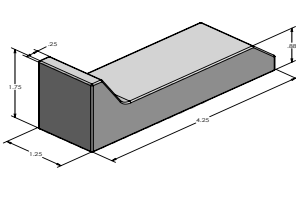
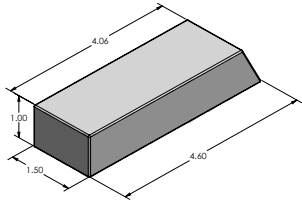
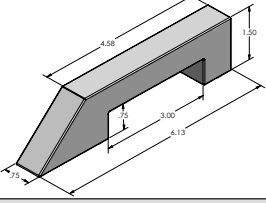
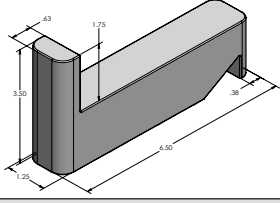
Steel Bucking Bars

- All bucking surfaces are polished to a minimum 63 finish after heat treat
- All sharp corners and edges are radiused 1/32"-1/16" to prevent skin damage
- All bucking surfaces are dipped in clear plastic to prevent damage during shipment and storage

			
ATI604 1.5 lb (.68 kg)	ATI605 1.5 lb (.68 kg)	ATI608 1.25 lb (.57 kg)	ATI610 .75 lb (.34 kg)
			
ATI613 5.5 lb (2.5 kg)	ATI619 1.25 lb (.57 kg)	ATI622 2.5 lb (1.13 kg)	ATI627 7.75 lb (3.52 kg)
			
ATI630 1.5 lb (.68 kg)	ATI633 1.5 lb (.68 kg)	ATI634 1 lb (.45 kg)	ATI638 1.25 lb (.57 kg)
			
ATI639 2 lb (.91 kg)	ATI646 2.25 lb (1.02 kg)	ATI647 1.5 lb (.68 kg)	ATI649 2 lb (.91 kg)
			
ATI658 3.75 lb (1.70 kg)	ATI669 1.5 lb (.68 kg)	ATI670 2 lb (.91 kg)	ATI681 1.5 lb (.68 kg)

Visit b2b.snapon.com
for product dimensions.

Visit b2b.snapon.com for product dimensions.

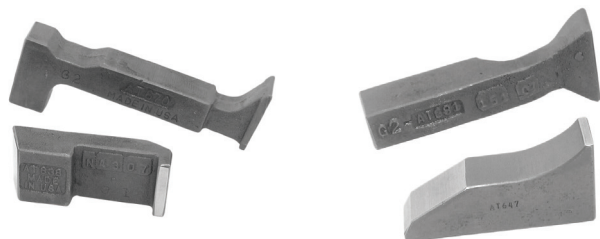
			
ATI690 2.5 lb (1.13 kg)	ATI692 3.25 lb (1.47 kg)	ATI694 2 lb (.91 kg)	ATI715 2 lb (.91 kg)
			
ATI720 .75 lb (.34 kg)	ATI722 1 lb (.45 kg)	ATI727 1 lb (.45 kg)	ATI730 1.25 lb (.57 kg)
			
ATI732 .75 lb (.34 kg)	ATI736 2.25 lb (1.02 kg)	ATI750N-1 2.5 lb (1.13 kg)	ATI750P-3 2.75 lb (1.25 kg)
			
ATI750S-1 2.75 lb (1.25 kg)	ATI750S-61 2.75 lb (1.25 kg)	ATI763 1.25 lb (.57 kg)	ATI760B-10 2 lb (.91 kg)
			
ATI760B-2 1.25 lb (.57 kg)	ATI761C5 4.5 lb (2.0 kg)		

Bucking Bar

ATI590BBK

- Set includes **ATI638**, **ATI647**, **ATI670** and **ATI681**
- Please refer to separate ATI online catalog for bucking bar specifications

Note: Additional sizes and configurations can be manufactured upon special request.



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Hi-Lok® Tools



ATISK3539



AT13539IT38



AT13600K



AT13594K



ATISK3539A8

Hi-Lok® Roller Clutch Wrench Kit

- Smooth, instantaneous engagement
- Good for limited access areas

Stock No.	Direction	Drive	Length inches	Finish
AT13539I1132	Installation	11/32" Socket	3	Black Oxide
AT13539IT14	Installation	1/4" Hex Socket	3	Black Oxide
AT13539IT38	Installation	3/8" Hex Socket	3	Black Oxide
AT13539IT516	Installation	5/16" Hex Socket	3	Black Oxide
AT13539IT716	Installation	7/16" Hex Socket	3	Black Oxide
AT13539IT732	Installation	7/32" Hex Socket	3	Black Oxide
ATISK3539	Installation	1/4" Square	3	Black Oxide
ATISK3539B	Installation	1/4" Square	3	Zinc
ATISK3539BL	Installation	1/4" Square	6	Zinc
ATISK3539L	Installation	1/4" Square	6	Black Oxide
ATISK3539LR	Removal	1/4" Square	6	Black Oxide

Comprehensive Frangible Collar Installation Kit

AT13600K

Comprehensive kit for installing frangible collar fasteners, including Hi-Lok® and Hi-Lite®

Kit Includes:

1	AT13594	1	AT13595
1	AT13596-19	1	AT13596-34
1	AT13596-22	1	AT13596-38
1	AT13596-25	1	AT13597-38
1	AT13596-28	1	AT13597-44
1	AT13596-31	1	AT13597-50
1	AT13594-2X	1	AT13597-3X
1	Hex Wrench	4	T-Hex Wrenches

Frangible Collar Installation Kit

AT13594K

Kit for installing frangible collar fasteners, including Hi-Lok® and Hi-Lite®

Kit Includes:

1	AT13594	1	AT13596-31
1	AT13596-19	1	AT13596-34
1	AT13596-22	1	AT13596-38
1	AT13596-25	1	AT13594-2X
1	AT13596-28	1	AT13594-4X
1	Hex Wrench	2	T-Hex Wrenches

Hi-Lok® Roller Clutch Wrench Kit

ATISK3539A8

- Used for fastener installation and removal in confined spaces

Kit Includes:

1	AT12979	1	AT1359I1132
1	ATISK3539	1	AT1359IT516
1	ATISK3539R	1	AT1359IT38
1	AT13539IT732	1	AT1359IT716
1	AT1359IT14		

Fastener Removal Tools

Hi-Lok® Fastener Removal Pliers

ATI2979U

- Serrated-jaw pattern for removal of all aluminum Hi-Lok® fasteners
- Comfort grip handles
- Easy access to tight areas



ATI2979U

Frangible Collar Removal Sockets

ATI3585 Series

- Patented design #9937607, immediately engages collars with minimal downward force
- Sockets feature 1/4" drive and set screw holds the socket in place on the ratchet
- Removes most collars such as Hi-Lok®, Hi-Lite®, Eddie Bolt®, and Huck® threaded collar systems, including stainless steel and aluminum
- Compact size enables removal in the tightest access areas

Stock No.	Description	Size inches
ATI3585-5B	Removes most 5/32" Hi-Lok® and Hi-Lite® collars, aluminum and stainless steel	5/32
ATI3585-6A	Removes most 3/16" Hi-Lok® and Hi-Lite® collars, stainless steel material	3/16
ATI3585-6B	Removes most 3/16" Hi-Lok® and Hi-Lite® collars, aluminum material	3/16
ATI3585-8A	Removes most 1/4" Hi-Lite® collars, aluminum and stainless steel material	1/4
ATI3585-8B	Removes most 1/4" Hi-Lok® collars, stainless steel material	1/4
ATI3585-8C	Removes most 1/4" Hi-Lok® collars, aluminum material	1/4



ATI3585-6A

ATI3581 Series

- Design features six-start, left-hand internal threads
- Made from hardened tool steel for long lasting wear and black oxide finish
- Sockets available with female square drive and external hex drive for use with hand or air ratchet, or open/box end wrench
- For use on aluminum, stainless steel, and titanium collars

Stock No.	Collar Size	Square Drive	Ext Hex
ATI3581-5	5/32"	1/4"	7/16"
ATI3581-6	3/16"	1/4"	7/16"
ATI3581-8	1/4"	1/4"	7/16"
ATI3581-10	5/16"	1/4"	7/16"
ATI3581-12	3/8"	3/8"	3/4"
ATI3581-14	7/16"	3/8"	3/4"
ATI3581-16	1/2"	3/8"	3/4"
ATI3581-18	9/16"	3/8"	3/4"
ATI3581-20	5/8"	3/8"	3/4"



ATI3581-5



ATI3581-8

ATI3581-4PC, Consists of (*) items above on a socket rail

ATI3581K Frangible Collar Removal Socket Kit

- Comprehensive kit for removing Hi-Lok®, Hi-Lite® and Eddie Bolt® collars
- Kit includes 1 each of the items below, plus applicable hex wrenches

Kit Includes:

ATI3594	1214RC	ATI3581-8	ATI3594-2X
ATI3595	ATI3581-5	ATI3581-10	ATI3594-4X
ATI2979U	ATI3581-6	ATI3581-12	

Frangible Collar Removal Kit

ATI3588K

- Kits for removing frangible collar type fasteners

Kit Includes:

1	ATI3594	1	ATI3585-8B
1	ATI3585-5B	1	ATI3585-8C
1	ATI3585-6A	1	ATI2979U
1	ATI3585-6B	1	ATI3594-2X
1	ATI3585-8A	1	ATI3594-4X
1	Hex Wrench	2	T-Hex Wrench



ATI3588K



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Fastener Removal Tools



ATI2165-2

Huck® Lockbolt Removal Chisels

- Used to remove swaged Huck® fasteners by shearing the collar
- .401 Shank
- 5-1/2" Long

Stock No.	Huck® Lockbolt Size inches	Head Diameter
ATI2165-2	5/32	0.62
ATI2165-3	3/16	0.75
ATI2165-4	1/4	0.81
ATI2165-5	5/16	0.81
ATI2165-6	3/8	0.81



ATI1206-6

Flat Chisel

- Precision sharpened
- .401 Shank diameter
- 3/4" Blade width

Stock No.	Length inches
ATI1206-6	6-3/4
ATI1206-8	8
ATI1206-10	10
ATI1206-12	12



ATI540SE-5

1/4" Hex - Bit Adaptor - 3/8" Square Drive

ATI540SE-5

- Use in conjunction with ATI540 and ATI540S screw removal tools
- 3/8" square drive
- 1/4" internal hex



ATI540

Screw Removal Tool

- .401 Shank diameter
- Secured wrench
- Hardened shock resistant steel

Stock No.	Drive	Length inches
ATI540	3/8" Square	9
ATI540S	3/8" Square	4-1/2
ATI540BS-5	1/4" Internal Hex	5-1/2
ATI540BL-7	1/4" Internal Hex	7-1/2



ATI540-5

El Brutus Screw Removal Tool

- Heat treated and plated for durability
- Removed the most stubborn screws

Stock No.	Screw Capacity inches	Weight (lb)	Length inches
ATI540-5	1/4	3.2	17
ATI540-7	3/8	5.4	18-3/4



ATI590L

Rivet Shaver Kit

ATI590L

- Includes **ATI429SXC** rivet shaver
- Carbide cutters and skirts for 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4" rivet heads
- Kit box with cutouts provides protection and quick identification of missing components



ATI429SXC

Rivet Shaver

ATI429SXC

- Maximum 3/4" cutter capacity (with **ATI429A-7** skirt)
- .0005" Depth adjustment
- Sioux® 1.0 Hp 20,000 rpm power unit
- Comfort grip
- Shipped with 1/2" skirt installed (**ATI429A-4**)

Skirt Stock No.	Cutter Stock No.	Diameter inches
-	ATI429B-0	1/4
ATI429A-1	ATI429B-1	5/16
ATI429A-2	ATI429B-2	3/8
ATI429A-3	ATI429B-3	7/16
ATI429A-4	ATI429B-4	1/2
ATI429A-5	ATI429B-5	9/16
ATI429A-6	ATI429B-6	5/8
ATI429A-7	ATI429B-7	3/4



ATIHTS-3

Torq-Set® Driver Bits

Stock No.	Screw Size	Overall Length
ATIT0A1	0"	1"
ATIT1A1	1"	1"
ATIT2A1	2"	1"
ATIT3A1	3"	1"
ATIT4A1	4"	1"
ATIT5A1	5"	1"
ATIT6A1	6"	1"
ATIT8A1	8"	1"
ATIT10A1	10"	1"
ATIT16A1	1/4"	1"

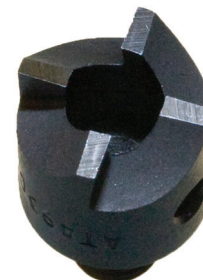
Hi-Torque® Driver Bits

Stock No.	Hex Insert	Blade Thickness inches	Blade Width inches	Body Diameter, inches	Length inches
ATIHTS1	1/4	0.049	0.274	1/2	1
ATIHTS-2	1/4	0.059	0.295	1/2	1
ATIHTS-3	1/4	0.059	0.377	1/2	1
ATIHTS3A	3/8	0.059	0.377	1/2	1
ATIHTS-4	1/4	0.073	0.502	1/2	1
ATIHTS4A	3/8	0.073	0.502	1/2	1-1/4
ATIHTS-5	3/8	0.079	0.629	3/4	1-1/4
ATIHTS6	3/8	0.095	0.745	3/4	1-1/4

Hollow Cutters

- Used to remove Hi-Shear and Huck® fasteners
- Used with standard microstops

Stock No.	Dimension "A" inches	Dimension "B" inches	Shank	Fastener Type	Size
ATI493C-0	0.365	0.124	1/4"-28	Hi-Shear	1/8
ATI493C-00	0.365	0.157	1/4"-28	Hi-Shear	5/32
ATI493C-1	0.438	0.188	1/4"-28	Hi-Shear	3/16
ATI493C-2	0.500	0.247	1/4"-28	Hi-Shear	1/4
ATI493C-3	0.562	0.310	1/4"-28	Hi-Shear	5/16
ATI493D-1	0.323	0.188	1/4"-28	Huck® Lock Bolt	L6
ATI493D-3	0.413	0.250	1/4"-28	Huck® Lock Bolt	L8



ATI493C-2



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

Shop Tools and Accessories



ATISK3614

Tire Valve Core Deflating Tool

ATISK3614

- For rapid and safe tire deflation
- Machined aluminum tool threads onto the valve stem
- Releases and traps the valve core within the tool
- Exhausts the tire air through ports, away from the technician, onto the wheel



ATI560MF12

Mina-Vacs Pneumatic

- ATI560M metal Mina-vac pulls up to 4.0 in. Hg static pull
- ATI560V plastic Mina-vac pulls up to 5.0 in. Hg static pull
- 25% stronger vacuum strength than comparable brands
- Built-in chip deflector minimizes bag damage
- Removes objects like aircraft fasteners up to 3/4" diameter
- One-piece housing and metal 1/4" NPT input for improved durability (ATI560V)
- Equipped with an "on" and "off" trigger button that can be locked in the "on" position (ATI560M)



ATI560V



ATI560A-3

Stock No.	Housing Material	Bag Stock No.	Extension Hose Stock No.	Hose Material	Hose Length inches
ATI560V	Plastic	ATI560A-3	-	-	-
ATI560VF12	Plastic	ATI560A-3	ATI560MFE12	Flexible Plastic	12
ATI560VF18	Plastic	ATI560A-3	ATI560MFE18	Flexible Plastic	18
ATI560VF24	Plastic	ATI560A-3	ATI560MFE24	Flexible Plastic	24
ATI560M	Aluminum	ATI560A-3	-	-	-
ATI560MF12	Aluminum	ATI560HD3	ATI560MFE36	Flexible Plastic	12
ATI560MF18	Aluminum	ATI560A-3	ATI560MFE18	Flexible Plastic	18
ATI560MF24	Aluminum	ATI560A-3	ATI560MFE24	Flexible Plastic	24
ATI560MF-36	Aluminum	ATI560A-3	ATI560MFE36	Flexible Plastic	36
ATI560MHDF18	Aluminum	ATI560A-3	ATI560MFE18	Flexible Plastic	18
ATI560MR-12	Aluminum	ATI560A-3	ATI560MRE12	Rigid Plastic	12
ATI560MR18	Aluminum	ATI560A-3	ATI560MRE18	Rigid Plastic	18
ATI560MR36	Aluminum	ATI560A-3	ATI560MRE36	Rigid Plastic	36

Aircraft Cable Swaging Equipment

Cable Swager - Portable Kit

ATI520JK

- Used to precision-swage various ms type cable terminals on 1/16"–3/16" diameter braided cables
- Can be used on the bench with the shock absorbing base or taken directly to the aircraft
- Kit includes base plate, foot control, air hose, complete set of dies and a pneumatic swager
- ATI520J pneumatic swager is available separately



Pull Tester Kit

ATI520CTK

- Self contained hydraulic unit
- Designed to put tension load on the cable terminal assembly to verify swaged terminal integrity
- Capable of testing up to 3/16" cables



Hydraulic Swager Kit

ATI520HK

- Consists of ATI520H Swager and thirteen pair of over-sized dies shown below
- Kit includes a sleeve, which when installed, provides the operator the capability to swage with standard swaging dies included with ATI520JK

Stock No.	Cable Diameter, inches	Terminal Reference
ATI520CB-10	5/16	RA2487
ATI520CB-12	3/8	RA2487
ATI520CDB-10	5/16	MS20663-10
ATI520CDB-7	7/32	MS20663-7
ATI520CDB-8	1/4	MS20663-8
ATI520CDB-9	9/32	MS20663-9
ATI520CS-10	5/16	MS20667, MS20668
ATI520CS-12	3/8	MS21260
ATI520CS-9	9/32	MS21259
ATI520CSB-10	5/16	MS20664-10
ATI520CSB-7	7/32	MS20664-7
ATI520CSB-8	1/4	MS20664-8
ATI520CSB-9	9/32	MS20664-9



Pull Tester Calibration Kit

ATI520CGC

- Force Gage kit with adaptors used to certify the cable tension indicator on the ATI520CT
- Quality assurance tool recognized by the Boeing® Company
- Eliminates the necessity of costly outside calibration service



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

What is a Microstop and What Does it Do?

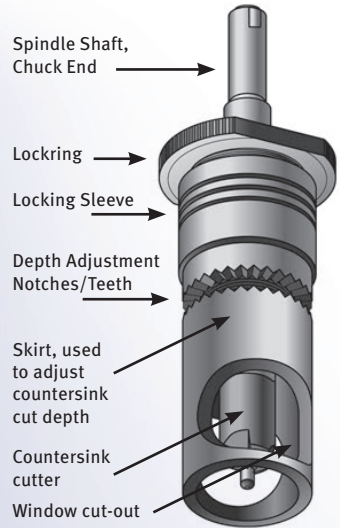
A “microstop” is a cylindrical tool that holds a cutting tool known as a “countersink.”

The microstop allows the countersink to move perpendicular to the cutting surface at precise depths. When countersinking, the microstop can make “micro” adjustments up and down, and “stop” the countersink at the exact depth to match the profile of the fastener to be installed. The countersink depth is controlled by rotating the microstop skirt. The adjustments are extremely precise. Rotating the countersink skirt adjusts the countersink depth by only 0.0005 in.

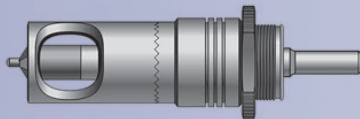
Extreme precision is important when countersinking a hole because it enables the ultimate objective: to ensure that the fastener – typically a flush rivet – fills the countersunk hole completely. Usually a rivet gun is used for installing and deforming the flush rivet into the hole’s geometry.

When each countersunk hole is precisely drilled and fasteners are properly installed, every part of the plane’s skin has consistent strength and load distribution. The use of a microstop allows for uniformity and helps achieve this goal.

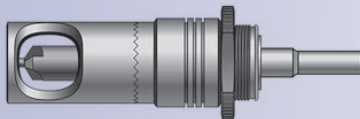
A versatile tool, a microstop works with any type of threaded shank cutter in applications where the depth of cut requires extreme precision. This would include countersinks, counterbores, and hollow cutters, just to name a few.



NOTE: Skirt remains stationary when in contact with the cutting surface, enabling the operator to view the cutter.



"Microstop & Countersink Cutter" in advanced position



"Microstop & Countersink Cutter" in retracted position

Anatomy of a Countersink

A countersink is a tool used to cut and form a hole so that a flush fastener can be installed. The main features of a countersink are the threaded shank, body, cutting angle, and pilot.

Threaded Shank

The threaded shank is inserted into the microstop shaft and its thread size is specified by the user. Industry standard thread sizes are 10-32, 1/4"-28, 3/8"-24, and 7/16"-20. The most common countersink shanks are 1/4"-28.

Body

The body of a countersink is typically cylindrical in shape and its diameter is determined by the fastener to be installed.

Cutting Angle

The cutting angle is determined by the fastener to be installed and is specified by the user. The cutting angle also indicates what the angle of the conically shaped hole will be when the hole is formed. The most common cutting angle is 100 degrees.

Pilot

The pilot diameter on a countersink is specified by the user and typically is the same diameter of the pre-drilled hole. It’s important for the pilot end to be smooth and to have a hemispherical tip in order to prevent scratching.

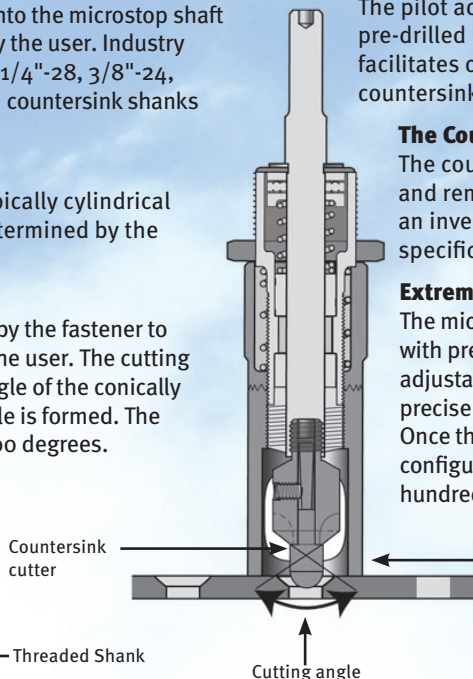
The pilot acts like a guide when it is inserted into the pre-drilled hole (called the “pilot hole”). The pilot facilitates countersinking by properly aligning the countersink to the target hole.

The Countersink Cutter

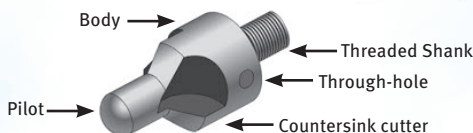
The countersink cutter rotates at a very high speed and removes material to form a hole shaped like an inverted cone. This hole is cut to form the exact specifications of the fastener to be installed.

Extreme Precision and Accuracy

The microstop controls the countersink’s depth with precise accuracy. Typically, the depth of cut is adjustable in increments of .001 inch, with more precise microstops available in .0005-inch increments. Once the microstop and countersink assembly is configured for the job, the assembly can be used hundreds of times with repeatable results.



NOTE: Microstop allows the countersink to move perpendicular to the cutting surface at precise depths.



NOTE: Integral countersink cutter shown. Countersinks are offered with interchangeable or integral pilot configurations.

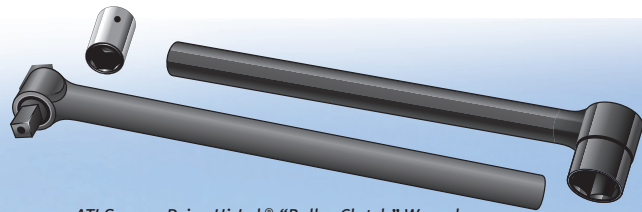
Installing a Hi-Lok® Fastener

The Hi-Lok® Roller Clutch Wrench is excellent for use in tight spaces. It works like a ratchet, but has a roller clutch mechanism that provides immediate engagement throughout its range. It also has a thru-hole that provides access for a hex wrench that may be needed to stop the pin from rotating during installation.

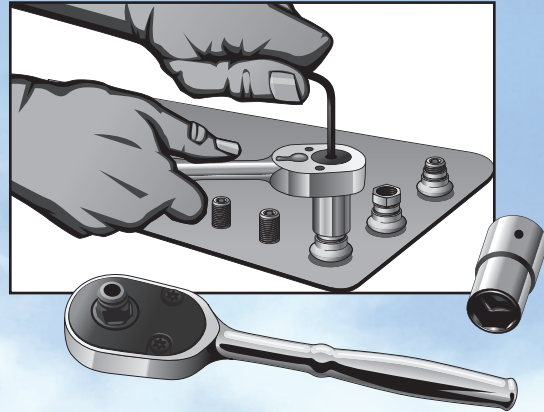
Installation Procedure – A Hi-Lok® Roller Clutch Wrench or Hi-Lok® ratchet and Hi-Lok® socket are used along with a hex wrench to install Hi-Lok®.

With these tools, the operator tightens the collar until the collar's hex nut shears (or "franges") off. During tightening, the hex wrench is used to secure the pin. It fits into the pin via the thru-hole in the wrench.

To complete installation, the operator collects the hex nut and removes it to minimize the risk of FOD.



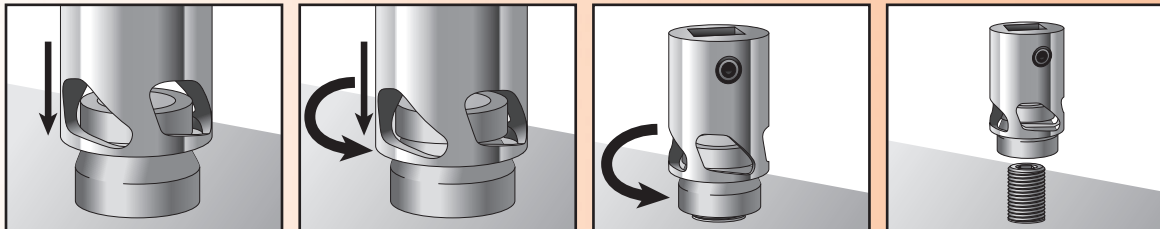
ATI Square Drive Hi-Lok® "Roller Clutch" Wrenches



Removing a Hi-Lok® Fastener

Removing a frangible collar can be a challenge. The pin and collar are mechanically connected and tamperproof, so standard tools won't work. Also, the removal process must avoid scratching the skin of the aircraft. ATI offers specialized sockets and pliers for removing frangible collars. Let's take a look:

Removal Procedure – The Hi-Lok® collar must be clamped and unscrewed and the pin tapped out to completely remove the assembly. A variety of tools can be used, but repeatability and scratching can be a problem.



Recently, ATI® developed a Hi-Lok® removal socket that has internal teeth that bite into the collar material. Using a Hi-Lok® ratchet or Hi-Lok® Roller Clutch Wrench, the operator places the socket over the collar and turns the ratchet. The socket's teeth dig into the collar material with sufficient force to gain a hold of the collar so that it can be unscrewed. Again, a hex wrench may be used to stop the pin from rotating as needed.

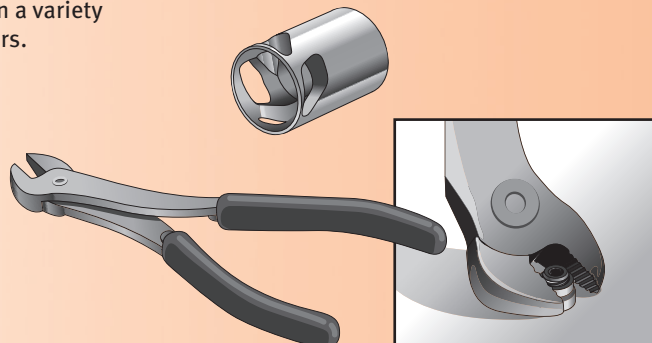
Pliers – Another way to remove Hi-Lok® fasteners is by using pliers that are designed for the purpose. The jaws of the Hi-Lok® Removal Pliers are knurled to enable a good grip on the collar. Then the user applies "elbow grease" to remove the collar.

Kits – ATI offers Frangible Collar Removal Kits that work on a variety of commonly used sizes of threaded, tamperproof fasteners.



ATI Hi-Lok® Frangible Collar Removal Kit (shown)

Other kits available.



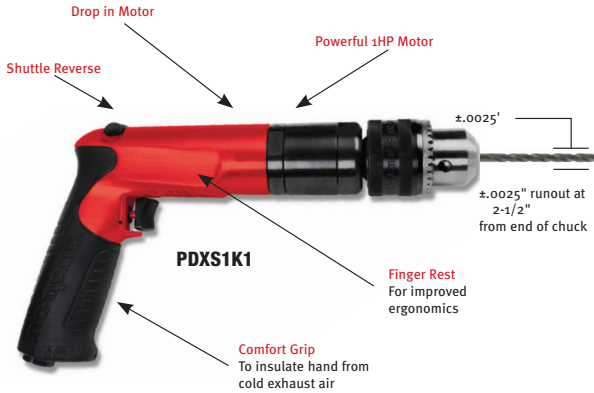
AVIATION AIR DRILLS



Snap-on® Industrial drills are used in aviation applications ranging from light assembly to metalworking. Their powerful five vane motors make these drills great for drilling applications that contain ferrous and non-ferrous metals, plastics, and composite materials.

Built for durability, their three planet gear system delivers superior life and load capacity. The Snap-on® Industrial

drills offer maximum comfort with reduced operator fatigue by providing a low sound level and low vibration solution. Operator comfort is achieved through the implementation of a lightweight aluminum housing and a comfort grip. Drills are available in both reversing and non-reversing pistol grip and lever handle configurations.



Performance

- Powerful motors easily handle a wide range of drilling applications
- With excellent run-out characteristics, (+/- 0.0025") drills provide precision required for critical applications
- Teasing trigger provides excellent speed control

Ergonomics

- Comfortable, compact drill bodies include finger rests on the side of the tool which allows hand to be in line with drill bit
- Anatomic design keeps wrist and arm straight, allows high feed forces
- Full length grip for comfort in extended use operations

Serviceability

- Drop-in motors for ease of maintenance
- High part interchangeability means lower service part inventories

Reversible Pistol Grip Air Drills

Style	Stock No. (Keyed Chuck)	Stock No. (Keyless Chuck)	Chuck Cap., inches (mm)	Free Speed RPM	Weight, lb (kg)	Length, inches (mm)	Spindle Thread
.5 hp (0.37 kW) Reversible	PDYT1KE	—	1/4 (6.5)	1,800	1.5 (0.7)	6.3 (160)	3/8"-24
	PDYT1KF	—	1/4 (6.5)	2,000	1.5 (0.7)	6.3 (160)	3/8"-24
	PDYT1KG	—	1/4 (6.5)	2,400	1.5 (0.7)	6.3 (160)	3/8"-24
	PDYT1KH	—	1/4 (6.5)	3,000	1.5 (0.7)	6.3 (160)	3/8"-24
1.0 hp (0.75 kW) Reversible	PDXF1K1	PDXF1L1	3/8 (10)	550	3.1 (1.4)	8.6 (220)	3/8"-24
	PDXS1K1	PDXS1L1	1/2 (13)	550	3.1 (1.4)	8.6 (220)	3/8"-24
	PDXF1K5	PDXF1L5	3/8 (10)	1,500	2.6 (1.15)	7.6 (195)	3/8"-24
	PDXF1K6	PDXF1L6	3/8 (10)	2,050	2.6 (1.15)	7.6 (195)	3/8"-24



PDXF2K3

Non-Reversible Pistol Grip Air Drills

Style	Stock No. (Keyed Chuck)	Stock No. (Keyless Chuck)	Chuck Cap., inches (mm)	Free Speed RPM	Weight, lb (kg)	Length, inches (mm)	Spindle Thread
.5 hp (0.37 kW) Non - Reversible	PDZT2K7	PDZT2L7	1/4 (6.5)	2,600	1.5 (0.7)	6.3 (160)	3/8"-24
	PDZT2KH	PDZT2LH	1/4 (6.5)	3,000	1.5 (0.7)	6.3 (160)	3/8"-24
	PDZT2KK	PDZT2LK	1/4 (6.5)	3,600	1.5 (0.7)	6.3 (160)	3/8"-24
	PDZT2KL	PDZT2LL	1/4 (6.5)	4,300	1.5 (0.7)	6.3 (160)	3/8"-24
	PDZT2KN	PDZT2LN	1/4 (6.5)	23,000	1.5 (0.7)	6.3 (160)	3/8"-24
1.0 hp (0.75 kW) Non-Reversible	PDXF2K0	—	3/8 (10)	450	2.9 (1.3)	8 (205)	3/8"-24
	PDXS2K0	PDXS2L0	1/2 (13)	450	3.3 (1.5)	8.5 (215)	1/2"-20
	PDXF2K2	—	3/8 (10)	600	2.9 (1.3)	8 (205)	3/8"-24
	PDXS2K2	PDXS2L2	1/2 (13)	600	3.3 (1.5)	8.5 (215)	1/2"-20
	PDXF2K3	PDXF2L3	3/8 (10)	900	2.9 (1.3)	8 (205)	3/8"-24
	PDXS2K3	PDXS2L3	1/2 (13)	900	3.3 (1.5)	8.5 (215)	1/2"-20
	PDXF2K4	PDXF2L4	3/8 (10)	1,350	2.9 (1.3)	8 (205)	3/8"-24
	PDXS2K4	PDXS2L4	1/2 (13)	1,350	3.3 (1.5)	8.5 (215)	1/2"-20
	PDXT2K7	—	1/4 (6)	2,600	2.3 (1.05)	6.5 (165)	3/8"-24
	PDXF2K7	PDXF2L7	3/8 (10)	2,600	2.5 (1.1)	7 (180)	3/8"-24
	PDXS2K7	PDXS2L7	1/2 (13)	2,600	2.9 (1.3)	7.5 (190)	1/2"-20
	PDXT2K8	—	1/4 (6)	3,500	2.3 (1.05)	6.5 (165)	3/8"-24
	PDXF2K8	PDXF2L8	3/8 (10)	3,500	2.5 (1.1)	7 (180)	3/8"-24
	PDXT2K9	—	1/4 (6)	5,500	2.3 (1.05)	6.5 (165)	3/8"-24
	PDXF2K9	PDXF2L9	3/8 (10)	5,500	2.5 (1.1)	7 (180)	3/8"-24



ANGLE DRILLS & SEALANT REMOVAL KITS

- 5 Head Types - A head for every job
- 7 Speeds - Right speed for material and diameter
- 0.4 hp motor - get the job done
- 3 Planetary Gears - Long life
- Spiral bevel angle gears for long life
- Integrated rubber grip for control and ergonomics
- Two-Finger safety lever for safety and control
- Drop-in motors for ease of maintenance



CE

Style	Stock No.	Free Speed rpm	Tool Weight, lb (kg)	Tool Length, inches (mm)	Angle Head Side to Center in(mm)	Spindle Thread
90° Standard Angle Head – 0.4 hp (0.30 kW)	SDR4A8S8L	800	2.1 (.94)	10.0 (255)	0.35 (8.9)	1/4"-28
	SDR4A20S8L	2000	1.9 (.87)	9.5 (240)	0.35 (8.9)	1/4"-28
	SDR4A27S8L	2700	1.9 (.87)	9.5 (240)	0.35 (8.9)	1/4"-28
	SDR4A33S8L	3300	1.9 (.87)	9.5 (240)	0.35 (8.9)	1/4"-28
	SDR4A44S8L	4400	1.9 (.87)	9.5 (240)	0.35 (8.9)	1/4"-28
	SDR4A55S8L	5500	1.9 (.87)	9.5 (240)	0.35 (8.9)	1/4"-28
	SDR4A27S9L	2700	1.9 (.87)	9.5 (240)	0.35 (8.9)	9/32"-40
90° Compact Angle Head – 0.4 hp (0.30 kW)	SDR4A28C8L	2800	1.9 (.84)	9.5 (240)	0.33 (8.4)	1/4"-28
	SDR4A35C8L	3500	1.9 (.84)	9.5 (240)	0.33 (8.4)	1/4"-28
	SDR4A47C8L	4700	1.9 (.84)	9.5 (240)	0.33 (8.4)	1/4"-28
	SDR4A57C8L	5700	1.9 (.84)	9.5 (240)	0.33 (8.4)	1/4"-28
90° Heavy Duty Angle Head – 0.4 hp (0.30 kW)	SDR4A8H8L	800	2.2 (.99)	10.3 (260)	0.49 (12.4)	1/4"-28
	SDR4A13H8L	1300	2.2 (.99)	10.3 (260)	0.49 (12.4)	1/4"-28
	SDR4A21H8L	2100	2.0 (.92)	9.8 (250)	0.49 (12.4)	1/4"-28
	SDR4A28H8L	2800	2.0 (.92)	9.8 (250)	0.49 (12.4)	1/4"-28
	SDR4A35H8L	3500	2.0 (.92)	9.8 (250)	0.49 (12.4)	1/4"-28
45° Angle Head – 0.4 hp (0.30 kW)	SDR4A8F8L	800	2.0 (.92)	10.3 (260)	0.36 (9.1)	1/4"-28
	SDR4A21F8L	2100	1.9 (.85)	9.8 (250)	0.36 (9.1)	1/4"-28
	SDR4A28F8L	2800	1.9 (.85)	9.8 (250)	0.36 (9.1)	1/4"-28
	SDR4A35F8L	3500	1.9 (.85)	9.8 (250)	0.36 (9.1)	1/4"-28
	SDR4A47F8L	4700	1.9 (.85)	9.8 (250)	0.36 (9.1)	1/4"-28
	SDR4A57F8L	5700	1.9 (.85)	9.8 (250)	0.36 (9.1)	1/4"-28
360° Swivel Head – 0.4 hp (0.30 kW)	SDR4A18T8L	1800	2.1 (.97)	10.0 (265)	0.35	1/4"-28
	SDR4A29T8L	2900	2.1 (.97)	10.0	0.35	1/4"-28
	SDR4A48T8L	4800	2.1 (.97)	10.0	0.35	1/4"-28
Sealant Removal Kit with 90° & 45° Head – 0.4 hp (0.30 kW)	SDR4A8SF-SRK	800	2.1 (.94)	10.0	0.35	1/4"-28
Sealant Removal Kit with 45° Head – 0.4 hp (0.30 kW)	SDR4A8F-SRK	800	2.0 (.92)	10.0	0.36	1/4"-28
Sealant Removal Kit with 90° Head – 0.4 hp (0.30 kW)	SDR4A8S-SRK	800	2.1 (.94)	10.0	0.35	1/4"-28



General: Air Inlet Size: 1/4" NPT - Recommended Hose Size: 3/8" (10 mm)
 Performance Rated @ 90 psig (6.2 bar) air pressure
 Standard Equipment: Parts list - Safety and Instruction manual



See our ATI threaded drills and countersinks



SDR4A8SF-SRK



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4



SSR4P26



2S2300SR



SSR6P25

Skin Clamp Runners

- Speed: 2200 to 2600 rpm
- Pistol grip and Z-handle
- 1/2-12 point internal, 9/16-6 point external hex



Style	Model Number	Free Speed, RPM	Weight lbs. (kg)	Length in. (mm)	Side to Center in. (mm)	Air Consumption Free Speed cfm (l/s)
Pistol Grip	SSR4P26	2,600	1.7 (0.7)	7.3 (185)	0.7 (17)	20 (10)
Z-Handle	2S2300SR	2,200	2.6 (1.2)	5.7 (145)	0.9 (23)	16 (8)
Pistol Grip	SSR6P25	2,500	2.7 (1.2)	9.2 (234)	0.9 (23)	30 (14)

General: Air Inlet Size: 1/4" NPT • Recommended Hose Size: 3/8" (10 mm) • Performance rated @ 90 psig (6.2 bar) air pressure
 Standard Equipment: Parts List • Safety and Instruction Manual • Comfort Grip (Pistol Grip models)
 Accessories: Skin Clamp Runner Accessories

Snap-on® Pistol Grip Rivet Shavers

- Powerful 21,000 RPM, 1HP (0.75 kw), 5 vane motor
- Micro adjustable shaving depth with spring loaded removable stabilizer
- Shaves rivets from 5/16" to 5/8" Head Diameter
- Uses industry standard 1/4" – 28 threaded rivet shaver cutters



Stock No.	Cutter Diameter, inches (mm)	Free Speed RPM	Weight, lb (kg)	Length inches (mm)
PVX1	5/16 (8)	21,000	2.7 (1.2)	8.0 (205)
PVX2	3/8 (10)	21,000	2.7 (1.2)	8.0 (205)
PVX3	7/16 (11)	21,000	2.7 (1.2)	8.0 (205)
PVX4	1/2 (13)	21,000	2.7 (1.2)	8.0 (205)
PVX5	9/16 (14)	21,000	2.7 (1.2)	8.0 (205)
PVX6	5/8 (16)	21,000	2.7 (1.2)	8.0 (205)



PVX1

See our ATI rivet shaver cutters

Tire Gauges



AVI300ATI

Digital & Analog Aircraft Tire Gauges & Inflators

ACCURACY YOU CAN COUNT ON

When it comes to aircraft tires and struts, proper measurement and inflation are key for safe takeoffs and landings and to ensure brake predictability and effectiveness. Snap-on® Industrial is proud to offer a complete line of pressure assemblies specifically designed for professional technicians and mechanics.

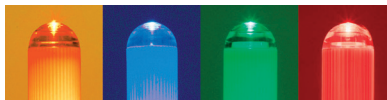
		300 PSI Tire Gauges				300 PSI Tire Inflators		3000 PSI Strut Gauge
Stock #		AVI300ATG	AVI300ATGSL	AVI300DTG	AVI300DTGK	AVI300ATI	AVI300DTI	AVI3000ASG
Description		Analog Aircraft Tire Gauge	Analog Aircraft Tire Gauge	Digital Aircraft Tire Gauge	Digital Master Kit Aircraft Tire Gauge Kit	Analog Aircraft Tire Inflator	Digital Aircraft Tire Inflator	Analog Aircraft Strut Gauge
Gauge Type		Inverted Analog Gauge	Inverted Analog Gauge	Digital Gauge (Quick Connect)	Digital Gauge (Quick Connect)	Standard Analog Gauge	Digital Gauge (Quick Connect)	Standard Analog Gauge
Fittings	Small bore straight chuck	•	•	•	•	•	•	
	Large bore straight chuck		•	•	•	•	•	
	Small bore straight chuck w/ hose extension				•			
	Large bore threaded chuck w/ hose extension				•			
	Small bore angle chuck w/ hose extension				•			
	Large bore angle chuck w/ hose extension				•			
	Goose neck fitting (for strut)							•
	Bleeder valve	•	•			•		•
	Quick connect fittings		•			•		
		Tread depth gauge				•		
Safety & Accessories	Valve stem tool				•			
	8 ft. extension hose					•	•	
	Safety blow-out valve					•	•	
	PSI rated hose included	300 PSI	300 PSI	n/a	n/a	300 PSI	n/a	3000 PSI

Glow Batons

Traffic Master Glow Batons

- Impact resistant top lens
- Extremely bright LEDs
- Large luminous body glow
- Economical, no bulbs to replace, LEDs last for over 100,000 hours and are impact resistant
- Two C batteries provide 72 hours in continuous glow mode
- Slip resistant rubber hand grip with wrist lanyard

- Tough, high impact, water resistant tube made of durable industrial grade plastic that possess excellent strength and optical qualities
- Lightweight (approximately 12.7 oz. with batteries), high visibility
- 16" L, 1-5/8" D with 360° of luminary surface



Applications:
 Marine and Aircraft Signaling, Search and Rescue Operations, Police and Fire/Rescue Operations, Military Procedures, Traffic and Crowd Control



GCEGB100-G-A



- Must wear eye protection
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

AVIATION TOOLS

0.032" Safety Cable Tool



WTSTC323

0.032" Safety Cable Tool

WTSTC323

- Automatically tensions the cable, crimps ferrules and cuts safety cable in a single, easy squeeze of the handle
- Cable tensioner automatically cams over and clicks when proper tension is reached
- After the cable is cut, the clipped cable is retained in the tensioner to prevent the clipping from becoming FOD (foreign object debris)
- Made of aircraft grade, hard-coat anodized aluminum and high strength tool steel
- Safety cable can be used in place of traditional lock wire or stainless steel safety wire in nearly every application
- Eliminates the headaches of using twisted safety wire while being more reliable and repeatable
- Wire diameter 0.032"; Nose length 3"



C10-218PKG

Pack of 50 Daniels® Brand Cables Ferrules

C10-218PKG



AOC01

FOD Oil Can Opener

AOC01

- Testing by Saybolt® laboratory proves this can opener eliminates a cause of FOD, eliminating costly downtime and repairs
- Using a screwdriver to open an oil can may leave metal debris in the oil, causing FOD to turbines
- Can opener is made of reinforced high-quality plastic designed to open a quart can of oil
- Durable, ergonomic, non-slip design is pocket size and can be attached to a key ring



LGSW125

Landing Gear Socket Wrench

LGSW125

- Used to remove and replace the landing gear harness through-bolt on Embraer® 190 aircraft
- 1-1/4" deep well socket with 1/4" slit cut allows the speed cable to pass through
- 3/8" square drive allows the torque wrench to torque the nut to 80 in-lb
- Flex-head and overall length is 11-1/2"

Digital Inspection Kit

High-Definition Borescope with 5.5 mm Dual Imager

BK7000

- End-to-end true high definition provides the best image quality on the market
- Innovative Picture-in-Picture allows technician to capture forward and side camera images simultaneously
- Large 5" high-resolution screen provides best-in-class viewing
- Capacitive touchscreen interface for a more familiar user experience
- True high definition (1,280 x 720) 5.5 mm dual-view imager for capturing finer details
- Interchangeable accessory imagers (not included) enable a wide variety of uses
- Ability to capture images and video, add text or audio annotation
- Powerful quadcore processor powers high resolution video
- Wi-Fi connectivity provides seamless software updates
- Ready to use out of the box
- Quick USB-C charging for less downtime
- Rugged design and quality materials designed to withstand life in a repair shop
- Supported by Snap-on's 2-year warranty and after sale service



Applications:

Internal engine diagnosis, under-dash, inside door panels, under-hood, behind engine block, inside transmission housings, and any areas not easily accessible by technician.



- Must wear eye protection
- ‡ These products can expose you to chemicals which are known to the state of California to cause cancer and reproductive harm. See pages 906-907 for details
- Airframe tooling can cause flying chips
- Read safety precautions on pages W1 to W4

AVIATION TOOL SETS

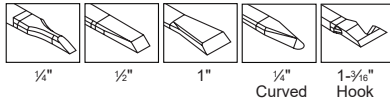
Mastic Removal Scrapers

XNGL Heavy Duty MRO Scrapers

- Stiff plastic scrapers set for MRO maintenance to remove caked on materials in repair and overhaul
- Manufactured from super-tough glass nylon composite for durability and precision



PSASET5XNGL



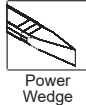
XNGL Heavy Duty MRO Scraper, 5 pc Set

PSASET5XNGL

- 5 pc set includes three flat scrapers (1/4", 1/2" and 1"), and one 1/4" curved scraper and one 1-3/16" hook edge scraper



PSA6XNGL



Power Wedge



PSA8XNGL



3/4" Wide



PSA11XNGL



1-1/4" Wide



PSA15XNGL



1-3/8" Wide Curved



PSA29XNGL



2" Wide Wedge



PSA65XNGL



1-3/8" Serrated



PSA7XNGL



Forked



PSA10XNGL



3/4" Wide Angled



PSA13XNGL



1" Wide Arched



PSA16XNGL



1-3/8" Wide Wedge



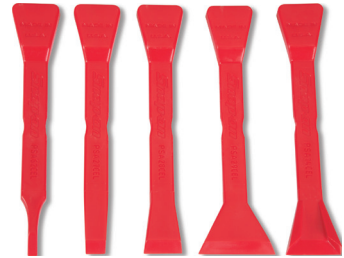
PSA53XNGL



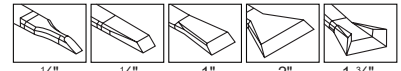
Seat Rail Cleaner

CELCON® OEM Scrapers

- Plastic scrapers for OEM - new builds
- Manufactured from Celcon® acetal copolymer for outstanding durability and resistance to long-term fatigue, moisture, solvents, and strong alkalis
- Ideal for removing new, not hard sealant
- Safe on glass, plexiglass, and polished surfaces



PSASET5CEL



1/4"

1/2"

1"

2"

1-3/8"

Wedge

Celcon® OEM Scraper, 5 pc Set

PSASET5CEL

- 5 pc set includes four flat scrapers (1/4", 1/2", 1" and 2"), and one 1-3/8" double wedge scraper



PSA8CEL



2" Wide Wedge



PSA11CEL



1-1/4" Wide



PSAWSPNUNGL

