COMPARE THE DIFFERENCE

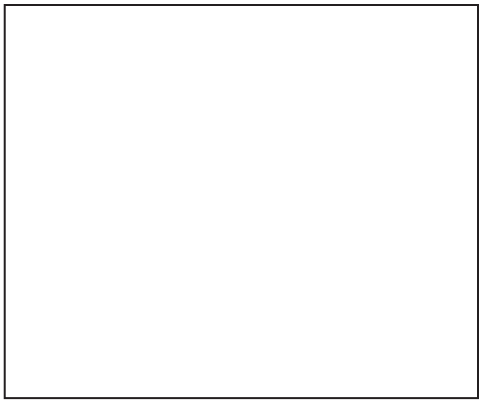
Ground on-centers to ensure concentricity and eliminate run out

Two cutting flutes for maximum chip relief; three flutes to eliminate chatter

120-degree seating angle for standard fit

Manufactured of M2 high-speed steel

1/4"-28 Threaded male shank



Recognized throughout the industry as the leading producer of quality cutting tools, ATI Tools continues an intensive research program to improve products through advanced design and manufacturing techniques.

The tools contained in this section are made of the finest materials. The cutters are carefully heat-treated, precision ground for correct cutting angles and proper clearance, then thoroughly checked to ensure accurate cutting without chatter. All tools are dipped in a protective plastic coating for shipment and storage.

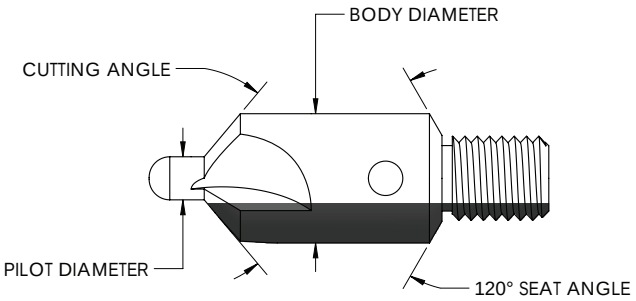
A variety of microstop countersink units and accessories have been designed to present a versatile selection of tools for all working surfaces and areas. Opportunities to analyze and assist with individual cutting problems are welcomed by ATI's engineering staff.

COUNTERSINK CUTTERS, INTEGRAL PILOT

- Manufactured of M2 high-speed steel or carbide-tipped
- High speed steel countersinks ground on-centers to insure concentricity
- 120-degree seating angle for standard fit
- Use with ATI444 or ATI443 Series microstops

HSS COUNTERSINKS, INTEGRAL PILOT, 100 DEGREE, 1/4"-28 THREADS

Pilot Diameter	Decimal Equivalent	Number of Flutes	Body Diameter			
			3/8"	7/16"	1/2"	5/8"
3/32"	.0938	2		ATI445D4-532	ATI445E43/32	
		3	ATI420C4332	ATI420D43/32	ATI420E43/32	
#41	.0960	2				ATI445G441N
		3	ATI420C4.096			
#40	.0980	2	ATI445C-4-40		ATI445E440	
		3	ATI420C440	ATI420D440	ATI420E440	
1/8"	.1250	2	ATI445C41/8		ATI445E41/8	
		3	ATI420C418	ATI420D41/8	ATI420E418	
#30	.1285	2	ATI445C430		ATI445E430	ATI445G430
		3	ATI420C430	ATI420D430	ATI420E430	
9/64"	.1406	2			ATI445E4964	
		3	ATI420C4964	ATI420D49/64		
#27	.1440	2	ATI445C427		ATI445E427	
		3		ATI420D427		ATI420G427
5/32"	.1563	2			ATI445E43/32	
		3	ATI420C45/32	ATI420D45/32	ATI420E45/32	
#21	.1590	2	ATI445C-4-21		ATI445E421	
		3	ATI420C421	ATI420D421	ATI420E421	
#20	.1610	2			ATI445E420	
		3	ATI420C420	ATI420D420	ATI420E420	
11/64	.1719	2	ATI445C41164			
		3	ATI420C41164	ATI420D41164		
#16	.1770	2			ATI445E416	
		3		ATI420D416	ATI420E4177	ATI420G416
#13	.1850	2			ATI445E413	
		3	ATI420C413	ATI420D413	ATI420E413	ATI420G413
3/16"	.1875	2	ATI445C4-316		ATI445E43/16	
		3	ATI420C4316	ATI420D43/16	ATI420E43/16	ATI420G43/16
#11	.1910	2			ATI445E4-11	
		3		ATI420D411	ATI420E411	
#10	.1935	2	ATI445C-4-10		ATI445E410	
		3	ATI420C410	ATI420D410	ATI420E410	
#8	.1990	2			ATI445E48	
		3			ATI420E48	ATI420G4N8
7/32"	.2188	2			ATI445E47/32	
		3		ATI420D47/32	ATI420E47/32	
#2	.2210	2	ATI445C42N			
		3				
1/4"	.2500	2			ATI445E4-1/4	ATI445G41/4
		3	ATI420C41/4	ATI420D41/4	ATI420E41/4	ATI420G4-1/4
5/16"	.3125	2			ATI445E45/16	ATI445G45/16
		3	ATI420C45/16	ATI420D45/16		ATI420G45/16
11/32"	.3438	2			ATI445E41132	
		3				
3/8"	.3750	2			ATI445E43/8	ATI445G43/8
		3				ATI420G43/8
1/2"	.5000	2				ATI445G41/2
		3				



HSS COUNTERSINKS, INTEGRAL PILOT, 100 DEGREE, 1/4"-28 THREADS

Pilot Diameter	Decimal Equivalent	Number of Flutes	BODY DIAMETER		
			1/4"	1/4" (10-32 THD)	5/16"
3/32"	.0938	2		ATI445A4332S	
		3	ATI420A4332		ATI420B43/32
#40	.0980	2	ATI445A4-40N	ATI445A440S2	
		3	ATI420A440		
#30	.1285	2	ATI445A-4-30	ATI445A430S2	
		3			
9/64"	.1406	2			
		3			ATI420B49/64
5/32"	.1563	2			
		3			ATI420B45/32
	.1620	2			ATI445B41620
		3			
3/16"	.1875	2			
		3			ATI420B43/16

Special countersink cutters may be ordered by providing the material, body diameter, pilot diameter, number of flutes, and cutting angle.

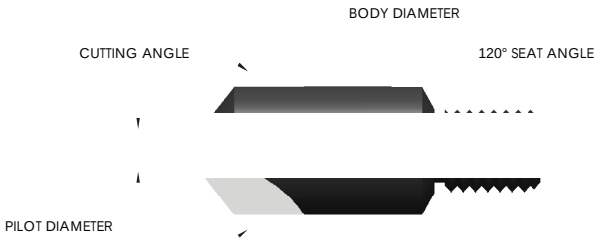
⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

precise, accurate countersinking

- Includes an assortment of popular skirt and nose piece configurations
- Includes nine 1/2" diameter, 100° cutters with pilots of #40, #30, #21, #10, 3/32", 1/8", 5/32", 3/16", and 1/4"

TA420D-4PC	4-PC Set Includes: A
TA420D-5PC	5-PC Set Includes: A
TA420D-9PC	9-PC Set Includes: A TA420D421, TA420D410
TA445E-4PC	4-PC Set Includes: A
TA445E-5PC	5-PC Set Includes: A
TA445E-9PC	9-PC Set Includes: A TA445E421, TA445E410



Pilot Diameter	Decimal Equivalent	Body Diameter	Part Number
13/64"	.2031	1/2"	ATI445CE1364
#3	.2130	1/2"	ATI445CE43N
	.2150	1/2"	ATI445CE4215
7/32"	.2188	1/2"	ATI445CE4732
#2	.2210	1/2"	ATI445CE42N
	.2430	1/2"	ATI445CE4243
D	.2460	1/2"	ATI445CE4246
	.2470	1/2"	ATI445CE4247
	.2475	1/2"	ATI445CTESP1
	.2480	1/2"	ATI445CE4248
1/4"	.2500	1/2"	ATI445CTE414
		5/8"	ATI445CG414
	.2620	1/2"	ATI445CE4262
	.2780	1/2"	ATI445CE4278
9/32"	.2813	1/2"	ATI445CE4932
	.3090	1/2"	ATI445CE4309
	.3100	1/2"	ATI445CE4310
5/16"	.3125	1/2"	ATI445CE4516
		5/8"	ATI445CG4516
	.3240	1/2"	ATI445CE4324
	.3250	1/2"	ATI445CE4325
	.3400	1/2"	ATI445CE4340
	.3420	1/2"	ATI445CE4342
	.3710	1/2"	ATI445CE4371
3/8"	.3750	1/2"	ATI445CE438

WARNING

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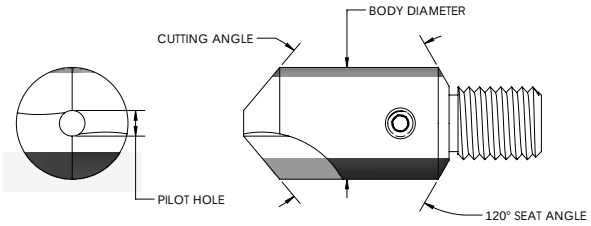
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

ATI455 SERIES, HIGH SPEED STEEL, 100°, 1/4"-28 THREADED SHANK

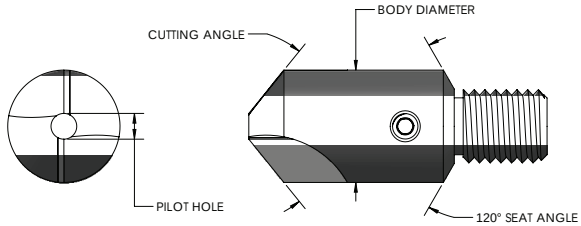


Refer to ATI484 Series and ATI435 series replaceable pilots.

Part Number	Body Diameter	Pilot Hole Diameter	Number of Flutes
ATI455A-4	1/4"	.086	2
ATI455B-4	5/16"	.086	2
ATI455C-4	3/8"	.086	2
ATI455D-4	7/16"	.086	2
ATI455E-4	1/2"	.086	2
ATI455F-4	9/16"	.086	2
ATI455G-4	5/8"	.086	2
ATI455H-4*	3/4"	.170	3
ATI455J-4*	7/8"	.170	3

*3/8"-24 threaded shanks
Special countersink cutters may be ordered by providing the material, body diameter, pilot hole diameter, and cutting angle.

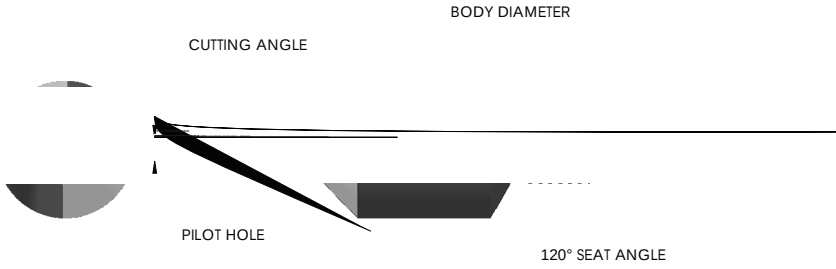
ATI455CT SERIES, CARBIDE-TIPPED, 100°, 1/4"-28 THREADED SHANK



Refer to ATI485 Series replaceable pilots.

Part Number	Body Diameter	Pilot Hole Diameter	Number of Flutes
ATI455CTC-4	3/8"	.125	2
ATI455CTE-4	1/2"	.125	2
ATI455CTG-4	5/8"	.125	2

ATI455SK SERIES, 1/4"-28 THREADED SHANK



ATM6 SERIES

ATM8 SERIESsizesS, sizesS, AT104317P2ESA8144600Q3ES

PILOTS

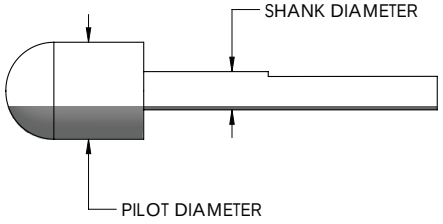
ATI484 SERIES

Used with ATI455, ATM6IP, ATM8IP Series cutters

Part Number	Pilot Diameter	Shank Diameter	Part Number	Pilot Diameter	Shank Diameter
ATI484-2	#40	.086	ATI484-2.38M	2.38MM	.086
ATI484-12	#30	.086	ATI484-2.50M	2.50MM	.086
ATI484-21	#21	.086	ATI484-3.17M	3.17MM	.086
ATI484-31	#11	.086	ATI484-3.50M	3.50MM	.086
ATI484-32	#10	.086	ATI484-3.96M	3.96MM	.086
ATI484-56	3/32	.086	ATI484-4.00M	4.00MM	.086
ATI484-57	1/8	.086	ATI484-4.76M	4.76MM	.086
ATI484-59	5/32	.086	ATI484-4.80M	4.80MM	.086
ATI484-61	3/16	.086	ATI484-5.00M	5.00MM	.086
ATI484-63	7/32	.086	ATI484-5.60M	5.60MM	.086
ATI484-65	1/4	.086	ATI484-6.00M	6.00MM	.086

Special size pilot diameters are available upon special request.

These replaceable pilots have a flat on the shank to accommodate cutters with a set screw, and an undercut to permit head-to-seat on cutter angle.



ATI485 SERIES

Used with ATI455CT, ATI455PD Series cutters

Part Number	Pilot Diameter	Shank Diameter
ATI485-12	#30	.125
ATI485-21	#21	.125
ATI485-31	#11	.125
ATI485-32	#10	.125
ATI485-57	1/8	.125
ATI485-59	5/32	.125
ATI485-61	3/16	.125
ATI485-63	7/32	.125
ATI485-65	1/4	.125

Special size pilot diameters are available upon special request.

ATI435 SERIES

Used with ATI455 Series cutters

Part Number	Pilot Diameter	Shank Diameter
ATI435-3/16	3/16	.170
ATI435-1/4	1/4	.170
ATI435-5/16	5/16	.170
ATI435-3/8	3/8	.170
ATI435-1/2	1/2	.170

Special size pilot diameters are available upon special request.

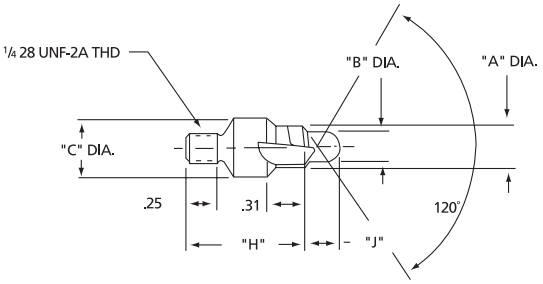
BRILES® COUNTERSINK CUTTERS

ATI438BRC SERIES, 1/4"-28 THREADED SHANK

These high speed steel countersinks feature a unique design that cuts a counterbore and countersink in the same hole. Use these special countersinks to prepare holes for MS14218, Briles® Rivet BRFZ, and Boeing BACR15FV.

Part Number	"A"	"B"	"C"	"H"	"J"
ATI438BRC3	.1235	.096	.375	.949	.180
ATI438BRC-4	.1625	.126	.375	.952	.200
ATI438BRC-5	.2105	.159	.375	.955	.220
ATI438BRC-6	.2585	.191	.375	.958	.250
ATI438BRC-7	.3125	.226	.375	.962	.280
ATI438BRC-8	.3585	.255	.500	.966	.280
ATI438BRC9	.4055	.288	.500	.969	.300
ATI438BRC10	.4545	.314	.500	.972	.300

Used with ATI444 SERIES microstops.



ATI438BRC-8

COUNTERSINK CUTTER EXTENSIONS, 1/4"-28 RECESS

Part Number	Shank Diameter	Body Diameter	Body Length
ATI470B-.75	1/4" Straight	1/2"	0.75"
ATI470B-1.0	1/4" Straight	1/2"	1.0"
ATI470B-1.5	1/4" Straight	1/2"	1.5"
ATI470B-3.0	1/4" Straight	1/2"	3.0"
ATI470B1	1/4" Straight	1/2"	4.0"
ATI470B1F	1/4" Straight with Flats	1/2"	4.0"
ATI470B-2	1/4" Straight	1/2"	6.0"
ATI470B-2F	1/4" Straight with Flats	1/2"	6.0"
ATI470B-8.0	1/4" Straight	1/2"	8.0"
ATI470C-1	1/4"-28 Thread	3/8"	1.0"
ATI470C-2	1/4"-28 Thread	3/8"	2.0"
ATI470C-3	1/4"-28 Thread	3/8"	3.0"
ATI470C-4	1/4"-28 Thread	3/8"	4.0"
ATI470C-5	1/4"-28 Thread	3/8"	5.0"
ATI470C-6	1/4"-28 Thread	3/8"	6.0"
ATI470C-12	1/4"-28 Thread	3/8"	12.0"

ATI470B1

⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

FOR COUNTERSINK CUTTERS THREADED 1/4"-28, M6 X 1, AND M8 X 1

(Refer to ATI420, ATI438, ATI445, ATI455, ATI463, ATM6, ATM8 countersink cutters)

Microstop - Ball Bearing

ATI444 MICROSTOPS

Cutaway View

- For high volume, accurate countersinking in a production environment
- Full ball bearing shaft support for increased life
- Heavy duty ball thrust bearing ensures depth repeatability
- Fail-safe design accomplished with integrated shoulder on shaft
- Debris filter prevents chips and dust from contaminating bearings
- .0005'' depth adjustment, 5/16'' shaft travel
- Right-hand threaded lock nut prevents jamming of adjustment mechanism
- Multiple skirt configuration options
- Multiple shaft configuration options

Microstop - Bushing

ATI443 MICROSTOPS

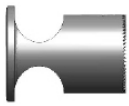
Cutaway View

- For lower volume countersinking in maintenance and home-build environments
- Bronze bushing shaft support
- Heavy duty ball thrust bearing ensures depth repeatability
- Fail-safe design accomplished with integrated shoulder on shaft
- .0005'' depth adjustment, 5/16'' shaft travel
- Right-hand threaded lock nut prevents jamming of adjustment mechanism.
- Multiple skirt configuration options
- Multiple shaft configuration options

SKIRTS:

S (ATI444-S)
Straight
3/4" Capacity

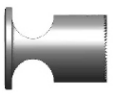
C (ATI444-C)
Close
5/16" Capacity



H (ATI444-A + ATI444-37NF)
Nylon Flange Insert
3/4" Capacity

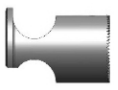
E (ATI444-E)
Straight Cutaway
3/4" Capacity

D (ATI444-D)
Bell
1" Capacity

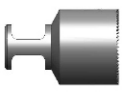


F (ATI444-F)
Flanged
3/4" Capacity

W (ATI444-W)
Flanged Bell
1" Capacity

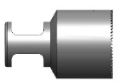


G (ATI444-G)
Flanged Cutaway
3/4" Capacity



J (ATI444-J)
.532 OD
.332 Capacity

B (ATI444-B)
2-Legged
3/4" Capacity



K (ATI444-K)
.600 OD
.400 Capacity

A (ATI444-A + ATI444-37P)
Phenolic Insert
3/4" Capacity

N (ATI444-A + ATI444-37N)
Nylon Insert
3/4" Capacity

EXTENDED SKIRTS:

2-3/4'' Extension
(Includes extension shaft)

LA (ATI444-LA)
10-32 Female Thread
1/4 ID X 3/8 OD

LB (ATI444-LB)
1/4-28 Female Thread
5/16 ID X 7/16 OD

LC (ATI444-LC)
1/4-28 Female Thread
3/8 ID X 1/2 OD

LD (ATI444-LD)
1/4-28 Female Thread
5/8 ID X 3/4 OD

SHAFTS:

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

1 (ATI444-1)
1/4-28 Female Thread
1/4 Round Shank

2 (ATI444-2)
1/4-28 Female Thread
3 Chuck Flats Shank

3 (ATI444-3)
1/4-28 Female Thread
Quick Change Shank

4 (ATI444-4)
M6 Female Thread
1/4 Round Shank

5 (ATI444-5)
M6 Female Thread
3 Chuck Flats Shank

6 (ATI444-19)
M8 Female Thread
3 Chuck Flats Shank

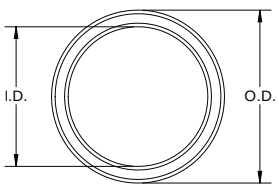
8 (ATI444-17)
3/8-24 Threads
3 Chuck Flats Shank

ORDERING: Choose either ATI444 or ATI443, Skirt Option, and Shaft Option.

Part Number		MODEL / SKIRT / SHAFT
Ex.	ATI444G2	ATI444 + G + 2
Ex.	ATI444LA4	ATI444 + LA + 4
Ex.	ATI443S1	ATI443 + S + 1
Ex.	ATI443A2	ATI443 + A + 2

INSERT CHART

Part Number	O.D.	I.D.	Material	
ATI444-37P	.960	.775	Phenolic	Used with ATI444A Series Microstop
ATI444-37N	.960	.775	Nylon	Used with ATI444A or ATI444N Series Microstop
ATI444-37NF	1.25	.775	Nylon	Used with ATI444A or ATI444H Series Microstop



⚠ WARNING

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WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

MICROSTOP FOR FEMALE-THREADED COUNTERSINK CUTTERS

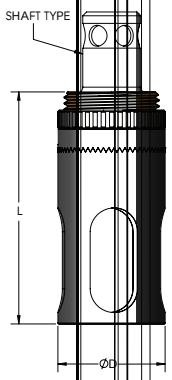
Refer to ATI418 series cutters and ATI416 series pilots

ATI442S1

MICROSTOP COUNTERSINK CAGES, SWIVEL SHAFT
ATI2351 SERIES

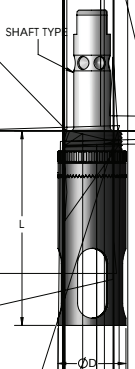
MICROSTOP COUNTERSINK CAGES, STUBBY

ATI448 SERIES



MICROSTOP COUNTERSINK CAGES, MIDGET

ATI449 SERIES



⚠ WARNING

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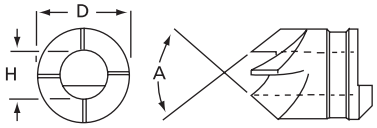
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

BACK COUNTERSINK CUTTERS

ATI402 SERIES

Used in restricted areas where direct countersinking is not possible.
A four-flute, one piece unit used with ATI404 Series Pilot

Part Number	Body Diameter	Pilot Hole	Angle
ATI402A-4	1/4"	1/8"	100°
ATI402B-4	1/4"	3/32"	100°
ATI402C-4	5/16"	1/8"	100°
ATI402D-4	5/16"	5/32"	100°
ATI402E-4	3/8"	3/16"	100°
ATI402F-4	3/8"	5/32"	100°
ATI402G-4	7/16"	3/16"	100°
ATI402H-4	7/16"	5/32"	100°
ATI402I-4	1/2"	3/16"	100°
ATI402J-4	1/2"	1/4"	100°
ATI402K-4	9/16"	3/16"	100°
ATI402L-4	9/16"	1/4"	100°
ATI402M-4	5/8"	1/4"	100°
ATI402N-4	5/8"	5/16"	100°
ATI402O-4	11/16"	1/4"	100°
ATI402P-4	11/16"	5/16"	100°
ATI402Q-4	3/4"	1/4"	100°
ATI402R-4	3/4"	5/16"	100°
ATI402S-4	7/8"	5/16"	100°
ATI402T-4	7/8"	3/8"	100°
ATI402U-4	1"	5/16"	100°
ATI402V-4	1"	3/8"	100°
ATI402W-4	1-1/4"	3/8"	100°
ATI402X-4	1-1/4"	1/2"	100°



ATI590TA BACK COUNTERSINK KIT

Compact kit for shop or field service requirement.
Contains 8 cutters and 8 gunlock pilots.

Part No.	QTY	Part No.	QTY
ATI402B-4	1	ATI404-1	1
ATI402C-4	1	ATI404-2	1
ATI402F-4	1	ATI404-3	1
ATI402I-4	1	ATI4044	1
ATI402Q-4	1	ATI4045	1
ATI402S-4	1	ATI404-6	1
ATI402V-4	1	ATI404-7	1
ATI402X-4	1	ATI404-8	1

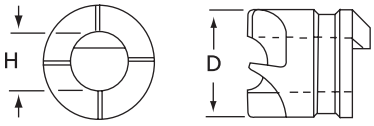
BACK SPOTFACER CUTTERS

ATI403 SERIES

For reverse spotfacing and counterboring in confined areas where one piece straight shank tools cannot be used. Designed with four cutting edges with .030R corner radii. Used with ATI404 Series Pilots.

Part Number	Body Diameter	Pilot Hole
ATI403A	1/4"	3/32"
ATI403B	1/4"	1/8"
ATI403C	5/16"	1/8"
ATI403D	5/16"	5/32"
ATI403E	3/8"	3/16"
ATI403F	3/8"	5/32"
ATI403G	7/16"	3/16"
ATI403H	7/16"	5/32"
ATI403I	1/2"	3/16"
ATI403J	1/2"	1/4"
ATI403K	9/16"	3/16"
ATI403L	9/16"	1/4"
ATI403M	5/8"	1/4"
ATI403N	5/8"	5/16"
ATI403O	11/16"	1/4"
ATI403P	11/16"	5/16"
ATI403Q	3/4"	1/4"
ATI403R	3/4"	5/16"
ATI403S	7/8"	5/16"
ATI403T	7/8"	3/8"
ATI403U	1"	5/16"
ATI403V	1"	3/8"
ATI403W	1-1/4"	3/8"
ATI403X	1-1/4"	1/2"

Note: Other radii available upon special order



ATI590S BACK SPOTFACER KIT

Compact kit for shop or field service requirement.
Contains 8 cutters and 8 gunlock pilots.

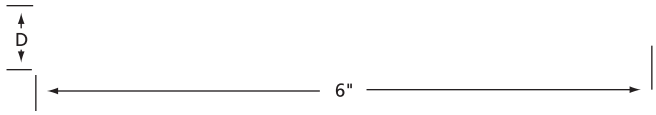
Part No.	QTY	Part No.	QTY
ATI403A	1	ATI404-1	1
ATI403C	1	ATI404-2	1
ATI403F	1	ATI404-3	1
ATI403I	1	ATI4044	1
ATI403M	1	ATI4045	1
ATI403R	1	ATI404-6	1
ATI403V	1	ATI404-7	1
ATI403X	1	ATI404-8	1

⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

ATI404 SERIES

Part Number	Description	D
ATI404-1	Pilot, Bayonet Locking Type, 6" OAL	3/32
ATI404-2	Pilot, Bayonet Locking Type, 6" OAL	1/8
ATI404-3	Pilot, Bayonet Locking Type, 6" OAL	5/32
ATI4044	Pilot, Bayonet Locking Type, 6" OAL	3/16
ATI4045	Pilot, Bayonet Locking Type, 6" OAL	1/4
ATI404-6	Pilot, Bayonet Locking Type, 6" OAL	5/16
ATI404-7	Pilot, Bayonet Locking Type, 6" OAL	3/8
ATI404-8	Pilot, Bayonet Locking Type, 6" OAL	1/2



STRAIGHT SHANK COUNTERSINK CUTTER

ATI408 SERIES

Specifically designed for countersinking. This cutter has three straight flutes accurately sharpened to prevent chatter.

Part Number	D	S	Angle
ATI408A-2	1/4	3/16	82°
ATI408A-4	1/4	3/16	100°
ATI408B-2	5/16	1/4	82°
ATI408B-4	5/16	1/4	100°
ATI408C-2	3/8	1/4	82°
ATI408C-4	3/8	1/4	100°
ATI408D-2	7/16	1/4	82°
ATI408D-4	7/16	1/4	100°
ATI408E-2	1/2	1/4	82°
ATI408E-4	1/2	1/4	100°
ATI408F-2	5/8	3/8	82°
ATI408F-4	5/8	3/8	100°
ATI408G-2	3/4	3/8	82°
ATI408G-4	3/4	3/8	100°
ATI408H-2	1	3/8	82°
ATI408H-4	1	3/8	100°

6-FLUTE COUNTERSINK CUTTER, STRAIGHT SHANK

Part Number	Body Diameter	Shank Diameter	Angle
ATI408AZ6F3	1/4	3/16	90°
ATI408AZ6F4	1/4	3/16	100°
ATI408CA6F0	3/8	1/4	60°
ATI408CA6F4	3/8	1/4	100°
ATI408CB6F0	3/8	5/16	60°
ATI408EC6F4	1/2	3/8	100°
ATI408FC6F-4	9/16	3/8	100°
ATI408GC6F0	5/8	3/8	60°
ATI408GC6F3	5/8	3/8	90°
ATI408GC6F4	5/8	3/8	100°

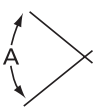
CUTTING TOOLS AND MICROSTOPS

STOP COUNTERSINK CUTTERS

ATI418 SERIES, 1/4"-28 THREADS

Used with ATI442S1 microstop

Three straight flute replaceable pilot cutters with female thread. These cutters are designed with extra deep flute to permit resharpening and radial clearance to assure fast smooth cutting. Other cutter angles available upon special request.



Part Number	Cutter Diameter	Pilot Hole	Angle
ATI418A-4	1/4	.086	100°
ATI418B-4	5/16	.086	100°
ATI418C-4	3/8	.086	100°
ATI418D-4	7/16	.086	100°
ATI418E4	1/2	.086	100°
ATI418F4	9/16	.086	100°
ATI418G4	5/8	.086	100°

For replaceable pilots, refer to ATI416 Series.

PILOTS

ATI416 SERIES

To maintain concentricity and prevent breakage, an undercut is provided to permit head-to-seat on cutter angle.

Part Number	D
ATI416-2	#40
ATI416-12	#30
ATI416-21	#21
ATI416-31	#11
ATI416-32	#10
ATI416-56	3/32
ATI416-57	1/8
ATI416-59	5/32
ATI416-61	3/16
ATI416-63	7/32
ATI416-65	1/4
ATI416-69	5/16

Used with ATI418 Series cutter.

CHATTERLESS COUNTERSINK CUTTER

ATI463 SERIES, 1/4"-28 THREADS

These precision cutters are the ultimate in chatterless countersinking. The minimum cutter diameter has been calculated to eliminate skin damage and the undercut on the flutes provides ease in chip removal. Made of M42 material for stainless steel or titanium.

Part Number	Body Diameter	Pilot Diameter	Angle	AN426 Rivet Size Ref.
ATI463145065	.145	.065	100°	1/16
ATI463210096	.210	.096	100°	3/32
ATI463256126	.256	.1265	100°	1/8
ATI463317157	.317	.157	100°	5/32
ATI463385191	.385	.1915	100°	3/16
ATI463507247	.507	.247	100°	1/4
ATI463595309	.595	.309	100°	5/16

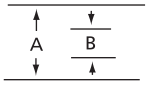
HOLLOW CUTTERS

ATI493 SERIES, 1/4"-28 THREADED SHANK

FOR REMOVING HUCK AND HI-SHEAR FASTENERS

These cutters are designed to fit standard microstops to control their cutting depth. Used to cut away the swaged collar from the fastener so the pin can be easily removed.

Part Number	Dimension "A"	Dimension "B"	Shank	Fastener Type	Size
ATI493C-0	.365	.124	1/4-28	HI-SHEAR	1/8
ATI493C-00	.365	.157	1/4-28	HI-SHEAR	5/32
ATI493C-1	.438	.188	1/4-28	HI-SHEAR	3/16
ATI493C-2	.500	.247	1/4-28	HI-SHEAR	1/4
ATI493C-3	.562	.310	1/4-28	HI-SHEAR	5/16
ATI493D-1	.323	.188	1/4-28	HUCK LOCK BOLT	L6
ATI493D-3	.413	.250	1/4-28	HUCK LOCK BOLT	L8



⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

- ATI precision hole saws are manufactured from high-speed tool steel
- Hole saws are heat-treated and ground to precise tolerances
- Hole saw design allows for resharpening of tool
- Use with ATI415 Hole Saw Arbors

FINE TOOTH SERIES

For cutting thin skins and corrugations in aluminum, steel, and other non-ferrous material. The hole saw can be resharpened many times and is designed for use in a portable power unit or in standard machine tools.

ATI413 SERIES

Part Number	Diameter	Thread
ATI413-1	3/8	5/16-24
ATI413-1X	13/32	5/16-24
ATI413-2	7/16	5/16-24
ATI4132X	15/32	5/16-24
ATI413-3	1/2	5/16-24
ATI413-3X	17/32	5/16-24
ATI413-4	9/16	5/16-24
ATI413-4X	19/32	5/16-24
ATI413-5	5/8	5/16-24
ATI4135X	21/32	5/16-24
ATI4136	11/16	5/16-24
ATI413-6X	23/32	5/16-24
ATI413-7	3/4	5/16-24
ATI4137X	25/32	5/16-24
ATI413-8	13/16	5/16-24
ATI413-8X	27/32	5/16-24
ATI413-9	7/8	5/16-24
ATI4139X	29/32	5/16-24
ATI41310	15/16	5/16-24
ATI41310X	31/32	5/16-24
ATI413-11	1	5/16-24
ATI413-11X	1-1/32	5/16-24
ATI413-12	1-1/16	5/16-24
ATI413-12X	1-3/32	5/16-24
ATI413-13	1-1/8	5/16-24
ATI413-13X	1-5/32	5/16-24
ATI413-14	1-3/16	5/16-24
ATI413-14X	1-7/32	5/16-24
ATI413-15	1-1/4	5/16-24
ATI413-15X	1-9/32	5/16-24
ATI413-16	1-5/16	5/16-24
ATI413-16X	1-11/32	5/16-24
ATI41317	1-3/8	5/16-24
ATI413-17X	1-13/32	5/16-24
ATI413-18	1-7/16	5/16-24
ATI413-18X	1-15/32	5/16-24
ATI41319	1-1/2	1/2-20
ATI413-19X	1-17/32	1/2-20
ATI413-20	1-9/16	1/2-20
ATI413-20X	1-19/32	1/2-20
ATI413-21	1-5/8	1/2-20
ATI413-21X	1-21/32	1/2-20
ATI413-22	1-11/16	1/2-20
ATI413-22X	1-23/32	1/2-20
ATI41323	1-3/4	1/2-20
ATI413-23X	1-25/32	1/2-20
ATI41324	1-13/16	1/2-20
ATI413-24X	1-27/32	1/2-20
ATI413-25	1-7/8	1/2-20
ATI413-25X	1-29/32	1/2-20
ATI413-26	1-15/16	1/2-20
ATI413-26X	1-31/32	1/2-20
ATI413-27	2	1/2-20
ATI413-27X	2-1/32	1/2-20
ATI413-28	2-1/16	1/2-20
ATI413-28X	2-3/32	1/2-20
ATI413-29	2-1/8	1/2-20
ATI413-29X	2-5/32	1/2-20
ATI41330	2-3/16	1/2-20
ATI413-30X	2-7/32	1/2-20
ATI413-31	2-1/4	1/2-20
ATI413-31X	2-9/32	1/2-20
ATI413-32	2-5/16	1/2-20
ATI413-32X	2-11/32	1/2-20
ATI413-33	2-3/8	1/2-20
ATI413-33X	2-13/32	1/2-20
ATI413-34	2-7/16	1/2-20
ATI413-34X	2-15/32	1/2-20
ATI413-35	2-1/2	1/2-20
ATI413-35X	2-17/32	1/2-20
ATI413-36	2-9/16	1/2-20
ATI413-36X	2-19/32	1/2-20
ATI413-37	2-5/8	1/2-20
ATI413-37X	2-21/32	1/2-20
ATI413-38	2-11/16	1/2-20
ATI413-38X	2-23/32	1/2-20
ATI413-39	2-3/4	1/2-20
ATI413-39X	2-25/32	1/2-20
ATI413-40	2-13/16	1/2-20
ATI413-40X	2-27/32	1/2-20
ATI413-41	2-7/8	1/2-20
ATI413-41X	2-29/32	1/2-20
ATI413-42	2-15/16	1/2-20
ATI413-42X	2-31/32	1/2-20
ATI413-43	3	1/2-20
ATI413-43X	3-1/32	1/2-20
ATI413-44	3-1/16	1/2-20
ATI413-44X	3-3/32	1/2-20
ATI413-45	3-1/8	1/2-20
ATI413-45X	3-5/32	1/2-20
ATI413-46	3-3/16	1/2-20
ATI413-46X	3-7/32	1/2-20
ATI413-47	3-1/4	1/2-20
ATI413-47X	3-9/32	1/2-20
ATI413-48	3-5/16	1/2-20
ATI413-48X	3-11/32	1/2-20
ATI413-49	3-3/8	1/2-20
ATI413-49X	3-13/32	1/2-20
ATI413-50	3-7/16	1/2-20
ATI413-50X	3-15/32	1/2-20
ATI413-51	3-1/2	1/2-20
ATI413-51X	3-17/32	1/2-20
ATI413-52	3-9/16	1/2-20
ATI413-52X	3-19/32	1/2-20
ATI413-53	3-5/8	1/2-20
ATI413-53X	3-21/32	1/2-20
ATI413-54	3-11/16	1/2-20
ATI413-54X	3-23/32	1/2-20
ATI413-55	3-3/4	1/2-20
ATI413-55X	3-25/32	1/2-20
ATI41356	3-13/16	1/2-20
ATI413-56X	3-27/32	1/2-20
ATI413-57	3-7/8	1/2-20
ATI413-57X	3-29/32	1/2-20
ATI413-58	3-15/16	1/2-20
ATI413-58X	3-31/32	1/2-20
ATI413-59	4	1/2-20

COARSE TOOTH SERIES

This tooth configuration is designed to effect fast cutting of aluminum and steel. When the correct speed and feed is used, this hole saw will cut close tolerance holes even in Titanium.

Part Number	Diameter	Thread
ATI474-1	3/8	5/16-24
ATI474-1X	13/32	5/16-24
ATI474-2	7/16	5/16-24
ATI474-2X	15/32	5/16-24
ATI474-3	1/2	5/16-24
ATI4743X	17/32	5/16-24
ATI474-4	9/16	5/16-24
ATI474-4X	19/32	5/16-24
ATI474-5	5/8	5/16-24
ATI474-5X	21/32	5/16-24
ATI474-6	11/16	5/16-24
ATI4746X	23/32	5/16-24
ATI474-7	3/4	5/16-24
ATI474-7X	25/32	5/16-24
ATI474-8	13/16	5/16-24
ATI474-8X	27/32	5/16-24
ATI474-9	7/8	5/16-24
ATI4749X	29/32	5/16-24
ATI474-10	15/16	5/16-24
ATI474-10X	31/32	5/16-24
ATI474-11	1	5/16-24
ATI47411X	1-1/32	5/16-24
ATI474-12	1-1/16	5/16-24
ATI47412X	1-3/32	5/16-24
ATI474-13	1-1/8	5/16-24
ATI47413X	1-5/32	5/16-24
ATI474-14	1-3/16	5/16-24
ATI47414X	1-7/32	5/16-24
ATI474-15	1-1/4	5/16-24
ATI47415X	1-9/32	1/2-20
ATI474-16	1-5/16	1/2-20
ATI47416X	1-11/32	1/2-20
ATI474-17	1-3/8	1/2-20
ATI474-17X	1-13/32	1/2-20
ATI474-18	1-7/16	1/2-20
ATI474-18X	1-15/32	1/2-20
ATI474-19	1-1/2	1/2-20
ATI474-19X	1-17/32	1/2-20
ATI474-20	1-9/16	1/2-20
ATI47420X	1-19/32	1/2-20
ATI474-21	1-5/8	1/2-20
ATI47421X	1-21/32	1/2-20
ATI474-22	1-11/16	1/2-20
ATI47422X	1-23/32	1/2-20
ATI474-23	1-3/4	1/2-20
ATI47423X	1-25/32	1/2-20
ATI474-24	1-13/16	1/2-20
ATI474-24X	1-27/32	1/2-20

Part Number	Diameter	Thread
ATI474-25	1-7/8	1/2-20
ATI47425X	1-29/32	1/2-20
ATI474-26	1-15/16	1/2-20
ATI474-26X	1-31/32	1/2-20
ATI474-27	2	1/2-20
ATI474-27X	2-1/32	1/2-20
ATI474-28	2-1/16	1/2-20
ATI474-28X	2-3/32	1/2-20
ATI474-29	2-1/8	1/2-20
ATI474-29X	2-5/32	1/2-20
ATI474-30	2-3/16	1/2-20
ATI474-30X	2-7/32	1/2-20
ATI474-31	2-1/4	1/2-20
ATI47431X	2-9/32	1/2-20
ATI474-32	2-5/16	1/2-20
ATI474-32X	2-11/32	1/2-20
ATI474-33	2-3/8	1/2-20
ATI474-33X	2-13/32	1/2-20
ATI47434	2-7/16	1/2-20
ATI474-34X	2-15/32	1/2-20
ATI474-35	2-1/2	1/2-20
ATI474-35X	2-17/32	1/2-20
ATI47436	2-9/16	1/2-20
ATI47436X	2-19/32	1/2-20
ATI47437	2-5/8	1/2-20
ATI474-37X	2-21/32	1/2-20
ATI474-38	2-11/16	1/2-20
ATI474-38X	2-23/32	1/2-20
ATI474-39	2-3/4	1/2-20
ATI474-39X	2-25/32	1/2-20
ATI474-40	2-13/16	1/2-20
ATI474-40X	2-27/32	1/2-20
ATI474-41	2-7/8	1/2-20
ATI474-41X	2-29/32	1/2-20
ATI474-42	2-15/16	1/2-20
ATI474-42X	2-31/32	1/2-20
ATI474-43	3	1/2-20
ATI47443X	3-1/32	1/2-20
ATI47444	3-1/16	1/2-20
ATI474-44X	3-3/32	1/2-20
ATI47445	3-1/8	1/2-20
ATI47445X	3-5/32	1/2-20
ATI47446	3-3/16	1/2-20
ATI474-46X	3-7/32	1/2-20
ATI474-47	3-1/4	1/2-20
ATI474-47X	3-9/32	1/2-20
ATI474-48	3-5/16	1/2-20
ATI474-48X	3-11/32	1/2-20

ATI474 SERIES

Part Number	Diameter	Thread
ATI47449	3-3/8	1/2-20
ATI474-49X	3-13/32	1/2-20
ATI474-50	3-7/16	1/2-20
ATI474-50X	3-15/32	1/2-20
ATI474-51	3-1/2	1/2-20
ATI474-51X	3-17/32	1/2-20
ATI474-52	3-9/16	1/2-20
ATI474-52X	3-19/32	1/2-20
ATI474-53	3-5/8	1/2-20
ATI474-53X	3-21/32	1/2-20
ATI47454	3-11/16	1/2-20
ATI474-54X	3-23/32	1/2-20
ATI474-55	3-3/4	1/2-20
ATI474-55X	3-25/32	1/2-20
ATI47456	3-13/16	1/2-20
ATI474-56X	3-27/32	1/2-20
ATI474-57	3-7/8	1/2-20
ATI474-57X	3-29/32	1/2-20
ATI474-58	3-15/16	1/2-20
ATI474-58X	3-31/32	1/2-20
ATI474-59	4	1/2-20

HOLE SAW ARBORS

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

ATI415-1

Part Number	Shank Diameter	Pilot Diameter	Thread
ATI415-0	1/4	3/16	5/16-24
ATI415-1	1/4	1/4	5/16-24
ATI415-2	1/2	1/4	1/2-20
ATI415-3	1/2	3/8	1/2-20
ATI415-10	1/4	1/4	1/2-20
ATI415-5	1/4" 3CF	1/4	5/16-24

⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

COUNTERBORES

- Aircraft style, straight shank counterbores are used to cut flat areas or recesses for bolt heads and nuts
- Use with ATI489 replaceable counterbore pilots
- A set screw ensures pilot stays in the counterbore
- Standard counterbores have no corner radius

Note: Corner radius available upon special order.

Part Number	Diameter	Pilot Hole Diameter	Shank Diameter
ATI488C-0	3/16	3/32	1/4
ATI488C-1	1/4	3/32	1/4
ATI488C-2	9/32	3/32	1/4
ATI488C-3	5/16	3/32	1/4
ATI488C-4	11/32	3/32	1/4
ATI488C-5	3/8	3/32	1/4
ATI488C-6	13/32	1/8	1/4
ATI488C-7	7/16	1/8	1/4
ATI488C-8	15/32	1/8	1/4
ATI488C-9	1/2	1/8	1/4
ATI488C-10	17/32	1/8	1/4
ATI488C-11	9/16	1/8	1/4

Part Number	Diameter	Pilot Hole Diameter	Shank Diameter
ATI488C-12	19/32	1/8	1/4
ATI488C-13	5/8	1/8	1/4
ATI488C-14	21/32	3/16	1/4
ATI488C-15	11/16	3/16	1/4
ATI488C-16	23/32	3/16	1/4
ATI488C-17	3/4	3/16	1/4
ATI488C-18	25/32	3/16	1/4
ATI488C-19	13/16	3/16	1/4
ATI488C-20	27/32	3/16	1/4
ATI488C-21	7/8	3/16	1/4
ATI488C-22	29/32	3/16	1/4
ATI488C-23	15/16	3/16	1/4
ATI488C-24	31/32	3/16	1/4

ATI488C-21

Part Number	Diameter	Pilot Hole Diameter	Shank Diameter
ATI488C-25	1	3/16	1/4
ATI488C-26	1 1/16	3/16	3/8
ATI488C-27	1 1/8	3/16	3/8
ATI488C-28	1 3/16	3/16	3/8
ATI488C-29	1 1/4	3/16	3/8
ATI488C-30	1 5/16	3/16	3/8
ATI488C-31	1 3/8	3/16	3/8
ATI488C-32	1 1/2	3/16	3/8

COUNTERBORE PILOTS

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

Part Number	Pilot Diameter	Shank Diameter
ATI489A-1	3/32	3/32
ATI489A-2	1/8	3/32
ATI489A-3	5/32	3/32
ATI489A-4	#21	3/32
ATI489A-5	3/16	3/32
ATI489A-6	#10	3/32
ATI489A-7	7/32	3/32
ATI489A-8	1/4	3/32
ATI489A-9	F	3/32
ATI489A-10	9/32	3/32
ATI489A-11	5/16	3/32

Part Number	Pilot Diameter	Shank Diameter
ATI489B-2	1/8	1/8
ATI489B-3	5/32	1/8
ATI489B-4	#21	1/8
ATI489B-5	3/16	1/8
ATI489B-6	#10	1/8
ATI489B-7	7/32	1/8
ATI489B-8	1/4	1/8
ATI489B-9	F	1/8
ATI489B-10	9/32	1/8
ATI489B-11	5/16	1/8
ATI489B-12	11/32	1/8
ATI489B-13	3/8	1/8
ATI489B-14	13/32	1/8
ATI489B-15	7/16	1/8
ATI489B-16	15/32	1/8
ATI489B-17	1/2	1/8

ATI489B-8

COUNTERBORE EXTENSION

Counterbore extensions are precision ground to insure concentricity. Used for counterboring in recesses or tight access areas where a longer shank is required.

Part Number	Shank Diameter	"L"
ATI470A-1	1/4"	4"
ATI470A-2	1/4"	6"

ATI470A-1

⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1

MICRO MILLER RIVET SHAVER

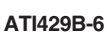
ATI429SXC
- 3/4" Cutter Capacity
- .0005" Depth Adjustment
- Sioux 1.0 HP 20,000 RPM Power Unit
- Comfort Grip
- Includes ATI429A-4 Skirt

ATI429SXC

MICRO MILLER CUTTERS AND SKIRTS

ATI429 SERIES
A carbide insert cutter to ensure a hard cutting edge and precision ground to produce a chatter-free cut.

Part Number (Cutter)	Part Number (Skirt)	Diameter
ATI429B-0	ATI429A-1	1/4"
ATI429B-1	ATI429A-1	5/16"
ATI429B2	ATI429A-2	3/8"
ATI429B-3	ATI429A-3	7/16"
ATI429B-4	ATI429A-4	1/2"
ATI429B-5	ATI429A-5	9/16"
ATI429B-6	ATI429A-6	5/8"
ATI429B-7	ATI429A-7	3/4"



ATI429B-6

ATI429A-7

RIVET SHAVER KIT

ATI590L
- Includes ATI429SXC Rivet Shaver
- Carbide cutters and skirts for 5/16", 3/8", 7/16", 1/2", 9/16", 5/8" AND 3/4" rivet heads
- Kit box with cutouts provides protection and quick identification of missing components

⚠ WARNING

SAFETY PRECAUTION: Read and follow all safety and operating instructions.
WARNING: Face & eye protection must be worn while operating power tools, per ANSI B186.1