With years of experience in Airframe tooling, we have every imaginable tool when it comes to Drilling, Countersinking, Riveting and Bucking procedures. When you need the right answer on Airframe maintenance and repair tools, we’re unmatched in the market place. And if we don’t have the right answer in stock, we have a full service staff of experts who can create a custom tool solution made to your specific needs that will have you covered.

Our manufacturing and quality control process adheres to very rigid standards that we stand behind.
Snap-on Industrial specializes in commercial tools for airframe production, maintenance and repair. Our extensive product line spans from cable swaging, drilling and aluminum cutting to specialized torque tools and every imaginable tool for aviation airframe fasteners.

Snap-on Industrial has a full service design and engineering staff with the capability to build custom tools to your specific specifications.

All Snap-on Industrial airframe tools adhere to rigid manufacturing standards including:

Certified:

ISO 14001-1996 Certificate No.: CERT-02711-2006-AEOHSAS
18001-1999 Certificate No.: CERT-03904-2006-SOC-HOU-OHSAS
Adhere to:
ISO 190011 – Audit Standards
ISO 17025 (ANSI NCSL-2540-1-1994)
laboratory Calibration Standard
ANSI/NCSL Z540-1, American National Standard for Calibration
ANSI/ASQ Z1.4-2003 and MIL-STD-105E
Sampling Inspection Plan

We also adhere to many other product specific standards:
MIL standards
ANSI standards
GOV standards
ISO standards
ASME standards
NIST standards
Edge Breakers

ATI514 Sheet Metal Edge Breaker.
Quickly removes burrs or sharp edges from any type of sheet metal stock with a hand shield to prevent injury. NSN #5110-01-428-0676

ATISP225 Carbide Double Edge Scraper.
Double-sided, indexable, carbide inserts, quickly removes burrs or sharp edges from any type or hardness of sheet metal stock with a hand shield to prevent injury. NSN #5110-01-368-5847

Burnishing Tools

ATI515 Burnish Tool.
Heat-treated blade is hard chrome plated and polished to mirror finish. Designed to remove surface blemishes on material. Large safety handle ensures comfortable grip. NSN #5120-01-428-5626

Side Grip Clamps

ATI550SG Spring Tension Side Grip Clamp - Pliers Operated.
This clamp accommodates a material capacity up to 3/4" thickness and reaches up to 1" in depth. The jaw (cast) with steel spring provides 60 pounds of clamping pressure. May be used in conjunction with optional ATI508S pliers.

ATI552SG Spring Tension Side Grip Clamp - Pliers Operated.
This clamp accommodates a material capacity up to 1/2" thickness and reaches up to 1" in depth. The jaw (cast) with steel spring provides 60 pounds of clamping pressure. May be used in conjunction with optional ATI508S pliers.

ATI551SG Spring Tension Side Grip Clamp - Pliers Operated.
This clamp accommodates a material capacity up to 3/4" thickness and reaches up to 1/2" in depth. The jaw (cast) with steel spring provides 60 pounds of clamping pressure. May be used in conjunction with optional ATI508S pliers.

Spring Tension Clamps

ATI542 Spring Tension U - Clamp - Pliers Operated.
This clamp accommodates a material capacity up to 7/16" thickness and reaches up to 2" in depth. The Zamak alloy yoke (cast) and a steel spring which provides 70 pounds of clamping pressure. May be used in conjunction with optional ATI508S pliers. NSN #5120-01-428-5605

ATI542S Spring Tension U - Clamp - Pliers Operated.
This clamp accommodates a material capacity up to 7/16" thickness and reaches up to 2" in depth. The steel yoke is used where extreme heat would affect an alloy metal. The steel spring provides 70 pounds of clamping pressure. May be used in conjunction with optional ATI508S pliers. NSN #5120-01-428-5579
Mastic & Decal Removal Tool for T3 Aluminum

**ATI590MRK Mastic Removal Kit.**
Cool new item specifically designed for use on T-3 aluminum and other soft delicate surfaces to eliminate the possibility of scribe marks when removing mastics. Contains no Teflon® or Silicon™. Each hand kit contains an ergonomic, vulcanized rubber handle, 6 -1" for-T3™ blades, 6 -1/2" for-T3™ blades, 3 -1/4" for-T3™ blades. Replacement for-T3 blades are available in the following sizes: Call for quote.

**Mastic Removal Kit Replacement Parts.**
- 1/8" in packs of 10 or cartons of 200
- 1/4" in packs of 10 or cartons of 200
- 1/2" in packs of 10 or cartons of 200
- 3/4" in packs of 10 or cartons of 200
- 1" in packs of 10 or cartons of 200

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**Pliers, Spring Tension Clamps**

**ATI044P3 Camloc Plier.**
For Camloc Fasteners, stud series 2000, 2700 and 4002.

**ATI508S Sheet Holder Plier.**
Made from forged steel. Use on plier operated spring tension clamps and all spring loaded type fasteners. NSN #5120-01-368-3971

**ATI508SG Sheet Holder Plier with Grips.**
Made from forged steel. Used with spring tension clamps and all spring loaded type fasteners.

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**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).
Angle Drills

Precision Gear-drive for Minimum Backlash and Reduced Friction.

**ATI332B Drill Attachment - Flat Head - Gear Drive - Straight Offset.**
Machined steel housing, recommended drill capacity 1/4", one to one drive ratio, 4 3/8" overall length, 15/16" width, 5 1/16" overall height, 19/64" thick gear drive body, 3 33/64" centerline distance from input shaft to output shaft, 27/64" from centerline of output shaft to end of housing, 1/4" diameter input shaft, #1/4"-28 female threaded output, high speed gear drive with anti-friction roller bearings.

**ATI331B Drill Attachment - Flat Head - Gear Drive - Straight Offset.**
Machined steel housing, recommended drill capacity 1/4", one to one drive ratio, 4 3/8" overall length, 15/16" width, 5 1/16" overall height, 19/64" thick gear drive body, 3 33/64" centerline distance from input shaft to output shaft, 11/32" from centerline of output shaft to end of housing, 1/4" diameter input shaft, #1/4"-28 female threaded output, high speed gear drive with anti-friction roller bearings.

**ATI332A Drill Attachment - Flat Head - Gear Drive - 60 Degree Right Hand Offset.**
Machined aluminum (hard-anodized) housing, recommended drill capacity 1/4", one to one drive ratio, 1 15/16" overall length, 5/16" width, 3 5/16" overall height, 19/64" thick gear drive body, 3 33/64" centerline distance from input shaft to output shaft, 11/32" from centerline of output shaft to end of housing, 1/4" diameter input shaft, #1/4"-28 female threaded output, high speed gear drive with anti-friction roller bearings.

**ATI333B Drill Attachment - Flat Head - Gear Drive - 60 Degree Left Hand Offset.**
Machined steel housing, recommended drill capacity 1/4", one to one drive ratio, 1 15/16" overall length, 5/16" width, 3 5/16" overall height, 19/64" thick gear drive body, 3 33/64" centerline distance from input shaft to output shaft, 11/32" from centerline of output shaft to end of housing, 1/4" diameter input shaft, #1/4"-28 female threaded output, high speed gear drive with anti-friction roller bearings.

SEE WARRANTY INFORMATION ON PAGE 465
ATI300B Drill Attachment - 7 1/16" Straight Drive - 90° Degree Head Angle. Sealed bearings, maintenance free straight drive drill attachment, recommended drill capacity 5/16", one to one drive ratio, 7 1/16" overall length includes the 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 1 5/8" head height, 13/16" head width, 13/32" centerline of output shaft to outside circumference of head. NSN #5130-01-388-9904.

ATI326B Drill Attachment - 7" Straight Drive - 90° Degree Head Angle. Sealed bearings, maintenance free straight drive drill attachment, recommended drill capacity 3/16", one to one drive ratio, 7" overall length includes the 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 27/32" head height, 17/32" head width, 17/64" centerline of output shaft to outside circumference of head. NSN #5130-01-388-9902

ATI336A Drill Attachment - 7 1/8" Straight Drive - 90 Degree Head Angle. Sealed bearings, maintenance free straight drive drill attachment, recommended drill capacity 3/8", 1.5 to one drive ratio, 7 1/8" overall length includes the 90-degree angle head. 1/4" diameter input shaft, three jaw adjustable 1/4" capacity drill chuck, 1 9/16" head height, 15/16" head width, 15/32" centerline of drill chuck to outside circumference of head. NSN #5130-00-289-8163

ATI337B Drill Attachment - 7 3/16" Straight Drive - 360 Adjustable 90° Degree Head Angle. Sealed bearings, maintenance free straight drive drill attachment, recommended drill capacity 3/8", 1.5 to one drive ratio, 7 3/16" overall length includes a 3 3/32" offset rotating 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 1 13/64" head height, 15/16" head width, 15/32" centerline of drill chuck to outside circumference of head. NSN #5130-01-388-9908

ATI302B Drill Attachment - 30" Flexible Drive - 90 Degree Head Angle. Sealed bearings, maintenance free flexible drive drill attachment, recommended drill capacity 5/16", one to one drive ratio, 36 1/2" overall length includes 30" flexible drive plus 6 1/2" hand grip and the 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 1 5/8" head height, 13/16" head width, 13/32" centerline of output shaft to outside circumference of head.

ATI303B Drill Attachment - 30" Flexible Drive - 45 - Degree Head Angle. Sealed bearings, maintenance free flexible drive drill attachment, recommended drill capacity 5/16", one to one drive ratio, 37" overall length includes 30" flexible drive plus 7" hand grip and the 45-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 1 5/8" head height, 13/16" head width, 13/32" centerline of output shaft to outside circumference of head.

ATI327B-24 Drill Attachment - 24" Flexible Drive - 90 - Degree Head Angle. Sealed bearings, maintenance free flexible drive drill attachment, recommended drill capacity 5/16", one to one drive ratio, 24" flexible drive plus 6 3/4" hand grip and the 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 27/32" head height, 17/32" head width, 17/64" centerline of output shaft to outside circumference of head.

ATI338B Drill Attachment - 24" Flexible Drive - 90 - Degree Head Angle. Sealed bearings, maintenance free flexible drive drill attachment, recommended drill capacity 3/8", 1.5 to one drive ratio, 30 3/4" overall length includes 24" flexible drive plus 6 3/4" hand grip and the 90-degree angle head. 1/4" diameter input shaft, 1/4"-28 female threaded output head, 1 3/16" head height, 15/16" head width, 15/32" centerline of output shaft to outside circumference of head.

ATI339A Drill Attachment - 24" Flexible Drive - 360 - Degree Adjustable 90 - Degree Head. Sealed bearings, maintenance free flexible drive drill attachment, recommended drill capacity 3/8", 1.5 to one drive ratio, 31 1/16" overall length includes a 3 3/32" offset rotating 90-degree angle head. 1/4" diameter input shaft, three jaw adjustable 1/4" capacity drill chuck, 1 37/64" head height, 15/16" head width, 15/32" centerline of drill chuck to outside circumference of head. NSN #5130-01-388-9897

WARNING

• Airframe tooling can cause flying chips.
• Wear safety goggles (user and bystanders).

Note: See Threaded Drills on Page 89.
Drilling Accessories – Drill Bushings

ATIS98A-098 Drill Guide Housing with #40 Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB098 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface. NSN #5120-01-316-2297

ATIS98A-1285 Drill Guide Housing with #30 Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB1285 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface. NSN #5120-01-316-2298

ATIS98A-159 Drill Guide Housing with #21 Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB159 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface. NSN #5120-01-046-2931

Consist of ATIS98AA drill guide housing and ATIS98AB1935 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface. NSN #5120-01-046-2928

ATIS98A257 Drill Guide Housing with “F” Drill Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB257 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

ATIS98AB098 Threaded Drill Bushing - #40.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB1562 Threaded Drill Bushing - 5/32”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB1875 Threaded Drill Bushing - 3/16”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB2187 Threaded Drill Bushing - 7/32”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB257 Threaded Drill Bushing - “F”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB1285 Threaded Drill Bushing - #30.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB159 Threaded Drill Bushing - #21.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB1935 Threaded Drill Bushing - #10.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB247 Threaded Drill Bushing - “O”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB281 Threaded Drill Bushing - “K”.
Interchangeable threaded drill bushing used with ATIS98AA drill guide housing. Carburized steel treatment for extended durability.

ATIS98AB-161 Drill Guide Housing with #20 Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB161 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

ATIS98AB2187 Drill Guide Housing with 7/32” Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB2187 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

ATIS98AB-1875 Drill Guide Housing with 3/16” Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB1875 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

ATIS98A250 Drill Guide Housing with 1/4” Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB250 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

ATIS98AB1935 Drill Guide Housing with #135 Bushing.
Consist of ATIS98AA drill guide housing and ATIS98AB1935 threaded bushing. A hand-held guide to keep drills and taps at a 90-degree angle to a flat or curved skin surface.

Polycarbonate Housing.
Warning

• Airframe tooling can cause flying chips.
• Wear safety goggles (user and bystanders).
Drill Adaptors

Straight Shank Drill Solutions for Threaded Spindles.

ATI503-30 Drill Adaptor #30.
1/4-28 threaded shank with 60 degree seating angle, drill is held securely by set screw. Used with angle and pancake drills.

ATI503C-1/4 Drill Collet Adaptor - 1/4".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503-10 Drill Collet Adaptor #10.
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-40 Drill Collet Adaptor #40.
1/4-28 threaded shank with 60 degree seating angle, drill is held securely by set screw. Used with angle and pancake drills.

ATI503C-1/8 Drill Collet Adaptor - 1/8".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-30 Drill Collet Adaptor #30.
1/4-28 threaded shank with 60 degree seating angle, drill is held securely by set screw. Used with angle and pancake drills.

ATI503C-1/16 Drill Collet Adaptor - 1/16".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-7/32 Drill Collet Adaptor - 7/32".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-5/32 Drill Collet Adaptor - 5/32".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-5/16 Drill Collet Adaptor - 5/16".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-3/16 Drill Collet Adaptor - 3/16".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-1/4 Drill Collet Adaptor - 1/4".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-1/8 Drill Collet Adaptor - 1/8".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-1/16 Drill Collet Adaptor - 1/16".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

ATI503C-7/32 Drill Collet Adaptor - 7/32".
1/4-28 threaded shank, drill is held securely by tightening collet cap to base. Used with angle and pancake drills.

Drill Chuck

ATI339EC Chuck-Three Jaw.
1/16" to 1/4" chuck is used with angle drills with 1/4-28 threaded spindles, allowing the use of straight shank tools. NSN #5130-01-368-5849

Drill Stops

ATI570-1/4 Drill Stop - 1/4".
Primarily designed to control hole depth, this tool will also cushion the break-through of a drill and prevent chuck jaws from coming in contact with the skin surface. Unit locks on drill with a set screw. NSN #5120-01-566-2854

ATI570-10 Drill Stop #10.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-105-6772

ATI570-20 Drill Stop #20.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-046-5003

ATI570-40 Drill Stop #40.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-094-0027

ATI570-11 Drill Stop #11.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-513-0147

ATI570-21 Drill Stop #21.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-104-5378

ATI570-5/16 Drill Stop - 5/16".
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-046-499S

ATI570-12 Drill Stop #12.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-053-7937

ATI570-30 Drill Stop #30.
Controls hole depth, cushion the break-through, unique rounded face prevents chuck jaws from coming in contact with the skin surface. Unit locks to drill with a set screws. NSN #5120-01-107-2181

ATI570-30 Drill Stop - 1/4".
1/4-28 threaded shank with 60 degree seating angle, drill is held securely by set screw. Used with angle and pancake drills.

SEE WARRANTY INFORMATION ON PAGE 465
### Threaded Drills

**ATIHSSL1/4**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 2 1/8" long (1-13/16" drill length plus 5/16" nut length). (Long).

**ATIHSSSH1/4**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 1 1/4" long (15/16" drill length plus 5/16" nut length). (Long). NSN #5133-01-546-6317

**ATIHSSSH1/8**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 1" long (3/4" drill length plus 1/4" nut length). (Short). NSN #5133-01-546-6313

**ATIHSSSH5/32**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 9/16" long (7/16" drill length plus 1/8" nut length). (Stub).

**ATIHSSST1/4**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 5/8" long (3/8" drill length plus 1/4" nut length). (Stub).

**ATIHSSST1/8**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 1/2" long (3/8" drill length plus 1/8" nut length). (Stub).

**ATIHSSST3/16**
- **1/4" - 28 Thread Shank Drill Bit**
- 1/4"-28 threaded shank, 135-degree split point,
- 9/16" long (7/16" drill length plus 1/8" nut length). (Stub).

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**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

**READ SAFETY PRECAUTIONS ON PAGES 461 to 464**
**Nut Plate Drill Jigs**

**ATI518A** Nut Plate Drill Jig - Two Lug Type. Double wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", B=.688", C=.139", D=#40, bolt size reference #6. NSN #5130-01-368-5862

**ATI518B** Nut Plate Drill Jig - Two Lug Type. Double wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", B=.688", C=.164", D=#40, bolt size reference #6. NSN #5130-01-368-5863

**ATI518C** Nut Plate Drill Jig - Two Lug Type. Double wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", B=.688", C=.191", D=#40, bolt size reference #10. NSN #3465-01-078-0674

**ATI518D** Nut Plate Drill Jig - Two Lug Type. Double wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.500", B=1.000", C=.248", D=#40, bolt size reference 1/4". NSN #3465-01-014-9133

**ATI518E** Nut Plate Drill Jig - Two Lug Type. Double wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.500", B=1.000", C=.312", D=#30, bolt size reference #5/16. NSN #5130-01-411-8176

**ATI518G** Nut Plate Drill Jig - One Lug Type. Single wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", C=.139", D=#40, bolt size reference #6. NSN #5130-01-368-5866

**ATI518J** Nut Plate Drill Jig - One Lug Type. Single wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", C=.191", D=#40, bolt size reference #10. NSN #3465-01-025-1562

**ATI518H** Nut Plate Drill Jig - One Lug Type. Single wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", C=.164", D=#40, bolt size reference #6. NSN #3465-01-025-0079

**ATI518K** Nut Plate Drill Jig - One Lug Type. Single wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", C=.248", D=#40, bolt size reference 1/4". NSN #3465-01-014-9129

**ATI518NA** Nut Plate Drill Jig - Two Lug Type. Double wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.203", B=.406", C=.112", D=#40, bolt size reference #4. NSN #5130-01-411-8177

**ATI518NB** Nut Plate Drill Jig - Two Lug Type. Double wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.218", B=.436", C=.139", D=#40, bolt size reference #6. NSN #5130-01-411-8180

**ATI518NC** Nut Plate Drill Jig - Two Lug Type. Double wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.234", B=.488", C=.164", D=#40, bolt size reference #8. NSN #5130-01-411-8179

**ATI518ND** Nut Plate Drill Jig - Two Lug Type. Double wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.250", B=.500", C=.191", D=#40, bolt size reference #10. NSN #5130-01-411-8182

**ATI518NE** Nut Plate Drill Jig - Two Lug Type. Double wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.281", B=.562", C=.248", D=#40, bolt size reference 1/4". NSN #5130-01-411-8181
Ergonomic Cast Aluminum Handle with Heat - Treated Spring Steel Attached to Oil Hardened Tool Steel Head.

ATI518PB Nut Plate Drill Jig - One Lug Type.
Single wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.218", C=.139", D=#40, bolt size reference #6. NSN #5130-01-411-8185

ATI518PC Nut Plate Drill Jig - One Lug Type.
Single wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.234", C=.164", D=#40, bolt size reference #6. NSN #5130-01-411-8183

ATI518PD Nut Plate Drill Jig - One Lug Type.
Single wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.250", C=.191", D=#40, bolt size reference #10. NSN #5130-01-411-8184

ATI518PE Nut Plate Drill Jig - One Lug Type.
Single wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.281", C=.248", D=#40, bolt size reference 1/4". NSN #5130-01-411-8172

ATI518SC Nut Plate Drill Jig - Corner Type.
Corner wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.281", C=.248", D=#40, bolt size reference #6. NSN #5130-01-374-1358

ATI518SD Nut Plate Drill Jig - Corner Type.
Corner wing miniature. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.250", C=.191", D=#40, bolt size reference #10. NSN #5130-01-411-8173

ATI518U Nut Plate Drill Jig - Corner Type.
Corner wing standard. High strength spring steel connects the 0-1 hardened head to the aluminum knurled handle. A=.344", C=.191", D=#40, bolt size reference #10. NSN #5130-01-368-5871

ATI518TA Nut Plate Drill Jig - Miniature Anchornut Type.

**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

*Read Safety Precautions on Pages 461 to 464*
Hole Saws

Precision High Speed Steel.

ATI474-3 Hole Saw - Coarse Tooth. 1/2" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-4 Hole Saw - Coarse Tooth. 9/16" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-5 Hole Saw - Coarse Tooth. 5/8" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-6 Hole Saw - Coarse Tooth. 11/16" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-7 Hole Saw - Coarse Tooth. 3/4" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-8 Hole Saw - Coarse Tooth. 13/16" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-9 Hole Saw - Coarse Tooth. 7/8" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-11 Hole Saw - Coarse Tooth. 1" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-13 Hole Saw - Coarse Tooth. 1 1/8" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-15 Hole Saw - Coarse Tooth. 1 1/4" Cutting diameter, 5/16"-24 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-17 Hole Saw - Coarse Tooth. 1 3/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-18 Hole Saw - Coarse Tooth. 1 7/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-20 Hole Saw - Coarse Tooth. 1 9/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-21 Hole Saw - Coarse Tooth. 1 5/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-22 Hole Saw - Coarse Tooth. 1 11/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-23 Hole Saw - Coarse Tooth. 1 3/4" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-25 Hole Saw - Coarse Tooth. 1 7/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-26 Hole Saw - Coarse Tooth. 1 15/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-27 Hole Saw - Coarse Tooth. 2" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-28 Hole Saw - Coarse Tooth. 2 1/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-29 Hole Saw - Coarse Tooth. 2 1/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-31 Hole Saw - Coarse Tooth. 2 1/4" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-32 Hole Saw - Coarse Tooth. 2 5/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-33 Hole Saw - Coarse Tooth. 2 3/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-35 Hole Saw - Coarse Tooth. 2 1/2" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-38 Hole Saw - Coarse Tooth. 2 11/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-39 Hole Saw - Coarse Tooth. 2 3/4" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or ATI415-1 arbor.

ATI474-40 Hole Saw - Coarse Tooth. 2 13/16" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or AT415-3 arbor.

ATI474-41 Hole Saw - Coarse Tooth. 2 7/8" Cutting diameter, 1/2"-20 threaded arbor hole. Used for fast and effective cutting of aluminum and steel. Use ATI415-0 or AT415-3 arbor.

Hole Saw Arbors

ATI415-0 Hole Saw Arbor. 1/4" shank and 3/16" pilot diameters are ground between centers, 5/16"-24 threaded arbor. For use with ATI413 and AT474-(1 through 15) Hole Saws.

ATI415-1 Hole Saw Arbor. 1/4" shank and 1/4" pilot diameters are ground between centers, 5/16"-24 threaded arbor. For use with ATI413 and AT474-(1 through 15) Hole Saws.

ATI415-2 Hole Saw Arbor. 1/2" shank and 1/4" pilot diameters are ground between centers, 1/2"-20 threaded arbor. For use with ATI413 and AT474-(1 through 59) Hole Saws.

ATI415-3 Hole Saw Arbor. 1/2" Ground Shank, 3/8" Pilot Shank with 1/2-20 Threads to assure absolute concentricity. For use with ATI413 and AT474 Hole Saws.

ATI415-10 Hole Saw Arbor. 1/4" shank and 1/4" pilot diameters are ground between centers, 1/2"-20 threaded arbor. For use with ATI413 and AT474-(16 through 59) Hole Saws.

ATI413-1 Hole Saw Arbor. 1/2" Cutting diameter, 5/16"-24 threaded arbor hole for cutting thin aluminum skins and corrugation sheets. Use ATI415-0 or AT415-1 Arbor.

ATI413-11 Hole Saw Arbor. 1" Cutting diameter, 5/16"-24 threaded arbor hole for cutting thin aluminum skins and corrugation sheets. Use ATI415-0 or AT415-1 Arbor.
**Warning**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

**Duplicating Punches**

**Tight Tolerance Hole Duplication.**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Size</th>
<th>Overall Length</th>
<th>Material</th>
<th>NSN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATI507-1</td>
<td>Duplicating Punch - 3/32&quot;</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3929</td>
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</tr>
<tr>
<td>ATI507-2</td>
<td>Duplicating Punch - #40</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3896</td>
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<tr>
<td>ATI507-3</td>
<td>Duplicating Punch - 1/8&quot;</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3911</td>
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<tr>
<td>ATI507-4</td>
<td>Duplicating Punch - #30</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3923</td>
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<tr>
<td>ATI507-10</td>
<td>Duplicating Punch - 1/4&quot;</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3894</td>
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<tr>
<td>ATI507-11</td>
<td>Duplicating Punch - 5/16&quot;</td>
<td>3 1/2&quot;</td>
<td>Manufactured from heat treated oil hardened drill rod (OHDR)</td>
<td>NSN #5120-01-429-3900</td>
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</tbody>
</table>

**ATI507KT**

**Duplicating Punch Kit.**


**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

**READ SAFETY PRECAUTIONS ON PAGES 461 TO 464**
Strap Duplicators

ATI500-52 Strap Duplicator - Punch Type - #30 Pilot.
6 1/4" working length, made from high grade spring steel. Center punches sheet from hidden pilot hole. NSN #5130-01-366-5851

ATI500-53 Strap Duplicator - Punch Type - #21 Pilot.
6 1/4" working length, made from high grade spring steel. Center punches sheet from hidden pilot hole. NSN #5130-01-366-5852

ATI500-55 Strap Duplicator - Punch Type - #10 Pilot.
6 1/4" working length, made from high grade spring steel. Center punches sheet from hidden pilot hole. NSN #5130-01-366-5853

ATI532-61 Strap Duplicator - Bushing Type - #40 Pilot/#40 Bushing.
6 1/4" working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-366-5854

ATI532-62 Strap Duplicator - Bushing Type - #30 Pilot/#30 Bushing.
6 1/4" working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-366-5855

ATI532-63 Strap Duplicator - Bushing Type - #21 Pilot/#21 Bushing.
6 1/4" working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-366-5831

ATI532-65 Strap Duplicator - Bushing Type - #10 Pilot/#10 Bushing.
6 1/4" working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-366-5832

ATI532-68 Strap Duplicator - Bushing Type - 1/4in Pilot/1/4in Bushing.
6 1/4" working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5465-01-050-7678

ATI532A-61 Strap Duplicator - Inverted Pilot Bushing Type - #40 Pilot/#40 Bushing.
6 1/4" working length, made from high grade spring steel. Similar as bushing type but has an inverted pilot. NSN #5130-01-366-5839

ATI532A-62 Strap Duplicator - Inverted Pilot Bushing Type - #30 Pilot/#30 Bushing.
6 1/4" working length, made from high grade spring steel. Similar as bushing type but has an inverted pilot. NSN #5130-01-366-5840

ATI532A-63 Strap Duplicator - Inverted Pilot Bushing Type - #21 Pilot/#21 Bushing.
6 1/4" working length, made from high grade spring steel. Similar as bushing type but has an inverted pilot. NSN #5130-01-366-5841

ATI532A-65 Strap Duplicator - Inverted Pilot Bushing Type - #10 Pilot/#10 Bushing.
6 1/4" working length, made from high grade spring steel. Similar as bushing type but has an inverted pilot. NSN #5130-01-368-5842
**Hole Duplication**

**Snap-On Airframe**

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**ATI532C-61 Strap Duplicator - Bushing Type - #40 Pilot/#40 Bushing.**
13 1/4” working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-368-5834

**ATI532C-62 Strap Duplicator - Bushing Type - #30 Pilot/#30 Bushing.**
13 1/4” working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-368-5835

**ATI532C-63 Strap Duplicator - Bushing Type - #21 Pilot/#21 Bushing.**
13 1/4” working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-368-5836

**ATI532C-65 Strap Duplicator - Bushing Type - #10 Pilot/#10 Bushing.**
13 1/4” working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-368-5837

**ATI532C-68 Strap Duplicator - Bushing Type - 1/4in Pilot/1/4in Bushing.**
13 1/4” working length, made from high grade spring steel. Bushing type for drilling duplicate holes in overlapping sheets. NSN #5130-01-368-5838

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**ATI532D-61 Strap Duplicator - Inverted Pilot Bushing Type - #40 Pilot/#40 Bushing.**
Similar as bushing type but has an inverted pilot. NSN #5130-01-369-2146

**ATI532D-62 Strap Duplicator - Inverted Pilot Bushing Type - #30 Pilot/#30 Bushing.**
Similar as bushing type but has an inverted pilot. NSN #5130-01-368-5844

**ATI512 Chip Chaser - 5 7/8in.**
Designed to remove chips between sheets after holes have been drilled for riveting. Spring steel with molded handle.

**ATISP200 Chip Chaser - Aluminum Handle.**
Aluminum handle only, uses optional ATISP20002, ATISP20003, ATISP20004, ATISP20005 chip chaser blades sold separately.

**ATISP200-1 Chip Chaser Tool-Pointed Hook - 5 7/8in.**
Consist of ATISP200 aluminum handle and ATISP20002 pointed hook blade.

**ATISP200-2 Chip Chaser Tool-Blunt Hook - 5 7/8in.**
Consist of ATISP200 aluminum handle and ATISP20003 blunt hook blade.

**ATISP200-3 Chip Chaser Tool-Pointed Hook - 2 3/4in.**
Consist of ATISP200 aluminum handle and ATISP20004 pointed hook blade.

**ATISP20002 Pointed Hook Chip Chaser Blade - 5 7/8in.**
Replacement blade, used with ATISP200 aluminum handle.

**ATISP20004 Pointed Hook Chip Chaser Blade - 2 3/4in.**
Replacement blade, used with ATISP200 aluminum handle.

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**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

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**The ATISP Series is Boeing Approved.**

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READ SAFETY PRECAUTIONS ON PAGES 461 to 464
ATI950CSK Microstop/Countersink Cutter Kit.
Kit includes nine 1/2" diameter 100-degree countersink cutters, with integral pilots of #40, #30, #21, #10, 3/32", 1/8", 5/32", 3/16" and 1/4", six foot pieces, and a .001" adjustable microstop with 5/16" travel.
NSN #5133-01-428-5693

ATI950SMKSP1 Sheet Metal Mechanics Kit.
Starter kit includes:
- 3X Rivet Gun, Sioux Brand
- 1/4" 2600 RPM Drill, Sioux Brand
- 3-1/2" Flush Rivet Set – 1-1/4"
- Integral Pilot Countersink Cutters - #10, #20, #30, #40
- Micro-Stop
- Hand Rivet Cutter
- Sheet Holder Pliers
- Spring Tension Clamps
- Sheet Holders 12ea. 3/32", 1/8", 5/32", 3/16"
- Drill Stops – 1ea. #10, #20, #30, #40
- Bucking Bar
- Drill Bits – 1ea. #10, #21, #30, #40, 1/8", 3/16", 3/32", 5/32"
- Retainer Spring-Quick Change

Countersinking Versatility in a Convenient and Portable Kit.
Microstops/Cuttersinks/Counterbores/Spotfacers/Back Spotfacers

Warning
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

Microstops

Accepts up to 1 1/4" countersink cutter diameter using 3/8"-24 male threaded shank, solid one piece shaft utilizes oilite bearings, and a thrust ball bearing for longevity.

ATH441HSA Microstop - .001" Adjustment - Phenolic Tipped Skirt.
Accepts up to 5/16" countersink cutter diameter using 1/4"-28 male threaded shank, utilizes needle bearings, 5/16" shaft travel, left handed hex locknut, 1/4" shaft, and a thrust ball bearing for longevity.

ATH441HSF Microstop - .001" Adjustment - Flanged Skirt.
Accepts up to 5/8" countersink cutter diameter using 1/4"-28 male threaded shank, utilizes needle bearings, 5/16" shaft travel, left handed hex locknut, 1/4" shaft, flanged skirt for increased stability, and a thrust ball bearing for longevity.

ATH441HSS Microstop - .001" Adjustment - Straight Skirt.
Accepts up to 5/8" countersink cutter diameter using 1/4"-28 male threaded shank, utilizes needle bearings, 5/16" shaft travel, left handed hex locknut, 1/4" shaft, straight skirt, and a thrust ball bearing for longevity.

ATH442HSS Microstop - .001" Adjustment - Straight Skirt.
Accepts up to 5/8" countersink cutter diameter using 1/4"-28 female threaded end, utilizes needle bearings, 5/16" shaft travel, left handed hex locknut, 1/4" shaft, straight skirt, and a thrust ball bearing for longevity. Recommend ATH418 family of female threaded countersink cutters and ATH416 family of countersink pilots.

Accepts up to 7/8" countersink cutter diameter using 3/8"-24 male threaded shank, solid one piece shaft utilizes oilite bearings, and a thrust ball bearing for longevity. NSN #3460-00-847-5135

ATH462H3-1.3 Microstop - 3/8" - 24 Threaded Jumbo - .0005in Adjustment.
Accepts up to 1 1/4" countersink cutter diameter using 3/8"-24 male threaded shank, solid one piece shaft utilizes ball radial bearings and thrust bearings for operating to 5000 RPM. Unique shaft features chucking flats and 3/4" travel.

ATH462H7-1.3 Microstop - 7/16" - 20 Jumbo - .0005in Adjustment. Accepts up to 1 1/4" countersink cutter diameter using 7/16"-20 male threaded shank, solid one piece shaft utilizes ball radial bearings and thrust bearings for operating to 5000 RPM. Unique shaft features chucking flats and 3/4" travel.

Nylon Inserts

ATH440A-13 Nylon Insert - Microstop.
Replacement insert for Microstop with interchangeable insert foot piece. Used with ATH440A1X Skirt.

NSN #5120-01-344-2736

NSN #5130-01-371-0080

NSN #3460-00-847-5135
Countersinks

Ground On-Center to Ensure Concentricity and Eliminates Run-Out.

Manufactured from M2 High Speed Steel.

ATI420D410 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, #10 integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3091

ATI420D421 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, #21 integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3087

ATI420D430 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, #30 integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3084

ATI420D440 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, #40 integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3081

ATI420D41/4 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 1/4" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3080

ATI420D42/1 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 1/8" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3079

ATI420D43/2 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 3/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3078

ATI420D44/3 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 5/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3077

ATI420D45/4 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 7/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3076

ATI420D41/8 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 1/8" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3075

ATI420D43/3 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 5/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3074

ATI420D41/4 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 5/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3073

ATI420D42/1 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 3/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3072

ATI420D43/2 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 3/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3071

ATI420D44/3 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 5/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3070

ATI420D45/4 Countersink - Integral Pilot - Three Flute.
7/16" body diameter, 7/32" integrated pilot, 3 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3069

Integral Pilot

ATI445E410 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, #10 integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3091

ATI445E421 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, #21 integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3087

ATI445E430 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, #30 integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3084

ATI445E41/4 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 1/4" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3082

ATI445E42/1 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 1/8" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3079

ATI445E43/2 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 3/32" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3078

ATI445E43/3 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 3/32" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3077

ATI445E43/4 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 5/32" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3076

ATI445E43/5 Countersink - Integral Pilot - Two Flute.
1/2" body diameter, 5/32" integrated pilot, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstop or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3075

SEE WARRANTY INFORMATION ON PAGE 465
Microstops/Countersinks/Counterbores/Spotfacers/Back Spotfacers

**Integral Pilot - Carbide Tip**

**ATI445CTE410 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, .187 integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3223

**ATI445CTE440 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, .440 integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3232

**Briels® Type**

**ATI438BRC3 Countersink - Briels® Type - 3/32" Rivet.**
- 3/8" body diameter, .096 pilot diameter, .180 pilot length, 3/32" rivet size, 120-degree cutting angle, .1235 intermediate body diameter, .949 body and shank length, 1/4"-28 threaded male shank.

**ATI438BRC6 Countersink - Briels® Type - 3/16" Rivet.**
- 3/8" body diameter, .191 pilot diameter, .250 pilot length, 3/16" rivet size, 120-degree cutting angle, .258 intermediate body diameter, .958 body and shank length, 1/4"-28 threaded male shank.

**Replaceable Pilot**

**ATI445CTE4  Countersink - Replaceable Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, .125" pilot hole, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI485 family of pilots and ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop.

**ATI455G-4 Countersink - Replaceable Pilot - Two Flute.**
- 3/8" body diameter, .086" pilot hole, 2 flute, 100-degree cutting angle with 3/8"-28 threaded male shank. Used with ATI484 family of pilots and ATI441HS-product family of Microstops or any 3/8"-24 threaded Microstop.

**ATI455E-4 Countersink - Replaceable Pilot - Two Flute.**
- 1/2" body diameter, .086" pilot hole, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI484 family of pilots and ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop.

**ATI455J-4 Countersink - Replaceable Pilot - Three Flute.**
- 7/8" body diameter, .170" pilot hole, 3 flute, 100-degree cutting angle with 3/8"-24 threaded male shank. Used with ATI435 family of pilots and ATI442HS-product family of Microstops or any 3/8"-24 threaded Microstop.

**ATI455D-4 Countersink - Replaceable Pilot - Two Flute.**
- 7/16" body diameter, .066" pilot hole, 2 flute, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI484 family of pilots and ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop.

**ATI455SKE-4 Countersink - Kevlar/Composite - Replaceable Pilot - Two Flute.**
- 1/2" body diameter, .085 pilot hole, 2 positive rake cutting flutes, 1/4"-28 threaded male shank for use on Kevlar® Composites, Fiberglass and Glass Epoxies. Uses ATI449-family of pilots.

**ATI455J-4 Countersink - Replaceable Pilot - Three Flute.**
- 7/8" body diameter, .170" pilot hole, 3 flute, 100-degree cutting angle with 3/8"-24 threaded male shank. Used with ATI435 family of pilots and ATI442HS-product family of Microstops or any 3/8"-24 threaded Microstop.

**ATI445CTE421 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, .521 integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3224

**ATI445CTE414 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, 1/4" integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-428-5682

**ATI445CTE430 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, .30 integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3225

**ATI445CTE418 Countersink - Integral Pilot - Two Flute - Carbide Tipped.**
- 1/2" body diameter, 1/8" integrated pilot, 2 flute, carbide tipped, 100-degree cutting angle with 1/4"-28 threaded male shank. Used with ATI441HS-product family of Microstops or any 1/4"-28 threaded Microstop. NSN #5133-01-397-3229

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**WARNING**

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).
Pilots

ATI416-57 Pilot. .086” shank diameter, 1/8” pilot diameter. Ground head diameter held to .0005” tolerance. Designed to fit ATI418 cutter and ATI421 spotfacer. NSN #3460-01-355-6198

ATI416-61 Pilot. .086” shank diameter, 3/16” pilot diameter. Ground head diameter held to .0005” tolerance. Designed to fit ATI418 cutter and ATI421 spotfacer. NSN #3460-01-355-6205

ATI416-65 Pilot. .086” shank diameter, 5/32” pilot diameter. Ground head diameter held to .0005” tolerance. Designed to fit ATI418 cutter and ATI421 spotfacer. NSN #3460-01-355-6195


ATI435-5/16 Pilot - Countersink - 5/16”. .170 shank diameter with flat for set screw, 5/16” pilot diameter, undercut to maintain concentricity and prevent breakage. Use with ATI435H and ATI455H and family of countersink cutters 3/4” and larger body diameter. NSN #3460-00-350-1445

ATI435-57 Pilot. .086” shank diameter, 1/8” pilot diameter. Ground head diameter held to .0005” tolerance. Designed to fit ATI418 cutter and ATI421 spotfacer.


ATI435-61 Pilot. .086” shank diameter, 3/16” pilot diameter. Ground head diameter held to .0005” tolerance. Designed to fit ATI418 cutter and ATI421 spotfacer.

ATI435-63 Pilot - Countersink - 7/32”. .086” shank diameter, 7/32” pilot diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-00-350-1445

ATI435-65 Pilot - Countersink - 1/4”. .086” shank diameter, 1/4” pilot diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-00-350-1445

ATI484-2 Pilot - Countersink - .086” Shank. #40 diameter. Use with ATI455 family of replaceable piloted countersink cutters.

ATI484-57 Pilot - Countersink - .086” Shank. 3/32” diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-01-292-4754

ATI484-59 Pilot - Countersink - .086” Shank. 5/32” diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-01-292-4756

ATI484-61 Pilot - Countersink - .086” Shank. 3/16” diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-01-292-4757

ATI484-63 Pilot - Countersink - .086” Shank. 7/32” diameter. Use with ATI455 family of replaceable piloted countersink cutters.

ATI484-65 Pilot - Countersink - .086” Shank. 1/4” diameter. Use with ATI455 family of replaceable piloted countersink cutters. NSN #3460-01-292-4758

Extensions

ATI470A-1 Extension-Counterbore. 1/4” shank diameter, 2 set screws to secure counterbore shaft. 4” overall length.

ATI470B1 Extension - Countersink. 1/4” shank diameter, 1/4”-.28 female thread with 120-degree seating angle, 4” Overall Length.
### Counterbores

**Heat-Treated M2 High Speed Steel**

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter</th>
<th>Pilot Diameter</th>
<th>Flute</th>
<th>Length</th>
<th>Shank Diameter</th>
<th>Pilot Hole Diameter</th>
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<tbody>
<tr>
<td>AT488C-1</td>
<td>1/4” Cutting</td>
<td>1/8”</td>
<td>4-flute</td>
<td>2 3/8”</td>
<td>1/4”</td>
<td>3/32”</td>
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<td>AT488C-2</td>
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<td>1/4”</td>
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<tr>
<td>AT488C-3</td>
<td>5/16” Cutting</td>
<td>1/4”</td>
<td>4-flute</td>
<td>2 3/8”</td>
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<td>1/8”</td>
</tr>
<tr>
<td>AT488C-5</td>
<td>3/8” Cutting</td>
<td>1/8”</td>
<td>4-flute</td>
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<td>1/4”</td>
<td>1/8”</td>
</tr>
<tr>
<td>AT488C-6</td>
<td>15/32” Cutting</td>
<td>1/8”</td>
<td>4-flute</td>
<td>2 13/16”</td>
<td>1/4”</td>
<td>1/8”</td>
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</tbody>
</table>

**Counterbore Pilots**

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter</th>
<th>Pilot Diameter</th>
<th>Flute</th>
<th>Length</th>
<th>Shank Diameter</th>
<th>Pilot Hole Diameter</th>
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</thead>
<tbody>
<tr>
<td>AT489A-1</td>
<td>3/32” Shank</td>
<td>3/32” Pilot</td>
<td>Flat</td>
<td>5/16”</td>
<td>3/32”</td>
<td>5/32”</td>
</tr>
<tr>
<td>AT489A-3</td>
<td>5/32” Shank</td>
<td>5/32” Pilot</td>
<td>Flat</td>
<td>5/32”</td>
<td>5/32”</td>
<td>5/32”</td>
</tr>
</tbody>
</table>

### WARNING

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).
Counterbore Pilots

ATI489C-5 Pilot - Counterbore, 3/16" Shank Diameter, 3/16" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-8 Pilot - Counterbore, 3/16" Shank Diameter, 1/4" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-11 Pilot - Counterbore, 3/16" Shank Diameter, 5/16" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-15 Pilot - Counterbore, 3/16" Shank Diameter, 7/16" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-17 Pilot - Counterbore, 3/16" Shank Diameter, 1/2" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-5 Pilot - Counterbore, 3/16" Shank Diameter, 3/16" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-13 Pilot - Counterbore, 3/16" Shank Diameter, 3/8" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-19 Pilot - Counterbore, 3/16" Shank Diameter, 3/4" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-21 Pilot - Counterbore, 3/16" Shank Diameter, 1" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-23 Pilot - Counterbore, 3/16" Shank Diameter, 1 1/4" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-25 Pilot - Counterbore, 3/16" Shank Diameter, 1 1/2" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-27 Pilot - Counterbore, 3/16" Shank Diameter, 2" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-29 Pilot - Counterbore, 3/16" Shank Diameter, 2 1/2" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-31 Pilot - Counterbore, 3/16" Shank Diameter, 3" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-33 Pilot - Counterbore, 3/16" Shank Diameter, 3 1/2" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

ATI489C-35 Pilot - Counterbore, 3/16" Shank Diameter, 4" Pilot Diameter. Flat surface for set screw security, use with ATI488C-14 through ATI488C-32 counterbores.

Counterbore Pilots

Kits

ATI590S Back Spot Facer Cutter Kit - 16 Pieces.
Kit includes 8 back spot facers and 8 pilots respectively:
- 1/4" diameter with 3/32" pilot
- 5/16" diameter with 1/8" pilot
- 3/8" diameter with 5/32" pilot
- 1/2" diameter with 3/16" pilot
- 3/4" diameter with 5/16" pilot
- 1" diameter with 3/8" pilot
- 1 1/4" diameter with 1/2" pilot
NSN #5133-01-014-5669

ATI590TA Back Countersink Cutter Kit - 16 Pieces.
Kit includes 8, 100-degree countersinks and 8 pilots respectively:
- 1/4" diameter with 3/32" pilot
- 5/16" diameter with 1/8" pilot
- 3/8" diameter with 5/32" pilot
- 1/2" diameter with 3/16" pilot
- 3/4" diameter with 5/16" pilot
- 7/8" diameter with 5/16" pilot
- 1" diameter with 3/8" pilot
- 1 1/4" diameter with 1/2" pilot
NSN #5133-01-428-5695

Back Spotfacers

ATI403A Back Spotfacer - 1/4" OD.
1/4" Body Diameter, 3/32" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-1 Pilot. NSN #5133-01-392-8367

ATI403B Back Spotfacer - 5/16" OD.
5/16" Body Diameter, 5/32" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-3 Pilot.

ATI403G Back Spotfacer - 7/16" OD.
7/16" Body Diameter, 3/16" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-4 Pilot. NSN #5133-01-392-8369

ATI403K Back Spotfacer - 9/16" OD.
9/16" Body Diameter, 5/32" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-6 Pilot.

ATI403Q Back Spotfacer - 3/4" OD.
3/4" Body Diameter, 1/4" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-8 Pilot.

ATI403R Back Spotfacer - 3/4" OD.
3/4" Body Diameter, 1/2" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-6 Pilot.

ATI403X Back Spotfacer - 1 1/4" OD.
1 1/4" Body Diameter, 1/2" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-8 Pilot.

ATI403C Back Spotfacer - 5/16" OD.
5/16" Body Diameter, 1/8" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-2 Pilot. NSN #5133-01-392-8364

ATI403F Back Spotfacer - 3/8" OD.
3/8" Body Diameter, 5/32" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-3 Pilot. NSN #5133-01-392-8365

ATI403I Back Spotfacer - 1/2" OD.
1/2" Body Diameter, 3/16" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-4 Pilot.

ATI403M Back Spotfacer - 5/8" OD.
5/8" Body Diameter, 1/4" Pilot Hole, 4 Flute, 100° Cutting Angle, .03 Corner Radius for reverse spotfacing and counterboring in confined areas. Use ATI404-5 Pilot.

See Warranty Information on page 465
WARNING

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

READ SAFETY PRECAUTIONS ON PAGES 461 to 464

103
ATI206A-3-P Male Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3685

ATI206A-4-P Male Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 1/4” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3686

ATI206A-5-P Male Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3692

ATI206A-6-P Male Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3677

ATI207A-3-P Female Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3577

ATI207A-4-P Female Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 1/4” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3582

ATI207A-5-P Female Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3596

ATI207A-6-P Female Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 1/4” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3616

ATI206A-3-R Male Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 3/8” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3684

ATI206A-4-R Male Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 3/8” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3687

ATI206A-5-R Male Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 3/8” Body Length for installing 5/32” AN426 Rivets.
NSN #5110-01-429-3689

ATI206A-6-R Male Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 3/8” Body Length for installing 3/16” AN426 Rivets.
NSN #5110-01-429-3691

ATI207A-3-R Female Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 3/8” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3579

ATI207A-4-R Female Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 3/8” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3592

ATI207A-5-R Female Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 3/8” Body Length for installing 5/32” AN426 Rivets.
NSN #5110-01-429-3596

ATI207A-6-R Female Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 3/8” Body Length for installing 3/16” AN426 Rivets.
NSN #5110-01-429-3608

ATI206A-3-S Male Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 1/2” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3688

ATI206A-4-S Male Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 1/2” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3690

ATI206A-5-S Male Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 1/2” Body Length for installing 5/32” AN426 Rivets.
NSN #5110-01-429-3693

ATI206A-6-S Male Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 1/2” Body Length for installing 3/16” AN426 Rivets.
NSN #5110-01-429-3694

ATI207A-3-S Female Dimple Die - Cold.
3/16” Shank Diameter, .56 Body Diameter, 1/2” Body Length for installing 3/32” AN426 Rivets.
NSN #5110-01-429-3573

ATI207A-4-S Female Dimple Die - Cold.
3/16” Shank Diameter, .62 Body Diameter, 1/2” Body Length for installing 1/8” AN426 Rivets.
NSN #5110-01-429-3579

ATI207A-5-S Female Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 1/2” Body Length for installing 5/32” AN426 Rivets.
NSN #5110-01-429-3592

ATI207A-6-S Female Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 1/2” Body Length for installing 3/16” AN426 Rivets.
NSN #5110-01-429-3606

ATI207A-5-S Female Dimple Die - Cold.
3/16” Shank Diameter, .68 Body Diameter, 1/2” Body Length for installing 5/32” AN426 Rivets.
NSN #5110-01-429-3598

ATI207A-6-S Female Dimple Die - Cold.
3/16” Shank Diameter, .75 Body Diameter, 1/2” Body Length for installing 3/16” AN426 Rivets.
NSN #5110-01-429-3610

See Warranty Information on Page 465
**Warning**

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

### Hi-Lok® Kits

**ATISK359495K** Comprehensive Hi-Lok® Kit - 1/4in and 3/8in Ratchet with Sockets and T-Hex Keys.

Kit includes T-key and 1/4" and 3/8" square drive reversible ratchets respectively. Socket sizes for 1/4" square drive are 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2". Socket sizes for 3/8" square drive are 3/8", 7/16", 1/2". Also included is a 1/16" Hex Key for securing sockets to ratchet drive. T-Hex keys included are 5/64", 3/32", 1/8", 5/32" for securing pin side of Hi-Lok® fastener during installation.

NSN #5120-01-531-7011

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**ATISK359495A8** Hi-Lok® Roller Clutch Wrench Kit.

Used for fastener installation in confined spaces. Kit includes 1/4" drive (zero backlash) roller clutch wrenches designed for maximum socket rotation with minimum handle movement. Hex sizes included are 7/32", 1/4", 5/16", 11/32", 3/8", 7/16".

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**ATISK3594K** Comprehensive Hi-Lok® Kit - 1/4in Ratchet with Sockets and T-Hex Key.

Kit includes 1/4" square drive reversible ratchet. 1/4" square drive sockets included are 3/16", 7/32", 1/4", 9/32", 5/16", 11/32" and 3/8". The 1/16" hex key secures socket to ratchet drive. The 3/32" T-hex key engages the pin side of the Hi-Lok® fastener during installation.
Hi-Lok® Wrenches

Great Access to Tight Areas.

ATISK3539 1/4" Square Drive Hi-Lok® Roller Clutch Wrench - Black Handle. Used for fastener installation in confined spaces. 1/4" drive, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Can be used with any standard 1/4" drive socket.

ATISK3539BL 1/4" Square Drive Hi-Lok® Roller Clutch Wrench - Zinc Handle. Used for fastener installation in confined spaces. 1/4" drive, 6" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Can be used with any standard 1/4" drive socket.

ATISK359IT38 Dedicated 3/8" Hex Hi-Lok® Roller Clutch Wrench - Black Handle. Dedicated 3/8" hex, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Used for fastener installation in confined spaces.

ATISK359IT732 Dedicated 7/32" Hex Hi-Lok® Roller Clutch Wrench - Black Handle. Dedicated 7/32" hex, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Used for fastener installation in confined spaces.

ATISK3539IT38 Dedicated 1/4" Hex Hi-Lok® Roller Clutch Wrench - Black Handle. Dedicated 1/4" hex, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Used for fastener installation in confined spaces.

ATISK359IT716 Dedicated 7/16" Hex Hi-Lok® Roller Clutch Wrench - Black Handle. Dedicated 7/16" hex, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Used for fastener installation in confined spaces.

ATISK3539IT38 Dedicated 3/8" Hex Hi-Lok® Roller Clutch Wrench - Black Handle. Dedicated 3/8" hex, 3" handle length (zero backlash) roller clutch wench is designed for maximum socket rotation with minimum handle movement. Can be used with any standard 1/4" drive socket.

Hi-Lok® Flank Drive® Sockets

ATISK359619 Hi-Lok® Socket - 1/4" Square Drive - 3/16" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359638 Hi-Lok® Socket - 1/4" Square Drive - 3/8" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359622 Hi-Lok® Socket - 1/4" Square Drive - 7/32" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359631 Hi-Lok® Socket - 1/4" Square Drive - 5/16" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359738 Hi-Lok® Socket - 3/8" Square Drive - 3/8" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359750 Hi-Lok® Socket - 3/8" Square Drive - 1/2" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK3581-1/4 Hi-Lok® Removal Tool - 1/4" Fastener. Grips the collar side of an installed 1/4" Hi-Lok® fastener for removal without damaging the skin. Works well with air and or hand operated 1/4" drive tools.

ATISK359631 Hi-Lok® Socket - 1/4" Square Drive - 5/16" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

ATISK359750 Hi-Lok® Socket - 3/8" Square Drive - 1/2" Hex. Chrome plated with set screw for securing socket to ratchet square drive.

Hi-Lok® Removal Tools

ATISK3581-1/4 Hi-Lok® Removal Tool - 1/4" Fastener. Grips the collar side of an installed 1/4" Hi-Lok® fastener for removal without damaging the skin. Works well with air and or hand operated 1/4" drive tools.

Fastener Installation Tools

SNAP-ON® AIRFRAME

Warning
• Airframe tooling can cause flying chips.
• Wear safety goggles (user and bystanders).

Ratchet

ATIFY936

ATISK3595

Hi-Torque® Bits

ATIHTS-2

ATIHTS-3

ATIHTS-4

ATIHTS-2 #2 Hi-Torque® Bit - 1/4" Square Drive. Blade thickness .059", width .395", 1/2" body diameter, 1" length.

ATIHTS-3 #3 Hi-Torque® Bit - 1/4" Square Drive. Blade thickness .059", width .377", 1/2" body diameter, 1" length.

ATIHTS-4 #4 Hi-Torque® Bit - 1/4" Square Drive. Blade thickness .073", width .502", 1/2" body diameter, 1" length.

Riveting Tool Kits

ATI590RGK3X Rivet Gun Kit.
Kit includes essentials for straight and offset riveting. Four commonly used bucking bars, eight cupped sets for 3/32", 1/8", 5/32" and 3/16", AN470 universal head rivets; three flush sets for AN426 rivets; two retainer springs, air regulator with durable case. NSN #5180-01-462-7729

ATI590RGK-4X Rivet Gun Kit.
Kit includes essentials for straight and offset riveting. Four commonly used bucking bars, eight cupped sets for 3/32", 1/8", 5/32" and 3/16", AN470 universal head rivets; three flush sets for AN426 rivets; two retainer springs, air regulator with durable case. NSN #5130-01-428-5692

Rivet Guns

ATIATC3X

ATIATC4X

ATIATC3X RIVET GUN PISTOL GRIP.
Power, control and industrial durability make these a popular choice for driving solid rivets. Both models have an excellent teasing trigger for precise control and upset uniformity. Beehive style retaining spring and air flow control valve are included. Most parts are interchangeable with Chicago Pneumatic “X” series rivet guns. Capacity 3/16" rivet, shank diameter .401, BPM 2160, length 6-1/2" and weight 3 lbs.

ATIATC4X RIVET GUN PISTOL GRIP.
Power, control and industrial durability make these a popular choice for driving solid rivets. Both models have an excellent teasing trigger for precise control and upset uniformity. Beehive style retaining spring and air flow control valve are included. Most parts are interchangeable with Chicago Pneumatic “X” series rivet guns. Capacity 1/4" rivet, shank diameter .401, BPM 1740, length 7-1/4" and weight 3 1/4 lbs.

Clear zipper case included.
Riveting Tools and Accessories

Retaining Springs

ATI114C-3 Spring Retainer-Quick Change. 
Quick-change any rivet set that has safety spring shoulder, utilizes fast thumb release. Works with 3X and 4X rivet guns. Accommodates 1/2" and 5/8" body diameter rivet sets. NSN #5130-01-053-7939

Angle Attachments

ATI115A Retainer Spring-Beehive Type. 
Ideal for production usage. Safely retains rivet sets in 3X and 4X rivet gun. Accepts straight and 10 degree sets with 1/2" body diameters. NSN #5130-01-486-3113

Rivet Sets, Straight Drive

ATI100A214 AN470 Cupped Rivet Set
5/8" Body. 
Straight-drive, 401 shank, 2 1/2" length for installing 1/4" AN470 rivet. NSN #5120-01-073-3999

ATI100A2-32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 2 1/2" length for installing 3/32" AN470 rivet. NSN #5120-01-073-3997

ATI100A3-1/8 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing 1/8" AN470 rivet. NSN #5130-01-358-8479

ATI100A35/32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing 5/32" AN470 rivet. NSN #5130-01-358-8480

ATI100A51/8 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 5 1/2" length for installing 1/8" AN470 rivet. NSN #5130-01-358-8584

ATI100A71/8 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 7 1/2" length for installing 1/8" AN470 rivet. NSN #5130-01-358-8586

ATI100A75/32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 7 1/2" length for installing 5/32" AN470 rivet. NSN #5130-01-358-8586

ATI100A83/32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 10 1/2" length for installing 3/32" AN470 rivet. NSN #5130-01-358-8586

ATI100A218 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 2 1/2" length for installing 1/8" AN470 rivet. NSN #5120-01-073-3998

ATI100A2532 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 2 1/2" length for installing 5/32" AN470 rivet. NSN #5120-01-073-3996

ATI100A33/16 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing 3/16" AN470 rivet. NSN #5130-01-358-8481

ATI100A33/32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing 7/32" AN470 rivet. NSN #5130-01-358-8482

ATI100A53/32 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing 3/16" AN470 rivet. NSN #5130-01-358-8587

ATI100A73/16 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 7 1/2" length for installing 3/16" AN470 rivet. NSN #5130-01-358-8589

ATI100A816 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 10 1/2" length for installing 1/8" AN470 rivet. NSN #5130-01-358-8487

ATI100A8532 AN470 Cupped Rivet Set
1/2" Body. 
Straight-drive, 401 shank, 10 1/2" length for installing 5/32" AN470 rivet. NSN #5130-01-358-8488

ATI100AF-3A Flush Rivet Set. 
Straight-drive, 401 shank, 3 1/2" length for installing flush rivets. NSN #5130-01-358-8486

ATI100AF-3B Flush Rivet Set 5/8" Body. 
Straight-drive, 401 shank, 3 1/2" length for installing flush rivets.

ATI100AF-5A Flush Rivet Set. 
Straight-drive, 401 shank, 5 1/2" length for installing flush rivets. NSN #5130-01-358-8563

See Warranty Information on page 465
Warning

• Airframe tooling can cause flying chips.
• Wear safety goggles (user and bystanders).
Rivet Sets

ATI107A-2D Peening Tool.
Peening tool, .401 shank, 3 1/4" length, 1" diameter face, aluminum head for straightening aluminum after forming. NSN #5130-01-422-1483

ATI110CA Rivet Set - Flush, Anti - Slip Edge.
.401 shank, 2 1/2" length, 3/4" diameter face, rubber guard added to prevent slipping and damage to skin surface. NSN #5130-01-388-9860

ATI110CB Rivet Set - Flush, Anti - Slip Edge.
.401 shank, 2 1/2" length, 1" diameter face, rubber guard added to prevent slipping and damage to skin surface. NSN #5130-01-388-9864

ATI112A Rivet Set - Flush Mushroom Type.
.401 shank, 3" length, 1 7/8" diameter face, crowned for riveting thin sections without danger of denting or dishing skin surface. NSN #5130-01-388-9852

ATI113A-1 Flush Rivet Set - Extra Short.
.401 Shank Diameter, 1 11/16" length, 3/4" diameter face, length of set allows riveting in limited areas.

ATI119A-1B Rivet Set, Flush.
.401 Shank Diameter, 3/4" Face Diameter, 2-1/8" Overall Length. Stubby type for riveting in limited areas. Crowned face prevents damage to skin surface. NSN #5130-01-388-9859

ATI119A-3B Rivet Set, Flush.
.401 Shank Diameter, 1 1/8" Face Diameter, 2-1/8" Overall Length. Stubby type for riveting in limited areas. Crowned face prevents damage to skin surface. NSN #5130-01-388-9889

ATI121A-3 Rivet Set, Flush, Offset.
.401 Shank Diameter, 10 Degree Offset, 1-1/4" Face Diameter, Crowned to prevent damage to skin surface. 3-1/2" Overall Length. NSN #5130-01-388-9883

Boeing® Rivet Sets

ATIST1111BK1 Boeing® Design - Rivet Set - Flush Anti - Slip Edge.
.401 Shank, 2 1/2" length, 3/4" diameter face, polyurethane rim to prevent slipping and damage to skin surface.

ATIST1111BK2 Boeing® Design - Rivet Set - Flush Anti - Slip Edge.
.401 Shank, 2 1/2" length, 1" diameter face, polyurethane rim to prevent slipping and damage to skin surface.

ATIST1111BK3 Boeing® Design - Rivet Set - Flush Anti - Slip Edge.
.401 Shank, 2 5/16" length, 1 1/4" diameter face, rubber guard added to prevent slipping and damage to skin surface. NSN #5130-01-388-8885

SEE WARRANTY INFORMATION ON PAGE 465
Riveting Tools and Accessories

SNAP-ON® AIRFRAME

Rivet Sets Extension and Adaptor

**ATI124A-6**

Rivet Gun Shank Adaptor .401 to .498 Diameter.
Extends tool 3". Use 5X, 9X and 7X guns with standard .401 tools.

Rivet Cutters

Adjustable guide maintains rivet cutting length.

Adjustable guide maintains rivet cutting length. 13" tubular handles for additional leverage, developed for the U.S. Government. NSN #5110-00-180-2892

Rivet Grip Gauges

**ATI2612** Grip Scale.
Simple, self-explanatory scale determines material thickness and proper rivet grip length.

**ATI269C3** Cherry Max Grip Gauge.
For Cherrymax and Cherrylock rivets.

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**WARNING**

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

READ SAFETY PRECAUTIONS ON PAGES 461 to 464
Rivet Squeezing - Hand

ATI501A Hand Rivet Squeezer - 2 1/2in Reach.
1 1/8" gap jaws are heat-treated tool steel, 18" handles provide leverage for ease of operation. Uses standard 3/16" shank tools. NSN #5120-01-334-6450

ATI502AHE 360° Hand Rivet Squeezer - 3in Reach.
360-degree yoke locks in any position, 3/8" stroke and 5/8" ram length adjustment, eliminates the necessity of shims. Uses standard 3/16" shank tools. Can be used for cold dimpling. NSN #5120-01-221-9097

ATI502AHDD 360° Hand Rivet Squeezer - 1 1/2in Reach.
360-degree yoke locks in any position, 3/8" stroke and 5/8" ram length adjustment, eliminates the necessity of shims. Uses standard 3/16" shank tools. Can be used for cold dimpling. NSN #5120-00-928-6628

Rivet Squeezers

ATI108AN1/8 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 3/8" Body Diameter, 1/8" Body Length for installing 1/8" AN470 Cupped Rivets. NSN #5180-01-537-2420

ATI108AN3/16 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 1/2" Body Diameter, 1/8" Body Length for installing 3/16" AN470 Cupped Rivets.

ATI108AN3/32 Rivet Squeezer - Cupped.

ATI108AP1/4 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 5/8" Body Diameter, 1/4" Body Length for installing 1/4" AN470 Cupped Rivets. NSN #5130-01-397-2920

ATI108AP1/8 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 3/8" Body Diameter, 1/4" Body Length for installing 1/8" AN470 Cupped Rivets. NSN #5130-01-397-2921

ATI108AP3/16 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 5/8" Body Diameter, 1/4" Body Length for installing 3/16" AN470 Cupped Rivets.

ATI108AP3/32 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 3/8" Body Diameter, 1/4" Body Length for installing 3/32" AN470 Cupped Rivets. NSN #5130-01-397-2923

ATI108AP5/32 Rivet Squeezer - Cupped.
3/16" Shank Diameter, 5/8" Body Diameter, 1/4" Body Length for installing 5/32" AN470 Cupped Rivets. NSN #5130-00-138-5302

ATI108A33PC Rivet Squeezer Kit.
Kit includes 23 each of ATI108A cupped & 10 each of the ATI109 flush rivet squeezer set, 3/16" shank. For installing AN470 (MS20470) and AN426 rivets. NSN #5180-01-537-7420

See Warranty Information on Page 465
CNC Machined, No Sharp Edges

ATI108APS/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/4” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-2924

ATI108AR3/16 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 3/8” Body Length for Installing 3/16” AN470 Cupped Rivets. NSN #5130-01-397-2927

ATI108AS1/4 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 5/8” Body Diameter, 1/2” Body Length for Installing 1/4” AN470 Cupped Rivets. NSN #5130-00-138-5305

ATI108AS3/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 3/32” AN470 Cupped Rivets. NSN #5130-01-397-3097

ATI108AT3/16 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 3/8” Body Length for Installing 3/16” AN470 Cupped Rivets. NSN #5130-01-397-3098

ATI108AW1/8 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/4” Body Length for Installing 1/8” AN470 Cupped Rivets. NSN #5130-01-397-3102

ATI109EN Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for Installing AN426 Flush Rivets.

ATI109AS Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for Installing AN426 Flush Rivets.

ATI109EN Rivet Squeezer - Flush. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing AN426 Flush Rivets.

ATI109ES Rivet Squeezer - Flush. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for installing AN426 Flush Rivets.

ATI109AP Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 1/4” Body Length for installing AN426 Flush Rivets.

ATI109AT Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 5/8” Body Length for installing AN426 Flush Rivets.


ATI109ET Rivet Squeezer - Flush. 3/16” Shank Diameter, 3/8” Body Diameter, 5/8” Body Length for installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/8” Body Length for installing 1/8” AN470 Cupped Rivets. NSN #5130-01-397-2925

ATI108AR14 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/8” Body Length for installing 1/4” AN470 Cupped Rivets.

ATI108AR3/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 3/32” AN470 Cupped Rivets. NSN #5130-01-397-2928

ATI108AS1/8 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 1/8” AN470 Cupped Rivets. NSN #5130-01-397-3095

ATI108AS5/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3098

ATI108AT3/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 5/8” Body Length for Installing 3/32” AN470 Cupped Rivets. NSN #5130-01-397-3100


ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/2” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3099

ATI108AT1/8 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 5/8” Body Length for Installing 1/8” AN470 Cupped Rivets. NSN #5130-01-397-3101

ATI108AT5/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 3/8” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3103

ATI108AW5/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 3/4” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3107

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for installing AN426 Flush Rivets.

ATI109AP Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 1/4” Body Length for installing AN426 Flush Rivets.

ATI109AT Rivet Squeezer - Flush. 3/16” Shank Diameter, 1/2” Body Diameter, 5/8” Body Length for installing AN426 Flush Rivets.


ATI109ET Rivet Squeezer - Flush. 3/16” Shank Diameter, 3/8” Body Diameter, 5/8” Body Length for installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/2” Body Length for Installing AN426 Cupped Rivets.

ATI109AW Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 3/8” Body Length for installing AN426 Cupped Rivets.

ATI109ER Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/8” Body Length for installing AN426 Cupped Rivets.

ATI109EW Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/4” Body Length for installing AN426 Cupped Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/8” Body Length for installing 1/8” AN470 Cupped Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/4” Body Length for installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/4” Body Length for installing AN426 Cupped Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/8” Body Length for installing 1/8” AN470 Cupped Rivets. NSN #5130-01-397-2929

ATI108AS3/16 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 3/32” AN470 Cupped Rivets. NSN #5130-01-397-3099

ATI108AS3/16 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 1/2” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3100

ATI108AW5/32 Rivet Squeezer - Cupped. 3/16” Shank Diameter, 3/8” Body Diameter, 3/8” Body Length for Installing 5/32” AN470 Cupped Rivets. NSN #5130-01-397-3107

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for installing AN426 Flush Rivets.

ATI109AR Rivet Squeezer - Cupped. 3/16” Shank Diameter, 1/2” Body Diameter, 1/8” Body Length for installing 1/8” AN470 Cupped Rivets.
Hi-Shear® Removal

ATI493C-0 Collar Cutter (Hi-Shear®)
5/32" - Hollow Core - Threaded Shank.
3/8" cutter diameter, 5/32" inside diameter,
1/4-28 threaded shank.

ATI493C-2 Collar Cutter (Hi-Shear®)
1/4" - Hollow Core - Threaded Shank.
1/2" cutter diameter, 1/4" inside diameter,
1/4-28 threaded shank.

ATI493C-1 Collar Cutter (Hi-Shear®)
3/16" - Hollow Core - Threaded Shank.
7/16" cutter diameter, 3/16" inside diameter,
1/4-28 threaded shank.

ATI493C-3 Collar Cutter (Hi-Shear®)
5/32" - Hollow Core - Threaded Shank.
9/16" cutter diameter, 5/16" inside diameter,
1/4-28 threaded shank.

Huck® Removal

ATI12165-2 Chisel - Huck Lockbolt®
.401 Shank Diameter,.62 Head Diameter, 5/32" Rivet Size, 5-1/2" Over All Length. NSN #5130-01-368-4501

ATI12165-4 Chisel - Huck Lockbolt®
.401 Shank Diameter,.81 Head Diameter, 1/4" Rivet Size, 5-1/2" Over All Length. NSN #5130-01-368-4503

ATI11206-6 Flat Chisel,
.401 Shank Diameter, 3/4" blade width, 6-3/4" overall length. NSN #5130-01-368-4500

ATI12165-3 Chisel - Huck Lockbolt®
.401 Shank Diameter,.75 Head Diameter, 3/16" Rivet Size, 5-1/2" Over All Length. NSN #5130-01-368-4502

ATI12165-5 Chisel - Huck Lockbolt®
.401 Shank Diameter,.81 Head Diameter, 5/16" Rivet Size, 5-1/2" Over All Length.

Hi-Shear® Installation Tools

ATI134GA Gooseneck Adaptor - Jiffy® Extension.
Works with interchangeable inserts for Hi-Shear® collars, also accommodates Jiffy® sets, ATI1757 (cupped) and ATI1758 (flush) rivet sets, and standard .401 shank diameter rivet sets. NSN #5130-01-368-4499

ATI493C-00 Collar Cutter (Hi-Shear®)
5/32" - Hollow Core - Threaded Shank.
3/8" cutter diameter, 5/32" inside diameter,
1/4-28 threaded shank.

ATI493C-2 Collar Cutter (Hi-Shear®)
1/4" - Hollow Core - Threaded Shank.
1/2" cutter diameter, 1/4" inside diameter,
1/4-28 threaded shank.

ATI493C-1 Collar Cutter (Hi-Shear®)
3/16" - Hollow Core - Threaded Shank.
7/16" cutter diameter, 3/16" inside diameter,
1/4-28 threaded shank.

ATI493C-3 Collar Cutter (Hi-Shear®)
5/32" - Hollow Core - Threaded Shank.
9/16" cutter diameter, 5/16" inside diameter,
1/4-28 threaded shank.

ATI12165-6 Chisel - Huck Lockbolt®
.401 Shank Diameter,.81 Head Diameter, 3/8" Rivet Size, 5-1/2" Over All Length. NSN #5130-01-528-8164

Knock-Out Punches

ATI140A-3 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 3/32" Rivet Size, 3-1/2" Overall Length.

ATI140A-4 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 1/8" Rivet Size, 3-1/2" Overall Length.

ATI140A-5 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 5/32" Rivet Size, 3-1/2" Overall Length.

ATI140A-6 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 3/16" Rivet Size, 3-1/2" Overall Length.

ATI140A-8 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 5/16" Rivet Size, 3-1/2" Overall Length.

ATI140A-10 Knock Out Punch, Hi-Shear®
.401 Shank Diameter, 1/4" Rivet Size, 3-1/2" Overall Length.

ATI141A33/32 Knock Out Punch
.401 Shank Diameter, 3/32" Rivet Size, 3-1/2" Overall Length.

ATI141A31/8 Knock Out Punch
.401 Shank Diameter, 1/8" Rivet Size, 3-1/2" Overall Length.

ATI141A35/32 Knock Out Punch
.401 Shank Diameter, 5/32" Rivet Size, 3-1/2" Overall Length.

ATI141A33/16 Knock Out Punch
.401 Shank Diameter, 3/16" Rivet Size, 3-1/2" Overall Length.

ATI141A31/4 Knock Out Punch
.401 Shank Diameter, 1/4" Rivet Size, 3-1/2" Overall Length.

ATI141A35/16 Knock - Out Punch
.401 Shank Diameter, 5/16" Rivet Size, 3-1/2" Overall Length.

ATI141A33/8 Knock Out Punch
.401 Shank Diameter, 3/8" Rivet Size, 3-1/2" Overall Length.
Bucking Bars – Kits

ATI590BBK 4 - Piece Bucking Bar Set.
Set includes ATI638, ATI647, ATI670 and ATI681.
Please refer to bucking bar specifications.

Bucking Bars
CNC Machined 32 RMS Finish.

ATI1001UK Trauma Reducing Bucking Bar Kit.
Seriously reduces vibration. Adjustable tension.
Five bucking bars and one ergonomic handle assembly.

WARNING
• Airframe tooling can cause flying chips.
• Wear safety goggles (user and bystanders).

READ SAFETY PRECAUTIONS ON PAGES 461 to 464
All Sharp Corners & Edges Are Radiused 1/32" - 1/16".
### Riveting Tools and Accessories

**Snap-on® Airframe**

#### Warning
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

**Smooth Edges Prevent Skin Damage.**

- **ATI694 Bucking Bar.**
  - 2 lbs (.91 kg)
  - NSN #5120-01-368-4308

- **ATI702 Bucking Bar.**
  - 2 lbs (.91 kg)
  - NSN #5120-01-368-4314

- **ATI719 Bucking Bar.**
  - 2 lbs (.91 kg)
  - NSN #5120-01-368-4320

- **ATI720 Bucking Bar.**
  - .75 lb (.34 kg)
  - NSN #5120-01-368-4321

- **ATI721 Bucking Bar.**
  - 1.75 lbs (.79 kg)
  - NSN #5120-01-368-4247

- **ATI722 Bucking Bar.**
  - 1 lb (.45 kg)
  - NSN #5120-01-368-4248

- **ATI723 Bucking Bar.**
  - 1.25 lbs (.57 kg)
  - NSN #5120-01-368-4249

- **ATI727 Bucking Bar.**
  - 1 lb (.45 kg)
  - NSN #5120-01-368-4252

- **ATI730 Bucking Bar.**
  - 1.25 lbs (.57 kg)
  - NSN #5120-01-368-4255

- **ATI732 Bucking Bar.**
  - .75 lb (.34 kg)
  - NSN #5120-01-368-4257

- **ATI736 Bucking Bar.**
  - 2.25 lbs (1.02 kgs)
  - NSN #5120-01-368-4259

- **ATI737 Bucking Bar.**
  - 1 lb (.45 kg)
  - NSN #5120-01-368-4260

- **ATI750D-23 Bucking Bar.**
  - 1.75 lbs (.79 kg)
  - NSN #5120-01-368-4261

- **ATI750N-1 Bucking Bar.**
  - 2.5 lbs (1.13 kgs)
  - NSN #5120-01-368-4328

- **ATI750S-1 Bucking Bar.**
  - 2.75 lbs (1.25 kgs)
  - NSN #5120-01-368-4330

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**Read Safety Precautions on Pages 461 to 464**

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Screw Removal

ATI540 Screw Removal Tool - 9" Length - 3/8" Square Drive.
.401" shank diameter, 9" overall length, use with optional ATI540SE-5 1/4" hex-bit adaptor.
NSN #5130-01-368-4504

ATI540S Screw Removal Tool - 4 1/2" Length - 3/8" Square Drive.
.401" shank diameter, 4 1/2" overall length, use with optional ATI540SE-5 1/4" hex-bit adaptor.
NSN #5120-01-418-9395

ATI540BL-7 Screw Removal Tool - 7 1/2" Length.
.401" shank diameter, 7 1/2" overall length, 1/4" hex-bit receptacle is machined into the tool.
Eliminates requirement for the hex-bit adaptor

ATI540BS-5 Screw Removal Tool - 5 1/2" Length.
.401" shank diameter, 5 1/2" overall length, 1/4" hex-bit receptacle is machined into the tool.
Eliminates requirement for the hex-bit adaptor

ATI540SE-5 1/4" Hex - Bit Adaptor - 3/8" Square Drive.
Use in conjunction with ATI540 and ATI540S screw removal tools.
**Warning**

- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

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**Rivet Shaver and Kit**

**ATI590L Rivet Shaver Kit.**

Known as the micro miller kit. Includes a .75 hp, 20,000 rpm rivet shaver, cutters and skirts for 5/16", 3/8", 7/16", 1/2", 9/16", 5/8" and 3/4".

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**ATI429SXC Micro Miller - Rivet Shaver Gun.**

3/4" cutter capacity, .0005" incremental depth adjustment, 1/4"-29 internal threaded spindle, utilises Sioux® motor, .75 HP at 20,000 rpm, comfort grip, 2-1/2 lbs.

NSN #5130-01-370-6734

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**Cutters – Micro Miller**

**ATI429B2 Cutter Detail - Micro Miller.**

3/8" diameter carbide cutter used with ATI429A-2 skrit. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B2-5 Cutter Detail - Micro Miller.**

9/16" diameter carbide cutter used with ATI429B-5 cutter. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429B-7 Cutter Detail - Micro Miller.**

3/4" diameter carbide cutter used with ATI429A-7 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

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**Skirts**

**ATI429A-1 Skirt Detail - Micro Miller.**

5/16" cutter capacity used with ATI429B-1 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429A-2 Skirt Detail - Micro Miller.**

3/8" cutter capacity used with ATI429B2 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429A-3 Skirt Detail - Micro Miller.**

7/16" cutter capacity used with ATI429B-3 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429A-4 Skirt Detail - Micro Miller.**

1/2" cutter capacity used with ATI429B-4 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429A-5 Skirt Detail - Micro Miller.**

9/16" cutter capacity used with ATI429B-5 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

**ATI429B-7 Skirt Detail - Micro Miller.**

3/4" cutter capacity used with ATI429B-7 cutter. Skirt and cutter are used with ATI429SXC Micro Miller rivet shaver. Exclusive only to ATI products.

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**ATI429B-1 Cutter Detail - Micro Miller.**

5/16" diameter carbide cutter used with ATI429A-1 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-2 Cutter Detail - Micro Miller.**

3/8" diameter carbide cutter used with ATI429A-2 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-3 Cutter Detail - Micro Miller.**

7/16" diameter carbide cutter used with ATI429A-3 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-4 Cutter Detail - Micro Miller.**

1/2" diameter carbide cutter used with ATI429A-4 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-5 Cutter Detail - Micro Miller.**

9/16" diameter carbide cutter used with ATI429A-5 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-6 Cutter Detail - Micro Miller.**

5/8" diameter carbide cutter used with ATI429A-6 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.

**ATI429B-7 Cutter Detail - Micro Miller.**

3/4" diameter carbide cutter used with ATI429A-7 skirt. Cutter and skirt are used with ATI429SXC Micro Miller rivet shaver or any 1/4-28" threaded Micro Miller.
Equipment

ATI520H Hydraulic Swager With Enerpac®
Unit accommodates cable sizes to 3/8" and operates on an air supply of 100-120 psi. Swaging is performed by applying a designated number of pressure increments while rotating the cable-terminal assembly. An adaptor is provided which allows the ATI520H to accept standard ATI520 family of swaging dies, used with both the ATI520J and ATI520D pneumatic swagers.

ATI520H Cable Swager - Portable Unit.
This light weight unit is designed to precision-sgage cable terminals. It can be used as a bench unit when mounted on the shock absorbing base, or taken directly to the scene of operation. The unit includes base plate, air hose and foot control. Dies must be ordered separately, see ATI520 family of dies. NSN #5130-01-212-9426

ATI520J Cable Swager - Portable Kit.
This kit includes ATI520J Swager, ATI520SG Swaging Gauge, Felco C7 hand cable cutters, ATISP1001 Turnbuckle Wrench, and 27 ATI520 family of dies. NSN #5130-00-712-4635

Swaging Dies

ATI520CD-2 Cutter Die - 1/16" Cable.
Female side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Eliminates ragged ends. Used with ATI520CP-2 male punch die.

ATI520CD-4 Cutter Die - 1/8" Cable.
Female side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Eliminates ragged ends. Used with ATI520CP-4 male punch die. NSN #5130-01-024-4011

ATI520CD-5 Cutter Die - 5/32" Cable.
Female side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Eliminates ragged ends. Used with ATI520CP-5 male punch die.

ATI520CP-2 Punch Die - 1/16" Cable.
Male side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Requires the use of spacer ATI520SP behind punch die.

ATI520CP-5 Punch Die - 5/32" Cable.
Male side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Requires the use of spacer ATI520SP behind punch die.

ATI520CP-6 Punch Die - 3/16" Cable.
Male side of the cutter die, packaged individually. Perfectly cuts and/or trims cable strands flush with ball end. Requires the use of spacer ATI520SP behind punch die.
Aircraft Cable Swaging

**SNAP-ON® AIRFRAME**

**Warning**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

### Aircraft Cable Swaging

**ATI520CB-2** Swaging Dies - 1/16" Cable Diameter.
- Swages 3/16" diameter round ball-end terminal to cable.
- Packaged as a matched pair.

**ATI520CB-3** Swaging Dies - 3/32" Cable Diameter.
- Swages 1/4" diameter round ball-end terminal to cable.
- Packaged as a matched pair. NSN #5130-01-005-8884

**ATI520CB-4** Swaging Dies - 1/8" Cable Diameter.
- Swages 5/16" diameter round ball-end terminal to cable.
- Packaged as a matched pair.

**ATI520CDB-2** Swaging Dies - 1/16" Cable Diameter.
- Swages MS20663-2 terminal to cable. Packaged as a matched pair.

**ATI520CDB-3** Swaging Dies - 3/32" Cable Diameter.
- Swages MS20663-3 terminal to cable. Packaged as a matched pair.

**ATI520CDB-4** Swaging Dies - 1/8" Cable Diameter.
- Swages MS20663-4 terminal to cable. Packaged as a matched pair.

**ATI520CS-2** Swaging Dies - 1/16" Cable Diameter.
- Swages MS21259-2, MS20667-2, MS20668-2, MS21260-2 terminal to cable. Packaged as a matched pair.

**ATI520CS-3** Swaging Dies - 3/32" Cable Diameter.
- Swages MS21259-3, MS20667-3, MS20668-3, MS21260-3 and Boeing stop terminal BACT14A-2 to cable. Packaged as a matched pair. NSN #5130-00-506-9964

**ATI520CS-4** Swaging Dies - 1/8" Cable Diameter.
- Swages MS21259-4, MS20667-4, MS20668-4, MS21260-4 and Boeing stop terminal BACT14A-3 to cable. Packaged as a matched pair.

**ATI520CS-5** Swaging Dies - 5/32" Cable Diameter.
- Swages MS21259-5, MS20667-5, MS20668-5, MS21260-5 and Boeing stop terminal BACT14A-4 to cable. Packaged as a matched pair.

**ATI520CS-6** Swaging Dies - 3/16" Cable Diameter.
- Swages MS21259-6, MS20667-6, MS20668-6, MS21260-6 and Boeing stop terminal BACT14A-5 to cable. Packaged as a matched pair.

**ATI520CSB-2** Swaging Dies - 1/16" Cable Diameter.
- Swages MS20664-2 terminal to cable. Packaged as a matched pair. NSN #5120-01-292-4516

**ATI520CSB-3** Swaging Dies - 3/32" Cable Diameter.
- Swages MS20664-3 terminal to cable. Packaged as a matched pair. NSN #5120-01-362-3318

**ATI520CSB-4** Swaging Dies - 1/8" Cable Diameter.
- Swages MS20664-4 terminal to cable. Packaged as a matched pair. NSN #5130-01-393-1283

**ATI520CSB-6** Swaging Dies - 3/16" Cable Diameter.
- Swages MS20664-6 terminal to cable. Packaged as a matched pair.

**ATI520SG** Swaging Go - Limit Gauges.
- Multiple gauges designed to check all swaged terminals within the designed range of the ATI520D and ATI520J swagers.

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**WARNING**
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

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*Read safety precautions on pages 461 to 464*
Pull Testers

ATI520CT Pull Tester - Portable - Instrumentation Only. Self-contained hydraulic unit in which the tensile load applied to the cable and terminal assembly is produced by developing pressure in a hydraulic cylinder. The pressure in the cylinder is related to the pounds tension applied to the terminal and cable assembly, and is indicated by a direct-reading pressure gage calibrated in pounds tension. The face of the gage is graduated and indicated by cable size, and the respective 60% rated tensile strength. This terminal tester has the capacity to pull-test sizes and types of terminals which can be swaged by the ATI520J or ATI520D. During testing, the cable is held between two soft copper blocks which have been designed to avoid damage to the cable. The basic unit weighs 24 3/4 lbs., is 5 3/4" wide, 10 1/4" high and 23 1/8" length. Allows proof-loading of swaged terminals after the cable has been installed. Note: Must be used with optional ATI adaptors and jaws sold separately.

ATI520HTK Hydraulic Pull Tester Kit. The ATI520HTK provides pull-test capabilities for all swaged terminal assemblies listed in this section.

ATI520CTK Pull Tester Kit. Kit includes ATI520CT self-contained hydraulic unit and all necessary pull tester hardware, adaptors and jaws required. Note: See ATI520CT for unit specifications. NSN #6635-00-864-3511

Calibration Kit

ATI520CGC Pull Tester Calibration Kit. This exclusive kit includes adaptors required to certify ATI Pull Tester Equipment part number ATI520CT. Quality assurance tool recognized by the Boeing Company. This instrument will eliminate the necessity of costly outside calibration service. NSN #4920-00-949-9409

SEE WARRANTY INFORMATION ON PAGE 465
Pull Tester Replacement Jaws

- **ATIS20CTD3 Pull Tester Cable Jaws - 3/32”**: Jaws are made of dead soft copper and will not damage the braided steel cable. Use in conjunction with ATIS20CT Pull Tester. NSN #5120-01-465-3706
- **ATIS20CTD4 Pull Tester Cable Jaws - 1/8”**: Jaws are made of dead soft copper and will not damage the braided steel cable. Use in conjunction with ATIS20CT Pull Tester.
- **ATIS20CTD-7 Pull Tester Cable Jaws - 7/32”**: Jaws are made of dead soft copper and will not damage the braided steel cable. Use in conjunction with ATIS20CT Pull Tester.
- **ATIS20CTD-8 Pull Tester Cable Jaws - 1/4”**: Jaws are made of dead soft copper and will not damage the braided steel cable. Use in conjunction with ATIS20CT Pull Tester.

Turnbuckle Wrench

- **ATISP1001 Turnbuckle Tool - 12”**: The tool consists of two clamps joined by a 12-inch sprocket chain. When clamped to cable-end fittings on each side of the turnbuckle, the cable becomes stationary, allowing free turnbuckle adjustment. Cable rigging tools assist in adjusting turnbuckles on aircraft cable.

Mina Vac – Plastic Body

- **ATI560C Mina - Vac Power Unit Sub - Assembly - Plastic Housing**: Plastic sub-assembly capable of pulling up to six inches of mercury. Flex and/or rigid extension tubes not included. Choose appropriate part number from the ATI560C family of extension tubes.

Mina Vac – Aluminum

- **ATI560A Mina - Vac Power Unit Sub - Assembly - Aluminum Housing**: Aluminum sub-assembly capable of pulling over four inches of mercury. Flex and/or rigid extension tubes not included. Choose appropriate part number from the ATI560C family of extension tubes.

Note: Select Tubes on page 124.
Mina Vac – Cast Aluminum

ATI560M Mina - Vac Power Unit Sub - Assembly - Aluminum Housing. Powerful one-piece aluminum sub-assembly with larger venturi that pulls up to six inches of mercury. Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces. NSN #7910-01-551-1384

ATI560MF12 Mina - Vac Air Vacuum With 12" Clear Flex Hose. Powerful one-piece aluminum vacuum that pulls up to six inches of mercury with a 12" clear flex hose. Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces.

ATI560MF18 Mina - Vac Air Vacuum With 18" Clear Flex Hose. Powerful one-piece aluminum vacuum that pulls up to six inches of mercury with an 18" clear flex hose. Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces. NSN #5130-01-368-5861

ATI560MF24 Mina - Vac Air Vacuum With 24" Clear Flex Hose. Powerful one-piece aluminum vacuum that pulls up to six inches of mercury with a 24" clear flex hose. Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces.

ATI560MR-12 Mina - Vac Air Vacuum With 12" Rigid PVC Tube. Powerful one-piece aluminum vacuum that pulls up to six inches of mercury with a 12" rigid PVC tube. Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces.

Mina Vac – Replacement Parts

ATI560A-3 Mina - Vac - Replacement Bag. Replacement bag only, made from canton flannel. Does not include the ATI560A-4 clip.

ATI560A-4 Mina-Vac-Replacement Clip For Bag. Universal replacement clip only, does not include the Mina-Vac bag.

ATI560CF12 Mina - Vac - 12" Long Extension Flex Tube. Clear PVC hose assembly for ATI560C and/or ATI560A Mina-Vac power unit sub-assembly.

ATI560CF18 Mina - Vac - 18" Long Extension Flex Tube. Clear PVC hose assembly for ATI560C and/or ATI560A Mina-Vac power unit sub-assembly.

ATI560CF24 Mina - Vac - 24" Long Extension Flex Tube. Clear PVC hose assembly for ATI560C and/or ATI560A Mina-Vac power unit sub-assembly.

ATI560R10 Mina - Vac - 12" Long Extension Gray Rigid Tube. Rigid gray PVC hose assembly for ATI560C and/or ATI560A Mina-Vac power unit sub-assembly only. NSN #7910-01-227-4249

ATI560MRE12 Mina - Vac - 12" Long Extension Clear Rigid Tube. Rigid clear PVC hose assembly for ATI560M Mina-Vac power unit sub-assembly only.

ATI560MFE12 Mina - Vac - 12" Long Extension Clear Flexible Tube. Flexible clear PVC hose assembly for ATI560M Mina-Vac power unit sub-assembly only.

ATI560MFE18 Mina - Vac - 18" Long Extension Clear Flexible Tube. Flexible clear PVC hose assembly for ATI560M Mina-Vac power unit sub-assembly only.

ATI560MFE24 Mina - Vac - 24" Long Extension Clear Flexible Tube. Flexible clear PVC hose assembly for ATI560M Mina-Vac power unit sub-assembly only.
Shop Tools and Accessories

Cannon Plug Pliers

ATI508K Cannon Plug Plier.
Slip-joint handles and serrated replaceable plastic jaws, make installation and removal of electric connectors easier and safer. NSN #5120-01-370-6693

ATI508KG Cannon Plug Plier With Grips.
Slip-joint handles with grips and serrated replaceable plastic jaws, make installation and removal of electric connectors easier and safer.

Cannon Plug Pliers Replacement Parts

ATI508K-4 Cannon Plug Plier Pad Set.
Replaceable pads for ATI508K and ATI508KG. NSN #5120-00-157-3660

Speed Drivers – Deburring Tool & Cutters

ATI521A Deburring - Speed Driver.
The swivel handle allows for rapid deburring of drilled holes, uses the optional ATI521C deburring cutter.

ATI521B Threaded Spindle Deburring - Speed Driver.
The swivel handle allows for rapid deburring of drilled holes, has 1/4"-28 threaded spindle. Use the AT407 deburring cutter and AT420, AT445 and AT455 family of cutters.

ATI407-4 Countersink - Hand Deburring.
100° cutting angle for hand deburring and countersinking. Use with AT421B Speed Driver or any 1/4-28” threaded drill attachment. NSN #5133-01-428-5671

ATI521C Deburring Cutter.
Used in ATI521A speed driver. 100-degree cutting angle, 3/8” body diameter, tip length 3/4”, shank length 7/8”, shank diameter 7/32”.

Valve Core Removal Tool

ATISK3614 Tire Valve Core Deflating Tool.
For rapid and safe tire deflation, this machined aluminum tool threads onto the valve stem, releases and traps the valve core within the tool and exhausts the tire air through ports, away from the technician, onto the wheel.

Ground Hole Burnishing Kit

ATSK3767-10 Ground - Wire Hole Burnishing Kit #10.
Specifically designed to clean the surfaces surrounding holes for ground-wire attachment. Kit includes four burnishing pads, four extensions, one positive screw-in type burnishing head and one negative and positive collet-type burnishing head.

ATSK3767-20 Ground - Wire Hole Burnishing Kit #20.
ATSK3767-30 Ground - Wire Hole Burnishing Kit #30.
ATSK3767-40 Ground - Wire Hole Burnishing Kit #40.

WARNING
- Airframe tooling can cause flying chips.
- Wear safety goggles (user and bystanders).

READ SAFETY PRECAUTIONS ON PAGES 461 to 464
Mastic Removal Tools and Kits

NYROC™ is a proprietary engineered plastic specifically formulated for removing difficult to remove materials on delicate, fragile and scratch prone surfaces. NYROC™ blades were designed originally for removing stubborn mastics in aircraft fuel tanks and fuselages; an application where any damage to the underlying aluminum can be cause to permanently ground an aircraft. NYROC™ blades have a large variety of applications from automotive to industrial.

Applications
Automotive/Engine Repair, Body Shop, Aviation, Industrial and Marine.
Visit www.snapon.com for complete application information.

NYROC™ Blades

<table>
<thead>
<tr>
<th>Blade Size</th>
<th>Description</th>
<th>Pack of 10</th>
<th>Pack of 200</th>
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<tbody>
<tr>
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<td>General Use</td>
<td>NYZ701810</td>
<td>NYZ7018200</td>
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<tr>
<td>1/4&quot; wide</td>
<td>General Use</td>
<td>NYZ700510</td>
<td>NYZ7005200</td>
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<tr>
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<td>NYZ7014200</td>
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<td>General Use</td>
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<td>NYZ7011200</td>
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<tr>
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<td>General Use</td>
<td>NYZ701510</td>
<td>NYZ7015200</td>
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<tr>
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<td>Highlock for 1/8&quot; high locks</td>
<td>NYZ701310</td>
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<td>Highlock for 3/8&quot; high locks</td>
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<td>NYZ7012200</td>
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Blades available in 10 pack and 200 pack quantities only.

Accessories


NYZ7000S Pneumatic Blade Sharpener. Pneumatic powered sharpener quickly sharpens all NYROC™ blades up to 1" in width. Consistently sharpens blades to the optimal 51° angle. Operates with single push button. Connects directly to shop air. Removed material is collected in disposable anti-static vacuum bag attached directly to the discharge chute.

NYZ7026EH NYROC™ Blade Holder. The vulcanized rubber padded blade holder works exclusively with NYROC™ blades. Fits comfortably in the users hand, reduces operator fatigue and helps to prevent injury.

Complete Kits

NYZ7000MDKIT Master Mastic Removal Kit
Save up to 80% of the time and labor involved to remove PRC and other mastics from every area of an aircraft without damage to the substrate. Speed controllable vibration gun permits infinitely variable job performance. The included pneumatic blade sharpener rapidly puts an edge on all NYROC blades up to 1" width right at the job site. Completely portable system is fully grounded and anti-static. Kit includes medium duty Vibro gun, pneumatic blade sharpener, (1) anti-static vacuum bag, (1) sharpening disc, (1) manual handle, (2) NYROC™ blades, (2) 1/2" NYROC™ blades, (2) 1/4" NYROC™ blades, blade locks and connecting hoses in padded storage case.

NYZ7001MD Basic Mastic Removal Kit
Same as NYZ7000MDKIT but does not include medium duty Vibro gun.

NYZ7007HD Manual Mastic Removal Kit
The hand kit is ideal for aviation, automotive and industrial use especially for delicate jobs and limited access scraping applications. The NYROC™ blades are easily sharpened with sandpaper, small stone or optional pneumatic sharpener. Kit includes (6) 1" NYROC™ blades, (6) 1/2" NYROC™ blades, (3) 1/4" NYROC™ blades and (1) ergonomic rubber handle.

NYZ7025H50 Air Hose (Anti-Static)
NONSTAT anti-static 1/4" hose is fully grounded to prevent static discharge. Hose is ideal for environments and projects where static control is essential. 50' long.

NYZ7024H100 Air Hose (Anti-Static)
Same as NYZ7025H50 except is 100' long.

NYZ7006MG Vibro Gun Kit
Kit includes medium duty Vibro gun, (1) 1" NYROC™ blade, (1) 1/2" NYROC™ blade, (1) 1/4" NYROC™ blade and (1) 1/8" NYROC™ blade plus blade locks in black kit bag. Medium duty Vibro gun adds pneumatic power to all scraping jobs using standard NYROC™ blades.

Guns and Hoses

NYZ7025H50 Air Hose (Anti-Static)

NYZ7006MG Vibro Gun Kit
Aircraft Vacuum/Fuel Pump Wrenches

AVPW716 Aircraft Vacuum Pump Wrench. Removes and replaces vacuum pump flange nuts on aviation and experimental aircraft. Use with any 1/4" drive extension. Easily fits into tight areas between the pump and nearby accessories. The cut-down head design adds greater flexibility than a wrench with a bent shank.

Applications Include:
- Cessna: Skylark, Stationair
- Piper: Cub, Warrior, Archer, Seminole, Navaho, Chief
- Mooney: M20 series, M200 series, Ovation, Acclaim
- Beechcraft: Bonanza, Duchess, Baron
- Cirrus: SR20 and SR22

AFPW38 Aircraft Fuel Pump Wrench. The AFPW38 is a small crowfoot which will remove and install the fuel primer/injector line on Continental and Lycoming engines. Can be used with a 1/4" drive extension and will easily fit into tight areas.

Aircraft Oil Filter Wrench

AOFW2 Aviation Oil Filter Wrench. Oil filter wrench can be used for installing and removing oil filters on all standard general aviation aircraft with 1” hex oil filters. Compact size allows for reach in restricted areas. 3/8" drive torque wrench. Please refer to Snap-on® S5306G Torque Chart for formula to obtain the correct applied torque.

Wire Twisters

Cushion throat wire twisters feature a polyurethane filler that is bonded into the tool’s cutter head to help prevent flying wire bits. A special undercut design helps maintain cutting edges and increases tool durability. Ideal for assembly line applications.

Safety Wire

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Wire Capacity, inches</th>
<th>Overall Length, inches</th>
<th>Wire Retainer</th>
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<tr>
<td>WT105-2004</td>
<td>.020</td>
<td>10 1/2</td>
<td>No</td>
</tr>
<tr>
<td>WT105-3204</td>
<td>.032</td>
<td>1 1/4</td>
<td>No</td>
</tr>
<tr>
<td>WT105-4204</td>
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<td>8 1/4</td>
<td>No</td>
</tr>
<tr>
<td>WT105-2016</td>
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<td>8 3/4</td>
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<td>.025</td>
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<tr>
<td>WT105-3216</td>
<td>.032</td>
<td>1 1/4</td>
<td>No</td>
</tr>
<tr>
<td>WT105-4116</td>
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<td>1 1/4</td>
<td>No</td>
</tr>
<tr>
<td>WT105-5116</td>
<td>.051</td>
<td>1 1/4</td>
<td>No</td>
</tr>
</tbody>
</table>

Wire Twister/Cutters

- GA311C: Wide range of applications.
- PR311: Similar to GA311C, but not spring loaded. Right hand only with manual return.
- WT11B: Small size for use in tight quarters.
- WTR1A: Reversible wire twisters let you perform right and left hand twist with the same tool. Spring return and control knob.
- WTR6W6A: Reversible Wire Twister. Perform right and left hand twist with the same tool. Spring return and control knob. TigerWave® Jaw captures and holds wire firmly.

Safety Wiring

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Wire Size, inches</th>
<th>Container</th>
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</thead>
<tbody>
<tr>
<td>WT105-2004</td>
<td>.020</td>
<td>1/4 lb. Spool</td>
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<tr>
<td>WT105-3204</td>
<td>.032</td>
<td>1/4 lb. Spool</td>
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<tr>
<td>WT105-4204</td>
<td>.041</td>
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</tr>
<tr>
<td>WT105-2016</td>
<td>.030</td>
<td>1 lb. Canister</td>
</tr>
<tr>
<td>WT105-2516</td>
<td>.025</td>
<td>1 lb. Canister</td>
</tr>
<tr>
<td>WT105-3216</td>
<td>.032</td>
<td>1 lb. Canister</td>
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