

Decimal Size Reference Chart

DRILL SIZE	DECIMAL	DRILL SIZE	DECIMAL	DRILL SIZE	DECIMAL
80	0.0135	40	0.0980	2	0.2210
79	0.0145	39	0.0995	1	0.2280
1/64	0.0156	38	0.1015	A	0.2340
78	0.0160	37	0.1040	15/64	0.2344
77	0.0180	36	0.1065	B	0.2380
76	0.0200	7/64	0.1094	C	0.2420
75	0.0210	35	0.1100	D	0.2460
74	0.0225	34	0.1110	1/4 or E	0.2500
73	0.0240	33	0.1130	F	0.2570
72	0.0250	32	0.1160	G	0.2610
71	0.0260	31	0.1200	17/64	0.2656
70	0.0280	1/8	0.1250	H	0.2660
69	0.0290	30	0.1285	I	0.2720
68	0.0310	29	0.1360	J	0.2770
1/32	0.0312	28	0.1405	K	0.2810
67	0.0320	9/64	0.1406	9/32	0.2812
66	0.0330	27	0.1440	L	0.2900
65	0.0350	26	0.1470	M	0.2950
64	0.0360	25	0.1495	19/64	0.2969
63	0.0370	24	0.1520	N	0.3020
62	0.0380	23	0.1540	5/16	0.3125
61	0.0390	5/32	0.1562	O	0.3160
60	0.0400	22	0.1570	P	0.3230
59	0.0410	21	0.1590	21/64	0.3281
58	0.0420	20	0.1610	Q	0.3320
57	0.0430	19	0.1660	R	0.3390
56	0.0465	18	0.1695	11/32	0.3438
3/64	0.0469	11/64	0.1719	S	0.3480
55	0.0520	17	0.1730	T	0.3580
54	0.0550	16	0.1770	23/64	0.3594
53	0.0595	15	0.1800	U	0.3680
1/16	0.0625	14	0.1820	3/8	0.3750
52	0.0635	13	0.1850	V	0.3770
51	0.0670	3/16	0.1875	W	0.3860
50	0.0700	12	0.1890	25/64	0.3906
49	0.0730	11	0.1910	X	0.3970
48	0.0760	10	0.1935	Y	0.4040
5/64	0.0781	9	0.1960	13/32	0.4062
47	0.0785	8	0.1990	Z	0.4130
46	0.0810	7	0.2010	27/64	0.4219
45	0.0820	13/64	0.2031	7/16	0.4375
44	0.0860	6	0.2040	29/64	0.4531
43	0.0890	5	0.2055	15/32	0.4688
42	0.0935	4	0.2090	31/64	0.4844
3/32	0.0938	3	0.2130	1/2	0.5000
41	0.0960	7/32	0.2188	33/64	0.5156



Tooling Excellence for Tomorrow's Technology

MRO Tools Catalogue

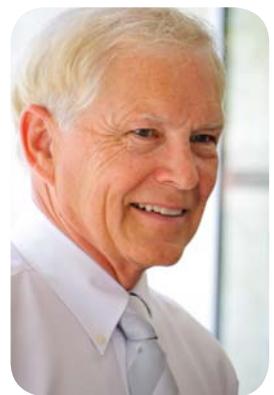


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Tooling excellence for tomorrow's technology

Founded in 1983, Omega Technologies, Inc. has become one of the world's leading sources of aircraft tools, continually working to increase the variety of tools available, while researching and developing ways to improve their strength, durability, and functionality. Omega manufactures its own proprietary line of tools, and also distributes for a host of other highly respected tool producers. Products include a complete line of fastener installation and removal tools, drills, countersinks, clamps, reamers, grinders, and more.

Quality at Omega shows in our knowledgeable staff, the conscientious and responsive job we do, and in the continually evolving line of products we offer. We thrive on innovation and welcome new solutions to problems. If you have an invention, please give us a call.



John Schooland
Founder & President



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Warranty: Omega Technologies Inc. products are warranted to be free of defects in material and workmanship. Products for which Return Goods Authorization (RGA) is requested should be returned, at buyer's cost, for evaluation to the address on the facing page. Please include the RGA# on the outside of the package.

This Warranty shall not apply to Products which have been misused, abused, damaged by accident or otherwise, repaired by an Authorized Repair Center or modified by anyone other than Omega and is in lieu of all other warranties whether express, implied, or statutory. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. Buyer's sole and exclusive remedy for breach of this Warranty is, at the opinion of Omega, repair or replacement of the defective product. IN NO EVENT WILL OMEGA BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING FROM BREACH OF THIS WARRANTY, EVEN IF OMEGA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Safety: All items are sold with the strict and specific understanding that they are to be used properly and with all necessary safety precautions, and that it is the user's responsibility to determine the suitability of the product for their intended use and assume all risk and liability in connection therewith. Common sense and various local, State, and Federal Laws require the constant use of safety equipment when working with any type of tool. Approved eye protection is always recommended when working with any cutting, rotary, or percussion device of any kind such as those listed within the contents of this catalog.

Customer Service: Our office is open to answer questions and take your order Monday through Friday, 7:30 am to 5:00 pm, Pacific Time (excluding holidays).

Cross Reference: See Appendix I at the back of this catalogue for a list of Hi-Shear and Fairchild part numbers.

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Hi-Lok® Installation Tools and Roller Ratchets®



Collar Removal Tools



Cutting Tools and Accessories



Microstops Countersinks and Drilling Accessories



Nut Plate Jigs



Screwdriver Bits and Holders



Universal Sockets and Adapters



Clecos and Side Grip Clamps

Please Note:
Cross Reference Table and Index
follow at end of catalogue

Hi-Lok® Installation Tools and Roller Ratchets®



Unique aircraft fasteners require specialized tooling for proper installation. Omega Technologies' extensive line of installation hand tools is unparalleled, and the Omega brand is rapidly becoming the industry standard.

We are particularly adept at tools used for "Broached Pin" installation. This includes Hi-Lok®, Hi-Lite®, Hi-Tigue®, and Torque Controlled fasteners. Omega also produces gauges to determine the correct fastener length for a hole, and to check the pin protrusion of the completed installation.

Omega is committed to further innovation and increased productivity in this ever-changing market. Our staff is available to help with recommendations and develop solutions to unique needs. We welcome input, and strive to help our customers increase efficiency and lower costs.

Roller Ratchets®

Box Ratchets

Hand Ratchets

The "Tight Squeeze" Hand Tool

Sockets

Hex Keys

ATHA & ATHR Assemblies

Pin Protrusion Gauges

Grip Scales

Roller Ratchets® were developed in response to the need for very small ratchet wrenches that could be used in extremely tight areas where handle 'swing' was limited by obstructions, and the need to have a ratchet that would engage with very little handle movement. The Roller Ratchet® satisfies both of these requirements, and this modular tool is now widely used in the aerospace community worldwide.



Omega Technologies Inc. has been at the forefront of continued research and development to improve the variety of tools available. With particular emphasis on strength, durability, and quality, we maintain the functionality and cost-effectiveness of the entire line of tools.

The Roller Ratchet® functions as a hand ratchet, yet its size greatly increases its versatility by allowing it to be used in tighter areas. The incorporation of a special 'toothless' clutch eliminates all lost motion, allowing even the slightest movement to engage the tool. The modular platform allows for multiple configurations. A through-hole also makes the tool compatible with Hi-Lok®, Hi-Lite®, and Eddie Bolt® systems.

- Small design allows for use in tight areas
- Modular platform provides versatility
- Through-hole permits use with Hi-Lok®, Hi-Lite®, and Eddie Bolt®
- Revolutionary clutch design
- Torque ratings from 150-600 lb-in.

Standard Roller Ratchet®

The Standard Roller Ratchet® comes in a wide range of sizes and strengths. Its reversible spindle allows the tool to be used in any application for installation or removal.



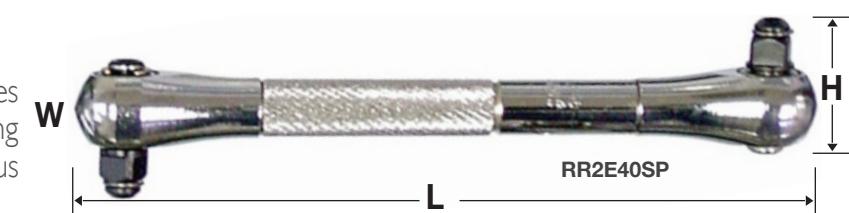
Standard Roller Ratchets®

PART NUMBER	MAX TORQUE (lb/in.)	SQUARE DRIVE	HEIGHT (H)	WIDTH (W)	LENGTH (L)
RR40S-SP*	150	1/4	0.91	0.65	3.5
RR40SP*	150	1/4	0.91	0.65	5.5
RR80SP	200	1/4	1.37	0.60	6.25
RR130SP	250	1/4	0.92	0.87	7.2
RR250SP	400	3/8	1.21	1.00	7.9
RR400SP	600	3/8	1.21	1.31	8.7

*Furnished with reversible spindle

Double-Ended Roller Ratchet®

The Double-Ended Roller Ratchet® eliminates the need for a reversible spindle, reducing the occurrence of foreign object damage, thus increasing efficiency.

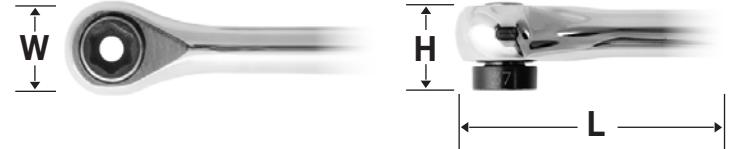


Double Ended Roller Ratchets®

PART NUMBER	MAX TORQUE (lb/in.)	SQUARE DRIVE	HEIGHT (H)	WIDTH (W)	LENGTH (L)
RR2E40S-SP	150	1/4	0.91	0.65	4.5
RR2E40SP	150	1/4	0.91	0.65	6.5
RR2E80SP	200	1/4	1.37	0.60	6.7
RR2E130SP	250	1/4	0.92	0.87	6.6
RR2E250SP	400	3/8	1.21	1.00	8.9
RR2E400SP	600	3/8	1.21	1.31	8.9

Integrated Socket Roller Ratchet®

The Integrated Socket Roller Ratchet® incorporates a low-profile socket and comes in a wide range of sizes. Available fixed or reversible.



Roller Ratchets® with Built-in Socket

Socket Hex Opening	150 b-in Max Torque	150 lb-in Max Torque	200 lb-in Max Torque	250 lb-in Max Torque	400 lb-in Max Torque
3/16	H = .76 L = 3.5	H = .76 L = 5.5	H = 1.23 L = 6.25	H = .78 & 1.01 L = 7.25	H = 1.16 L = 7.9
7/32	RR40A18S	RR40A18			
1/4	RR40A21S	RR40A21			
9/32	RR40A25S	RR40A25	RR80A25	RR130A25	
5/16	RR40A28S	RR40A28	RR80A28	RR130A28	
11/32	RR40A31S	RR40A31	RR80A31	RR130A31	
3/8	RR40A34S	RR40A34	RR80A34	RR130A34	
7/16	RR40A37S	RR40A37		RR130A37	
1/2	RR40A43S	RR40A43		RR130A43	
					RR250A50

The OMDD with Stepped Sockets

The OMDD series roller ratchets incorporate five integral sockets into a single wrench, allowing the installation of collar hex sizes 7/32, 1/4, 5/16, 11/32, and 5/8 inch. This one wrench covers most -5, -6, -8, -10, and -12 collars. Available straight (OMDD1) or offset 15° (OMDD1F)..



Bit Holders

The Bit Holder Roller Ratchet® is fitted with a 1/4" bit holder, making it compatible with any hex insert screwdriver bit.



The RRQC-BH1/4 quick change replacement for the 1/4" square drive spindle accommodates multiple insert bits

Spindle Bits

The integrated spindle bit allows the wrench to accept the bit directly. The exclusion of the lengthier bit holder allows greater clearance, while still maintaining easy reversible capability.



Box Ratchets

Perfect for installing Hi-Lok® fasteners, our box ratchets are made of high quality, heat-treated steel and finished with a nickel-chrome plating. The result is a durable, long-lasting tool.

Several design aspects make these box ratchets ideal for use in tight areas. Even without line of sight, the head fits easily onto a collar; while the shoulder ring prevents the collar from slipping though the socket. An optional collar ejector pin quickly discards the removed collar.

Box ratchets are available flat or offset 20°, with or without collar ejectors.

- Durable
- Perfect for tight areas
- Shoulder ring inside socket
- Optional collar ejector pin
- Available straight or offset 20°



Offset (20°) Box Ratchet
with Collar-Stop
ATBRO3134



Flat Box Ratchet
with Collar-Stop
ATBRO3134



Offset (20°) Box Ratchet
with Collar-Stop and Ejector Buttons
ATBRO3134E



Flat Box Ratchet
with Collar-Stop and Ejector Buttons
ATBRO3134E

Box Ratchets

Hex 1	Hex 2	Flat	Flat with Ejector	Offset	Offset with Ejector
7/32	1/4	ATBR2125	ATBR2125E	ATBRO2125	ATBRO2125E
1/4	9/32	ATBR2528	ATBR2528E	ATBRO2528	ATBRO2528E
1/4	5/16	ATBR2531	ATBR2531E	ATBRO2531	ATBRO2531E
9/32	5/16	ATBR2831	ATBR2831E	ATBRO2831	ATBRO2831E
5/16	11/32	ATBR3134	ATBR3134E	ATBRO3134	ATBRO3134E
5/16	3/8	ATBR3137	ATBR3137E	ATBRO3137	ATBRO3137E
7/16	1/2	ATBR4350	ATBR4350E	ATBRO4350	ATBRO4350E

Larger sizes available on request

Hand Ratchets

Manufactured from high quality materials and nickel-plated for durability, these ratchets are available in a variety of sizes and are suitable for a wide range of installations, including Hi-Lok® systems.

The square drive provides versatility and gets into tight places. A through-hole in the head of the ratchet makes it appropriate for use with Hi-Lok® systems. By increasing the number of teeth in the head (as many as 72 teeth, depending on size), the ratchet engages with less movement. Finally, an ergonomic thumb switch changes the direction of the ratchet, allowing it to be used for installation or removal.

- Versatility of use
- Durable
- Easily reversible
- Compatible with Hi-Lok® system
- Engages with minimal movement



Hand Ratchets

PART NUMBER	SQUARE DRIVE	THROUGH HOLE DIAMETER	HEAD WIDTH	SIDE TO CENTER	HEAD HEIGHT	OVERALL LENGTH	WEIGHT (LBS.)
ATHR-MINI	1/4	0.11	0.92	0.46	0.40	4.60	0.20
ATHR250	1/4	0.11	1.08	0.50	0.44	5.50	0.35
ATHR-TILT	1/4	0.11	0.90	0.45	0.40	6.25	0.30
ATHR375	3/8	0.21	1.40	0.70	0.60	7.85	0.85
ATHR500	1/2	0.29	1.74	0.87	0.75	10.35	1.50

The "Tight Squeeze" Hand Tool

One of the newest innovations from Omega Technologies, the Tight Squeeze is a full function hand tool for Hi-Lok® and Hi-Lite® fasteners. The tool's unique profile allows for one-handed operation in tight spots, blind areas, and around corners. The operation is identical to pneumatic installation tools, but is more affordable and versatile.

Interchangeable hex keys and sockets fit an entire range of pin/collar combinations. We have also incorporated our toothless ratcheting system from the Roller Ratchet® which allows the slightest movement to engage the tool. This elegant solution turns impossible jobs into routine work.

- Single-Handed operation
- Zero backlash or "toothless" ratchet
- Cost-effective



"Tight Squeeze"

COMPLETE TOOL PART NUMBER	SOCKET SIZE	SOCKET PART NUMBER	HEX KEY SIZE	HEX KEY PART NUMBER
TSQ25-218-062	7/32	ATHS218	1/16	TSQ-062
TSQ25-250-062	1/4	ATHS250	1/16	TSQ-062
TSQ25-281-062	9/32	ATHS281	1/16	TSQ-062
TSQ25-312-062	5/16	ATHS312	1/16	TSQ-062
TSQ25-281-079	9/32	ATHS281	5/64	TSQ-079
TSQ25-312-079*	5/16	ATHS312	5/64	TSQ-079
TSQ25-343-079*	11/32	ATHS343	5/64	TSQ-079
TSQ25-437-079	7/16	ATHS437A	5/64	TSQ-079
TSQ25-312-094	5/16	ATHS312	3/32	TSQ-094
TSQ25-343-094	11/32	ATHS343	3/32	TSQ-094
TSQ25-437-094	7/16	ATHS437A	3/32	TSQ-094

*Most popular

Sockets (ATHS)

Anti-FOD Sockets are manufactured to fit conventional square drives. They feature a generous through-hole to enable the use of hex keys when necessary for Hi-Lok®, Hi-Lite®, and Hi-Tigue® installations. A set screw is provided to positively retain the sockets onto the square drives as an anti-FOD measure.



Anti-Fod Hex Sockets



ATHS437

Socket (ATHS) Measurements

PART NUMBER	HEX OPENING (6-POINT)	SQUARE DRIVE-SIZE	NOSE DIAMETER	OVERALL LENGTH
ATHS156	5/32	1/4	0.280	0.86
ATHS187	3/16	1/4	0.312	0.86
ATHS218	7/32	1/4	0.312	0.86
ATHS250	1/4	1/4	0.375	0.88
ATHS281	9/32	1/4	0.410	0.88
ATHS312	5/16	1/4	0.467	0.88
ATHS343	11/32	1/4	0.508	0.88
ATHS375	3/8	3/8	0.560	1.00
ATHS375A	3/8	1/4	0.560	0.88
ATHS437	7/16	3/8	0.640	1.00
ATHS437A	7/16	1/4	0.600	0.86
ATHS500	1/2	3/8	0.710	1.00

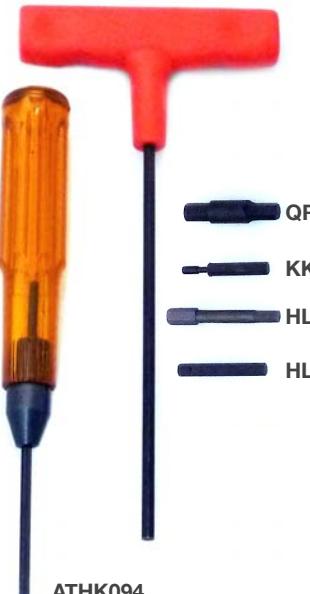
Hex Keys

Hex keys for hand-tool applications, and replacement tips for most popular air-tool systems.

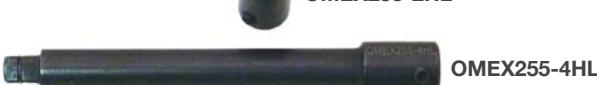
Hex Keys and Replacement Tips

Hand-Held Hex Keys			Replacement Tips			
HEX KEY SIZE	PLASTIC HANDLE	T-HANDLE	Hi-SHEAR® STANDARD	Hi-SHEAR® SUPER KEY	Voi-SHAN KWIK-KEY®	Lok-FAST QRS®
1/16 (0.062)	ATHK062		HLT140-062	HLT140K062	KK101-06	QRK5
5/64 (0.079)	ATHK079		HLT140-078	HLT140K078	KK101-07	QRK6
3/32 (0.094)	ATHK094	ATHK094T	HLT140-094	HLT140K094	KK101-09	QRK8
1/8 (0.125)	ATHK125	ATHK125T	HLT140-125	HLT140K125		QRK10
5/32 (0.156)		ATHK156T	HLT140-156	HLT140K156		QRK12
3/16 (0.187)		ATHK187T	HLT140-187	HLT140K187		
7/32 (0.218)		ATHK218T				
1/4 (0.250)	ATHK250T					

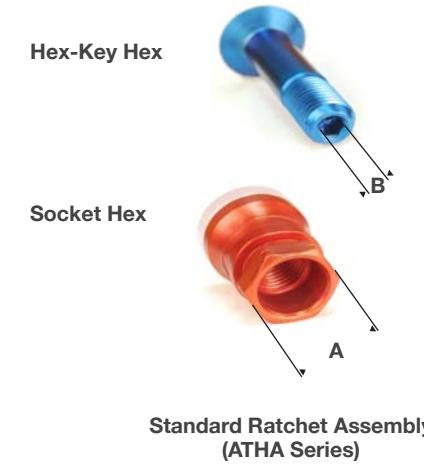
ATHK125T

**Through Hole Extensions**

Available in 2" and 4" lengths



ATHK094



Standard Ratchet Assembly (ATHA Series)



This is a hand tool assembly for the installation of the Hi-Lok® or Hi-Lite® fastening systems. The ATHA Series consists of a hand ratchet wrench (ATHR250) with a through hole, a socket, and a plastic handle Allen® wrench.

The through hole in the ratchet allows for the insertion of an Allen® key. While any Allen® key style may be used in conjunction with the ratchet, a plastic handle or a "T" handle Allen® wrench with a replaceable blade is furnished. The socket is held to the square drive with a set screw, eliminating FOD.

This entire assembly is completely interchangeable with the Hi-Shear equivalent (see cross reference table on back of catalogue).

Roller Ratchet® Assembly (ATRR Series)



Integral Socket Assembly (RRXXA Series)

**ATHA, ATRR, and RRXXA Assembly**

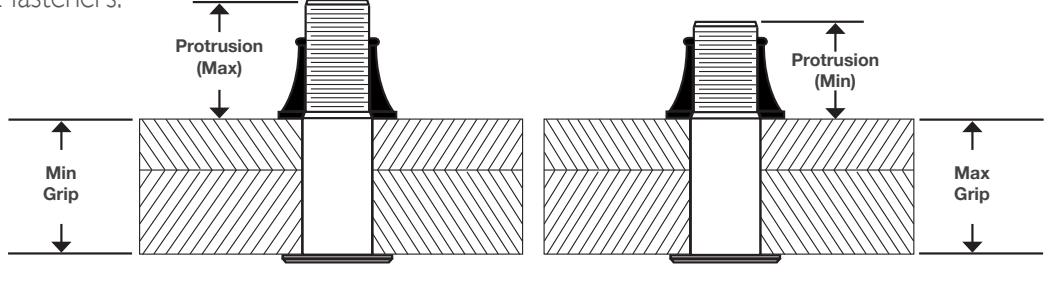
Normal Pin Diameter			Part Numbers		
SOCKET HEX WIDTH (A)	HEX KEY WIDTH (B)	SQUARE DRIVE SIZE*	STANDARD RATCHET 3-PIECE ASSEMBLY**	ROLLER RATCHET 3-PIECE ASSEMBLY	INTEGRAL SOCKET 2-PIECE ASSEMBLY
3/16 (0.187)	1/16 (0.062)	1/4	ATHA1	ATRR1	RR40A187-062
7/32 (0.218)	1/16 (0.062)	1/4	ATHA2	ATRR2	RR40A218-062
1/4 (0.250)	1/16 (0.062)	1/4	ATHA3	ATRR3	RR40A250-062
9/32 (0.281)	1/16 (0.062)	1/4	ATHA4	ATRR4	RR40A281-062
5/16 (0.312)	1/16 (0.062)	1/4	ATHA5	ATRR5	RR40A312-062
11/32 (0.343)	1/16 (0.062)	1/4	ATHA6	ATRR6	RR40A343-062
7/32 (0.218)	5/64 (0.078)	1/4	ATHA7	ATRR7	RR40A218-078
1/4 (0.250)	5/64 (0.078)	1/4	ATHA8	ATRR8	RR40A250-078
9/32 (0.281)	5/64 (0.078)	1/4	ATHA9	ATRR9	RR40A281-078
5/16 (0.312)	5/64 (0.078)	1/4	ATHA10	ATRR10	RR40A312-078
11/32 (0.343)	5/64 (0.078)	1/4	ATHA11	ATRR11	RR40A343-078
3/8 (0.375)	5/64 (0.078)	1/4	ATHA12	ATRR12	RR40A375-078
5/16 (0.312)	3/32 (0.094)	1/4	ATHA13	ATRR13	RR130A312-094
11/32 (0.343)	3/32 (0.094)	1/4	ATHA14	ATRR14	RR130A343-094
3/8 (0.375)	3/32 (0.094)	1/4	ATHA15	ATRR15	RR130A375-094
7/16 (0.437)	3/32 (0.094)	3/8	ATHA16	ATRR16	RR130A437-094
1/2 (0.500)	3/32 (0.094)	3/8	ATHA21	ATRR21	RR250A500-094
3/8 (0.375)	1/8 (0.125)	3/8	ATHA17	ATRR17	RR130A375-125
7/16 (0.437)	1/8 (0.125)	3/8	ATHA18	ATRR18	RR130A437-125
1/2 (0.500)	1/8 (0.125)	3/8	ATHA22	ATRR22	RR250A500-125
7/16 (0.437)	5/32 (0.156)	3/8	ATHA19	ATRR19	RR130A437-156
1/2 (0.500)	5/32 (0.156)	3/8	ATHA20	ATRR20	RR250A500-156

*Square Drive size does not apply to Roller Ratchet assemblies, as socket is built in.

**ATHA1-ATHA15 assemblies come with the ATRR-250 hand ratchet. To substitute a smaller hand ratchet (ATHR-MINI), add "M" to part number, i.e. "ATHA10M"

Pin Protrusion Gauges are manufactured for use on all types of frangible and torque-control fasteners. These gauges determine if the correct length pin has been installed by determining if the pin's protrusion is between the allowable minimum and maximum limits shown on the gauge.

Gauges are available for Hi-Lok®, Hi-Lite®, and Hi-Tigue® systems. To select the correct gauge for the fastener, select the one that corresponds to the appropriate pin diameter. If the pin falls short of the minimum limit or exceeds the maximum, it must be removed, and a more appropriate size selected. Exceeding the maximum limit requires a shorter pin, and falling short the minimum limit requires a longer pin. The correct pin will lie between the maximum and minimum limitations giving a proper ratio of grip to protrusion. These are complete sets that include gauges for -5 to -12 fasteners.



Hi-Lok® Standard Protrusion Guages (OM2-1522)



Hi-Lite® Standard Protrusion Guages (OM2-1522 HST)



Hi-Lok® Aerospace "B" Gauge Set (OM2-1522-B)



Hi-Lite® Aerospace "B" Gauge Set (OM2-1522HST-B)



Hi-Lok® Large Diameter Guage Set (OM2-1522-2, OM2-1522-B-2)



Hi-Lite® Large Diameter Guage Set (OM2-1522HST-2)



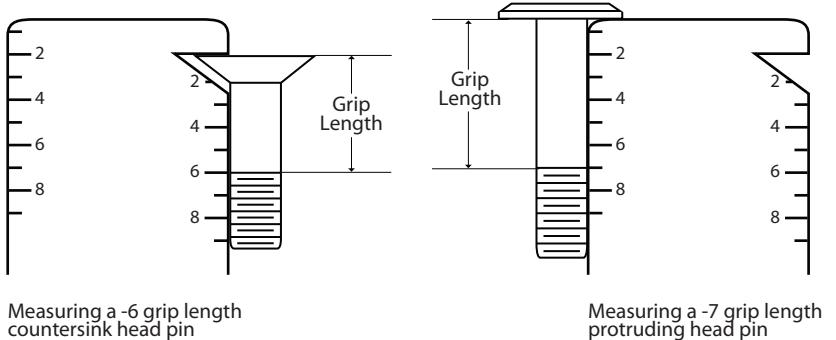
Protrusion Guages

Dash Sizes	Nominal Pin Diameter		OM2-1522 Pin Protrusion Limits*		OM2-1522-B Pin Protrusion Limits**		OM2-1522 HST Pin Protrusion Limits*		OM2-1522 HST-B Pin Protrusion Limits**	
	DECIMAL	FRACTION	DECIMAL	MIN	MAX	MIN	MAX	MIN	MAX	MIN
-5	5/32"	0.1560	0.302	0.384	0.302	0.389	0.270	0.352	0.270	0.352
-6	3/16"	0.1875	0.315	0.397	0.315	0.402	0.280	0.362	0.280	0.362
-8	1/4"	0.2500	0.385	0.467	0.385	0.472	0.310	0.392	0.310	0.392
-10	5/16"	0.3125	0.490	0.572	0.490	0.577	0.370	0.452	0.370	0.452
-12	3/8"	0.3750	0.535	0.617	0.535	0.622	0.410	0.492	0.410	0.492
Dash Sizes	Nominal Pin Diameter		OM2-1522-2 Pin Protrusion Limits*		OM2-1522-B-2 Pin Protrusion Limits**		OM2-1522HST-2 Pin Protrusion Limits*		OM2-1522 HST-B-2 Pin Protrusion Limits**	
-14	7/16"	0.4375	0.625	0.707	0.625	0.707	0.475	0.557	0.475	0.557
-16	1/2"	0.5000	0.675	0.757	0.675	0.757	0.515	0.597	0.515	0.597
-18	9/16"	0.5625	0.760	0.842	0.760	0.842	0.590	0.672	0.590	0.672
-20	5/8"	0.6250	0.815	0.897	0.815	0.897	0.650	0.732	0.630	0.712
-24	3/4"	0.750	1.040	1.122	1.040	1.122	-	-	-	-

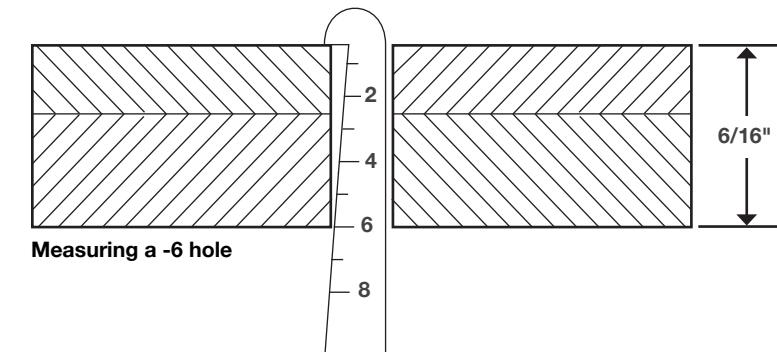
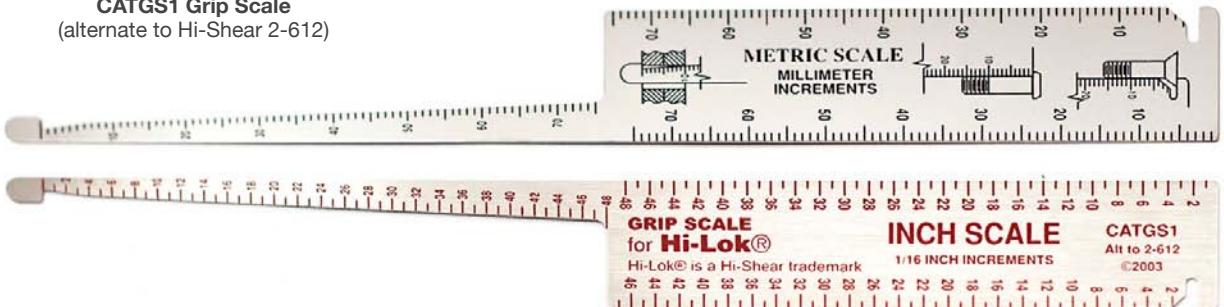
*OM2-1522 and OM2-1522 HST are interchangeable with Hi-Shear 2-1522 and 2-1522 HST respectively

**Values per BAC5004-2

Our grip scales serve two purposes: first, the thicker side is used to measure the "grip-length" of Hi-Lok® and Hi-Lite® pins, Shear Lockbolts, structural screws, and bolts; second, the thinner side is used to measure the thickness of materials to be fastened so that the proper length pin may be chosen.



CATGS1 Grip Scale
(alternate to Hi-Shear 2-612)



As shown here, when measuring material which is 6/16" thick, a -6 grip length fastener would be selected

OM2-651 Grip Scale and Slide Assembly
(alternate to Hi-Shear 2-651)



OM2-615 Grip Scale Slide
(alternate to Hi-Shear 2-615)





Collar Removal Tools

Tools for the removal of threaded collars come in a variety of shapes and sizes to meet a wide range of needs. Some work best on aluminum collars, while others are better-suited for steel or titanium. Space constraints often require the use of special configurations. Omega offers a full range of tools for all approaches. Our competent staff is eager to answer questions and make recommendations for particular applications. We also welcome user comments, suggestions, and feedback about tools, their performance, suitability in various applications, and ways we might improve them.

REM Series

Savi-Socket

OMAR and OMSK Series

Six-Wing® Tool and Socket Series

Pliers

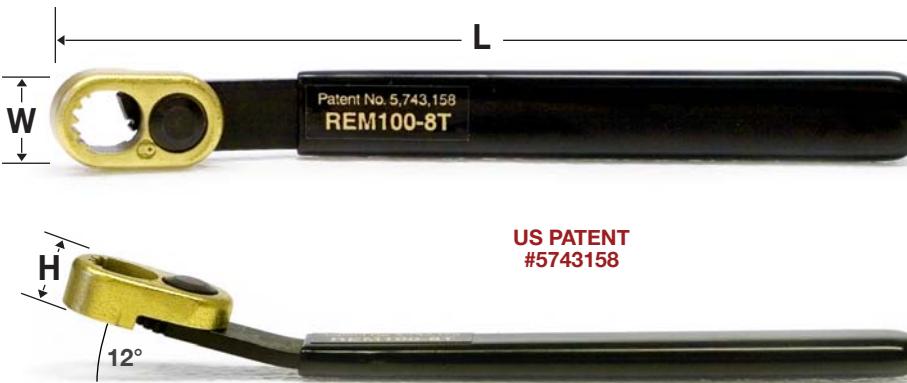
OM86

REM 100 Series (PATENTED)

This patented hand tool slips easily over any threaded collar (Hi-Lok®, Hi-Lite®, and Eddie-Bolt®) and quickly unscrews without cutting or prying. Particularly useful for round or damaged collars, the REM Series prevents metal shavings, broken pieces, and damage to skins or to the adjacent structure.

Tools are available for collar dash sizes -5 thru -20 in a variety of configurations

- Affordable
- Versatile
- Durable
- Easy to use



**Reading Part Numbers
REM 100-56E**

- Type
 - E: Eddie Bolt
 - S: Straight (Flat Handle)
 - P: Open End
 - CF: Crow Foot
- Dash Size

Hi-Lok® and Hi-Lite® Collar Removal Tools

Fastener Data		Tool Dimensions			Part Number	
DASH SIZE	DIAMETER RANGE	WIDTH (W)	HEAD HEIGHT (H)	HANDLE LENGTH (L)	12° OFFSET HANDLE	STRAIGHT HANDLE
-5, -6	0.283 - 0.335	0.560	0.350	5.6	REM 100-56T	REM 100-56TS
-8	0.407 - 0.422	0.670	0.350	6	REM 100-8T	REM 100-8TS
-10	0.512 - 0.538	0.790	0.400	7	REM 100-10T	REM 100-10TS
-1012	0.512 - 0.538	0.790	0.400	7	REM 100-1012T	REM 100-1012TS
-12	0.614 - 0.649	0.900	0.500	8	REM 100-12T	REM 100-12TS
-14	0.707 - 0.775	1.165	0.625	10	REM 100-14T	REM 100-14TS
-16	0.809 - 0.880	1.260	0.625	11	REM 100-16T	REM 100-16TS
-18	0.861 - 0.935	1.365	0.725	12	REM 100-18T	REM 100-18TS
.20	0.985 - 1.005	1.435	0.725	13	REM 100-20T	REM 100-20TS

Eddie-Bolt® Collar Removal Tools

Fastener Data		Tool Dimensions			Part Number	
DASH SIZE	NOMINAL DIAMETER	WIDTH (W)	HEAD HEIGHT (H)	HANDLE LENGTH (L)	12° OFFSET HANDLE	STRAIGHT HANDLE
-5	5/32	0.42	0.35	5.6	REM 100-56E	REM 100-56ES
-6	3/16	0.42	0.35	5.6	REM 100-56E	REM 100-56ES
-8	1/4	0.56	0.35	5.6	REM 100-8E	REM 100-8ES
-10	5/16	0.67	0.35	6	REM 100-10E	REM 100-10ES
-12	3/8	0.79	0.40	7	REM 100-12E	REM 100-12ES

*Larger sizes to -24 available on request

Crow-Foot Series

When removing collars in limited access areas, these variations offer much needed versatility. The crow-foot version may be driven directly with a standard hand ratchet, or fitted to an extension for deeper access. If you face a particularly challenging application, our experienced staff would be pleased to work with you and make a tool recommendation.



CROW FOOT	CROW FOOT OPEN END	SQUARE DRIVE	WIDTH (W)	HEIGHT (H)	LENGTH (L)
REM 100-56CF	REM100-56CFP	1/4"	0.56	0.35	1.19
REM100-8CF	REM100-8CFP	1/4"	0.67	0.35	2.25
REM100-10CF	REM100-10CFP	1/4"	0.79	0.40	2.52
REM100-12CF	REM100-12CFP	3/8"	0.90	0.50	2.83
REM100-14CF	n/a	3/8"	1.17	0.63	3.60
REM100-16CF	n/a	3/8"	1.26	0.63	4.25



90° OFFSET	CROW FOOT OPEN END	SQUARE DRIVE	WIDTH (W)	HEIGHT (H)	LENGTH (L)
REM 102-56	REM102-56P	1/4"	0.56	0.35	1.05
REM102-8	REM102-8P	1/4"	0.67	0.35	1.19
REM102-10	REM102-10P	1/4"	0.79	0.40	1.45
REM102-12	REM102-12P	3/8"	0.90	0.50	1.63
REM102-14	n/a	3/8"	1.17	0.63	2.10
REM102-16	n/a	3/8"	1.26	0.63	2.25

Savi-Socket is the newest innovation for removing Hi-Lok®, Hi-Lite®, Eddie-Bolt®, and HUCK threaded collar systems. It is the first socket to utilize a conical/tapered shape with helical teeth to remove collars or bolts. This design firmly draws the socket onto the collar, gripping and removing it with minimal effort and wear on the tool, without jamming the collar into the socket. The socket cannot be used to install or tighten collars after the hex is broken off. Experienced users are capable of removing collars 5-8 times faster than with traditional systems.

Manufactured in the USA of high-strength tool steel, the socket is then heat-treated for optimum durability and finished with a highly visible corrosion-resistant coating. It is suited for use on aluminum, steel, titanium, and all coated collars. As an anti-FOD measure, it incorporates a set screw for positive retention.

SAVI SOCKET



SAVI-59

4 Piece Set: SAVI-56810EB Eddie Bolt® Sockets

Savi-Socket Collar Removal Tools

NOMINAL COLLAR SIZE	COLLAR "DASH" NUMBER	SQUARE DRIVE SIZE	TOP OF COLLAR DIA. (MM)*	TOP OF COLLAR DIA. (IN.)*	INDIVIDUAL SAVI-SOCKET PART NUMBER	AVAILABLE SETS			
						EDDIE-BOLT® SAVI-56810-EB (4-PIECE SET)	Hi-Lok® Hi-Lite® SAVI-568-HL (12-PIECE SET)	Hi-Lok® SAVI-568-RED (6-PIECE SET)	SAVI-1012 (6-PIECE SET)
5/32"EB	5 EB	1/4"	5.5	0.21	SAVI-21	21			
5/32, 3/16"EB	5 & 6 EB	1/4"	6.2	0.24	SAVI-24	24	24		
5/32"	5	1/4"	6.5	0.25	SAVI-25		25	25	
5/32 & 3/16	5, 6	1/4"	6.7	0.26	SAVI-26		26	26	
5/32 & 3/17	5, 6	1/4"	7.0	0.27	SAVI-27		27		
3/16"	6	1/4"	7.2	0.28	SAVI-28		28	28	
3/16"	6	1/4"	7.5	0.29	SAVI-29		29	29	
1/4", 1/4EB	8 & 8 EB	1/4"	8.2	0.32	SAVI-32	32	32		
1/4"	8	1/4"	8.5	0.33	SAVI-33		33		
1/4"	8	1/4"	8.7	0.34	SAVI-34		34		
1/4"	8	1/4"	9.0	0.35	SAVI-35		35		
1/4"	8	1/4"	9.2	0.36	SAVI-36		36	36	
1/4"	8	1/4"	9.5	0.37	SAVI-37		37	37	
5/16"EB	10 EB	1/4"	10.0	0.39	SAVI-39	39			
5/16"	10	3/8"	11.0	0.43	SAVI-43			43	
5/16"	10	3/8"	11.5	0.45	SAVI-45			45	
5/16"	10	3/8"	12.0	0.47	SAVI-47				
5/16"	10	3/8"	12.7	0.50	SAVI-50			50	
3/8"	12	3/8"	13.0	0.51	SAVI-51			51	
3/8"	12	3/8"	14.0	0.55	SAVI-55			55	
3/8"	12	3/8"	14.3	0.56	SAVI-56			56	
7/16"	14	3/8"	15.0	0.59	SAVI-59				
7/16"	14	3/8"	16.0	0.63	SAVI-63				
1/2"	16	1/2"	17.0	0.67	SAVI-67				
1/2"	16	1/2"	17.5	0.69	SAVI-69				

*Collar opening diameter where socket just fits over the top of the collar



OMAR Series

Our OMAR Series tools are ideal for removing damaged or rounded threaded collars.

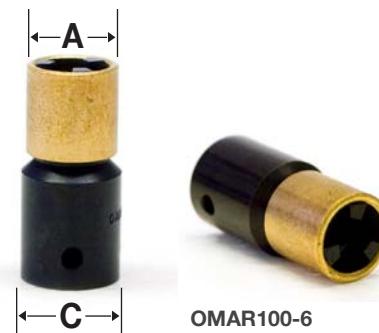
The OMAR series is adaptable to power or hand tools, with a reverse function and a 3/8" drive, for removal of installed frangible Hi-Lok®/Hi-Lite® or similar collars. A hex key set screw is included as an anti-FOD measure. Best for aluminum collars.

- Powerful Application - Excellent Grip
- Tailored to Specific Sizes

OMAR100-6



OMAR100-8



OMAR100-6

OMAR Series Collar Removal Tool

DASH SIZE	A DIAMETER (IN.)	C DIAMETER (IN.)	OMAR 100 Hi-Lok® PART NUMBER	OMAR 100 Hi-Lite® PART NUMBER
-5	5/8	11/16	OMAR 100-5	OMAR 102-5
-6	5/8	11/16	OMAR 100-6	OMAR 102-6
-8	13/16	3/4	OMAR 100-8	OMAR 102-8
-10	3/4*	3/4	OMAR 100-10	OMAR 102-10
-12	7/8**	7/8	OMAR 100-12	OMAR 102-12

*Sleeveless
**Removes similar collar types

OMSK Series (PATENTED)

The OMSK Series offers an efficient and convenient way to remove Hi-Lok® and Eddie-Bolt® collars. The patented 1/4" square drive collar removal sockets incorporate a tapered left-hand thread which, when screwed counter-clockwise onto the collar, breaks it loose, and unscrews the collar. This system is best suited to aluminum collars, but solutions for titanium and steel collars are available upon request.

- Strong Grip
- Tailored to Sizes

US PATENT
#5737981



OMSK Series Removal Sockets

DASH SIZE	COLLAR PIN DIA.	1/4" SQUARE DRIVE PART NUMBER	3/8" SQUARE DRIVE PART NUMBER
-5	5/32"	OMSK3581-5/32	
-6	3/16"	OMSK3581-3/16	
-8	1/4"	OMSK3581-1/4	
-10	5/16"	OMSK3581-5/16	OMSK3581A-5/16
-12	3/8"	OMSK3581-3/8	OMSK3581A-3/8
-14	7/16"	OMSK3581-7/16	OMSK3581A-7/16
-16	1/2"		OMSK3581-1/2



OMSK Series

Replaces ATSK3581 Series sockets

Six Wing® Tool

The Six-Wing® frangible collar is recognizable by the six-faceted, semi-spline arrangement of wings around the collar base. These collars are used in high strength applications, typically on fighter aircraft. Special tapered spline sockets were developed to remove these collars. When fitted into the flat box-ratchet handle, these sockets provide easy removal, while at the same time preventing re-installation or re-use of the removed collars. New collars must be used to insure proper torque.

Available as an individual socket or a complete ratchet tool assembly



Northrop Six-Wing® Tool

The Northrop version of the Six-Wing® tool incorporates a hex side for collar installation, and a spline side for removal. This arrangement also prevents the re-use of removed collars.

Northrop Six-Wing® Tool

DASH SIZE	COLLAR SIZE	PART NUMBER
-1	5/32	T201X37-1
-2	3/16	T201X37-2
-3	1/4	T201X37-3
-4	5/16	T201X37-4
-5	3/8	T201X37-5
-6	7/16	T201X37-6

Other sizes available on request



Pliers may be used to remove collars in open access applications, but results are typically mixed. Omega offers the Zephyr style, which is best suited to small aluminum collars. It has been our experience that they do not work well with large collars, or steel/titanium collars where greater gripping force is required to achieve the required torque to break collars loose. The Savi-Socket fitted to a standard hand ratchet will usually offer far superior results.

Hi-Lok® Pliers ZHP-100

This variation of the ATI® model is equipped with a hardened, diamond-jaw pattern that allows the pliers to grip aluminum collars from any direction.



ZHP100

OM86 Series Hollow Cutter

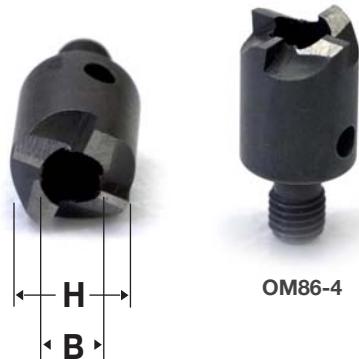
These tools are designed to cut away swaged or threaded collars from fasteners so the fastener pin can be easily removed. They are ideal for removing Hi-Shear® rivets.

The rotating cutter is applied to the collar until a sufficient amount of collar material has been removed. The pin is then easily removed with a punch. A microstop cage is typically used to prevent the cutter teeth from contacting and damaging the work surface.

OM86 Series Hollow Cutter

DASH SIZE	BODY DIAMETER (B)	HOLE DIAMETER (H)	PART NUMBER	FASTENER SIZE
-1	0.365	0.1240	OM86-1	1/8
-2	0.365	0.1570	OM86-2	5/32
-3	0.438	0.1875	OM86-3	3/16
-4	0.500	0.2470	OM86-4	1/4
-5	0.562	0.3100	OM86-5	5/16

Larger sizes available on request



OM86-4

Cutting Tools and Accessories



Precisely drilled holes are crucial to the integrity of aircraft joints. Whether it's thin skins or major structure, depend on precision cutting tools from Omega Technologies to produce and prepare superior holes for optimum fastener performance. Our experienced staff is eager to assist in selecting the best tool for a particular application.

Taper -Lok Cutters

Threaded Shank Drills

Jobber Drills

Aircraft Extension Drills

Chuckling Reamers

Threaded Shank Reamers

Aircraft Counterbores

Paint Cutters

Hole Saws

Other Cutters

Taper-Lok drills and reamers are manufactured to the most stringent tolerances for precision hole preparation. Standard in HSS or M7, high speed steel, they are also available in cobalt and carbide. A complete line of Taper-Lok gauging tools is also available.

Taper-Lok Cutters



Taper-Lok Drill Reamer

Part Numbers

TLD2040AR1-04	TLD2040BR1-04	TLD2060AR1-04	TLD2060BR1-04
TLD2040AR1-05	TLD2040BR1-05	TLD2060AR1-05	TLD2060BR1-05
TLD2040AR1-3	TLD2040BR1-3	TLD2060AR1-3	TLD2060BR1-3
TLD2040AR1-07	TLD2040BR1-07	TLD2060AR1-07	TLD2060BR1-07
TLD2040AR1-4	TLD2040BR1-4	TLD2060AR1-4	TLD2060BR1-4
TLD2040AR1-5	TLD2040BR1-5	TLD2060AR1-5	TLD2060BR1-5
TLD2040AR1-6	TLD2040BR1-6	TLD2060AR1-6	TLD2060BR1-6
TLD2040AR1-7	TLD2040BR1-7	TLD2060AR1-7	TLD2060BR1-7
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TLD2040AR5-14	TLD2040BR5-14	TLD2060AR5-14	TLD2060BR5-14
TLD2040AR5-16	TLD2040BR5-16	TLD2060AR5-16	TLD2060BR5-16

Reading Part Numbers

TLD2040 AR 1 - 5

Nominal Bolt Diameter
In 1/16
or 1/32, if preceded by "0" (-05)

Bolt Group

Type of Bolt

AR: Flush Head
BR: button/protruding head

HSS Cutter Series

CUSTOM KITS

Available on Request

Taper-Lok
Tooling Kit



Taper-Lok Kit

Taper-Lok
Gauge Kit



Widely used in the aircraft industry, Threaded Shank (Adapter) Drills facilitate access to space-restricted areas unsuited for standard chuck-type drills. They can be used with a host of angle-drills and offset drills, and are available in high speed steel (HSS), cobalt (CO), and carbide (CB). To aid in identification, HSS drills are made with hexagonal adapters, while cobalt drills are made with square adapters.

Omega stocks NAS965 spec drills, and will fabricate special lengths to order. We also make threaded core drills, double margin drills, stove-burner drills, and gun drills – all available with pilots and in Metric sizes.

High speed steel and cobalt drills feature 135° split points.

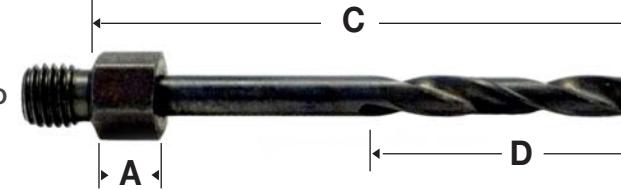
1664COSH



1664COST



#10HSLO



Reading Part Numbers

#10 HS SH

Length

VS: Very Stub

ST: Stub

SH: Short

LO: Long

Material

HS: High Speed Steel (Type B)

CO: Cobalt (Type D)

CB: Carbide

Cutter Diameter

Refer to Decimal Chart

Threaded Shank Tools

Series	Drill Diameter	Adapter Length (A)	Flute Length (D)	Overall Length (C)
Stub	0.06250 - 0.1250	1/8	5/16	1/2
Stub	0.1285 - 0.1935	1/8	5/16	9/16
Stub	0.1960 - 0.2570	1/4	5/16	5/8
Short	0.0625 - 0.1250	1/4	9/16	1
Short	0.1285 - 0.1935	1/4	9/16	1-1/4
Short	0.1960 - 0.2570	5/16	9/16	1-1/4
Long	0.0625 - 0.1250	1/4	7/8	2-1/8
Long	0.1285 - 0.1935	1/4	1-1/8	2-1/8
Long	0.1960 - 0.2570	5/16	1-1/8	2-1/8

Special configurations, including piloted versions and custom lengths, are readily available.

High Speed Steel

		Part Numbers						Part Numbers						
SIZE	DECIMAL	STUB	SHORT	LONG	SIZE	DECIMAL	STUB	SHORT	LONG	SIZE	DECIMAL	STUB	SHORT	LONG
1/64"	0.0156	0164HSST	0164HSSH	0164HSLO	11/64"	0.1719	1164HSST	1164HSSH	1164HSLO	1/64"	0.0156	0164COST	0164COSH	0164COLO
1/32"	0.0312	0264HSST	0264HSSH	0264HSLO	#17	0.1730	#17HSST	#17HSSH	#17HSLO	1/32"	0.0312	0264COST	0264COSH	0264COLO
#60	0.0400	#60HSST	#60HSSH	#60HSLO	#16	0.1770	#16HSST	#16HSSH	#16HSLO	#60	0.0400	#60COST	#60COSH	#60COLO
#59	0.0410	#59HSST	#59HSSH	#59HSLO	#15	0.1800	#15HSST	#15HSSH	#15HSLO	#59	0.0410	#59COST	#59COSH	#59COLO
#58	0.0420	#58HSST	#58HSSH	#58HSLO	#14	0.1820	#14HSST	#14HSSH	#14HSLO	#58	0.0420	#58COST	#58COSH	#58COLO
#57	0.0430	#57HSST	#57HSSH	#57HSLO	#13	0.1850	#13HSST	#13HSSH	#13HSLO	#57	0.0430	#57COST	#57COSH	#57COLO
#56	0.0465	#56HSST	#56HSSH	#56HSLO	3/16"	0.1875	1264HSST	1264HSSH	1264HSLO	#56	0.0465	#56COST	#56COSH	#56COLO
3/64"	0.0469	0364HSST	0364HSSH	0364HSLO	#12	0.1890	#12HSST	#12HSSH	#12HSLO	3/64"	0.0469	0364COST	0364COSH	0364COLO
#55	0.0520	#55HSST	#55HSSH	#55HSLO	#11	0.1910	#11HSST	#11HSSH	#11HSLO	#55	0.0520	#55COST	#55COSH	#55COLO
#54	0.0550	#54HSST	#54HSSH	#54HSLO	#10	0.1935	#10HSST	#10HSSH	#10HSLO	#54	0.0550	#54COST	#54COSH	#54COLO
#53	0.0590	#53HSST	#53HSSH	#53HSLO	#9	0.1960	#9HSST	#9HSSH	#9HSLO	#53	0.0590	#53COST	#53COSH	#53COLO
1/16"	0.0625	0464HSST	0464HSSH	0464HSLO	#8	0.1990	#8HSST	#8HSSH	#8HSLO	1/16"	0.0625	0464COST	0464COSH	0464COLO
#52	0.0635	#52HSST	#52HSSH	#52HSLO	#7	0.2010	#7HSST	#7HSSH	#7HSLO	#52	0.0635	#52COST	#52COSH	#52COLO
#51	0.0670	#51HSST	#51HSSH	#51HSLO	13/64"	0.2031	1364HSST	1364HSSH	1364HSLO	#51	0.0670	#51COST	#51COSH	#51COLO
#50	0.0700	#50HSST	#50HSSH	#50HSLO	#6	0.2040	#6HSST	#6HSSH	#6HSLO	#50	0.0700	#50COST	#50COSH	#50COLO
#49	0.0730	#49HSST	#49HSSH	#49HSLO	#5	0.2055	#5HSST	#5HSSH	#5HSLO	#49	0.0730	#49COST	#49COSH	#49COLO
#48	0.0760	#48HSST	#48HSSH	#48HSLO	#4	0.2090	#4HSST	#4HSSH	#4HSLO	#48	0.0760	#48COST	#48COSH	#48COLO
5/64"	0.0781	0564HSST	0564HSSH	0564HSLO	#3	0.2130	#3HSST	#3HSSH	#3HSLO	5/64"	0.0781	0564COST	0564COSH	0564COLO
#47	0.0785	#47HSST	#47HSSH	#47HSLO	7/32"	0.2188	1464HSST	1464HSSH	1464HSLO	#47	0.0785	#47COST	#47COSH	#47COLO
#46	0.0810	#46HSST	#46HSSH	#46HSLO	#2	0.2210	#2HSST	#2HSSH	#2HSLO	#46	0.0810	#46COST	#46COSH	#46COLO
#45	0.0820	#45HSST	#45HSSH	#45HSLO	#1	0.2280	#1HSST	#1HSSH	#1HSLO	#45	0.0820	#45COST	#45COSH	#45COLO
#44	0.0860	#44HSST	#44HSSH	#44HSLO	A	0.2340	AHSST	AHSSH	AHSLO	#44	0.0860	#44COST	#44COSH	#44COLO
#43	0.0890	#43HSST	#43HSSH	#43HSLO	15/64"	0.2344	1564HSST	1564HSSH	1564HSLO	#43	0.0890	#43COST	#43COSH	#43COLO
#42	0.0935	#42HSST	#42HSSH	#42HSLO	B	0.2380	BHSST	BHSSH	BHSLO	#42	0.0935	#42COST	#42COSH	#42COLO
3/32"	0.0938	0664HSST	0664HSSH	0664HSLO	C	0.2420	CHSST	CHSSH	CHSLO	3/32"	0.0938	0664COST	0664COSH	0664COLO
#41	0.0960	#41HSST	#41HSSH	#41HSLO	D	0.2460	DHSST	DHSSH	DHSLO	#41	0.0960	#41COST	#41COSH	#41COLO
#40	0.0980	#40HSST	#40HSSH	#40HSLO	1/4"	0.2500	1664HSST	1664HSSH	1664HSLO	#40	0.0980	#40COST	#40COSH	#40COLO
#39	0.0995	#39HSST	#39HSSH	#39HSLO	E	0.2500	EHSST	EHSSH	EHSLO	#39	0.0995	#39COST	#39COSH	#39COLO
#38	0.1015	#38HSST	#38HSSH	#38HSLO	F	0.2570	FHSST	FHSSH	FHSLO	#38	0.1015	#38COST	#38COSH	#38COLO
#37	0.1040	#37HSST	#37HSSH	#37HSLO	G	0.2610	GHSST	GHSSH	GHSLO	#37	0.1040	#37COST	#37COSH	#37COLO
#36	0.1064	#36HSST	#36HSSH	#36HSLO	17/64"	0.2656	1764HSST	1764HSSH	1764HSLO	#36	0.1064	#36COST	#36COSH	#36COLO
7/64"	0.1094	0764HSST	0764HSSH	0764HSLO	H	0.2660	HHSST	HHSSH	HHSLO	7/64"	0.1094	0764COST	0764COSH	0764COLO
#35	0.1100	#35HSST	#35HSSH	#35HSLO	I	0.2720	IHSST	IHSSH	IHSLO	#35	0.1100	#35COST	#35COSH	#35COLO
#34	0.1110	#34HSST	#34HSSH	#34HSLO	J	0.2770	JHSST	JHSSH	JHSLO	#34	0.1110	#34COST	#34COSH	#34COLO
#33	0.1130	#33HSST	#33HSSH	#33HSLO	K	0.2810	KHSST	KHSSH	KHSLO	#33	0.1130	#33COST	#33COSH	#33COLO
#32	0.1160	#32HSST	#32HSSH	#32HSLO	9/32"	0.2812	1864HSST	1864HSSH	1864HSLO	#32	0.1160	#32COST	#32COSH	#32COLO
#31	0.1200	#31HSST	#31HSSH	#31HSLO	L	0.2900	LHSST	LHSSH	LHSLO	#31	0.1200	#31COST	#31COSH	#31COLO
1/8"	0.1250	0864HSST	0864HSSH	0864HSLO	M	0.2950	MHSST	MHSSH	MHSLO	1/8"	0.1250	0864COST	0864COSH	0864COLO
#30	0.1285	#30HSST	#30HSSH	#30HSLO	19/64"	0.2969	1964HSST	1964HSSH	1964HSLO	#30	0.1285	#30COST	#30COSH	#30COLO
#29	0.1360	#29HSST	#29HSSH	#29HSLO	N	0.3020	NHSST	NHSSH	NHSLO	#29	0.1360	#29COST	#29COSH	#29COLO
#28	0.1405	#28HSST	#28HSSH	#28HSLO	5/16"	0.3125	2064HSST	2064HSSH	2064HSLO	#28	0.1405	#28COST	#28COSH	#28COLO
9/64"	0.1406	0964HSST	0964HSSH	0964HSLO	O	0.3160	OHSST	OHSSH	OHSLO	9/64"	0.1406	0964COST	0964COSH	0964COLO
#27	0.1440	#27HSST	#27HSSH	#27HSLO	P	0.3230	PHSST	PHSSH	PHSLO	#27	0.1440	#27COST	#27COSH	#27COLO
#26	0.1470	#26HSST	#26HSSH	#26HSLO	21/64"	0.3281	2164HSST	2164HSSH	2164HSLO	#26	0.1470	#26COST	#26COSH	#26COLO
#25	0.1495	#25HSST	#25HSSH	#25HSLO	Q	0.3320	QHSST	QHSSH	QHSLO	#25	0.1495	#25COST	#25COSH	#25COLO
#24	0.1520	#24HSST	#24HSSH	#24HSLO	R	0.3390	RHSST	RHSSH	RHSLO	#24	0.1520	#24COST	#24COSH	#24COLO
#23	0.1542	#23HSST	#23HSSH	#23HSLO	11/32"	0.3438	2264HSST	2264HSSH	2264HSLO	#23	0.1542	#23COST	#23COSH	#23COLO
5/32"	0.1562	1064HSST	1064HSSH	1064HSLO	S	0.3480	SHSST	SHSSH	SHSLO	5/32"	0.1562	1064COST	1064COSH	1064COLO
#22	0.1570	#22HSST	#22HSSH	#22HSLO	T	0.3580	THSST	THSSH	THSLO	#22	0.1570	#22COST	#22COSH	#22COLO
#21	0.1590	#21HSST	#21HSSH	#21HSLO	23/64"	0.3594	2364HSST	2364HSSH	2364HSLO	#21	0.1590	#21COST	#2	

Jobber Length Drills, commonly referred to as simply "Jobber Drills," are the workhorse of the industry. Quality is the key to producing satisfactory holes, and will determine production rates and tool durability.

Omega offers a complete range of quality NAS907 aircraft drills in both high speed steel and cobalt (both with 135° split points). These drills are listed on the following pages. Additionally, carbide drills, core drills, double margin drills, stove-burner drills, and specials are also available, though not shown in the catalogue. Please contact our customer service staff for all inquiries and pricing.



Jobber Drill Dimensions

DRILL SIZE	DRILL DIA. (IN.)	DRILL DIA. (MM)	OVERALL LENGTH (IN.)	OVERALL LENGTH (MM)	FLUTE LENGTH (IN.)	FLUTE LENGTH (MM)
1/16"	0.063	1.588	1.875	48	0.875	22
51	0.067	1.702	2.000	51	1.000	25
46	0.081	2.057	2.125	54	1.125	29
43	0.089	2.261	2.250	57	1.250	32
41	0.096	2.438	2.375	60	1.375	35
38	0.102	2.578	2.500	64	1.438	37
7/64	0.109	2.779	2.625	67	1.500	38
32	0.116	2.946	2.750	70	1.625	41
29	0.136	3.454	2.875	73	1.750	44
27	0.144	3.658	3.000	76	1.875	48
24	0.152	3.861	3.125	79	2.000	51
21	0.159	4.039	3.250	83	2.125	54
17	0.173	4.394	3.375	86	2.188	56
13	0.185	4.699	3.500	89	2.313	59
10	0.194	4.915	3.625	92	2.438	62
6	0.204	5.182	3.750	95	2.500	64
2	0.221	5.613	3.438	87	2.625	67
B	0.238	6.045	4.000	102	2.750	70
F	0.257	6.528	4.125	105	2.875	73
K	0.281	7.137	4.250	108	2.938	75
M	0.295	7.493	4.375	111	3.063	78
5/16	0.313	7.938	4.500	114	3.188	81
P	0.323	8.204	4.625	117	3.313	84
Q	0.332	8.433	4.750	121	3.438	87
S	0.348	8.839	4.875	124	3.500	89
U	0.368	9.347	5.000	127	3.625	92
W	0.386	9.804	5.125	130	3.750	95
Y	0.404	10.262	5.250	133	3.875	98
27/64	0.422	10.716	5.375	137	3.938	100
7/16	0.438	11.113	5.500	140	4.063	103
29/64	0.453	11.509	5.625	143	4.188	106
15/32	0.469	11.908	5.750	146	4.313	110
31/64	0.484	12.304	5.875	149	4.375	111
1/2	0.500	12.700	6.000	152	4.500	114

Reading Part Numbers

#10 CO JO

Material

HSJO: High Speed Steel
HSJOHD: High Speed Steel
COJO: Cobalt (Type J)
CBOJ: Carbide

Cutter Diameter

Refer to Decimal Chart

Jobber Drills

Part Numbers				Part Numbers			
SIZE	DECIMAL	HIGH SPEED STEEL	COBALT	SIZE	DECIMAL	HIGH SPEED STEEL	COBALT
1/64"	0.0156	0164HSJOHD	0164COJO	11/64"	0.1719	1164HSJOHD	1164COJO
1/32"	0.0312	0264HSJOHD	0264COJO	#17	0.1730	#17HSJOHD	#17COJO
#60	0.0400	#60HSJOHD	#60COJO	#16	0.1770	#16HSJOHD	#16COJO
#59	0.0410	#59HSJOHD	#59COJO	#15	0.1800	#15HSJOHD	#15COJO
#58	0.0420	#58HSJOHD	#58COJO	#14	0.1820	#14HSJOHD	#14COJO
#57	0.0430	#57HSJOHD	#57COJO	#13	0.1850	#13HSJOHD	#13COJO
#56	0.0465	#56HSJOHD	#56COJO	3/16"	0.1875	1264HSJOHD	1264COJO
3/64"	0.0469	0364HSJOHD	0364COJO	#12	0.1890	#12HSJOHD	#12COJO
#55	0.0520	#55HSJOHD	#55COJO	#11	0.1910	#11HSJOHD	#11COJO
#54	0.0550	#54HSJOHD	#54COJO	#10	0.1935	#10HSJOHD	#10COJO
#53	0.0590	#53HSJOHD	#53COJO	#9	0.1960	#9HSJOHD	#9COJO
1/16"	0.0625	0464HSJOHD	0464COJO	#8	0.1990	#8HSJOHD	#8COJO
#52	0.0635	#52HSJOHD	#52COJO	#7	0.2010	#7HSJOHD	#7COJO
#51	0.0670	#51HSJOHD	#51COJO	13/64"	0.2031	1364HSJOHD	1364COJO
#50	0.0700	#50HSJOHD	#50COJO	#6	0.2040	#6HSJOHD	#6COJO
#49	0.0730	#49HSJOHD	#49COJO	#5	0.2055	#5HSJOHD	#5COJO
#48	0.0760	#48HSJOHD	#48COJO	#4	0.2090	#4HSJOHD	#4COJO
5/64"	0.0781	0564HSJOHD	0564COJO	#3	0.2130	#3HSJOHD	#3COJO
#47	0.0785	#47HSJOHD	#47COJO	7/32"	0.2188	1464HSJOHD	1464COJO
#46	0.0810	#46HSJOHD	#46COJO	#2	0.2210	#2HSJOHD	#2COJO
#45	0.0820	#45HSJOHD	#45COJO	#1	0.2280	#1HSJOHD	#1COJO
#44	0.0860	#44HSJOHD	#44COJO	A	0.2340	AHSJOHD	ACOJO
#43	0.0890	#43HSJOHD	#43COJO	15/64"	0.2344	1564HSJOHD	1564COJO
#42	0.0935	#42HSJOHD	#42COJO	B	0.2380	BHSJOHD	BCOJO
3/32"	0.0938	0664HSJOHD	0664COJO	C	0.2420	CHSJJOHD	CCOJO
#41	0.0960	#41HSJOHD	#41COJO	D	0.2460	DHSJOHD	DCOJO
#40	0.0980	#40HSJOHD	#40COJO	1/4"	0.2500	1664HSJOHD	1664COJO
#39	0.0995	#39HSJOHD	#39COJO	E	0.2500	EHSJOHD	ECOJO
#38	0.1015	#38HSJOHD	#38COJO	F	0.2570	FHSJOHD	FCOJO
#37	0.1040	#37HSJOHD	#37COJO	G	0.2610	GHSJOHD	GCOJO
#36	0.1064	#36HSJOHD	#36COJO	17/64"	0.2656	1764HSJOHD	1764COJO
7/64"	0.1094	0764HSJOHD	0764COJO	H	0.2660	HHSJOHD	HCOJO
#35	0.1100	#35HSJOHD	#35COJO	I	0.2720	IHSJOHD	ICOJO
#34	0.1110	#34HSJOHD	#34COJO	J	0.2770	JHSJOHD	JCOJO
#33	0.1130	#33HSJOHD	#33COJO	K	0.2810	KHSJOHD	KCOJO
#32	0.1160	#32HSJOHD	#32COJO	9/32"	0.2812	1864HSJOHD	1864COJO
#31	0.1200	#31HSJOHD	#31COJO	L	0.2900	LHSJOHD	LCOJO
1/8"	0.1250	0864HSJOHD	0864COJO	M	0.2950	MHSJOHD	MCOJO
#30	0.1285	#30HSJOHD	#30COJO	19/64"	0.2969	1964HSJOHD	1964COJO
#29	0.1360	#29HSJOHD	#29COJO	N	0.3020	NHSJOHD	NCOJO
#28	0.1405	#28HSJOHD	#28COJO	5/16"	0.3125	2064HSJOHD	2064COJO
9/64"	0.1406	0964HSJOHD	0964COJO	O	0.3160	OHSJOHD	OCOJO
#27	0.1440	#27HSJOHD	#27COJO	P	0.3230	PHSJJOHD	PCOJO
#26	0.1470	#26HSJOHD	#26COJO	21/64"	0.3281	2164HSJOHD	2164COJO
#25	0.1495	#25HSJOHD	#25COJO	Q	0.3320	QHSJOHD	QCOJO
#24	0.1520	#24HSJOHD	#24COJO	R	0.3390	RHSJOHD	RCOJO
#23	0.1542	#23HSJOHD	#23COJO	11/32"	0.3438	2264HSJOHD	2264COJO
5/32"	0.1562	1064HSJOHD	1064COJO	S	0.3480	SHSJOHD	SCOJO
#22	0.1570	#22HSJOHD	#22COJO	T	0.3580	THSJJOHD	TCOJO
#21	0.1590	#21HSJOHD	#21COJO	23/64"	0.3594	2364HSJOHD	2364COJO
#20	0.1610	#20HSJOHD	#20COJO	U	0.3680	UHSJOHD	UCOJO
#19							

Used where extra reach is required, extension drills are offered standard in 6" and 12" lengths, in NAS907 high speed steel or cobalt with 135° split points. Special lengths are available up to 36".



Reading Part Numbers

#55 HS X 12

Length

6 in.

12 in.

Material

HS: High Speed Steel

CO: Cobalt

CB: Carbide

Drill Diameter

Note: Fractional sizes are expressed in 64ths of an inch
i.e. 1/8 = 0864, 1/4 = 1664

Extension Drills

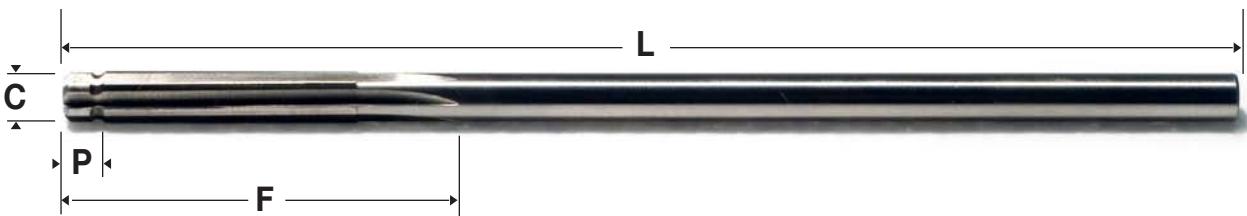
Part Numbers						Part Numbers					
SIZE	DECIMAL	HSS 6"	HSS 12"	COBALT 6"	COBALT 12"	SIZE	DECIMAL	HSS 6"	HSS 12"	COBALT 6"	COBALT 12"
1/64"	0.0156	0164HSX6	0164HSX12	0164COX6	0164COX12	1/2"	0.5000	3264HSX6	3264HSX12	3264COX6	3264COX12
1/32"	0.0312	0264HSX6	0264HSX12	0264COX6	0264COX12	11/64"	0.1719	1164HSX6	1164HSX12	1164COX6	1164COX12
#60	0.0400	#60HSX6	#60HSX12	#60COX6	#60COX12	#17	0.1730	#17HSX6	#17HSX12	#17COX6	#17COX12
#59	0.0410	#59HSX6	#59HSX12	#59COX6	#59COX12	#16	0.1770	#16HSX6	#16HSX12	#16COX6	#16COX12
#58	0.0420	#58HSX6	#58HSX12	#58COX6	#58COX12	#15	0.1800	#15HSX6	#15HSX12	#15COX6	#15COX12
#57	0.0430	#57HSX6	#57HSX12	#57COX6	#57COX12	#14	0.1820	#14HSX6	#14HSX12	#14COX6	#14COX12
#56	0.0465	#56HSX6	#56HSX12	#56COX6	#56COX12	#13	0.1850	#13HSX6	#13HSX12	#13COX6	#13COX12
3/64"	0.0469	0364HSX6	0364HSX12	0364COX6	0364COX12	3/16"	0.1875	1264HSX6	1264HSX12	1264COX6	1264COX12
#55	0.0520	#55HSX6	#55HSX12	#55COX6	#55COX12	#12	0.1890	#12HSX6	#12HSX12	#12COX6	#12COX12
#54	0.0550	#54HSX6	#54HSX12	#54COX6	#54COX12	#11	0.1910	#11HSX6	#11HSX12	#11COX6	#11COX12
#53	0.0590	#53HSX6	#53HSX12	#53COX6	#53COX12	#10	0.1935	#10HSX6	#10HSX12	#10COX6	#10COX12
1/16"	0.0625	0464HSX6	0464HSX12	0464COX6	0464COX12	#9	0.1960	#9HSX6	#9HSX12	#9COX6	#9COX12
#52	0.0635	#52HSX6	#52HSX12	#52COX6	#52COX12	#8	0.1990	#8HSX6	#8HSX12	#8COX6	#8COX12
#51	0.0670	#51HSX6	#51HSX12	#51COX6	#51COX12	#7	0.2010	#7HSX6	#7HSX12	#7COX6	#7COX12
#50	0.0700	#50HSX6	#50HSX12	#50COX6	#50COX12	13/64"	0.2031	1364HSX6	1364HSX12	1364COX6	1364COX12
#49	0.0730	#49HSX6	#49HSX12	#49COX6	#49COX12	#6	0.2040	#6HSX6	#6HSX12	#6COX6	#6COX12
#48	0.0760	#48HSX6	#48HSX12	#48COX6	#48COX12	#5	0.2055	#5HSX6	#5HSX12	#5COX6	#5COX12
5/64"	0.0781	0564HSX6	0564HSX12	0564COX6	0564COX12	#4	0.2090	#4HSX6	#4HSX12	#4COX6	#4COX12
#47	0.0785	#47HSX6	#47HSX12	#47COX6	#47COX12	#3	0.2130	#3HSX6	#3HSX12	#3COX6	#3COX12
#46	0.0810	#46HSX6	#46HSX12	#46COX6	#46COX12	7/32"	0.2188	1464HSX6	1464HSX12	1464COX6	1464COX12
#45	0.0820	#45HSX6	#45HSX12	#45COX6	#45COX12	#2	0.2210	#2HSX6	#2HSX12	#2COX6	#2COX12
#44	0.0860	#44HSX6	#44HSX12	#44COX6	#44COX12	#1	0.2280	#1HSX6	#1HSX12	#1COX6	#1COX12
#43	0.0890	#43HSX6	#43HSX12	#43COX6	#43COX12	A	0.2340	AHSX6	AHSX12	ACOX6	ACOX12
#42	0.0935	#42HSX6	#42HSX12	#42COX6	#42COX12	15/64"	0.2344	1564HSX6	1564HSX12	1564COX6	1564COX12
3/32"	0.0938	0664HSX6	0664HSX12	0664COX6	0664COX12	B	0.2380	BHSX6	BHSX12	BCOX6	BCOX12
#41	0.0960	#41HSX6	#41HSX12	#41COX6	#41COX12	C	0.2420	CHSX6	CHSX12	CCOX6	CCOX12
#40	0.0980	#40HSX6	#40HSX12	#40COX6	#40COX12	D	0.2460	DHSX6	DHSX12	DCOX6	DCOX12
#39	0.0995	#39HSX6	#39HSX12	#39COX6	#39COX12	1/4"	0.2500	1664HSX6	1664HSX12	1664COX6	1664COX12
#38	0.1015	#38HSX6	#38HSX12	#38COX6	#38COX12	E	0.2500	EHSX6	EHSX12	ECOX6	ECOX12
#37	0.1040	#37HSX6	#37HSX12	#37COX6	#37COX12	F	0.2570	FHSX6	FHSX12	FCOX6	FCOX12
#36	0.1064	#36HSX6	#36HSX12	#36COX6	#36COX12	G	0.2610	GHSX6	GHSX12	GCOX6	GCOX12
7/64"	0.1094	0764HSX6	0764HSX12	0764COX6	0764COX12	17/64"	0.2656	1764HSX6	1764HSX12	1764COX6	1764COX12
#35	0.1100	#35HSX6	#35HSX12	#35COX6	#35COX12	H	0.2660	HHSX6	HHSX12	HCOX6	HCOX12
#34	0.1110	#34HSX6	#34HSX12	#34COX6	#34COX12	I	0.2720	IHSX6	IHSX12	ICOX6	ICOX12
#33	0.1130	#33HSX6	#33HSX12	#33COX6	#33COX12	J	0.2770	JHSX6	JHSX12	JCOX6	JCOX12
#32	0.1160	#32HSX6	#32HSX12	#32COX6	#32COX12	K	0.2810	KHSX6	KHSX12	KCOX6	KCOX12
#31	0.1200	#31HSX6	#31HSX12	#31COX6	#31COX12	9/32"	0.2812	1864HSX6	1864HSX12	1864COX6	1864COX12
1/8"	0.1250	0864HSX6	0864HSX12	0864COX6	0864COX12	L	0.2900	LHSX6	LHSX12	LCOX6	LCOX12
#30	0.1285	#30HSX6	#30HSX12	#30COX6	#30COX12	M	0.2950	MHSX6	MHSX12	MCOX6	MCOX12
#29	0.1360	#29HSX6	#29HSX12	#29COX6	#29COX12	19/64"	0.2969	1964HSX6	1964HSX12	1964COX6	1964COX12
#28	0.1405	#28HSX6	#28HSX12	#28COX6	#28COX12	N	0.3020	NHSX6	NHSX12	NCOX6	NCOX12
9/64"	0.1406	0964HSX6	0964HSX12	0964COX6	0964COX12	O	0.3160	OHSX6	OHSX12	OCOX6	OCOX12
#27	0.1440	#27HSX6	#27HSX12	#27COX6	#27COX12	P	0.3230	PHSX6	PHSX12	PCOX6	PCOX12
#26	0.1470	#26HSX6	#26HSX12	#26COX6	#26COX12	21/64"	0.3281	2164HSX6	2164HSX12	2164COX6	2164COX12
#25	0.1495	#25HSX6	#25HSX12	#25COX6	#25COX12	Q	0.3320	QHSX6	QHSX12	QCOX6	QCOX12
#24	0.1520	#24HSX6	#24HSX12	#24COX6	#24COX12	R	0.3390	RHSX6	RHSX12	RCOX6	RCOX12
#23	0.1542	#23HSX6	#23HSX12	#23COX6	#23COX12	11/32"	0.3438	2264HSX6	2264HSX12	2264COX6	2264COX12
#22	0.1570	#22HSX6	#22HSX12	#22COX6	#22COX12	S	0.3480	SHSX6	SHSX12	SCOX6	SCOX12
#21	0.1590	#21HSX6	#21HSX12	#21COX6	#21COX12	T	0.3580	THSX6	THSX12	TCOX6	TCOX12
#20	0.1610	#20HSX6	#20HSX12	#20COX6	#20COX12	23/64"	0.3594	2364HSX6	2364HSX12	2364COX6	2364COX12
#19	0.1660	#19HSX6	#19HSX12	#19COX6	#19COX12	U	0.3680	UHSX6	UHSX12	UCOX6	UCOX12
#18	0.1695	#18HSX6	#18HSX12	#18COX6	#18COX12	3/8"	0.3750	2464HSX6	2464HSX12</td		

Reamers (Chuckng)

Reamers are used throughout the industry to improve the dimensional precision and wall finish of the inside of holes prior to fastener installation. This becomes critically important in aircraft work, especially for interference fit fasteners where closely controlled dimensions are crucial.

Reamers are frequently employed to enlarge or "finish" holes. Piloted reamers are particularly useful for maintaining the concentricity of the reamed hole with a pilot hole, or when enlarging a hole for an oversized fastener. A portion of the tip of the reamer (the "pilot") is ground to the diameter of the initial hole. The reamer then centers itself on this pilot hole as it travels the length of the hole, enlarging it to the final diameter.

Omega stocks straight flute reamers in high speed steel and cobalt, and offers a complete range of carbide and adjustable reamers. Spiral flute reamers are available, though not shown in this catalogue. Please contact our customer service staff for pricing and other inquiries..



Reamers (Chuckng) Standard Dimensions

CUTTER DIAMETER (C)	FLUTE LENGTH (F)	PILOT LENGTH (P)	OVERALL LENGTH (L)
0.0292 - 0.0330	0.500	0.1875	1.375
0.0350 - 0.0390	0.500	0.1875	1.500
0.0394 - 0.0635	0.500	0.1875	2.500
0.0670 - 0.0938	0.750	0.1875	3.000
0.0960 - 0.1285	0.875	0.1875	3.500
0.1360 - 0.1570	1.000	0.1875	4.000
0.1590 - 0.1890	1.125	0.1875	4.500
0.1910 - 0.2130	1.250	0.1875	5.000
0.2188 - 0.3438	1.500	0.1875	6.000
0.3480 - 0.4688	1.750	0.2500	7.000
0.4844 - 0.5938	2.000	0.3750	8.000
0.6094 - 0.7344	2.500	0.3750	9.000
0.7500 - 0.8594	2.500	0.3750	9.500
0.8750 - 0.9844	2.625	0.3750	10.000

Larger sizes available on request

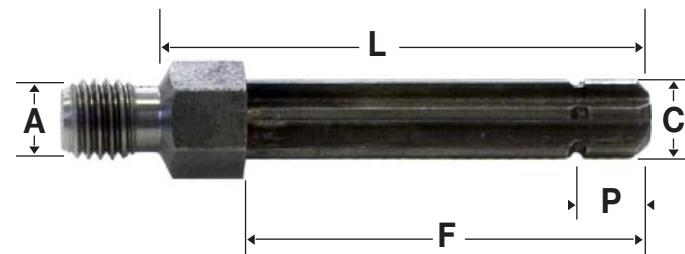
Reading Part Numbers	
No Pilot	60-4688
Cutter Diameter	Refer to Decimal Chart
Material	60: High Speed Steel 80: Cobalt
Piloted	61-2130-1875
Pilot Diameter	
Cutter Diameter	
Material	61: High Speed Steel 81: Cobalt

As with Threaded Shank Drills, Threaded Shank Reamers allow access where straight-on access is impossible. They are available in a number of lengths, with or without pilots. Larger diameter reamers are typically fabricated with 5/16", 3/8", and 7/16" threaded bases. They may be used in a variety of 45° and 90° angle heads, or with flat-offset "pancake" attachments.

As Threaded Shank Reamers are frequently made to customer specified lengths, our experienced staff is prepared to quote special requirements.



1-Inch Reamers (Stub)



CUTTER DIAMETER (C)	FLUTE LENGTH (F)	PILOT LENGTH (P)	ADAPTOR THREAD (A)
0.0960 - 0.1285	0.813	0.1875	1/4-28
0.1286 - 0.1570	0.813	0.1875	1/4-28
0.1571 - 0.1890	0.813	0.1875	1/4-28
0.1891 - 0.2188	0.813	0.1875	1/4-28
0.2189 - 0.3438	0.813	0.1875	1/4-28
0.3439 - 0.4688	0.750	0.2500	1/4-28

Larger sizes available on request

2-Inch Reamers (Short)

CUTTER DIAMETER (C)	FLUTE LENGTH (F)	PILOT LENGTH (P)	ADAPTOR THREAD (A)
0.0960 - 0.1285	0.875	0.1875	1/4-28
0.1286 - 0.1570	1.000	0.1875	1/4-28
0.1571 - 0.1890	1.125	0.1875	1/4-28
0.1891 - 0.2188	1.250	0.1875	1/4-28
0.2189 - 0.3438	1.500	0.1875	1/4-28
0.3439 - 0.4688	1.750	0.2500	1/4-28

Larger sizes available on request

3-Inch Reamers (Long)

CUTTER DIAMETER (C)	FLUTE LENGTH (F)	PILOT LENGTH (P)	ADAPTOR THREAD (A)
0.0960 - 0.1285	0.875	0.1875	1/4-28
0.1286 - 0.1570	1.000	0.1875	1/4-28
0.1571 - 0.1890	1.125	0.1875	1/4-28
0.1891 - 0.2188	1.250	0.1875	1/4-28
0.2189 - 0.3438	1.500	0.1875	1/4-28
0.3439 - 0.4688	1.750	0.2500	1/4-28
0.4689 - 0.7480	2.000	0.3750	5/16-24

Larger sizes available on request

Spiral Flutes and Print Specials readily available

Print Specials readily available

Aircraft counterbores are used to assure a flat seating surface for fasteners or mating parts that are 90° to the axis of the hole. A pilot is used to assure concentricity of the counterbore with the hole.

Counterbores are furnished without a "corner radius" unless specified.



Counterbore (1/4 in Shank)

PART NUMBER	SIZE	PILOT HOLE	PART NUMBER	SIZE	PILOT HOLE
OM488-1	1/4	3/32	OM488-17	3/4	3/16
OM488-2	9/32	3/32	OM488-18	25/32	3/16
OM488-3	5/16	3/32	OM488-19	13/16	3/16
OM488-4	11/32	3/32	OM488-20	27/32	3/16
OM488-5	3/8	3/32	OM488-21	7/8	3/16
OM488-6	13/32	1/8	OM488-22	29/32	3/16
OM488-7	7/16	1/8	OM488-23	15/16	3/16
OM488-8	15/32	1/8	OM488-24	31/32	3/16
OM488-9	1/2	1/8	OM488-25	1	3/16
OM488-10	17/32	1/8	OM488-26	1-1/16	3/16
OM488-11	9/16	1/8	OM488-27	1-1/8	3/16
OM488-12	19/32	1/8	OM488-28	1-3/16	3/16
OM488-13	5/8	1/8	OM488-29	1-1/4	3/16
OM488-14	21/32	3/16	OM488-30	1-5/16	1/4
OM488-15	11/16	3/16	OM488-31	1-3/8	1/4
OM488-16	23/32	3/16	OM488-32	1-1/2	1/4

Larger sizes available on request

Counterbore (Pilot)

PART NUMBER	PILOT DIAMETER	SHANK DIAMETER	PART NUMBER	PILOT DIAMETER	SHANK DIAMETER
OM489A1	3/32	3/32	OM489B16	15/32	1/8
OM489A2	1/8	3/32	OM489B17	1/2	1/8
OM489A3	5/32	3/32	OM489B18	17/32	1/8
OM489A4	#21	3/32	OM489B19	9/16	1/8
OM489A5	3/16	3/32	OM489C5	3/16	3/16
OM489A6	#10	3/32	OM489C6	#10	3/16
OM489A7	7/32	3/32	OM489C7	7/32	3/16
OM489A8	1/4	3/32	OM489C8	1/4	3/16
OM489A9	F	3/32	OM489C9	F	3/16
OM489A10	9/32	3/32	OM489C10	9/32	3/16
OM489A11	5/16	3/32	OM489C11	5/16	3/16
OM489B2	1/8	1/8	OM489C12	11/32	3/16
OM489B3	5/32	1/8	OM489C13	3/8	3/16
OM489B4	#21	1/8	OM489C14	13/32	3/16
OM489B5	3/16	1/8	OM489C15	7/16	3/16
OM489B6	#10	1/8	OM489C16	15/32	3/16
OM489B7	7/32	1/8	OM489C17	1/2	3/16
OM489B8	1/4	1/8	OM489C18	17/32	3/16
OM489B9	F	1/8	OM489C19	9/16	3/16
OM489B10	9/32	1/8	OM489C20	19/32	3/16
OM489B11	5/16	1/8	OM489C21	5/8	3/16
OM489B12	11/32	1/8	OM489C22	21/32	3/16
OM489B13	3/8	1/8	OM489C23	11/16	3/16
OM489B14	13/32	1/8	OM489C24	23/32	3/16
OM489B15	7/16	1/8	OM489C25	3/4	3/16

Larger sizes available on request

Solid carbide and carbide-tipped counterbores, reverse countersinks, and reverse spotfacers are also available on request.

Paint Cutters

PART NUMBER	FASTENER SIZE	CUT CIRCLE DIAMETER	COLOR
PC4	3/32"	.187	Silver
PC6	1/8"	.254	Copper
PC8	5/32"	.281	Black
PC10	3/16"	.328	Brass
PC1/4	1/4"	.453	Copper



Fine Tooth Hole Saws

Fine tooth hole saws (OM400) are made from solid high speed steel. A back taper on the outside and inside diameters ensures fast, free cutting. The outside diameter is ground concentric with the tapped hole to produce close tolerance and perfectly round holes. These fine tooth hole saws are designed primarily for fast cutting through thin skins, steel, and other material, and are particularly useful for tubular assemblies.



OM400-1 1/4

Stock sizes available:

- Diameters 3/8" through 1-1/4" - 5/16"-24 thread
- Diameters 1-5/16" through 4" - 1/2"-20 thread

Coarse Tooth Hole Saws

Primarily the same as fine tooth hole saws, the coarse tooth variety (OM401) has fewer and deeper teeth. This type is better suited for thick material and faster cutting where better chip flow is required. Also used on plastics, laminated woods, aluminum, steel or other materials.



OM401-1 1/16

Stock sizes available:

- Diameters 3/8" through 1-1/4" - 5/16"-24 thread
- Diameters 1-5/16" through 4" - 1/2"-20 thread

Hole Saws Arbors

Hole saw arbors (OM402) are made of high quality tool steel, properly heat treated and precision ground to insure concentricity between all diameters. Carried in stock in the sizes shown. Special pilot diameters available on special order.



OM402-1

Hole Saw Arbors

PART NUMBER	"D" PILOT DIAMETER	SHANK DIAMETER	THREAD SIZE
OM402-0	Special	1/4	5/16-24
OM402-1	3/16	1/4	5/16-24
OM402-2	1/4	1/4	5/16-24
OM402-3	1/4	1/2	1/2-20
OM402-4	3/8	1/2	1/2-20

Omega Technologies' also offers many other styles and types of fluted cutters, including:

- Double Margin Drills
- "Store Burner" Drills
- Screw-Machine Drills
- Carbide Drills and Reamers
- Core Drills
- Gun-Barrel Drills
- Reduced Shank Drills
- Composite Drills

...and many others. Give us a call today!

Microstops Countersinks and Drilling Accessories



The importance of precision cutting requires accessories to aide in drilling accuracy, providing tighter tolerances while protecting surface areas from skin-damage. Precision depth control can also prevent damage to surrounding surfaces when rivet-shaver cutters are being used. Omega understands this vital importance and provides accessories to improve productivity while maintaining overall accuracy.

Microstop Cages

Countersink Cutters

Rivet Shaver Cutters

Drill Collets

Drill Stops

"Egg Cup" Drill Stands

Microstop Cages provide precise depth control by limiting the travel of the cutter being used, and aiding in the alignment of the cutter so that it is exactly perpendicular to the surface against which the cage rests.

All Microstop units feature hardened and ground spindles. These are supported by bronze bushings (for general use), or needle bearings and ball bearings (for more demanding high-speed applications). Thrust bearings provide axial support while the micro-adjustment offers precise depth control. Units may be ordered with a variety of foot-pieces and skirt styles.



Microstop Countersink Units

MODEL NUMBER	CUTTER CAPACITY	SHAFT TRAVEL	SPINDLE THREAD	MAX RPM	SKIRT DIAMETER (D)	OVERALL LENGTH (L)
OM330S*	5/8	5/16	1/4-28	3000	0.900	3.625
ZT330S	5/8	9/32	1/4-28	3000	0.870	3.562
OM350	1/2	1/4	1/4-28	3000	0.685	3.250
OM550	5/8	5/16	1/4-28	3000	0.900	3.625
OM550-3RL-2.75	3/8	5/16	1/4-28	3000	0.490	6.250
OM560**	5/8	5/16	1/4-28	3000	0.900	3.625
OM565**	5/8	5/16	1/4-28	10000	0.900	3.625
OM566***	5/8	5/16	1/4-28	10000	0.900	3.625
OM575	5/8	5/16	1/4-28	10000	0.900	3.625
OM650**	1	1/2	3/8-24	3000	1.300	5.125
OM655***	1 1/4	1/2	3/8-24	3000	1.800	5.125

* OM330S is a light duty cage suitable for occasional use
** Dual bearings for upper and lower spindle support
*** Sealed ball bearing unit

CUSTOM KITS Available on Request



Countersink Cutters

Piloted Aircraft Stop Countersink Cutters (often called micro-stop cutters, or microstop countersinks) are used to make precision countersinks to accept flush-head fasteners. Omega Technology's cutters are precision ground to exact tolerances to insure concentricity. Cutters may be used in any micro-stop "cage" that accepts 1/4 - 28 threaded shank cutters.

Select the pilot diameter that matches the pre-drilled hole, and the body diameter according to the diameter of the fastener head. Metric and other sizes quoted on request. Popular items listed below.

Reading Part Numbers	
OM154-22-40	
-----	Pilot Diameter
-----	Body Diameter
17: 1/4"	
22: 3/8"	
26: 7/16	
30: 1/2"	
49: 5/8"	



Countersink Cutter 100° HSS

PILOT DIAMETER	1/4	3/8	7/16	1/2	5/8
#40	OM154-17-40	OM154-22-40	OM154-26-40	OM154-30-40	OM154-49-40
#30	OM154-17-30	OM154-22-30	OM154-26-30	OM154-30-30	OM154-49-30
#27		OM154-22-27			
#21		OM154-22-21	OM154-26-21	OM154-30-21	
#20		OM154-22-20	OM154-26-20	OM154-30-20	
#13		OM154-22-13	OM154-26-13	OM154-30-13	
#11		OM154-22-11	OM154-26-11	OM154-30-11	
#10		OM154-22-10	OM154-26-10	OM154-30-10	
#8		OM154-22-8	OM154-26-8	OM154-30-8	
#6				OM154-30-6	
1/16		OM154-22-1/16			
3/32		OM154-22-3/32	OM154-26-3/32	OM154-30-3/32	
1/8		OM154-22-1/8	OM154-26-1/8	OM154-30-1/8	
3/16		OM154-22-3/16	OM154-26-3/16	OM154-30-3/16	
1/4		OM154-22-1/4	OM154-26-1/4	OM154-30-1/4	
5/32		OM154-22-5/32	OM154-26-5/32	OM154-30-5/32	
3/16		OM154-22-3/16	OM154-26-3/16	OM154-30-3/16	OM154-49-3/16
7/32			OM154-26-7/32	OM154-30-7/32	
5/16			OM154-26-5/16	OM154-30-5/16	OM154-49-5/16
3/8				OM154-30-3/8	OM154-49-3/8
D					OM154-30-D
F				OM154-26-F	OM154-30-F

Other countersink angles available:

- 80°, 82°, 90°, 120°, and 130°

Other available materials include:

- Carbide Tipped (2 and 3 flute)
- Solid Carbide (2, 3, and 4 flute)
- Diamond Plated
- Poly-Crystalline Diamond (PCD)



Carbide Tipped Rivet Shaver Cutters

Used with a microstop cage that accepts 1/4-28 THD, rivet shaver cutters trim excess material after buckling flush head rivets



Rivet Shaver Cutters

PART NUMBER	DIAMETER
OM50-0	1/4"
OM50-1	5/16"
OM50-2	3/8"
OM50-3	7/16"
OM50-4	1/2"
OM50-5	9/16"
OM50-6	5/8"
OM50-7	3/4"

Drill Collets effectively convert a Straight Shank tool of any kind (typically drills and reamers) into a Threaded Shank tool. Most commonly used to adapt drills, they can be used with broken drills, reamers, or other straight shank cutting tools such as counterbores and countersinks. Simply choose a collet with the appropriate size to fit the straight shank tool to be adapted. Great for emergencies, and getting into tight places.

Drill Collet Stock Sizes

DRILL DIA	SIZE	P/N	DRILL DIA	SIZE	P/N
0.257	F	OMDCF	0.161	#20	OMDC20
0.250	1/4"	OMDC1/4	0.159	#21	OMDC21
0.218	7/32"	OMDC7/32	0.152	#24	OMDC24
0.194	#10	OMDC10	0.144	#27	OMDC27
0.191	#11	OMDC11	0.129	#30	OMDC30
0.188	3/16"	OMDC3/16	0.125	1/8"	OMDC1/8
0.185	#13	OMDC13	0.098	#40	OMDC40
0.182	#14	OMDC14	0.094	3/32"	OMDC3/32
0.177	#16	OMDC16			



OMDC7/32

Drill Stops

These drill stops have a coiled spring to cushion drill break-through, while the rounded smooth face eliminates marking and prevents the drill chuck from marring the surface. Other sizes are available upon request.



OMDS10

OMDS40

Available Drill Stops

PART NUMBER	DRILL SIZE	COLOR
OMDS10	10	Brass
OMDSE10*	10	Brass
OMDS20	20	Zinc/Black
OMDSE20*	20	Zinc
OMDS21	21	Black
OMDS30	30	Copper
OMDS40	40	Zinc
OMDSF	F	Black
OMDS 1/4	1/4	Copper
OMDS 5/16	5/16	Zinc



OMDS21

Chip Chasers

These US-made chip chasers are stainless steel and are available in long and short versions.



OM512

OM511

"Egg-Cup" Drill Stands

Often referred to as "Egg-Cup" Drill Stands, these hand-held drill guides provide a quick and easy way to assure hole position and quality. The guide housing is made in the USA of GE Lexan®, which is virtually unbreakable and ensures a well-lighted work surface.

Two styles are available to accommodate standard 1/2"-13 threaded drill bushings, and 1/2" OD slip-renewable drill bushings. A locking screw on the slip-renewable housing permits positive retention of the slip-fit bushing, thus reducing FOD concern.

"Egg-Cup" Drill Stands

PART NUMBER	DESCRIPTION
OM589AA	1/2"-13 Threaded Housing
OM589EA	1/2" I.D. Slip-Fit Housing



Drill bushings sold separately



OM589EA

OM589AA

CUSTOM KITS

Available on Request



OMBQC1

OMBQC3

OMBQC2

Boeing Quick Change Adapters

All have 1/4"-28 THD for adapting regular threaded cutters for use in Boeing Quick Change Chucks.

Available in 1", 2", 3", and 6" lengths.

Countersink Extensions

Available in 1", 2", 3", 4", and 6" lengths and named accordingly: CS-EXT(Length). 1/4"-28 Male to 1/4-28 Female thread.



CS-EXT2

Chuck Spud and Drill Adaptor

Straight chucking shank, available in 2", 4", 6", 8", and 10" lengths and named accordingly: OM1023-(Length)



OM1023-8

OM1023-2

Designed to facilitate accurate rivet hole drilling for standard Plate Nuts (also commonly known as Anchor Nuts, or Nut Plates), Omega's hand-held Nut Plate Jigs are manufactured to precise tolerances and include drill bushings to reduce wear and assure consistent hole-spacing. Redesigned pins and pilots make the tool much easier to use.

Each tool features an ergonomically designed handle with a flexible stainless steel spring blade, allowing for clearance while the jig is in use. Its convenient size allows it to fit most tool-box cutouts.



Nut Plate Jigs

Single Wing Standard

Single Wing Miniature

Two-Lug Double Wing Standard

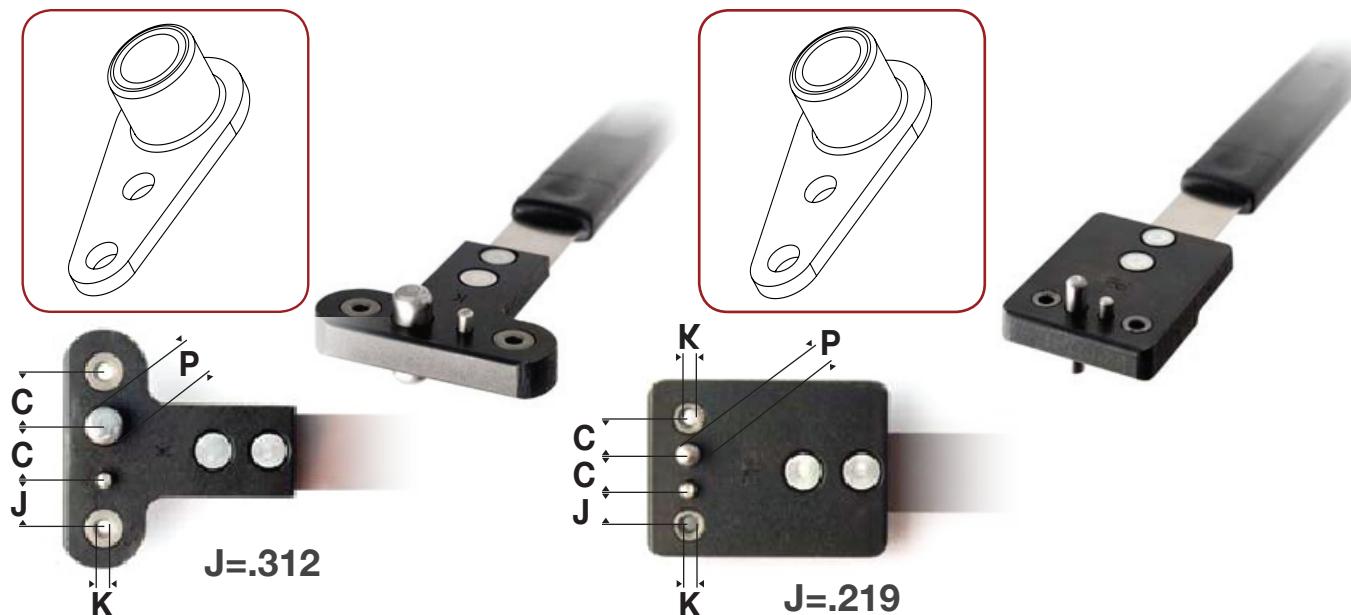
Two-Lug Double Wing Miniature

Corner Wing Standard

Corner Wing Miniature

Side Lug Miniature

Selection Tables

**Single Wing Standard (SWS)**

PART NUMBER	NUT THREAD REFERENCE	(C) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518G	#6	0.344	0.1390	#40
NPJ518H	#8	0.344	0.1640	#40
NPJ518J	#10	0.344	0.1910	#40
NPJ518K	1/4	0.344	0.2480	#40
NPJ518NAS-D-A5	5/16	0.559	0.3120	#30
NPJ518NAS-D-A6	3/8	0.414	0.3720	#30
NPJ518RP	5/16	0.500	0.3105	#30
NPJ518RG	5/16	0.500	0.3145	#30
NPJ518FH	5/16	0.500	0.3720	#30
NPJ518RH	3/8	0.500	0.3730	#30
NPJ518RJ	7/16	0.500	0.4350	#30
NPJ518RB	#6	0.344	0.1425	#40
NPJ518RL	#8	0.344	0.1645	#40
NPJ518RC	#8	0.344	0.1675	#40
NPJ518RM	#10	0.344	0.1875	#40
NPJ518RD	#10	0.344	0.1920	#40
NPJ518L	#10	0.344	0.2130	#40
NPJ518RU	#8	0.344	0.2265	#40
NPJ518RE	1/4	0.344	0.2555	#40
NPJ518LF	#8 / #10	0.344	0.2810	#40
NPJ518RW	1/4	0.344	0.3105	#40
NPJ518RO	1/4	0.500	0.2480	#40
NPJ518RF	1/4	0.500	0.2555	#40
NPJ518RX	1/4	0.500	0.3105	#40
NPJ518YF	1/4	0.500	0.3430	#40

To request items not listed, specify dimensions as follows
SWS-.XXX-.XXX-.XXXX-XX

- Drill Size
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Single Wing Standard

Custom Marking Available

Single Wing Miniature (SWM)

PART NUMBER	NUT THREAD REFERENCE	(C) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518JB	#6	0.218	0.1660	#40
NPJ518JC	#8	0.234	0.1930	#40
NPJ518JD	#10	0.250	0.2180	#40
NPJ518JE	1/4	0.281	0.2810	#40
NPJ518NAS-B-A02	#2	0.125	0.0860	#51
NPJ518NAS-B-A03	#3	0.133	0.0990	#51
NPJ518NAS-B-A04	#4	0.148	0.1120	#51
NPJ518NAS-B-A06	#6	0.171	0.1390	#51
NPJ518PA	#4	0.203	0.1120	#40
NPJ518PB	#6	0.218	0.1390	#40
NPJ518PC	#8	0.234	0.1640	#40
NPJ518PD	#10	0.250	0.1910	#40
NPJ518PE	1/4	0.281	0.2500	#40
NPJ518PF	-	0.250	0.1875	#40

To request items not listed, specify dimensions as follows
SWM-.XXX-.XXX-.XXXX-XX

- Drill Size
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Single Wing Miniature

**Two-Lug Double Wing Standard (DWS)**

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE	PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518A	0.344	0.688	0.1390	#40	NPJ 518P	0.6870	1.375	0.8110	#30
NPJ518B	0.344	0.688	0.1640	#40	NPJ518HU	0.6870	1.375	0.9380	#30
NPJ518C	0.344	0.688	0.1910	#40	NPJ518HY	0.7000	1.400	0.8500	#30
NPJ518D	0.500	1.000	0.2480	#40	NPJ518HE	0.3130	0.625	0.1870	#40
NPJ518E	0.500	1.000	0.3120	#30	NPJ518HM	0.3130	0.625	0.2180	#40
NPJ518F	0.500	1.000	0.3720	#30	NPJ518KA	0.3440	0.688	0.1185	#40
NPJ518NAS-A-A5	0.359	0.718	0.3120	#30	NPJ518KB	0.3440	0.688	0.1425	#40
NPJ518NAS-A-A6	0.414	0.828	0.3720	#30	NPJ518KK	0.3440	0.688	0.1645	#40
NPJ518HF	0.500	1.000	0.1910	#30	NPJ518KC	0.3440	0.688	0.1675	#40
NPJ518HU	0.687	1.375	0.9380	#30	NPJ518KL	0.3440	0.688	0.1875	#40
NPJ518KN	0.500	1.000	0.3105	#30	NPJ518KD	0.3440	0.688	0.1920	#40
NPJ518KF	0.500	1.000	0.3145	#30	NPJ518GL	0.3440	0.688	0.2180	#40
NPJ518GK	0.500	1.000	0.3430	#30	NPJ518KT	0.3440	0.688	0.2265	#40
NPJ518KG	0.500	1.000	0.3730	#30	NPJ518KU	0.3440	0.688	0.2555	#40
NPJ518GD	0.500	1.000	0.3750	#30	NPJ518BF	0.3440	0.688	0.2810	#40
NPJ518HG	0.500	1.000	0.3890	#30	NPJ518HL	0.3440	0.688	0.2900	#40
NPJ518KP	0.500	1.000	0.4570	#30	NPJ518GM	0.3440	0.688	0.3120	#40
NPJ518HD	0.500	1.000	0.5000	#30	NPJ518HO	0.3750	0.750	0.2480	#40
NPJ518HS	0.500	1.000	0.5610	#30	NPJ518HP	0.3750	0.750	0.2810	#40
NPJ518GB	0.500	1.000	0.5930	#30	NPJ518HH	0.3750	0.750	0.3720	#40
NPJ518HT	0.500	1.000	0.6240	#30	NPJ518GH	0.3750	0.750	0.3970	#40
NPJ518N	0.500	1.000	0.6875	#30	NPJ518GF	0.3750	0.750	0.4370	#40
NPJ518GA	0.500	1.000	0.7020	#30	NPJ518M	0.3750	0.750	0.4375	#40
NPJ518GP	0.562	1.124	0.4375	#30	NPJ518HN	0.3750	0.750	0.4670	#40
NPJ518HW	0.592	1.184	0.8110	#30	NPJ518GT	0.4375	0.875	0.3730	#40
NPJ518GN	0.595	1.190	0.5920	#30	NPJ518HX	0.4500	0.900	0.3720	#40
NPJ518KH	0.625	1.250	0.4350	#30	NPJ518KM	0.5000	1.000	0.2480	#40
NPJ518HB	0.687	1.375	0.1910	#30	NPJ518KE	0.5000	1.000	0.2555	#40
NPJ518HC	0.387	1.375	0.4050	#30	NPJ518GR	0.5000	1.000	0.2710	#40
NPJ518KJ	0.687	1.375	0.4980	#30	NPJ518GJ	0.5000	1.000	0.2810	#40
NPJ518GE	0.687	1.375	0.5000	#30	NPJ518GS	0.5000	1.000	0.2955	#40
NPJ518HK	0.687	1.375	0.6560	#30	NPJ518KV	0.5000	1.000	0.3105	#40
NPJ518GC	0.687	1.375	0.7180	#30	NPJ518DF	0.5000	1.000	0.3430	#40
NPJ518HA	0.687	1.375	0.7490	#30	NPJ518GG	0.5000	1.000	0.6560	#40

To request items not listed, specify dimensions as follows
DWS-.XXX-.XXX-.XXXX-XX

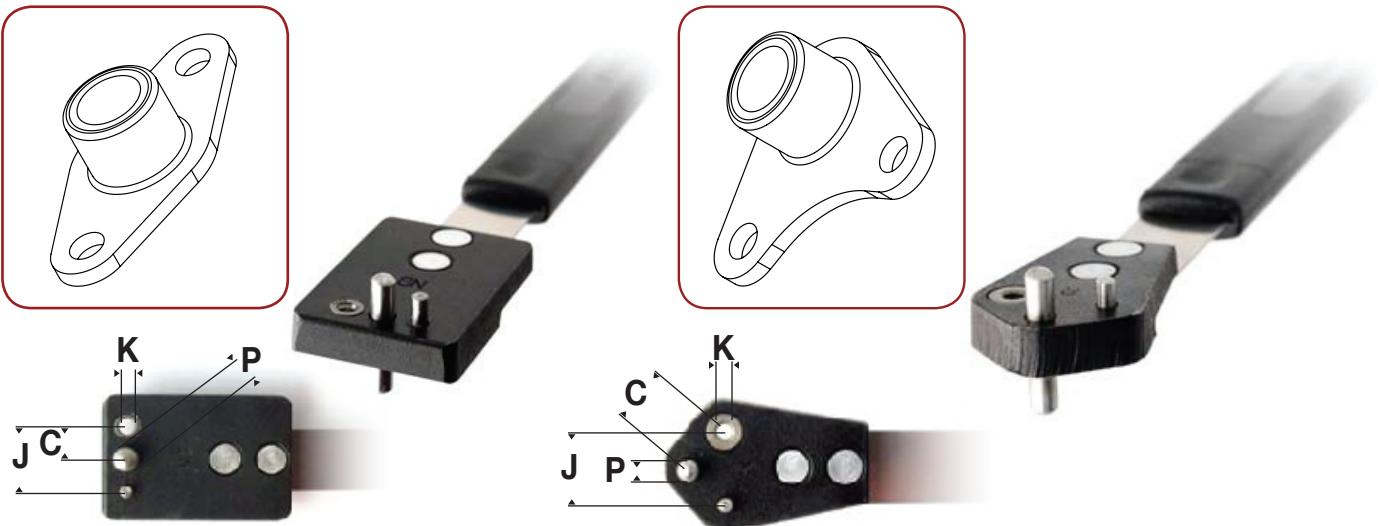
- Drill Size
- Pilot Diameter
- "J" Rivet Spacing (2 x C)
- "C" Spacing (Pilot to Rivet Hole)
- Double Wing Standard

Custom Marking Available

To request items not listed, specify dimensions as follows
SWS-.XXX-.XXX-.XXXX-XX

- Drill Size
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Single Wing Standard

Custom Marking Available



Two-Lug Double Wing Miniature (DWM)

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518NA	0.2030	0.4060	0.1120	#40
NPJ518NB	0.2180	0.4360	0.1390	#40
NPJ518NC	0.2340	0.4680	0.1640	#40
NPJ518ND	0.2500	0.5000	0.1910	#40
NPJ518NE	0.2810	0.5620	0.2480	#40
NPJ518NF	0.3125	0.6250	0.3120	#30
NPJ518AF	0.3125	0.6250	0.3430	#30
NPJ518BG	0.3590	0.7180	0.3730	#30
NPJ518AA	0.2030	0.4060	0.1400	#40
NPJ518BA	0.2030	0.1800	0.1800	#40
NPJ518AB	0.2185	0.4370	0.1660	#40
NPJ518BB	0.2185	0.4370	0.2055	#40
NPJ518NG	0.2340	0.4680	0.19250	#40
NPJ518AC	0.2340	0.4680	0.1930	#40
NPJ518NH	0.2340	0.4680	0.2270	#40
NPJ518BC	0.2340	0.4680	0.2340	#40
NPJ518NJ	0.2500	0.5000	0.1875	#40
NPJ518AD	0.2500	0.5000	0.2180	#40
NPJ518BD	0.2500	0.5000	0.2570	#40
NPJ518AE	0.2810	0.5620	0.2810	#40
NPJ518BE	0.2810	0.5620	0.3230	#40
NPJ518NAS-1474-A3	0.2950	0.5900	0.1910	#40
NPJ518ZX	0.5390	0.2695	0.2480	#40
NPJ518NAS-A-A02	0.1250	0.2500	0.0860	#51
NPJ518NAS-A-A03	0.1325	0.2650	0.0990	#51
NPJ518NAS-A-A04	0.1480	0.2960	0.1120	#51
NPJ518NAS-A-A06	0.1715	0.3430	0.1390	#51

To request items not listed, specify dimensions as follows
DWM-.XXX-.XXX-.XXXX-XX

- Drill Diameter
- Pilot Diameter
- "J" Rivet Spacing (2 x C)
- "C" Spacing (Pilot to Rivet Hole)
- Double Wing Miniature



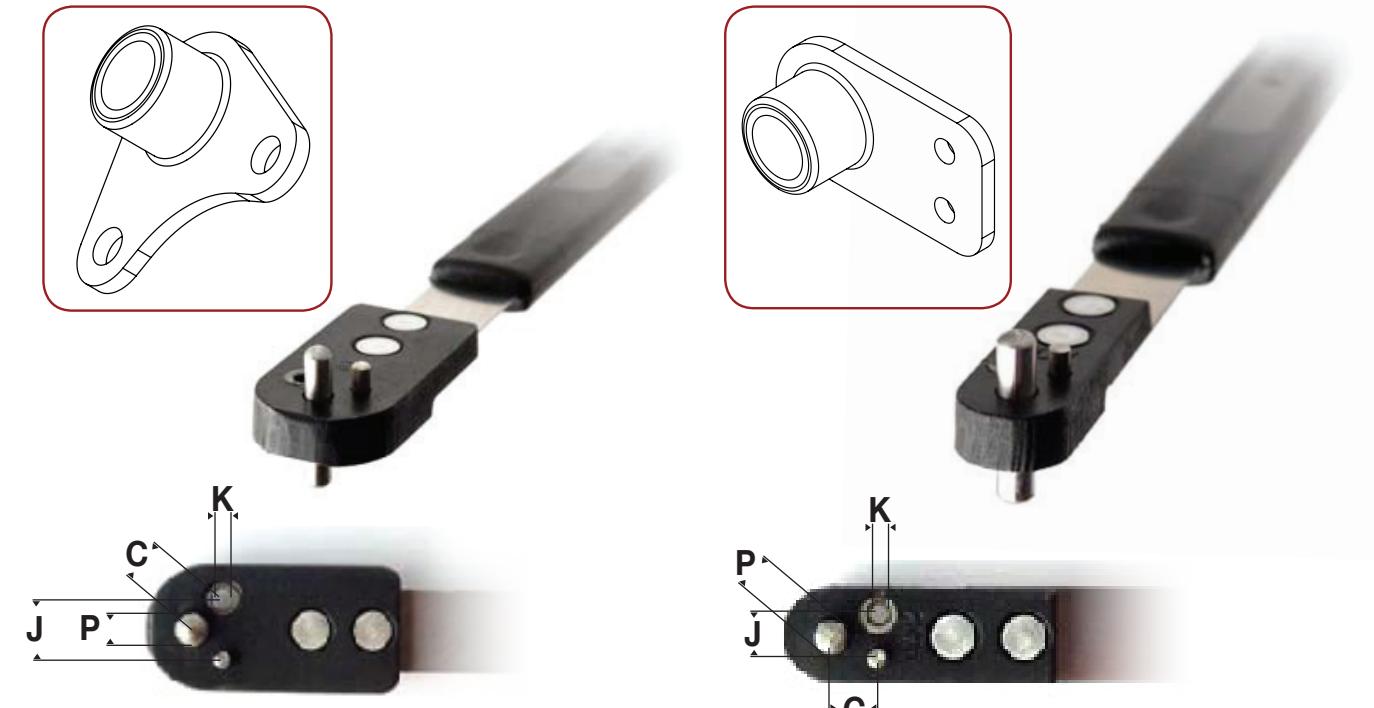
Corner Wing Standard (CWS)

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ518R	0.344	0.4860	0.1390	#40
NPJ 518S	0.344	0.4860	0.1640	#40
NPJ518T	0.344	0.4860	0.1910	#40
NPJ518U	0.500	0.7070	0.2480	#40
NPJ518V	0.500	0.7070	0.3120	#30
NPJ518W	.0500	0.7070	0.3720	#30
NPJ518NAS-C-A5	0.358	0.5060	0.3120	#30
NPJ518MN	0.500	0.7070	0.3110	#30
NPJ518MF	0.500	0.7070	0.3140	#30
NPJ518MP	0.500	0.7070	0.3730	#30
NPJ518MR	0.500	0.7950	0.4350	#30
NPJ518X	0.562	0.7950	0.4375	#30
NPJ518MB	0.344	0.4860	0.1425	#30
NPJ518MK	0.344	0.4860	0.1645	#40
NPJ518MC	0.344	0.4860	0.1675	#40
NPJ518ML	0.344	0.4860	0.1875	#40
NPJ518MD	0.344	0.4860	0.1920	#40
NPJ518MT	0.344	0.4860	0.2265	#40
NPJ518NE			0.2265	

To request items not listed, specify dimensions as follows
CWS-.XXX-.XXX-.XXXX-XX

- Drill Diameter
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Corner Wing Standard

Custom Marking Available



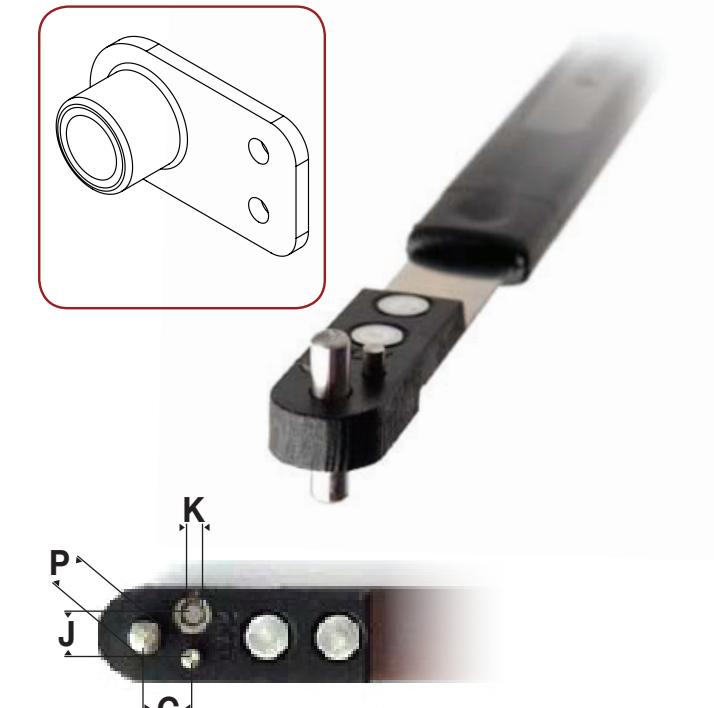
Corner Wing Miniature (CWM)

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518SA	0.203	0.287	0.1120	#40
NPJ518SB	0.218	0.308	0.1390	#40
NPJ518SC	0.234	0.331	0.1640	#40
NPJ518SD	0.250	0.354	0.1910	#40
NPJ518SE	0.281	0.397	0.2480	#40
NPJ518SF	0.312	0.441	0.3120	#30
NPJ518SJ	0.250	0.354	0.1875	#40
NPJ518UF	0.312	0.441	0.3430	#30
NPJ518UA	0.203	0.287	0.1400	#40
NPJ518UB	0.218	0.308	0.1660	#40
NPJ518UC	0.234	0.0331	0.1930	#40
NPJ518UD	0.250	0.354	0.2180	#40
NPJ518UE	0.281	0.397	0.2810	#40
NPJ518NAS-C-A02	0.125	0.177	0.0860	#51
NPJ518NAS-C-A03	0.138	0.195	0.0990	#51
NPJ518NAS-C-A04	0.148	0.209	0.1120	#51
NPJ518NAS-C-A06	0.172	0.243	0.1390	#51

To request items not listed, specify dimensions as follows
CWM-.XXX-.XXX-.XXXX-XX

- Drill Diameter
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Corner Wing Miniature

Custom Marking Available



Side Lug Miniature (SLM)

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518TA	0.250	0.219	0.1910	#40
NPJ518TB	0.281	0.219	0.2480	#40
NPJ518TC	0.312	0.250	0.3120	#30
NPJ518TD	0.359	0.269	0.3125	#30
NPJ518NAS-D-A5	0.359	0.269	0.3120	#30
NPJ518NAS-D-A6	0.414	0.269	0.3720	#30
NPJ518NAS-D-A08	0.234	0.219	0.1640	#40
NPJ518TE	0.250	0.219	0.1875	#40

To request items not listed, specify dimensions as follows
SLM-.XXX-.XXX-.XXXX-XX

- Drill Diameter
- Pilot Diameter
- "J" Rivet Spacing
- "C" Spacing (Pilot to Rivet Hole)
- Side Lug Miniature

Side Lug Standard (SLS)

PART NUMBER	(C) HOLE SPACING	(J) HOLE SPACING	(P) PILOT DIAMETER	(K) DRILL SIZE
NPJ 518SA	0.203	0.287	0.1400	#40
NPJ518SB	0.218	0.308	0.1660	#40
NPJ518SC	0.234	0.0331	0.1930	#40
NPJ518SD	0.250	0.354	0.2180	#40
NPJ518SE	0.281	0.397	0.2810	#40
NPJ518SF	0.312	0.441	0.3430	#30
NPJ518SJ	0.250	0.354	0.1875	#40
NPJ518UF	0.312	0.441	0.3430	#30
NPJ518UA	0.203	0.287	0.1400	#40
NPJ518UB	0.218	0.308	0.1660	#40
NPJ518UC	0.234	0.0331	0.1930	#40
NPJ518UD	0.250	0.354	0.2180	#40
NPJ518UE	0.281	0.397	0.2810	#40
NPJ518NAS-C-A02	0.125	0.177	0.0860	#51
NPJ518NAS-C-A03	0.138	0.195	0.0990	#51
NPJ518NAS-C-A04	0.148	0.209	0.1120	#51
NPJ518NAS-C-A06	0.172			

Once the hole pattern and spacing are determined, selecting a jig is largely dependent on the diameter of the hole over which the plate-nut is to be riveted. The pilot pin in the jig should fill the underlying hole until proper positioning of rivet holes is insured. Our experienced staff is available to answer questions that arise during selection.

Nut Plate Jig Selection Table

Standard or Print	Style	Part Number	Standard or Print	Style	Part Number
AN366F-06	2-LUG Double Wing	NPJ518A	BACN11G4D-X-XX	2-LUG Double Wing	SPECIAL
AN366F-08	2-LUG Double Wing	NPJ518B	BACN11G5A-X-XX	2-LUG Double Wing	NPJ518E
AN366F-3	2-LUG Double Wing	NPJ518C	BACN11G5B-X-XX	1-LUG Single Wing	NPJ518RP
AN366F-4	2-LUG Double Wing	NPJ518D	BACN11G5C-X-XX	Corner Wing	NPJ518V
AN366F-5	2-LUG Double Wing	NPJ518E	BACN11G5D-X-XX	2-LUG Double Wing	SPECIAL
AT518(xx)	All Styles use same letters	NPJ518(xx)	F2000-06	1-LUG Single Wing	NPJ518H
BACN10JB3	2-LUG Double Wing	NPJ518C	F2000-08	1-LUG Single Wing	NPJ518J
BACN10JB4	2-LUG Double Wing	NPJ518D	F2000-3	1-LUG Single Wing	NPJ518RU
BACN10JB5	2-LUG Double Wing	NPJ518E	F5000-06	2-LUG Double Wing	NPJ518B
BACN10JB6	2-LUG Double Wing	NPJ518KG	F5000-08	2-LUG Double Wing	NPJ518C
BACN10JN04	2-LUG Double Wing	NPJ518NA	F5000-3	2-LUG Double Wing	NPJ518KT
BACN10JN06	2-LUG Double Wing	NPJ518NB	K1000-06	2-LUG Double Wing	NPJ518A
BACN10JN08	2-LUG Double Wing	NPJ518NC	K1000-08	2-LUG Double Wing	NPJ518B
BACN10JN3	2-LUG Double Wing	NPJ518ND	K1000-3	2-LUG Double Wing	NPJ518C
BACN10JN4	2-LUG Double Wing	NPJ518NE	K1000-4	2-LUG Double Wing	NPJ518D
BACN10JN5	2-LUG Double Wing	NPJ518NAS-A-A5	K1000-5	2-LUG Double Wing	NPJ518E
BACN10JP04	2-LUG Double Wing	NPJ518NA	K2000-08	1-LUG Single Wing	NPJ518H
BACN10JP06	2-LUG Double Wing	NPJ518NB	K2000-3	1-LUG Single Wing	NPJ518J
BACN10JP08	2-LUG Double Wing	NPJ518NC	K2000-4	1-LUG Single Wing	NPJ518K
BACN10JP3	2-LUG Double Wing	NPJ518ND	K2000-5	1-LUG Single Wing	NPJ518RP
BACN10JP4	2-LUG Double Wing	NPJ518NE	K3000-04	Corner Wing	NPJ518R
BACN10JP5	2-LUG Double Wing	NPJ518NF	K3000-06	Corner Wing	NPJ518R
BACN10JR06	2-LUG Double Wing	NPJ518A	K3000-08	Corner Wing	NPJ518S
BACN10JR08	2-LUG Double Wing	NPJ518B	K3000-3	Corner Wing	NPJ518T
BACN10JR3	2-LUG Double Wing	NPJ518C	K3000-4	Corner Wing	NPJ518U
BACN10JR4	2-LUG Double Wing	NPJ518D	K3000-5	Corner Wing	NPJ518V
BACN10JR5	2-LUG Double Wing	NPJ518E	MK1000-04	2-LUG Double Wing	NPJ518NA
BACN10JR6	2-LUG Double Wing	NPJ518F	MK1000-06	2-LUG Double Wing	NPJ518NB
BACN10JT3	2-LUG Double Wing	NPJ518C	MK1000-08	2-LUG Double Wing	NPJ518NC
BACN10JT4	2-LUG Double Wing	NPJ518D	MK1000-3	2-LUG Double Wing	NPJ518ND
BACN10JT5	2-LUG Double Wing	NPJ518E	MK1000-4	2-LUG Double Wing	NPJ518NE
BACN10JZ3A	2-LUG Double Wing	NPJ518C	MK1000-5	2-LUG Double Wing	NPJ518NAS-A-A5
BACN10JZ3A	2-LUG Double Wing	NPJ518D	MK2000-04	1-LUG Single Wing	NPJ518PA
BACN10JZ3A	2-LUG Double Wing	NPJ518E	MK2000-06	1-LUG Single Wing	NPJ518PB
BACN10JZ3B	Single Lug, Side-by-Side	SPECIAL	MK2000-08	1-LUG Single Wing	NPJ518PC
BACN10JZ3B	Single Lug, Side-by-Side	SPECIAL	MK2000-3	1-LUG Single Wing	NPJ518PD
BACN10JZ3B	Single Lug, Side-by-Side	SPECIAL	MK2000-4	1-LUG Single Wing	NPJ518PE
BACN10JZ3C	2-LUG Double Wing	SPECIAL	MS21047-06	2-LUG Double Wing	NPJ518A
BACN10JZ3C	2-LUG Double Wing	SPECIAL	MS21047-08	2-LUG Double Wing	NPJ518B
BACN10JZ3C	2-LUG Double Wing	SPECIAL	MS21047-3	2-LUG Double Wing	NPJ518C
BACN10KE3	2-LUG Double Wing	NPJ518C	MS21047-4	2-LUG Double Wing	NPJ518D
BACN10KE4	2-LUG Double Wing	NPJ518D	MS21047-5	2-LUG Double Wing	NPJ518E
BACN10KE5	2-LUG Double Wing	NPJ518E	MS21048-06	2-LUG Double Wing	NPJ518A
BACN10KH3	Single Lug, Side-by-Side	NPJ518TA	MS21048-08	2-LUG Double Wing	NPJ518B
BACN11G3A-X-XX	2-LUG Double Wing	NPJ518C	MS21048-3	2-LUG Double Wing	NPJ518C
BACN11G3B-X-XX	1-LUG Single Wing	NPJ518J	MS21048-4	2-LUG Double Wing	NPJ518D
BACN11G3C-X-XX	Corner Wing	NPJ518T	MS21048-5	2-LUG Double Wing	NPJ518E
BACN11G3D-X-XX	2-LUG Double Wing	SPECIAL	MS21049-08	2-LUG Double Wing	NPJ518B
BACN11G4A-X-XX	2-LUG Double Wing	NPJ518D	MS21049-3	2-LUG Double Wing	NPJ518C
BACN11G4B-X-XX	1-LUG Single Wing	NPJ518K	MS21049-4	2-LUG Double Wing	NPJ518D
BACN11G4C-X-XX	Corner Wing	NPJ518U	MS21049-5	2-LUG Double Wing	NPJ518E

Nut Plate Jig Selection Table (cont.)

Standard or Print	Style	Part Number	Standard or Print	Style	Part Number
MS21050-08	2-LUG Double Wing	NPJ518B	MS21062-08	1-LUG Single Wing	NPJ518H
MS21050-3	2-LUG Double Wing	NPJ518C	MS21062-3	1-LUG Single Wing	NPJ518J
MS21050-4	2-LUG Double Wing	NPJ518D	MS21062-4	1-LUG Single Wing	NPJ518RO
MS21050-5	2-LUG Double Wing	NPJ518E	MS21062-5	1-LUG Single Wing	NPJ518RG
MS21051-08	1-LUG Single Wing	NPJ518H	MS21069-04	2-LUG Double Wing	NPJ518NA
MS21051-3	1-LUG Single Wing	NPJ518J	MS21069-06	2-LUG Double Wing	NPJ518NB
MS21051-4	1-LUG Single Wing	NPJ518K	MS21069-08	2-LUG Double Wing	NPJ518NC
MS21051-5	1-LUG Single Wing	NPJ518RP	MS21069-3	2-LUG Double Wing	NPJ518ND
MS21052-06	1-LUG Single Wing	NPJ518G	MS21069-4	2-LUG Double Wing	NPJ518NE
MS21052-08	1-LUG Single Wing	NPJ518H	MS21069-5	2-LUG Double Wing	NPJ518NAS-A-A5
MS21052-3	1-LUG Single Wing	NPJ518J	MS21070-04	2-LUG Double Wing	NPJ518NA
MS21052-4	1-LUG Single Wing	NPJ518K	MS21070-06	2-LUG Double Wing	NPJ518NB
MS21052-5	1-LUG Single Wing	NPJ518RX	MS21070-08	2-LUG Double Wing	NNPJ518NC
MS21053-08	1-LUG Single Wing	NPJ518H	MS21070-3	2-LUG Double Wing	NPJ518ND
MS21053-3	1-LUG Single Wing	NPJ518J	MS21070-4	2-LUG Double Wing	NPJ518NE
MS21053-4	1-LUG Single Wing	NPJ518RO	MS21070-5	2-LUG Double Wing	NPJ518NAS-A-A5
MS21053-5	1-LUG Single Wing	NPJ518RX	MS21071-04	1-LUG Single Wing	NPJ518PA
MS21054-08	1-LUG Single Wing	NPJ518H	MS21071-06	1-LUG Single Wing	NPJ518PB
MS21054-3	1-LUG Single Wing	NPJ518J	MS21071-08	1-LUG Single Wing	NPJ518PC
MS21054-4	1-LUG Single Wing	NPJ518RO	MS21071-3	1-LUG Single Wing	NPJ518PD
MS21054-5	1-LUG Single Wing	NPJ518RX	MS21071-4	1-LUG Single Wing	NPJ518PE
MS21055-04	Corner Wing	NPJ518R	MS21072-04	1-LUG Single Wing	NPJ518PA
MS21055-06	Corner Wing	NPJ518R	MS21072-06	1-LUG Single Wing	NPJ518PB
MS21055-08	Corner Wing	NPJ518S	MS21072-08	1-LUG Single Wing	NPJ518PC
MS21055-3	Corner Wing	NPJ518T	MS21072-3	1-LUG Single Wing	NPJ518PD
MS21055-4	Corner Wing	NPJ518U	MS21072-4	1-LUG Single Wing	NPJ518PE
MS21055-5	Corner Wing	NPJ518V	MS21073-04	Corner Wing	NPJ518SA
MS21056-08	Corner Wing	NPJ518S	MS21073-06	Corner Wing	NPJ518SB
MS21056-3	Corner Wing	NPJ518T	MS21073-08	Corner Wing	NPJ518SC
MS21056-4	Corner Wing	NPJ518U	MS21073-3	Corner Wing	NPJ518SD
MS21056-5	Corner Wing	NPJ518V	MS21073-4	Corner Wing	NPJ518SE
MS21057-08	Corner Wing	NPJ518S	MS21074-04	Corner Wing	NPJ518SA
MS21057-3	Corner Wing	NPJ518T	MS21074-06	Corner Wing	NPJ518SB
MS21057-4	Corner Wing	NPJ518U	MS21074-08	Corner Wing	NPJ518SC
MS21057-5	Corner Wing	NPJ518V	MS21074-3	Corner Wing	NPJ518SD
MS21058-08	Corner Wing	NPJ518S	MS21074-4	Corner Wing	NPJ518SE
MS21058-3	Corner Wing	NPJ518T	MS21075-04	2-LUG Double Wing	NPJ518NA
MS21058-4	Corner Wing	NPJ518U	MS21075-06	2-LUG Double Wing	NPJ518NB
MS21058-5	Corner Wing	NPJ518V	MS21075-08	2-LUG Double Wing	NPJ518NC
MS21059-06	2-LUG Double Wing	NPJ518A	MS21075-3	2-LUG Double Wing	NPJ518ND
MS21059-08	2-LUG Double Wing	NPJ518B	MS21075-4	2-LUG Double Wing	NPJ518NE
MS21059-3	2-LUG Double Wing	NPJ518C	MS21075-5	2-LUG Double Wing	NPJ518NAS-A-A5
MS21059-4	2-LUG Double Wing	NPJ518D	MS21076-04	2-LUG Double Wing	NPJ518NA
MS21059-5	2-LUG Double Wing	NPJ518E	MS21076-06	2-LUG Double Wing	NPJ518NB
MS21060-06	2-LUG Double Wing	NPJ518A	MS21076-08	2-LUG Double Wing	NPJ518NC
MS21060-08	2-LUG Double Wing	NPJ518B	MS21076-3	2-LUG Double Wing	NPJ518ND
MS21060-3	2-LUG Double Wing	NPJ518C	MS21		

Nut Plate Jig Selection Table (cont.)

Standard or Print	Style	Part Number	Standard or Print	Style	Part Number
MS21078-08	2-LUG Double Wing	NPJ518B	NAS1023N-06	2-LUG Double Wing	NPJ518A
MS21078-3	2-LUG Double Wing	NPJ518C	NAS1023N-08	2-LUG Double Wing	NPJ518B
MS21078-4	2-LUG Double Wing	NPJ518D	NAS1023N-3	2-LUG Double Wing	NPJ518C
MS21078-5	2-LUG Double Wing	NPJ518E	NAS1023N-4	2-LUG Double Wing	NPJ518D
MS21078-6	2-LUG Double Wing	NPJ518F	NAS1023N-5	2-LUG Double Wing	NPJ518E
MS21080-06	1-LUG Single Wing	NPJ518G	NAS1025A-08	1-LUG Single Wing	NPJ518H
MS21080-08	1-LUG Single Wing	NPJ518H	NAS1025A-3	1-LUG Single Wing	NPJ518J
MS21080-3	1-LUG Single Wing	NPJ518J	NAS1025A-4	1-LUG Single Wing	NPJ518K
MS21080-4	1-LUG Single Wing	NPJ518K	NAS1025A-5	1-LUG Single Wing	NPJ518RP
MS21080-5	1-LUG Single Wing	NPJ518RG	NAS1025N-06	1-LUG Single Wing	NPJ518G
MS21080-6	1-LUG Single Wing	NPJ518RH	NAS1025N-08	1-LUG Single Wing	NPJ518H
MS21081-06	Corner Wing	NPJ518R	NAS1025N-3	1-LUG Single Wing	NPJ518J
MS21081-08	Corner Wing	NPJ518S	NAS1025N-4	1-LUG Single Wing	NPJ518K
MS21081-3	Corner Wing	NPJ518T	NAS1025N-5	1-LUG Single Wing	NPJ518RG
MS21081-4	Corner Wing	NPJ518U	NAS1025N-6	1-LUG Single Wing	NPJ518RH
MS21081-5	Corner Wing	NPJ518V	NAS1027A-04	Corner Wing	NPJ518R
MS21081-6	Corner Wing	NPJ518W	NAS1027A-06	Corner Wing	NPJ518R
MS21082-06	1-LUG Single Wing	NPJ518G	NAS1027A-08	Corner Wing	NPJ518S
MS21082-08	1-LUG Single Wing	NPJ518H	NAS1027A-3	Corner Wing	NPJ518T
MS21082-3	1-LUG Single Wing	NPJ518J	NAS1027A-4	Corner Wing	NPJ518U
MS21082-4	1-LUG Single Wing	NPJ518RO	NAS1027A-5	Corner Wing	NPJ518V
MS21082-5	1-LUG Single Wing	NPJ518RG	NAS1027N-06	Corner Wing	NPJ518R
MS21082-6	1-LUG Single Wing	NPJ518RH	NAS1027N-08	Corner Wing	NPJ518S
MS21086-08	Single Lug, Side-by-Side	NPJ518NAS-D-A08	NAS1027N-3	Corner Wing	NPJ518T
MS21086-3	Single Lug, Side-by-Side	NPJ518TA	NAS1027N-4	Corner Wing	NPJ518U
MS21086-4	Single Lug, Side-by-Side	NPJ518TB	NAS1027N-5	Corner Wing	NPJ518V
MS21086-5	Single Lug, Side-by-Side	NPJ518TD	NAS1027N-6	Corner Wing	NPJ518W
MS21087-08	Single Lug, Side-by-Side	NPJ518NAS-D-A08	NAS1067-08	Single Lug, Side-by-Side	NPJ518NAS-D-A08
MS21087-3	Single Lug, Side-by-Side	NPJ518TA	NAS1067-3	Single Lug, Side-by-Side	NPJ518TA
MS21087-4	Single Lug, Side-by-Side	NPJ518TB	NAS1067-4	Single Lug, Side-by-Side	NPJ518TB
MS21087-5	Single Lug, Side-by-Side	NPJ518TD	NAS1067-5	Single Lug, Side-by-Side	NPJ518TC
MS21087-6	Single Lug, Side-by-Side	NPJ518NAS-D-A6	NAS1067-6	Single Lug, Side-by-Side	NPJ518NAS-D-A5
NA1-06	2-LUG Double Wing	NPJ518A	NAS1068-04	2-LUG Double Wing	NPJ518NAS-A-A04
NA1-08	2-LUG Double Wing	NPJ518B	NAS1068-04L	2-LUG Double Wing	NPJ518NA
NA1-3	2-LUG Double Wing	NPJ518C	NAS1068-06	2-LUG Double Wing	NPJ518NAS-A-A06
NA1-4	2-LUG Double Wing	NPJ518D	NAS1068-06L	2-LUG Double Wing	NPJ518NB
NA1-5	2-LUG Double Wing	NPJ518E	NAS1068-08	2-LUG Double Wing	NPJ518NC
NA17-06	1-LUG Single Wing	NPJ518G	NAS1068-3	2-LUG Double Wing	NPJ518ND
NA17-08	1-LUG Single Wing	NPJ518H	NAS1068-4	2-LUG Double Wing	NPJ518NE
NA17-3	1-LUG Single Wing	NPJ518J	NAS1068-5	2-LUG Double Wing	NPJ518NAS-A-A5
NA17-4	1-LUG Single Wing	NPJ518K	NAS1474-3	2-LUG Double Wing	NPJ518NAS1474-A3
NA17-5	1-LUG Single Wing	NPJ518RG	NAS1789-3	Single Lug, Side-by-Side	NPJ518TA
NA17-6	1-LUG Single Wing	NPJ518RH	NAS1789-4	Single Lug, Side-by-Side	NPJ518TB
NA5-06	Corner Wing	NPJ518R	NAS1789-5	Single Lug, Side-by-Side	NPJ518TD
NA5-08	Corner Wing	NPJ518S	NAS1789-6	Single Lug, Side-by-Side	NPJ518NAS-D-A6
NA5-3	Corner Wing	NPJ518T	NAS1791-08	2-LUG Double Wing	NPJ518B
NA5-4	Corner Wing	NPJ518U	NAS1791-3	2-LUG Double Wing	NPJ518C
NA5-5	Corner Wing	NPJ518V	NAS1791-4	2-LUG Double Wing	NPJ518D
NA5-6	Corner Wing	NPJ518W	NAS1791-5	2-LUG Double Wing	NPJ518E
NAS1023A-06	2-LUG Double Wing	NPJ518A	NAS1791-6	2-LUG Double Wing	NPJ518F
NAS1023A-08	2-LUG Double Wing	NPJ518B	NAS1793-3	Single Lug Side by Side	SLS 335-486-191-40
NAS1023A-3	2-LUG Double Wing	NPJ518C	NAS1793-4	Single Lug Side by Side	SLS 375-707-250-40
NAS1023A-4	2-LUG Double Wing	NPJ518D	NAS1793-5	Single Lug Side by Side	SLS 480-707-312-40
NAS1023A-5	2-LUG Double Wing	NPJ518E	NAS680N-06	2-LUG Double Wing	NPJ518A
NAS1023N-06	2-LUG Double Wing	NPJ518A	NAS680N-08	2-LUG Double Wing	NPJ518B

Nut Plate Jig Selection Table (cont.)

Standard or Print	Style	Part Number
NAS680N-3	2-LUG Double Wing	NPJ518C
NAS680N-4	2-LUG Double Wing	NPJ518D
NAS680N-5	2-LUG Double Wing	NPJ518E
NAS682A-08	1-LUG Single Wing	NPJ518H
NAS682A-3	1-LUG Single Wing	NPJ518J
NAS682A-4	1-LUG Single Wing	NPJ518K
NAS682A-5	1-LUG Single Wing	NPJ518RP
NAS684A-04	Corner Wing	NPJ518R
NAS684A-06	Corner Wing	NPJ518R
NAS684A-08	Corner Wing	NPJ518S
NAS684A-3	Corner Wing	NPJ518T
NAS684A-4	Corner Wing	NPJ518U
NAS684A-5	Corner Wing	NPJ518V
NAS696-04	1-LUG Single Wing	NPJ518PA
NAS696-06	1-LUG Single Wing	NPJ518NAS-B-A06
NAS696-06L	1-LUG Single Wing	NPJ518PB
NAS696-08	1-LUG Single Wing	NPJ518PC
NAS696-3	1-LUG Single Wing	NPJ518PD
NAS696-4	1-LUG Single Wing	NPJ518PE
NAS696A-04	1-LUG Single Wing	NPJ518PA
NAS696A-06	1-LUG Single Wing	NPJ518PB
NAS696A-08	1-LUG Single Wing	NPJ518PC
NAS696A-3	1-LUG Single Wing	NPJ518PD
NAS696A-4	1-LUG Single Wing	NPJ518PE
NAS697N-04	2-LUG Double Wing	NPJ518NA
NAS697N-06	2-LUG Double Wing	NPJ518NB
NAS697N-08	2-LUG Double Wing	NPJ518NC
NAS697N-3	2-LUG Double Wing	NPJ518ND
NAS697N-4	2-LUG Double Wing	NPJ518NE
NAS697N-5	2-LUG Double Wing	NPJ518NAS-A-A5
ST3M442-3	1-LUG Single Wing	NPJ518J
ST3M442-4	1-LUG Single Wing	NPJ518RO
ST3M442-5	1-LUG Single Wing	NPJ518RG
ST3M442-6	1-LUG Single Wing	NPJ518RH
ST3M443-3	2-LUG Double Wing	NPJ518C
ST3M443-4	2-LUG Double Wing	NPJ518D
ST3M443-5	2-LUG Double Wing	NPJ518E
ST3M443-6	2-LUG Double Wing	NPJ518F
ST3M719-3	2-LUG Double Wing	NPJ518C
ST3M719-4	2-LUG Double Wing	NPJ518D
ST3M719-5	2-LUG Double Wing	NPJ518E
ST3M719-6	2-LUG Double Wing	NPJ518F
ST3M721-3	Corner Wing	NPJ518T
ST3M721-4	Corner Wing	NPJ518U
ST3M721-5	Corner Wing	NPJ518V
ST3M721-6	Corner Wing	NPJ518W

Though Omega Technologies distributes many brands of screwdriver tooling, APEX® bits remain the most popular due to their quality workmanship and reputation within the industry. Formed from the highest grade steel, each piece is tempered with a proprietary heat treating process to achieve optimum toughness for demanding aerospace applications.

APEX® bits are manufactured to exact tolerances that often exceed licensing agreement requirements, standing up to rigorous government/military specifications. These tolerances greatly increase the durability and life of the tool. An APEX® bit can last up to ten-times longer than competitive bits. Closer tolerances also mean a better fit and less "cam-out" or stripping, which in turn keeps work areas free of damage and reduces incidence of bit failure and costly re-work.

Our commitment to innovative solutions allows us to explore custom options for specific needs that may arise.



Screwdriver Bits and Holders

Phillips® Fastener Bits

Torq-Set® Fastener Bits and Hand Drivers

Tri-Wing® Fastener Bits

Hi-Torque® Fastener Bits

Torx® Fastener Bits

Bit Holders · Adapters · Extensions

Not all bits are created equal.

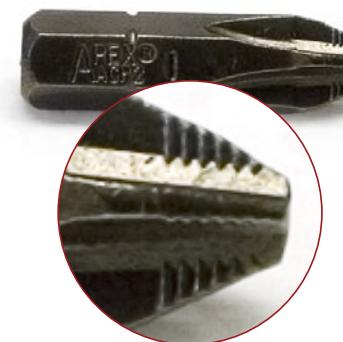
The manufacture of top-quality aerospace screwdriver tooling is an art developed over decades in response to the ever-changing demands of fastener applications. These demands vary by industry, but are particularly exacting in aviation.

Special alloys have been developed that offer attributes suited to the specific demands of the aerospace industry. Typically, the industry uses the X hardness bits, yet hardness is only one attribute governing performance. Bits of equal hardness from different brands will yield different results. We understand that determining the material/brand of choice can be a confusing process. Omega's staff, with nearly 40 years of experience in aerospace fasteners and tooling, will be pleased to offer specific recommendations, and to clarify any confusion.

We welcome your feedback. If our customers are not getting the performance they expect, we want to hear about it. A bit is only as good as the job it does.

**ACR**

The most important feature of a bit is its ability to manipulate the screw. Painted, coated, corroded, or worn fasteners can inhibit a bit's ability to grip. The Apex® ACR® bits offer a ribbed tip that grips screw recesses to reduce stripping and the tendency to cam, which in turn reduces debris in the work area. Bits are available for driving, removal, or both. For availability, see the ACR® column in the charts on the following pages.

**Types of Bits**

Common Aerospace Recesses



Phillips®



Hi-Torque®



Torq-Set®



Tri-Wing®



Torx®

Other Styles Available



Slotted



Pozidriv®



B.N.A.E.



Frearson



Clutch



Socket (Hex)



MorTorq®



Triple-Square



Spanner



Quadrex®



Torx® Tamper Resistant



Torx® Plus Tamper Resistant



Torx-Plus®



Phillips®

Phillips bits are by far the most widely used in the industry. Optimum performance depends on properly formed recesses and precision bit tip dimensions. With tough materials and scientific heat treatment, APEX® bits set the standard.

Insert Bits

PART NUMBER	POINT SIZE	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
440-3BN	3	1/4	1 1/4	-
440-1	1	1/4	1	✓
440-2	2	1/4	1	✓
440-3	3	1/4	1	✓
440-4	4	1/4	1	✓
446-0	0	1/4	1	-
446-1	1	1/4	1	-
446-2	2	1/4	1	✓
480-1	1	5/16	1 1/4	✓
480-2	2	5/16	1 1/4	✓
480-3	3	5/16	1 1/4	✓
480-4	4	5/16	1 1/4	✓



446-2X



480-2ACR-R



440-3BN

Power Bits

PART NUMBER	POINT SIZE	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
4910	0	1/4	1 15/16	-
4910A	0	1/4	2 3/4	-
491	1	1/4	1 15/16	✓
491A	1	1/4	2 3/4	-
491B	1	1/4	3	-
491C	1	1/4	6	-
492	2	1/4	1 15/16	✓
492A	2	1/4	2 3/4	✓
492B	2	1/4	3	✓
492C	2	1/4	6	✓
493	3	1/4	1 15/16	✓
4930	3	1/4	1 15/16	-
493A	3	1/4	2 3/4	✓
493B	3	1/4	3	✓
493C	3	1/4	6	✓



492C-X



491-X



492-I

Square Shank

PART NUMBER	POINT SIZE	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
830-1	1	5/16 Square	1 1/8	-
830-2	2	5/16	1 1/8	✓
830-3	3	5/16	1 1/8	✓
830-4	4	5/16	1 1/8	-



830-1

Torq-Set® bits are popular throughout the aircraft/aerospace industry. Precision fit and unique geometry permit high installation loads and a greater surface for achieving high removal torque. "Offset" driving wings are also tamper resistant.

Additional lengths and shank sizes available.



212-10



212-1/4A



170-1/4B



170-5/16B



170-10



TSS-10

Hex Shank Insert Bits

PART NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
212-0	1/4	1	-
212-1	1/4	1	-
212-2	1/4	1	-
212-3	1/4	1	-
212-4	1/4	1	-
212-5	1/4	1	-
212-6	1/4	1	✓
212-8	1/4	1	✓
212-8A	5/16	1 1/4	-
212-10	1/4	1	✓
212-10A	5/16	1 1/4	✓
212-1/4A	1/4	1	✓
212-1/4A	5/16	1 1/4	✓
212-5/16A	5/16	1 1/4	✓
212-3/8A	5/16	1 1/4	-

Hex Shank Power Bits

PART NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
170-0	1/4	1 1/4	-
170-1	1/4	1 1/4	-
170-2	1/4	1 1/4	-
170-3	1/4	1 1/4	-
170-4	1/4	1 1/4	-
170-5	1/4	1 1/4	-
170-6	1/4	1 1/4	✓
170-8	1/4	1 1/4	✓
170-8A	5/16	1 1/4	-
170-10	1/4	1 1/4	✓
170-10A	5/16	1 1/4	-
170-1/4	7/16	1 1/4	✓
170-1/4A	5/16	1 1/4	✓
170-1/4B	1/4	1 1/4	-
170-5/16	7/16	1 1/4	✓
170-5/16A	5/16	1 1/4	-
170-5/16B	1/4	1 1/4	-
170-3/8A	5/16	1 1/4	-
170-3/8B	1/4	1 1/4	-

Also available as power bits (up to 6"), as hand drivers, and as M-Series (extended)

Torq-Set Drivers

PART NUMBER	TIPO SIZE	PART NUMBER	TIPO SIZE
TSS-0	0	TSS-6	6
TSS-1	1	TSS-8	8
TSS-2	2	TSS-10	10
TSS-3	3	TSS-1/4	1/4
TSS-4	4	TSS-5/16	5/16
TSS-5	5	TSS-3/8	3/8

Tri-Wing® bits offer a good fit to recesses, plenty of installation torque, and even higher removal torque (the removal face of the bit is larger than the installation face). The three-wing design is highly tamper resistant.

Additional lengths and shank sizes available.



Tri-Wing®

Insert Bits

PART NUMBER	RECESS NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
TWD-0	0	1/4	1	-
TWD-1	1	1/4	1	-
TWD-2	2	1/4	1	-
TWD-3	3	1/4	1	-
TWD-4	4	1/4	1	✓
TWD-5	5	1/4	1	✓
TWD-6	6	1/4	1 1/4	-
TWD-7	7	1/4	1 1/4	-
TWD-8	8	1/4	1 1/4	-
TWE-4	4	5/16	1 1/4	-
TWE-5	5	5/16	1 1/4	-
TWE-6	6	5/16	1 1/4	-
TWE-7	7	5/16	1 1/4	-
TWE-8	8	5/16	1 1/4	-



TWD-4



TWD-6

Power Bits

PART NUMBER	RECESS NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	ACR® FEATURE AVAILABLE
TW-0	0	1/4	1 1/4	-
TW-1	1	1/4	1 1/4	-
TW-2	2	1/4	1 1/4	-
TW-3	3	1/4	1 1/4	-
TW-4	4	1/4	1 1/4	✓
TW-5	5	1/4	1 1/4	✓
TWB-6	6	1/4	1 1/4	-
TWB-7	7	1/4	1 1/4	-
TWB-8	8	1/4	1 1/4	-
TWA-4	4	5/16	1 1/4	-
TWA-5	5	5/16	1 1/4	-
TWA-6	6	5/16	1 1/4	-
TWA-7	7	5/16	1 1/4	-
TWA-8	8	5/16	1 1/4	-
TW-6	6	7/16	1 1/4	-
TW-7	7	7/16	1 1/4	-
TW-8	8	7/16	1 1/4	-
TWC-9	9	7/16	1 1/4	-
TW-9	9	5/8	1 1/4	-
TW-10	10	5/8	1 1/4	-
TW-11	11	5/8	1 1/4	-
TW-12*	12	5/8	1 1/4	-
TW-13*	13	5/8	1 1/4	-
TW-14*	14	3/4	3	-
TW-15*	15	3/4	3	-



TWA-8



TW-5



TW-7

*These sizes also available in male square (Service Drive)
Hand drivers also available

The Hi-Torque® recess was designed to provide very high installation and removal torques, with a very shallow recess for use on 120° and 130° flush fasteners in thin skins. It reduces the need for end-load of the driver by the operator while installing and removing screws.



1-Piece Drivers

		PART NUMBER	RECESS NUMBER	BOLT NOMINAL DIAMETER	DRIVE	BODY DIAMETER (B)	HEAD DIAMETER (D)	LENGTH (L)
HTS7		HTS0	HT0	#0 #1 #2	1/4 Fm. Sq.	0.50	0.187	1.00
		HTS1	HT1	#3 #4 #5 #6	1/4 Fm. Sq.	0.50	0.274	1.00
HTS6		HTS2	HT2	#8	1/4 Fm. Sq.	0.50	0.295	1.00
		HTS3	HT3	#10	1/4 Fm. Sq.	0.50	0.377	1.00
HTS5		HTS3A	HT3	#10	3/8 Fm. Sq.	0.50	0.377	1.00
		HTS4	HT4	1/4	1/4 Fm. Sq.	0.50	0.497	1.00
HTS4		HTS4A	HT4	1/4	3/8 Fm. Sq.	0.75	0.497	1.25
		HTS5	HT5	5/16	3/8 Fm. Sq.	0.75	0.629	1.25
HTS3		HTS6	HT6	3/8	3/8 Fm. Sq.	0.75	0.747	1.25
		HTS7	HT7	7/16	1/2 Fm. Sq.	1.00	0.880	1.62
HTS2		HTS8	HT8	1/2	1/2 Fm. Sq.	1.00	0.997	1.62
		HTS9	HT9	9/16	1/2 Fm. Sq.	1.25	1.140	1.62
HTS1		HTS10	HT10	5/8	1/2 Fm. Sq.	1.25	1.500	1.82
		HTS12	HT12	3/4	3/4 Fm. Sq.	1.50	1.500	2.37
HTS2A		HTS14	HT14	7/8	3/4 Fm. Sq.	1.62	1.620	2.50
		HTS16	HT16	1	3/4 Fm. Sq.	1.75	1.750	2.62
HTN-B3		HTN-B1	HT1	#3 #4 #5 #6	1/4 Mi. Hex	0.28	0.274	1.25
		HTN-B2	HT2	#8	1/4 Mi. Hex	0.31	0.295	1.25
HTN-B3		HTN-B3	HT3	#10	1/4 Mi. Hex	0.38	0.377	1.25
		HTN-B4	HT4	1/4	1/4 Mi. Hex	0.50	0.502	1.25

2-Piece Drivers

	PART NUMBER (ASSEMBLY)	PART NUMBER (BLADE ONLY)	RECESS NUMBER	BOLT NOMINAL DIAMETER	DRIVE	BODY DIAMETER (B)	HEAD DIAMETER (D)	LENGTH (L)
HT3304M	HTA2	H2B2P	HT2	#8	1/4 Fm. Sq.	0.50	0.364	1.25
	HTA3	HTB3P	HT3	#10	1/4 Fm. Sq.	0.50	0.552	1.30
	HTA4	HTB4P	HT4	1/4	3/8 Fm. Sq.	0.75	0.864	2.20
	HTA5	HTB5P	HT5	5/16	3/8 Fm. Sq.	0.75	0.990	2.25
	HTA6	HTB6P	HT6	3/8	3/8 Fm. Sq.	0.75	1.240	2.38
	HT3202M	HTB2M	HT2	#8	1/4 Fm. Sq.	0.50	0.500	1.25
	HT3203M	HTB3M	HT3	#10	1/4 Fm. Sq.	0.50	0.552	1.36
	HT3304M	HTB4M	HT4	1/4	3/8 Fm. Sq.	0.75	0.864	2.67
	HT3305M	HTB5M	HT5	5/16	3/8 Fm. Sq.	0.75	0.990	2.73
	HT3306M	HTB6M	HT6	3/8	3/8 Fm. Sq.	0.75	1.240	2.73
HT4404M	HT3406M	HTB6M	HT6	3/8	1/2 Fm. Sq.	1.00	1.240	3.17
	HT3407M	HTB7M	HT7	7/16	1/2 Fm. Sq.	1.00	1.375	3.23
	HT3408M	HTB8M	HT8	1/2	1/2 Fm. Sq.	1.00	1.500	3.30
	HT3409M	HTB9M	HT9	9/16	1/2 Fm. Sq.	1.00	1.750	3.42
	HT3410M	HTB10M	HT10	5/8	1/2 Fm. Sq.	1.00	2.000	3.55
	HT4403M	HTB3M	HT3	#10	1/4 Mi. Hex	0.50	0.552	3.50
	HT4404M	HTB4M	HT4	1/4	1/4 Mi. Hex	0.50	0.864	3.50

Shown: "Pizza Cutter" style drivers with replaceable blades.



The patented Torx® recess permits high torque loads with reasonably shallow recesses. Additional lengths and shank sizes available.

1/4" Hex Insert Bits

PART NUMBER	RECESS NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	HEAD DIAMETER (D)
440-TX01	T-1	1/4	1	0.033
440 TX02	T-2	1/4	1	0.037
440 TX03	T-3	1/4	1	0.044
440 TX04	T-4	1/4	1	0.051
440 TX05	T-5	1/4	1	0.055
440 TX06	T-6	1/4	1	0.065
440 TX07	T-7	1/4	1	0.077
440 TX08	T-8	1/4	1	0.090
440 TX09	T-9	1/4	1	0.097
440 TX10	T-10	1/4	1	0.107
440 TX15	T-15	1/4	1	0.128
440 TX20	T-20	1/4	1	0.151
440 TX25	T-25	1/4	1	0.173
440 TX27	T-27	1/4	1	0.195
440 TX30	T-30	1/4	1	0.216
440 TX40	T-40	1/4	1	0.260



440-TX20



480-TX45

5/16" Hex Insert Bits

PART NUMBER	RECESS NUMBER	SHANK SIZE (HEX)	OVERALL LENGTH	HEAD DIAMETER (D)
480-TX30	T-301	5/16	1 1/4	0.216
480 TX40	T-401	5/16	1 1/4	0.260
480 TX45	T-451	5/16	1 1/4	0.306
480 TX50	T-501	5/16	1 1/4	0.346
480 TX55	T-551	5/16	1 1/4	0.440



440-TX

Also available as power shank, as Torx® key, and hand driver

Bit Holders and Extensions

Popular Bit Holders*

PART NUMBER	DRIVE TYPE	FOR BIT SIZE	OVERALL LENGTH	MAGNETIC
490	1/4" Hex Power Shank	1/4" Hex Insert Bits	2 1/8"	No
M490	1/4" Hex Power Shank	1/4" Hex Insert Bits	2 1/8"	Yes
490-4	1/4" Hex Power Shank	1/4" Hex Insert Bits	4"	No
M490-4	1/4" Hex Power Shank	1/4" Hex Insert Bits	4"	Yes
825	1/4" Fm. Square Drive	1/4" Hex Insert Bits	1"	Yes
838	3/8" Fm. Square Drive	1/4" Hex Insert Bits	1/2"	No

*See website for more configurations



490



490-4



825



838

<h4

These unique sockets and adapters were developed by Omega Technologies for aerospace applications where torque control is necessary. The "tilt" is limited to 15° in order to improve the repeatability and accuracy of installation torque values. The unique gold and black color scheme makes these quality tools readily distinguishable from traditional swivels.

They feature a very low profile for maximum access and are available in 6-point and 12-point configurations. **Please note that they are not intended for use with impact tools.**

Square Drive Swivel Sockets

Square Drive Universal Adaptors

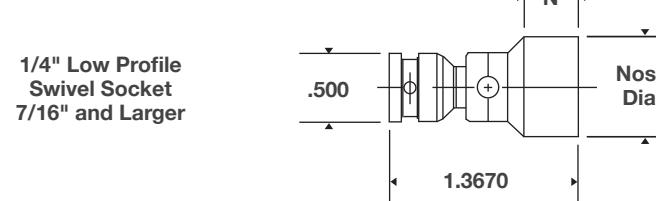
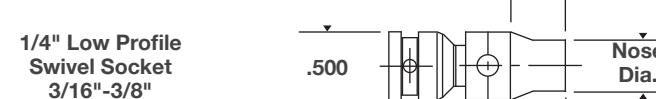


**Universal Sockets
and Adapters**
For "Torque Control" Applications

The use of standard universal adapters and swivel sockets may compromise joint integrity—preventing adequate torque from reaching the fastener. Studies have determined that when the swivel angle exceeds 15°, there may be significant 'scatter' or reduction in measured torque values.

Omega Technologies has developed a line of Universal Adapters and Swivel Sockets that have a maximum tilt of 15°. Available for 1/4", 3/8", and 1/2" square drives, these tools are color-coded gold and black for easy identification. Machined from premium shock-resistant 4340 steel and heat-treated for toughness, these tools offer top performance and long life. For extremely tight places, a low-profile (LP) version of the 1/4" swivel sockets is also available.

Please note that these are not intended for use with impact tools.

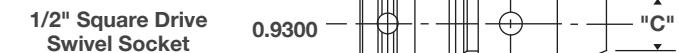


1/4" Square Drive Low Profile Swivel Sockets

SIZE	PART NUMBER (6 PT.)	PART NUMBER (12 PT.)	NOSE DIAMETER	NOSE LENGTH (N)
3/16	US250-18	USD250-18	0.317	0.400
7/32	US250-21	USD250-21	0.343	0.400
1/4	US250-25	USD250-25	0.379	0.400
9/32	US250-28	USD250-28	0.445	0.400
5/16	US250-31	USD250-31	0.451	0.400
11/32	US250-34	USD250-34	0.480	0.400
3/8	US250-37	USD250-37	0.510	0.400
7/16	US250-43	USD250-43	0.585	0.500
1/2	US250-50	USD250-50	0.690	0.500
9/16	US250-56	USD250-56	0.750	0.500

Do not exceed 240 lb-in.

Omega Torque Control Swivel Adapters are tough. Max torque values are higher than typical 30°-35° swivels.



1/2" Square Drive Swivel Sockets

SIZE	PART NUMBER (6 PT.)	PART NUMBER (12 PT.)	LENGTH (A)	DIAMETER (B)	NOSE (C)
3/16	US500-18	USD500-18	2.167	0.750	0.339
7/32	US500-21	USD500-21	2.167	0.750	0.375
1/4	US500-25	USD500-25	2.167	0.750	0.410
9/32	US500-28	USD500-28	2.167	0.750	0.448
5/16	US500-31	USD500-31	2.167	0.750	0.485
11/32	US500-34	USD500-34	2.167	0.750	0.520
3/8	US500-37	USD500-37	2.167	0.850	0.550
7/16	US500-43	USD500-43	2.167	0.850	0.615
1/2	US500-50	USD500-50	2.267	0.850	0.682
9/16	US500-56	USD500-56	2.367	0.850	0.800
5/8	US500-62	USD500-62	2.467	0.850	1.000
3/4	US500-75	USD500-75	2.567	0.850	1.125

Do not exceed 1000 lb-in.



UJ750 UJ500 UJ375 UJ250

Square Drive Universal Adapters

SIZE	PART NUMBER	MAX TORQUE	MALE SQ.	FEMALE SQ.
1/4"	UJ250	240 lb-in	1/4"	1/4"
3/8"	UJ375	1000 lb-in	3/8"	3/8"
1/2"	UJ500	2400 lb-in	1/2"	1/2"
3/4"	UJ750	3876 lb-in	3/4"	3/4"

Universal Sockets
and Adapters

Universal Sockets
and Adapters



3/8" Square Drive Swivel Sockets

SIZE	PART NUMBER (6 PT.)	PART NUMBER (12 PT.)	LENGTH (A)	DIAMETER (B)	NOSE (C)
3/16	US375-18	USD375-18	1.906	0.750	0.339
7/32	US375-21	USD375-21	1.906	0.750	0.375
1/4	US375-25	USD375-25	1.906	0.750	0.410
9/32	US375-28	USD375-28	1.906	0.750	0.448
5/16	US375-31	USD375-31	1.906	0.750	0.485
11/32	US375-34	USD375-34	1.906	0.750	0.520
3/8	US375-37	USD375-37	1.906	0.850	0.550
7/16	US375-43	USD375-43	1.906	0.850	0.615
1/2	US375-50	USD375-50	2.006	0.850	0.682
9/16	US375-56	USD375-56	2.106	0.850	0.800
5/8	US375-62	USD375-62	2.206	0.850	1.000
3/4	US375-75	USD375-75	2.306	0.850	1.125

Do not exceed 1000 lb-in.



* Torque control sockets and adapters are not intended for use with "impact" tools.

Omega offers a wide range of lightweight, temporary fastening systems that have played an important role in automotive, racing, and aircraft sheet metal repair for decades. Clecos, 'skin pins', clamps, and drill stops come in a wide variety of shapes and sizes, designed with very specific functions, and color coded by size for easy identification,

Fasteners can be operated with power tools, pliers, or by hand. Most are available in several lengths and strengths to accommodate a range of manufacturing processes. While standard clecos are effective for most space requirements, shorter or extended clecos are specially designed to operate in extreme range specifications. Heavy-duty clecos are made specifically for applications requiring an extended grip length, providing more clamping force than the standard series.

Side-grip clamps also offer a unique solution to the challenges of temporary fastening. Drill stops control drilling depth and reduce the possibility of damage and scarring.

Plier Operated Clecos

Wing-Nut Clecos

Cylindrical-Body Clecos

Hex-Nut Clecos

Other Fastening Systems and Accessories



Clecos and Side Grip Clamps

Plier Operated Clecos

The Plier Operated (K) series sheet holder clamp is the standard temporary fastener solution. These spring-loaded, steel bodied fasteners are suited for light clamping force (no more than 25 lbs), and are a simple, plier-actuated, inexpensive alternative to competitive fasteners.



KK-3/32, 3/16, 1/8



KK-3/16

Reading Part Numbers

K-1/16

- Diameter
 - Type
- | |
|-----------------|
| K: Standard |
| KHD: Heavy Duty |
| KK: Extra Short |
| KL: Long |
| KEL: Extra Long |

Wing-Nut Clecos

The Wing Nut (KW) series is a hand operated clamp with a wide range of grip force. It is best suited for low-production settings where additional installation tools (pliers, wrenches, ratchets, etc.) are not required, and fits in tight areas where a powered tool wouldn't fit. The wing-nut is easy to grip and is 'free-wheeling' allowing it to back completely off while still remaining intact with the body. Clamping force ranges from 12-300 lbs making it suitable for all types of metallic and composite materials.



KWNL-FW-7/32

Reading Part Numbers

KWNS-FW-3/32

- Diameter
 - Type
- | |
|-------------------|
| KWNS: Short |
| KWN: Standard |
| KWNL: Long |
| KWNEL: Extra Long |
| KWNK: Super Long |

Standard (K) 0-1/4" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
K-1/16	Black	1/16	1/16
K-3/32	Zinc	3/32	#40
K-1/8	Copper	1/8	#30
K-5/32	Black	5/32	#20
K-3/16	Brass	3/16	#10
K-7/32	Zinc	7/32	7/32
K-1/4	Copper	1/4	1/4

Heavy Duty (KHD) 0-1/2" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHD-3/32	Zinc	3/32	#40
KHD-1/8	Copper	1/8	#30
KHD-5/32	Black	5/32	#20
KHD-3/16	Brass	3/16	#10
KHD-7/32	Zinc	7/32	7/32
KHD-1/4	Copper	1/4	1/4

Extra Short (KK) 0-1/4" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KK-3/32	Zinc	3/32	#40
KK-1/8	Copper	1/8	#30
KK-5/32	Black	5/32	#20
KK-3/16	Brass	3/16	#10

Long (KL) 1/4-1/2" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KL-3/32	Zinc	3/32	#40
KL-1/8	Copper	1/8	#30
KL-5/32	Black	5/32	#20
KL-3/16	Brass	3/16	#10

Extra Long (KEL) 1/2-3/4" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KEL-3/32	Zinc	3/32	#40
KEL-1/8	Copper	1/8	#30
KEL-5/32	Black	5/32	#20
KEL-3/16	Brass	3/16	#10



KK-5/32

KK-3/32

KHD-1/8

K-3/16

Short (KWNS) 0-5/16" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KWNS-FW-3/32	Silver	3/32	#40
KWNS-FW-1/8	Copper	1/8	#30
KWNS-FW-5/32	Black	5/32	#20
KWNS-FW-3/16	Brass	3/16	#10
KWNS-FW-1/4	Copper	1/4	1/4

Standard (KWN) 0-1/2" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KWN-FW-3/32	Silver	3/32	#40
KWN-FW-1/8	Copper	1/8	#30
KWN-FW-5/32	Black	5/32	#20
KWN-FW-3/16	Brass	3/16	#10
KWN-FW-7/32	Silver	7/32	7/32
KWN-FW-1/4	Copper	1/4	1/4
KWN-FW-5/16	Black	5/16	5/16

Long (KWNL) 0-1" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KWNL-FW-3/32	Silver	3/32	#40
KWNL-FW-1/8	Copper	1/8	#30
KWNL-FW-5/32	Black	5/32	#20
KWNL-FW-3/16	Brass	3/16	#10
KWNL-FW-7/32	Silver	7/32	7/32
KWNL-FW-1/4	Copper	1/4	1/4
KWNL-FW-5/16	Black	5/16	5/16

Extra Long (KWNEL) 1/2-1 1/2" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KWNEL-FW-3/32	Silver	3/32	#40
KWNEL-FW-1/8	Copper	1/8	#30
KWNEL-FW-5/32	Black	5/32	#20
KWNEL-FW-3/16	Brass	3/16	#10
KWNEL-FW-1/4	Copper	1/4	1/4
KWNEL-FW-5/16	Black	5/16	5/16

Super Long (KWNK) 1 1/2-2 1/2" Grip

PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KWNK-FW-1/8	Copper	1/8	#30
KWNK-FW-5/32	Black	5/32	#20
KWNK-FW-3/16	Brass	3/16	#10
KWNK-FW-1/4	Copper	1/4	1/4
KWNK-FW-5/16	Black	5/16	5/16



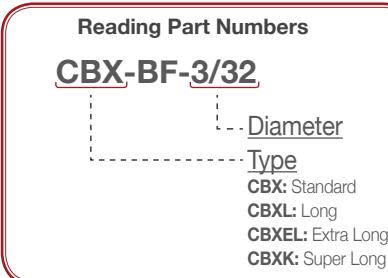
Special sizes quoted on request

Cylindrical Body Clecos

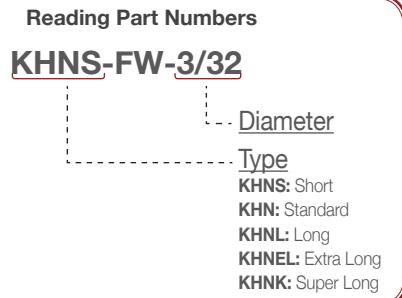
The Cylindrical Body (CBX) series is designed to eliminate tedious fastener-to-tool orientation problems that can result in reduced installation and removal time. The double-lead thread design enhances overall installation and removal efficiency while its large bearing area makes it a suitable choice for both composite and metallic surfaces.



CBX-BF-5/16



KHN-FW-3/16



Standard (CBX) 0-1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
CBX-BF-3/32	Silver	3/32	#40
CBX-BF-1/8	Copper	1/8	#30
CBX-BF-5/32	Black	5/32	#20
CBX-BF-3/16	Brass	3/16	#10
CBX-BF-7/32	Silver	7/32	7/32
CBX-BF-1/4	Copper	1/4	1/4
CBX-BF-5/16	Black	5/16	5/16

Long (CBXL) 0-1" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
CBXL-BF-3/32	Silver	3/32	#40
CBXL-BF-1/8	Copper	1/8	#30
CBXL-BF-5/32	Black	5/32	#20
CBXL-BF-3/16	Brass	3/16	#10
CBXL-BF-7/32	Silver	7/32	7/32
CBXL-BF-1/4	Copper	1/4	1/4
CBXL-BF-5/16	Black	5/16	5/16

Extra Long (CBXEL) 1/2-1 1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
CBXEL-BF-3/32	Silver	3/32	#40
CBXEL-BF-1/8	Copper	1/8	#30
CBXEL-BF-5/32	Black	5/32	#20
CBXEL-BF-3/16	Brass	3/16	#10
CBXEL-BF-1/4	Copper	1/4	1/4
CBXEL-BF-5/16	Black	5/16	5/16

Super Long (CBXK) 1 1/2-2 1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
CBXK-BF-1/8	Copper	1/8	#30
CBXK-BF-5/32	Black	5/32	#20
CBXK-BF-3/16	Brass	3/16	#10
CBXK-BF-1/4	Copper	1/4	1/4
CBXK-BF-5/16	Black	5/16	5/16



Clecos and Side
Grip Clamps

Hex Nut Short (KHNS) 0-5/16" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHNS-FW-3/32	Silver	3/32	#40
KHNS-FW-1/8	Copper	1/8	#30
KHNS-FW-5/32	Black	5/32	#20
KHNS-FW-3/16	Brass	3/16	#10
KHNS-FW-1/4	Copper	1/4	1/4

Standard (KHN) 0-1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHN-FW-3/32	Silver	3/32	#40
KHN-FW-1/8	Copper	1/8	#30
KHN-FW-5/32	Black	5/32	#20
KHN-FW-3/16	Brass	3/16	#10
KHN-FW-7/32	Silver	7/32	7/32
KHN-FW-1/4	Copper	1/4	1/4
KHN-FW-5/16	Black	5/16	5/16

Long (KHNL) 0-1" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHNL-FW-3/32	Silver	3/32	#40
KHNL-FW-1/8	Copper	1/8	#30
KHNL-FW-5/32	Black	5/32	#20
KHNL-FW-3/16	Brass	3/16	#10
KHNL-FW-7/32	Silver	7/32	7/32
KHNL-FW-1/4	Copper	1/4	1/4
KHNL-FW-5/16	Black	5/16	5/16

Extra Long (KHNEL) 1/2-1 1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHNEL-FW-3/32	Silver	3/32	#40
KHNEL-FW-1/8	Copper	1/8	#30
KHNEL-FW-5/32	Black	5/32	#20
KHNEL-FW-3/16	Brass	3/16	#10
KHNEL-FW-7/32	Copper	1/4	1/4
KHNEL-FW-5/16	Black	5/16	5/16

Super Long (KHNK) 1 1/2-2 1/2" Grip			
PART NUMBER	COLOR	DIAMETER	DRILL SIZE
KHNK-FW-1/8	Copper	1/8	#30
KHNK-FW-5/32	Black	5/32	#20
KHNK-FW-3/16	Brass	3/16	#10
KHNK-FW-1/4	Copper	1/4	1/4
KHNK-FW-5/16	Black	5/16	5/16



Clecos and Side
Grip Clamps

The Hex Nut (KH) series is operated with a pneumatic power tool and best suited to high-production settings requiring fast, consistent, uniform clamping force. Its "free-wheeling" allowing it to back completely off while still remaining intact with the body. This fastener is suitable for all types of metallic and composite materials.

Special sizes quoted on request

Other Fastening Systems and Accessories

Side-Grip Clamps (KSG)

The plier-operated "KSG" series is designed to clamp material together where no holes are available. Ideal for bonding, gluing and sealant operations, these clamps work well with all types of material. The larger surface area minimizes scarring while its spring-loaded mechanism prevents over-tightening.



Side Grip Clamps deliver up to 60 lbs. of clamping force.

Side Grip Clamps

PART NUMBER	JAW DEPTH	MATERIAL THICKNESS	COLOR
KSG 1/2 x 1/2	1/2"	0-1/2"	Copper
KSG 1/2 x 1	1"	0-1/2"	Copper
KSG 3/4 x 1/2	1/2"	0-3/4"	Brass
KSG 3/4 x 1	1"	0-3/4"	Brass

Cleco Pliers

Cleco pliers are specially designed for installing spring-loaded temporary fasteners. A specially designed "body seat" holds the fastener in place while the plunger is depressed. These nickel-plated or black-oxide coated pliers are constructed of forged steel, thus resisting wear, abuse, and corrosion.



For Drill Stops see page 40

Protective Caps

Offered for all Cleco-type fasteners, protective caps protect the surface of a structure from galvanic corrosion and scratches. Available in vinyl, hard plastic and aluminum.

Call Omega customer service staff for size and material options.



Clecos and Side
Grip Clamps

Appendix I

Part Number Cross Reference

Hi-Shear® | VSI® | Fairchild® | Alcoa® | ATI® | Zephyr®

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
13401	PC900-4, PC4	Paint Cutter, Silver Color, for #4 (4-40) Screw	
13402	PC900-6, PC6	Paint Cutter, Copper Color, for #6 (6-32) Screw	
13403	PC900-8, PC8	Paint Cutter, Black Color, for #8 (8-32) Screw	
13404	PC900-10, PC10	Paint Cutter, Brass color, for #10 (10-32) Screw	
13405	PC900-1/4	Paint Cutter, Copper color, for 1/4 (1/4-28) Screw	
13406	PC-SET-5	5 Piece Paint Cutter Set #4, #6, #8, #10, & 1/4	
16420	OMSK3581-5/33	Removal Socket for 5/32" Threaded Collars	
16421	OMSK3581-3/16	Removal Socket for 3/16" Threaded Collars	
16422	OMSK3581-1/4	Removal Socket for 1/4" Threaded Collars	
1023-3	OM1023-3	2" OAL Chucking Spud 1/4" round shank, 1/4-28 Female Thread	
1023-4	OM1023-4	4" OAL Chucking Spud 1/4" round shank, 1/4-28 Female Thread	
1023-6	OM1023-6	6" OAL Chucking Spud 1/4" round shank, 1/4-28 Female Thread	
1023-8	OM1023-8	8" OAL Chucking Spud 1/4" round shank, 1/4-28 Female Thread	
1255-1/4	OMDC1/4	1/4" Drill Collet 1/4-28 thread	
1255-1/8	OMDC1/8	1/8" Drill Collet 1/4-28 thread	
1255-10	OMDC10	#10 Drill Collet 1/4-28 thread	
1255-11	OMDC11	#11 Drill Collet 1/4-28 thread	
1255-12	OMDC12	#12 Drill Collet 1/4-28 thread	
1255-13	OMDC13	#13 Drill Collet 1/4-28 thread	
1255-14	OMDC14	#14 Drill Collet 1/4-28 thread	
1255-16	OMDC16	#16 Drill Collet 1/4-28 thread	
1255-19	OMDC19	#19 Drill Collet 1/4-28 thread	
1255-20	OMDC20	#20 Drill Collet 1/4-28 thread	
1255-21	OMDC21	#21 Drill Collet 1/4-28 thread	
1255-27	OMDC27	#27 Drill Collet 1/4-28 thread	
1255-3/16	OMDC3/16	3/16" Drill Collet 1/4-28 thread	
1255-3/32	OMDC3/32	3/32" Drill Collet 1/4-28 thread	
1255-30	OMDC30	#30 Drill Collet 1/4-28 thread	
1255-40	OMDC40	#40 Drill Collet 1/4-28 thread	
1255-5/32	OMDC5/32	5/32" Drill Collet 1/4-28 thread	
1255-7/32	OMDC7/32	7/32" Drill Collet 1/4-28 thread	
1255-8	OMDC8	#8 Drill Collet 1/4-28 thread	
1297-1	OM87-1	Hollow Cutter for 1/8" Huck Collar Removal	
1297-2	OM87-2	Hollow Cutter for 5/32" Huck Collar Removal	
1297-3	OM87-3	Hollow Cutter for 3/16" Huck Collar Removal	
1297-4	OM87-4	Hollow Cutter for 1/4" Huck Collar Removal	
1297-5	OM87-5	Hollow Cutter for 5/16" Huck Collar Removal	
1297-6	OM87-6	Hollow Cutter for 7/16" Huck Collar Removal	
1297-7	OM87-7	Hollow Cutter for 3/8" Huck Collar Removal	
1900-1304	MINI-AIR-VAC	Mini Air Vacuum, plastic hose, metal body	
2-1522	OM2-1522	Protrusion Gauge for (Hi-Lok®)	
2-1522-B	OM2-1522-B	Protrusion Gauge for (Hi-Lok®) New Aerospace "B" Version Serialized	
2-1522HST	OM2-1522HST	Protrusion Gauge for (Hi-Lite®)	
2-1522HST-B	OM2-1522HST-B	Protrusion Gauge for (Hi-Lite®) New Aerospace "B" Version Serialized	
2595-100	CS-EXT1	1" Countersink Extension 1/4-28 Male to 1/4-28 Female Thread	
2595-200	CS-EXT2	2" Countersink Extension 1/4-28 Male to 1/4-28 Female Thread	
2595-300	CS-EXT3	3" Countersink Extension 1/4-28 Male to 1/4-28 Female Thread	
2595-400	CS-EXT4	4" Countersink Extension 1/4-28 Male to 1/4-28 Female Thread	
2-612	CATGS1	Grip Scale for (Hi-Lok®)	
2-615	OM2-615	Slide only for Grip Scale	
2-651	OM2-651	Grip Scale Assembly with Slide	
36-511	PC900-4, PC4	Paint Cutter, Silver Color, for #4 (4-40) Screw	
36-512	PC900-6, PC6	Paint Cutter, Copper Color, for #6 (6-32) Screw	
36-513	PC900-8, PC8	Paint Cutter, Black Color, for #8 (8-32) Screw	
36-514	PC900-10, PC10	Paint Cutter, Brass color, for #10 (10-32) Screw	
36-517	PC900-1/4	Paint Cutter, Copper color, for 1/4 (1/4-28) Screw	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
AR102-10	OMAR102-10	Collar Removal Tool for 5/16 (Hi-Lite®) 3/8" FM SQ DRIVE	
AR102-12	OMAR102-12	Collar Removal Tool for 3/8 (Hi-Lite®) 3/8" FM SQ DRIVE	
AR102-5	OMAR102-5	Collar Removal Tool for 5/32 (Hi-Lite®) 3/8" FM SQ DRIVE	
AR102-6	OMAR102-6	Collar Removal Tool for 1/4 (Hi-Lite®) 3/8" FM SQ DRIVE	
AR102-8	OMAR102-8	Collar Removal Tool for 1/4 (Hi-Lite®) 3/8" FM SQ DRIVE	
AT493C0	OM86-1 (1/8)	Hollow Cutter for 1/8" Rivet Collar Removal	
AT493C00	OM86-2 (5/32)	Hollow Cutter for 5/32" Rivet Collar Removal	
AT493C1	OM86-3 (3/16)	Hollow Cutter for 3/16" Rivet Collar Removal	
AT493C2	OM86-4 (1/4)	Hollow Cutter for 1/4" Rivet Collar Removal	
AT493C3	OM86-5 (5/16)	Hollow Cutter for 5/16" Rivet Collar Removal	
AT493C4	OM86-6 (3/8)	Hollow Cutter for 3/8" Rivet Collar Removal	
AT493D1	OM87-1	Hollow Cutter for 1/8" Huck Collar Removal	
AT493D2	OM87-2	Hollow Cutter for 5/32" Huck Collar Removal	
AT493D3	OM87-3	Hollow Cutter for 3/16" Huck Collar Removal	
AT493D4	OM87-4	Hollow Cutter for 1/4" Huck Collar Removal	
AT493D5	OM87-5	Hollow Cutter for 5/16" Huck Collar Removal	
AT493D6	OM87-6	Hollow Cutter for 7/16" Huck Collar Removal	
AT493D7	OM87-7	Hollow Cutter for 3/8" Huck Collar Removal	
AT511	OM511	Short Chip chaser disposable, not changeable blade - import	
AT511	OM511US	Short Chip chaser disposable, not changeable blade - made in USA	
AT512	OM512	Long Chip chaser disposable, not changeable blade - import	
AT512	OM512US	Long Chip chaser disposable, not changeable blade - made in USA	
AT589AA	OM589AA	Clear Lexan (Egg-Cup) Drill Stand, for 1/2" dia Threaded Drill bushings	
AT589EA	OM589EA	Clear Lexan (Egg-Cup) Drill Stand, for 1/2" dia Slip-Fit Drill bushings	
ATBR2125E	ATBR2125E	Flat Box Ratchet, 7/32 X 1/4 with Flange for Hi-Lok® Collars with Ejector	
ATBR2528E	ATBR2528E	Flat Box Ratchet, 1/4 X 9/32 with Flange for Hi-Lok® Collars with Ejector	
ATBR2531E	ATBR2531E	Flat Box Ratchet, 1/4 X 5/16 with Flange for Hi-Lok® Collars with Ejector	
ATBR2831E	ATBR2831E	Flat Box Ratchet, 9/32 X 5/16 with Flange for Hi-Lok® Collars with Ejector	
ATBR3134E	ATBR3134E	Flat Box Ratchet, 5/16 X 11/32 with Flange for Hi-Lok® Collars with Ejector	
ATBR3137E	ATBR3137E	Flat Box Ratchet, 5/16 X 3/8 with Flange for Hi-Lok® Collars with Ejector	
ATBR4350E	ATBR4350E	Flat Box Ratchet, 7/16 X 1/2 with Flange for Hi-Lok® Collars with Ejector	
ATBRO2125	ATBRO2125	25° Offset Box Ratchet for Hi-Lok® Installation 7/32 X 1/4	
ATBRO2125E	ATBRO2125E	25° Offset Box Ratchet for Hi-Lok® Installation 7/32 X 1/4 with Ejector	
ATBRO2528	ATBRO2528	25° Offset Box Ratchet for Hi-Lok® Installation 1/4 X 9/32	
ATBRO2528E	ATBRO2528E	25° Offset Box Ratchet for Hi-Lok® Installation 1/4 X 9/32 with Ejector	
ATBRO2531	ATBRO2531	25° Offset Box Ratchet for Hi-Lok® Installation 1/4 X 5/16	
ATBRO2531E	ATBRO2531E	25° Offset Box Ratchet for Hi-Lok® Installation 1/4 X 5/16 with Ejector	
ATBRO2834	ATBRO2834	25° Offset Box Ratchet for Hi-Lok® Installation 9/32 X 11/32	
ATBRO2834E	ATBRO2834E	25° Offset Box Ratchet for Hi-Lok® Installation 9/32 X 11/32 with Ejector	
ATBRO3134	ATBRO3134	25° Offset Box Ratchet for Hi-Lok® Installation 5/16 X 11/32	
ATBRO3134E	ATBRO3134E	25° Offset Box Ratchet for Hi-Lok® Installation 5/16 X 11/32 with Ejector	
ATBRO3137	ATBRO3137	25° Offset Box Ratchet for Hi-Lok® Installation 5/16 X 3/8	
ATBRO3137E	ATBRO3137E	25° Offset Box Ratchet for Hi-Lok® Installation 5/16 X 3/8 with Ejector	
ATBRO4350	ATBRO4350	25° Offset Box Ratchet for Hi-Lok® Installation 7/16 X 1/2	
ATBRO4350E	ATBRO4350E	25° Offset Box Ratchet for Hi-Lok® Installation 7/16 X 1/2 with Ejector	
ATKS3591IT-1/4	RR40A25S-SP	1/4" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3495	ATHR375	Standard 3/8" Sq Dr Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
ATSK3539A5	RRSKT5	Roller Ratchet® Kit - 5 Integral Socket Wrenches plus Hi-Lok® Plier	
ATSK3539A8	RRSKT8	Roller Ratchet® Kit - 6 Integral Socket, 2- 1/4" Sq Dr Wrenches plus Hi-Lok® Plier	
ATSK3581-1/4	OMSK3581-1/4	Removal Socket for 1/4" Threaded Collars	
ATSK3581-3/16	OMSK3581-3/16	Removal Socket for 3/16" Threaded Collars	
ATSK3581-3/8	OMSK3581-3/8	Removal Socket for 3/8" Threaded Collars	
ATSK3581-3/8	OMSK3581-3/8A	Removal Socket for 3/8" Threaded Collars 3/8" Sq Dr	
ATSK3581-5/16	OMSK3581-5/16	Removal Socket for 5/16" Threaded Collars	
ATSK3581-5/16	OMSK3581-5/16A	Removal Socket for 5/16" Threaded Collars 3/8" Sq Dr	
ATSK3581-5/32	OMSK3581-5/32	Removal Socket for 5/32" Threaded Collars	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
ATSK3581-7/16	OMSK3581-7/16	Removal Socket for 7/16" Threaded Collars 3/8" Sq Dr	
ATSK3591-3/16	RR40A18S-SP	3/16" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591-7/16	RR40A43S-SP	7/16" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591IT-11/32	RR40A34S-SP	11/32" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591IT-3/8	RR40A37S-SP	3/8" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591IT-5/16	RR40A31S-SP	5/16" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591IT-7/32	RR40A21S-SP	7/32" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3591IT-9/32	RR40A28S-SP	9/32" Integral Socket Roller Ratchet - Low Profile, Short Handle	
ATSK3594	ATHR-MINI	Short 1/4" Square Drive Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
ATSK3594/95K	OMSK3594/95	Hi-Lok® Installation Kit: 10 Sockets, 1/4" & 3/8" Hand Ratchets, and 5 Hex Keys	
ATSK3594K	OMSK3594	Hi-Lok® Installation Kit: 7 Sockets, 1/4" Sq Dr Hand Ratchet, 3 Hex Keys	
ATSK3596-19	AHS187	3/16" Hex Socket with Set Screw	
ATSK3596-22	AHS218	7/32" Hex Socket with Set Screw	
ATSK3596-25	AHS250	1/4" Hex Socket with Set Screw	
ATSK3596-28	AHS281	9/32" Hex Socket with Set Screw	
ATSK3596-31	AHS312	5/16" Hex Socket with Set Screw	
ATSK3596-43	AHS343	11/32" Hex Socket with Set Screw	
ATSK3597-38	AHS375	3/8" Hex Socket with Set Screw	
ATSK3597-44	AHS437	7/16" Hex Socket with Set Screw	
ATSK3597-50	AHS500	1/2" Hex Socket with Set Screw	
ATSK3744	ATHR-TILT	Flex-Head 1/4" Square Drive Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
BAT-PC4PC	PC-SET-4	4 Piece Paint Cutter Set #4, #6, #8, #10	
BAT-PC5PC	PC-SET-5	5 Piece Paint Cutter Set #4, #6, #8, #10, & 1/4	
CS246DT	CS-EXT3	2" Countersink Extension 1/4-28 Male to 1/4-28 Female Thread	
CS247	OM1023-2	2" OAL Chucking Spud 1/4" round shank, 1/4-28 Female Thread	
DS1/4	OMDS1/4	1/4" Drill Stop	
DS10	OMDS10	#10 Drill Stop	
DS20	OMDS20	#20 Drill Stop	
DS21	OMDS21	#21 Drill Stop	
DS30	OMDS30	#30 Drill Stop	
DS40	OMDS40	#40 Drill Stop	
DS5/16	OMDS5/16	5/16" Drill Stop	
DS7/32	OMDS7/32	7/32" Drill Stop	
EBRT100-10	REM100-10E	Removal Tool for 5/16" Eddie-Bolt® Collars	
EBRT100-1012	REM100-1012E	Removal Tool for Eddie-Bolt® 5/16 & 3/8 Collars	
EBRT100-1012S	REM100-1012S-E	Straight Removal Tool for Eddie-Bolt® 5/16 & 3/8 Collars	
EBRT100-10CF	REM100-10CF-E	Removal Tool for Eddie-Bolt® 5/16 Collars (Crow-Foot) 90° offset	
EBRT100-10S	REM100-10S-E	Straight Removal Tool for Eddie-Bolt® 5/16 Collars	
EBRT100-12	REM100-12E	Removal Tool for Eddie-Bolt® 3/8 Collars	
EBRT100-12CF	REM100-12CF-E	Removal Tool for Eddie-Bolt® 3/8 Collars (Crow-Foot) 90° offset	
EBRT100-12S	REM100-12S-E	Straight Removal Tool for Eddie-Bolt® 3/8 Collars	
EBRT100-14	REM100-14E	Removal Tool for Eddie-Bolt® 7/16 Collars	
EBRT100-14CF	REM100-14CF-E	Removal Tool for Eddie-Bolt® 7/16 Collars (Crow-Foot) 90° offset	
EBRT100-14S	REM100-14S-E	Straight Removal Tool for Eddie-Bolt® 7/16 Collars	
EBRT100-16 *	REM100-16-E	Removal Tool for Eddie-Bolt® 1/2" Collars	
EBRT100-16S *	REM100-16S-E	Straight Removal Tool for Eddie-Bolt® 1/2" Collars	
EBRT100-18 *	REM100-18E	Removal Tool for Eddie-Bolt® 9/16" Collars	
EBRT100-18S *	REM100-18S-E	Straight Removal Tool for Eddie-Bolt® 9/16" Collars	
EBRT100-20 *	REM100-20E	Removal Tool for Eddie-Bolt® 5/8" Collars	
EBRT100-20S *	REM100-20S-E	Straight Removal Tool for Eddie-Bolt® 5/8" Collars	
EBRT100-56	REM100-56E	Removal Tool for Eddie-Bolt® 5/32 & 3/16 Collars	
EBRT100-56CF	REM100-56CF-E	Removal Tool for Eddie-Bolt® 5/32 & 3/16 Collars (Crow-Foot) 90°	
EBRT100-56S	REM100-56S-E	Straight Removal Tool for Eddie-Bolt® 5/32 & 3/16 Collars	
EBRT100-8	REM100-8E	Removal Tool for Eddie-Bolt® 1/4 Collars	
EBRT100-8CF	REM100-8CF-E	Removal Tool for Eddie-Bolt® 1/4 Collars (Crow-Foot) 90° offset	
EBRT100-8S	REM100-8S-E	Straight Removal Tool for Eddie-Bolt® 1/4 Collars	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
EBRT200-10	REM200-10E	Hand or Power Removal Tool for -10 Eddie-Bolt® Collars	
EBRT200-5	REM200-5E	Hand or Power Removal Tool for -5 Eddie-Bolt® Collars	
EBRT200-6	REM200-6E	Hand or Power Removal Tool for -6 Eddie-Bolt® Collars	
EBRT200-8	REM200-8E	Hand or Power Removal Tool for -8 Eddie-Bolt® Collars	
GM70SHL	ATHR-MINI	Short 1/4" Square Drive Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
HA9108-2SH	OMEX255-2HL	1/4" Sq Drive Hi-Lok® Socket Extension. 2" OAL with through-hole	
HA9108-4SH	OMEX255-4HL	1/4" Sq Drive Hi-Lok® Socket Extension. 4" OAL with through-hole	
HLC1-10	OMAR100-10	Collar Removal Tool for 5/16 (-10) Hi-Lok® Collars	
HLC1-12	OMAR100-12	Collar Removal Tool for 3/8 (-12) Hi-Lok® Collars	
HLC1-5	OMAR100-5	Collar Removal Tool for 5/32 (-5) Hi-Lok® Collars	
HLC1-6	OMAR100-6	Collar Removal Tool for 3/16 (-6) Hi-Lok® Collars	
HLC1-8	OMAR100-8	Collar Removal Tool for 1/4 (-8) Hi-Lok® Collars	
HLG101	OMG51	Gear Box for Hi-Shear HLA1051 Pistol Style Air Tool	
HLH101-250	ATHR250	Hand Racket Wrench 1/4" Square, Reversible, 72 tooth, w thru-hole	
HLH101-250	ATHR250	Standard 1/4" Sq Dr Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
HLH101-375	ATHR375	Hand Racket Wrench 3/8" Square, Reversible, 72 tooth with thru-hole	
HLH101-375	ATHR375	Standard 3/8" Sq Dr Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
HLH101-500	ATHR500	Hand Racket Wrench 1/2" Square, Reversible, with thru-hole	
HLH101-500	ATHR500	Standard 1/2" Sq Dr Hand Ratchet with thru-hole for Hi-Lok®/Hi-Lite®	
HLH102-187	AHS187	Socket 3/16" with 1/4" Square Drive & Set Screw	
HLH102-218	AHS218	Socket 7/32" with 1/4" Square Drive & Set Screw	
HLH102-250	AHS250	Socket 1/4" with 1/4" Square Drive & Set Screw	
HLH102-281	AHS281	Socket 9/32" with 1/4" Square Drive & Set Screw	
HLH102-312	AHS312	Socket 5/16" with 1/4" Square Drive & Set Screw	
HLH102-343	AHS343	Socket 11/32" with 1/4" Square Drive & Set Screw	
HLH102-375	AHS375A	Socket 1/4" with 1/4" Square Drive & Set Screw	
HLH102-375-A	AHS375	Socket 3/8" with 1/4" Square Drive & Set Screw	
HLH102-437	AHS437	Socket 7/16" with 3/8" Square Drive & Set Screw	
HLH102-500	AHS500	Socket 1/2" with 3/8" Square Drive & Set Screw	
HLH105-062	ATHK062	1/16" Hex, Wrench Tip Assembly, (plastic Handle with replaceable blade)	
HLH105-078	ATHK079	5/64" Hex, Wrench Tip Assembly, (plastic Handle with replaceable blade)	
HLH105-094	ATHK094	3/32" Hex, Wrench Tip Assembly, ('T'-Handle)	
HLH105-125	ATHK125	1/8" Hex, Wrench Tip Assembly, ('T'-Handle)	
HLH105-156	ATHK156	5/32" Hex, Wrench Tip Assembly, ('T'-Handle)	
HLH105-218	ATHK218	7/32" Hex, Wrench Tip Assembly, ('T'-Handle)	
HLH110-187-062	ATHA1	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-218-062	ATHA2	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-218-078	ATHA7	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-250-062	ATHA3	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-250-062	ATHA3	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH110-250-078	ATHA8	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-281-062	ATHA4	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-281-078	ATHA9	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-312-062	ATHA5	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-312-078	ATHA10	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-312-094	ATHA13	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-343-062	ATHA6	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-343-078	ATHA11	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-343-094	ATHA14	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-375-078	ATHA12	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-375-079	ATHA23	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH110-375-094	ATHA15	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-375-125	ATHA17	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-437-094	ATHA16	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-437-125	ATHA18	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-437-156	ATHA19	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
HLH110-500-094	ATHA21	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-500-125	ATHA22	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH110-500-156	ATHA20	3-pc Installation Tool for Hi-Lok®, (Ratchet, Hex-Key and Socket)	
HLH128-10	REM102-10 **	90° Offset Collar Remover for -10 Hi-Lok®/ Hi-tigue® Collars	
HLH128-12	REM102-12 **	90° Offset Collar Remover for -12 Hi-Lok®/ Hi-tigue® Collars	
HLH128-14	REM102-14 **	90° Offset Collar Remover for -14 Hi-Lok®/ Hi-tigue® Collars	
HLH128-6	REM102-56 **	90° Offset Collar Remover for -5 & -6 Hi-Lok®/ Hi-tigue® Collars	
HLH128-8	REM102-8 **	90° Offset Collar Remover for -8 Hi-Lok®/ Hi-tigue® Collars	
HLH149-218-250	ATBR2125	Flat Box Ratchet Wrench, 7/32 X 1/4, for Hi-Lok® Collar Installation	
HLH149-250-281	ATBR2528	Flat Box Ratchet Wrench, 1/4 X 9/32, for Hi-Lok Collar Installation	
HLH149-250-312	ATBR2531	Flat Box Ratchet Wrench, 1/4 X 5/16, for Hi-Lok® Collar Installation	
HLH149-281-312	ATBR2831	Flat Box Ratchet Wrench, 9/32 X 5/16, for Hi-Lok® Collar Installation	
HLH149-312-343	ATBR3134	Flat Box Ratchet Wrench, 5/16 X 11/32, for Hi-Lok® Collar Installation	
HLH149-312-375	ATBR3137	Flat Box Ratchet Wrench, 5/16 X 3/8, for Hi-Lok® Collar Installation	
HLH149-437-500	ATBR4350	Flat Box Ratchet Wrench, 7/16 X 1/2, for Hi-Lok® Collar Installation	
HLH216-10	ATHO216-375	90° Offset Box Ratchet 3/8" Hex for Hi-Lok®/Hi-Lite®	
HLH216-12	ATHO216-437	90° Offset Box Ratchet 7/16" Hex for Hi-Lok®/Hi-Lite®	
HLH216-218	ATHO216-218	90° Offset Box Ratchet 7/32" Hex for Hi-Lok®/Hi-Lite®	
HLH216-250	ATHO216-250	90° Offset Box Ratchet 1/4" Hex for Hi-Lok®/Hi-Lite®	
HLH216-281	ATHO216-281	90° Box Ratchet Wrench 9/32" for Hi-Lok® Collar Installation	
HLH216-281	ATHO216-281	90° Offset Box Ratchet 9/32" Hex for Hi-Lok®/Hi-Lite®	
HLH216-312	ATHO216-312	90° Box Ratchet Wrench 5/16" for Hi-Lok® Collar Installation	
HLH216-312	ATHO216-312	90° Offset Box Ratchet 5/16" Hex for Hi-Lok®/Hi-Lite®	
HLH216-343	ATHO216-343	90° Box Ratchet Wrench 11/32" for Hi-Lok® Collar Installation	
HLH216-343	ATHO216-343	90° Offset Box Ratchet 11/32" Hex for Hi-Lok®/Hi-Lite®	
HLH216-375	ATHO216-375	90° Box Ratchet Wrench 3/8" for Hi-Lok® Collar Installation	
HLH216-375	ATHO216-375	90° Offset Box Ratchet 3/8" Hex for Hi-Lok®/Hi-Lite®	
HLH216-437	ATHO216-437	90° Box Ratchet Wrench 7/16" for Hi-Lok® Collar Installation	
HLH216-437	ATHO216-437	90° Offset Box Ratchet 7/16" Hex for Hi-Lok®/Hi-Lite®	
HLH216-5	ATHO216-281	90° Offset Box Ratchet 9/32" Hex for Hi-Lok®/Hi-Lite®	
HLH216-500	ATHO216-500	90° Box Ratchet Wrench 1/2" for Hi-Lok® Collar Installation	
HLH216-500	ATHO216-500	90° Offset Box Ratchet 1/2" Hex for Hi-Lok®/Hi-Lite®	
HLH216-6	ATHO216-312	90° Offset Box Ratchet 5/16" Hex for Hi-Lok®/Hi-Lite®	
HLH216-8	ATHO216-343	90° Offset Box Ratchet 11/32" Hex for Hi-Lok®/Hi-Lite®	
HLH500-1000-250	ATHA35	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-1125-312	ATHA36	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-500-094	ATHA24	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-500-125	ATHA25	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-500-218	ATHA37	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-562-125	ATHA26	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-562-156	ATHA27	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-562-187	ATHA28	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-625-156	ATHA29	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-687-156	ATHA30	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-687-218	ATHA31	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-750-187	ATHA32	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-875-218	ATHA33	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLH500-937-250	ATHA34	3-pc Installation Tool for Hi-Lok®/Hi-Lite®, (Ratchet, Hex-Key and Socket)	
HLT140-062	HK06	Replacement Hex Tip, .0625"	
HLT140-062	HK06	1/16" Standard Hex Tip Replacement for older Hi-Shear Style tools	
HLT140-078	HK07	Replacement Hex Tip, .0781"	
HLT140-078	HK07	5/64" Standard Hex Tip Replacement for older Hi-Shear Style tools	
HLT140-094	HK09	Replacement Hex Tip, .0938"	
HLT140-094	HK09	3/32" Standard Hex Tip Replacement for older Hi-Shear Style tools	
HLT140-125	HK12	Replacement Hex Tip, .1250"	
HLT140-125	HK125	1/8" Standard Hex Tip Replacement for older Hi-Shear Style tools	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
HLT140-156	HK15	Replacement Hex Tip, .1562"	
HLT140-156	HK156	5/32" Standard Hex Tip Replacement for older Hi-Shear Style tools	
HLT140K062	HLT140K062	1/16" Super-Key Hex Tip Replacement for newer Hi-Shear Style tools	
HLT140K078	HLT140L078	3/32" Super-Key Hex Tip Replacement for newer Hi-Shear Style tools	
HLT140K094	HLT140K094	5/64" Super-Key Hex Tip Replacement for newer Hi-Shear Style tools	
HT3202M	HT3202M	Hi-Torque® Driver, Wheel-type, #2, 1/4" Square Drive	
HT3203M	HT3203M	Hi-Torque® Driver, Wheel-type, #3, 1/4" Square Drive	
HT3304M	HT3304M	Hi-Torque® Driver, Wheel-type, #4, 3/8" Square Drive	
HT3305M	HT3305M	Hi-Torque® Driver, Wheel-type, #5, 3/8" Square Drive	
HT3306M	HT3306M	Hi-Torque® Driver, Wheel-type, #6, 3/8" Square Drive	
HT3407M	HT3407M	Hi-Torque® Driver, Wheel-type, #7, 1/2" Square Drive	
HT3408M	HT3408M	Hi-Torque® Driver, Wheel-type, #8, 1/2" Square Drive	
HT4403M	HT4403M	Hi-Torque® Driver, Wheel-type, #3, 1/4" Male Hex Power Shank Drive	
HT4404M	HT4404M	Hi-Torque® Driver, Wheel-type, #4, 1/4" Male Hex Power Shank Drive	
HTB2M	HTB2M	Blade Replacement, for HT3202M Hi-Torque® Driver, Recess #2	
HTB3M	HTB3M	Blade Replacement, for HT3203M Hi-Torque® Driver, Recess #3	
HTB4M	HTB4M	Blade Replacement, for HT3304M Hi-Torque® Driver, Recess #4	
HTB5M	HTB5M	Blade Replacement, for HT3305M Hi-Torque® Driver, Recess #5	
HTB6M	HTB6M	Blade Replacement, for HT3306M Hi-Torque® Driver, Recess #6	
HTB7M	HTB7M	Blade Replacement, for HT3407M Hi-Torque® Driver, Recess #7	
HTB8M	HTB8M	Blade Replacement, for HT3408M Hi-Torque® Driver, Recess #8	
HTS-0	HTS-0	Hi-Torque® Bit, Recess Size 0, 1/4" Square Drive	
HTS-1	HTS-1	Hi-Torque® Bit, Recess Size 1, 1/4" Square Drive	
HTS-10	HTS-10	Hi-Torque® Bit, Recess Size 10, 1/2" Square Drive	
HTS-12	HTS-12	Hi-Torque® Bit, Recess Size 12, 3/4" Square Drive	
HTS-2	HTS-2	Hi-Torque® Bit, Recess Size 2, 1/4" Square Drive	
HTS-2A	HTS-2A	Hi-Torque® Bit, Recess Size 2, 3/8" Square Drive	
HTS-3	HTS-3	Hi-Torque® Bit, Recess Size 3, 1/4" Square Drive	
HTS3A	HTS3A	Hi-Torque® Bit, Recess Size 3, 3/8" Square Drive	
HTS-4	HTS-4	Hi-Torque® Bit, Recess Size 4, 1/4" Square Drive	
HTS-4A	HTS-4A	Hi-Torque® Bit, Recess Size 4, 3/8" Square Drive	
HTS-5	HTS-5	Hi-Torque® Bit, Recess Size 5, 3/8" Square Drive	
HTS-6	HTS-6	Hi-Torque® Bit, Recess Size 6, 3/8" Square Drive	
HTS-7	HTS-7	Hi-Torque® Bit, Recess Size 7, 1/2" Square Drive	
HTS-8	HTS-8	Hi-Torque® Bit, Recess Size 8, 1/2" Square Drive	
HTS-9	HTS-9	Hi-Torque® Bit, Recess Size 9, 1/2" Square Drive	
KDS1/4	OMDS1/4	1/4" Drill Stop	
KDS10	OMDS10	#10 Drill Stop	
KDS20	OMDS20	#20 Drill Stop	
KDS21	OMDS21	#21 Drill Stop	
KDS30	OMDS30	#30 Drill Stop	
KDS40	OMDS40	#40 Drill Stop	
KDS5/16	OMDS5/16	5/16" Drill Stop	
KDS7/32	OMDS7/32	7/32" Drill Stop	
KK101-06	KK101-06	Kwik-Key® Replacement Hex Tip 1/16" .062	
KK101-07	KK101-07	Kwik-Key® Replacement Hex Tip 5/64" .079	
KK101-07	KK101-07	5/64" Replacement Hex for Kwik-Key® Tool	
KK101-09	KK101-09	Kwik-Key® Replacement Hex Tip 3/32" .094	
KK101-09	KK101-09	3/32" Replacement Hex for Kwik-Key® Tool	
MM335-1	OM86-1 (1/8)	Hollow Cutter for 1/8" Rivet Collar Removal	
MM335-2	OM86-2 (5/32)	Hollow Cutter for 5/32" Rivet Collar Removal	
MM335-3	OM86-3 (3/16)	Hollow Cutter for 3/16" Rivet Collar Removal	
MM335-4	OM86-4 (1/4)	Hollow Cutter for 1/4" Rivet Collar Removal	
MM335-5	OM86-5 (5/16)	Hollow Cutter for 5/16" Rivet Collar Removal	
MM335-6	OM86-6 (3/8)	Hollow Cutter for 3/8" Rivet Collar Removal	
OM2-1522-B	OM2-1522-B	Protrusion Gauge for (Hi-Lok®) New Aerospace "B" Version Serialized	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
OM2-1522HST-B	OM2-1522HST-B	Protrusion Gauge for (Hi-Lite®) New Aerospace "B" Version Serialized	
OMBQC-1	2602-2	1" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-10	2602-10	10" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-2	2602-3	2" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-3	2602-4	3" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-4	2606-4	4" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-6	2602-6	6" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMBQC-8	2602-8	8" Boeing Quick-Change to 1/4-28 Female Thread Extension Adapter	
OMDC1/4	OMDC1/4	1/4" Drill Collet 1/4-28 thread	
OMDC1/8	OMDC1/8	1/8" Drill Collet 1/4-28 thread	
OMDC10	OMDC10	#10 Drill Collet 1/4-28 thread	
OMDC11	OMDC11	#11 Drill Collet 1/4-28 thread	
OMDC12	OMDC12	#12 Drill Collet 1/4-28 thread	
OMDC13	OMDC13	#13 Drill Collet 1/4-28 thread	
OMDC14	OMDC14	#14 Drill Collet 1/4-28 thread	
OMDC16	OMDC16	#16 Drill Collet 1/4-28 thread	
OMDC19	OMDC19	#19 Drill Collet 1/4-28 thread	
OMDC20	OMDC20	#20 Drill Collet 1/4-28 thread	
OMDC21	OMDC21	#21 Drill Collet 1/4-28 thread	
OMDC27	OMDC27	#27 Drill Collet 1/4-28 thread	
OMDC3/16	OMDC3/16	3/16" Drill Collet 1/4-28 thread	
OMDC3/32	OMDC3/32	3/32" Drill Collet 1/4-28 thread	
OMDC30	OMDC30	#30 Drill Collet 1/4-28 thread	
OMDC40	OMDC40	#40 Drill Collet 1/4-28 thread	
OMDC5/32	OMDC5/32	5/32" Drill Collet 1/4-28 thread	
OMDC7/32	OMDC7/32	7/32" Drill Collet 1/4-28 thread	
OMDC8	OMDC8	#8 Drill Collet. 1/4-28 thread	
QRK5	QRK5	1/16" Hex Tip Replacement for Lok-Fast Style Frangible Collar Tools	
QRK6	QRK6	5/64" Hex Tip Replacement for Lok-Fast Style Frangible Collar Tools	
QRK8	QRK8	3/32" Hex Tip Replacement for Lok-Fast Style Frangible Collar Tools	
QRK8-TC	QRK8-TC	3/32" Hex Tip Replacement for Lok-Fast Style Torque Control Tools	
RS100-EB10	SAVI-39 (EB-10)	Removal Socket for -10 (5/16") Eddie-Bolt® Collars	
RS100-EB12	SAVI-51 (EB-12)	Removal Socket for -12 (3/8") Eddie-Bolt® Collars	
RS100-EB5	SAVI-21 (EB-5)	Removal Socket for -5 (5/32") Eddie-Bolt® Collars	
RS100-EB6	SAVI-24 (EB-6)	Removal Socket for -6 (3/16") Eddie-Bolt® Collars	
RS100-EB8	SAVI-32 (EB-8)	Removal Socket for -8 (1/4") Eddie-Bolt® Collars	
RT100-10	REM100-10T	Hand Removal Tool for 5/16 Hi-Lok®/Hi-Lite® Collars	
RT100-1012	REM100-1012T	Hand Removal Tool for 5/16 & 3/8 Hi-Lok®/Hi-Lite® Collars	
RT100-1012S	REM100-1012ST	Hand Removal Tool, for 5/16 & 3/8 Hi-Lok®/Hi-Lite® Collars straight	
RT100-10CF	REM100-10CF	Hand Removal Tool for 5/16 Hi-Lok®/Hi-Lite® Collars (Crow-Foot) 90° offset	
RT100-10S	REM100-10ST	Hand Removal Tool, for 5/16 Hi-Lok®/Hi-Lite® Collars straight	
RT100-12	REM100-12T	Hand Removal Tool for 3/8 Hi-Lok®/Hi-Lite® Collars	
RT100-12CF	REM100-12CF	Hand Removal Tool for 3/8 Hi-Lok®/Hi-Lite® Collars (Crow-Foot) 90° offset	
RT100-12S	REM100-12ST	Hand Removal Tool, for 3/8 Hi-Lok®/Hi-Lite® Collars straight	
RT100-14	REM100-14T	Hand Removal Tool for 7/16 Hi-Lok®/Hi-Lite® Collars	
RT100-14CF	REM100-14CF	Hand Removal Tool for 7/16 Hi-Lok®/Hi-Lite® Collars (Crow-Foot) 90° offset	
RT100-14S	REM100-14ST	Hand Removal Tool, for 7/16 Hi-Lok®/Hi-Lite® Collars straight	
RT100-16 *	REM100-16T	Hand Removal Tool for 1/2" Hi-Lok®/Hi-Lite® Collars	
RT100-16S *	REM100-16ST	Hand Removal Tool, for 1/2" Hi-Lok®/Hi-Lite® Collars straight	
RT100-18 *	REM100-18T	Hand Removal Tool for 9/16" Hi-Lok®/Hi-Lite® Collars	
RT100-18S *	REM100-18ST	Hand Removal Tool Straight, for 9/16" Hi-Lok®/Hi-Lite® Collars	
RT100-20 *	REM100-20T	Hand Removal Tool for 5/8" Hi-Lok®/Hi-Lite® Collars	
RT100-20S *	REM100-20ST	Hand Removal Tool, for 5/8" Hi-Lok®/Hi-Lite® Collars straight	
RT100-56	REM100-56T	Hand Removal Tool for 5/32 & 3/16 Hi-Lok®/Hi-Lite® Collars	
RT100-56CF	REM100-56CF	Hand Removal Tool for 5/32 & 3/16 Hi-Lok®/Hi-Lite® Collars (Crow-Foot) 90°	
RT100-56S	REM100-56ST	Hand Removal Tool, for 5/32 & 3/16 Hi-Lok®/Hi-Lite® Collars straight	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
RT100-8	REM100-8T	Hand Removal Tool for 1/4 Hi-Lok®/Hi-Lite® Collars	
RT100-8CF	REM100-8CF	Hand Removal Tool for 1/4 Hi-Lok®/Hi-Lite® Collars (Crow-Foot) 90° offset	
RT100-8S	REM100-8ST	Hand Removal Tool, for 1/4 Hi-Lok®/Hi-Lite® Collars straight	
RT200-10	REM200-10	Collet Style Removal Tool for -10 Hi-Lok®/Hi-Lite® Collars	
RT200-5	REM200-5	Collet Style Removal Tool for -5 Hi-Lok®/Hi-Lite® Collars	
RT200-6	REM200-6	Collet Style Removal Tool for -6 Hi-Lok®/Hi-Lite® Collars	
RT200-8	REM200-8	Collet Style Removal Tool for -8 Hi-Lok®/Hi-Lite® Collars	
RTO100-10	REM100-10P	Open-End Removal Tool for 5/16 Hi-Lok®/Hi-Lite® Collars	
RTO100-12	REM100-12P	Open-End Removal Tool for 3/8 Hi-Lok®/Hi-Lite® Collars	
RTO100-14	REM100-14P	Open-End Removal Tool for 7/16 Hi-Lok®/Hi-Lite® Collars	
RTO100-56	REM100-56P	Open-End Removal Tool for 5/32 & 3/16 Hi-Lok®/Hi-Lite® Collars	
RTO100-8	REM100-8P	Open-End Removal Tool for 1/4 Hi-Lok®/Hi-Lite® Collars	
RWB100-130	RR130SP	Roller Ratchet®, 250 in-lb, (child 130 in-lb) Torque Rating	
RWB100-40	RR40SP	Roller Ratchet®, 150 in-lb, (Fairchild 40 in-lb) Torque	
RWB100-400	RR400SP	Roller Ratchet®, 600 inch/lbs (Fairchild 400 lb-in) Torque Rating	
RWB100-80	RR80SP	Roller Ratchet®, 1/4" Sq Dr, 200 lb-in max torque rating, (Fairchild 80 in-lb)	
RWB130A25 *	RR130A25SP	Roller Ratchet® with 1/4" integral socket, 250 lb-in	
RWB130A28 *	RR130A28SP	Roller Ratchet® with 9/32" integral socket, 250 lb-in	
RWB130A31 *	RR130A31SP	Roller Ratchet® with 5/16" integral socket, 250 lb-in	
RWB130A34 *	RR130A34SP	Roller Ratchet® with 11/32" integral socket, 250 lb-in	
RWB130A37 *	RR130A37SP	Roller Ratchet® with 3/8" integral socket, 250 lb-in	
RWB130A43 *	RR130A43SP	Roller Ratchet® with 7/16" integral socket, 250 lb-in	
RWB250A50 *	RR250A50SP	Roller Ratchet® with 1/2" integral socket, 400 lb-in	
RWB40A21	RR40A21SP	Roller Ratchet® with 7/32" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A25	RR40A25SP	Roller Ratchet® with 1/4" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A28	RR40A28SP	Roller Ratchet® with 9/32" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A31	RR40A31SP	Roller Ratchet® with 5/16" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A34	RR40A34SP	Roller Ratchet® with 11/32" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A37	RR40A37SP	Roller Ratchet® with 3/8" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB40A43 *	RR40A43SP	Roller Ratchet® with 7/16" integral socket, 150 lb-in rating (Fairchild 40 lb-in)	
RWB80A21	RR80A21SP	Roller Ratchet® with 7/32" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A25	RR80A25SP	Roller Ratchet® with 1/4" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A28	RR80A28SP	Roller Ratchet® with 9/32" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A31	RR80A31SP	Roller Ratchet® with 5/16" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A34	RR80A34SP	Roller Ratchet® with 11/32" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A37	RR80A37SP	Roller Ratchet® with 3/8" integral socket, 200 lb-in (Fairchild 80 lb-in)	
RWB80A43 *	RR80A43SP	Roller Ratchet® with 7/16" integral socket, 200 lb-in (Fairchild 80 lb-in)	
SG1/2X1	KSG1/2X1	Side Grip Clamp 0-1/2" GRIP, 1" Reach (Jaw Depth)	
SG1/2X1/2	KSG1/2X1/2	Side Grip Clamp 0-1/2" GRIP, 1/2" Reach (Jaw Depth)	
SG3/4X1	KSG3/4X1	Side Grip Clamp 0-3/4" GRIP, 1" Reach (Jaw Depth)	
SG3/4X1/2	KSG3/4X1/2	Side Grip Clamp 0-3/4" GRIP, 1/2" Reach (Jaw Depth)	
SWT14-10	CAT18-31	Collar Removal Tool for Six-Wing®, 5/16", Socket Only	
SWT14-12	CAT18-37	Collar Removal Tool for Six-Wing®, 3/8", Socket Only	
SWT14-14	CAT18-43	Collar Removal Tool for Six-Wing®, 7/16", Socket Only	
SWT14-15	CAT18-15	Collar Removal Tool for Six-Wing®, 5/32", Socket Only	
SWT14-15-1	CAT18-15-1	Collar Removal Tool for Six-Wing®, 5/32", 1" Extension, Socket Only	
SWT14-18	CAT18-18	Collar Removal Tool for Six-Wing®, 3/16", Socket Only	
SWT14-18-1	CAT18-18-1	Collar Removal Tool for Six-Wing®, 3/16", 1" Extension, Socket Only	
SWT14-25	CAT18-25	Collar Removal Tool for Six-Wing®, 1/4", Socket Only	
SWT14-25	CAT18-25	Collar Removal Tool for Six-Wing®, 1/4", Socket Only	
SWT14-25-1	CAT18-25-1	Collar Removal Tool for Six-Wing®, 1/4", 1" Extension, Socket Only	
SWT14-31	CAT18-31	Collar Removal Tool for Six-Wing®, 5/16", Socket Only	
SWT14-31-1	CAT18-31-1	Collar Removal Tool for Six-Wing®, 5/16", 1" Extension, Socket Only	
SWT14-37	CAT18-37	Collar Removal Tool for Six-Wing®, 3/8", Socket Only	
SWT14-37-1	CAT18-37-1	Collar Removal Tool for Six-Wing®, 3/8", 1" Extension, Socket Only	
SWT14-43	CAT18-43	Collar Removal Tool for Six-Wing®, 7/16", Socket Only	

Part Number Cross Reference

OTHER BRAND PART NUMBER	OMEGA PART NUMBER	DESCRIPTION	*ITEM OR SIZE EXCLUSIVE TO OMEGA **SAME APPLICATION - NOT IDENTICAL
SWT14-43	CAT19-43	Collar Removal Tool for Six-Wing®, 7/16", with Box Ratchet	
SWT14-43-1	CAT18-43-1	Collar Removal Tool for Six-Wing®, 7/16", 1" Extension, Socket Only	
SWT14-43-1	CAT19-43-1	Collar Removal Tool for Six-Wing®, 7/16", 1" Extension with Box Ratchet	
SWT14-5	CAT18-15	Collar Removal Tool for Six-Wing®, 5/32", Socket Only	
SWT14-6	CAT18-18	Collar Removal Tool for Six-Wing®, 3/16", Socket Only	
SWT15-10	CAT19-31	Collar Removal Tool for Six-Wing®, 5/16", with Box Ratchet	
SWT15-12	CAT19-37	Collar Removal Tool for Six-Wing®, 3/8", with Box Ratchet	
SWT15-14	CAT19-43	Collar Removal Tool for Six-Wing®, 7/16", with Box Ratchet	
SWT15-31	CAT19-31	Collar Removal Tool for Six-Wing®, 5/16", with Box Ratchet	
SWT15-31-1	CAT19-31-1	Collar Removal Tool for Six-Wing®, 5/16", 1" Extension with Box Ratchet	
SWT15-37	CAT19-37	Collar Removal Tool for Six-Wing®, 3/8", with Box Ratchet	
SWT15-37-1	CAT19-37-1	Collar Removal Tool for Six-Wing®, 3/8", 1" Extension with Box Ratchet	
SWT15-5	CAT19-15	Collar Removal Tool for Six-Wing®, 5/32", with Box Ratchet	
SWT15-6	CAT19-18	Collar Removal Tool for Six-Wing®, 3/16", with Box Ratchet	
SWT15-8	CAT19-25	Collar Removal Tool for Six-Wing®, 1/4", with Box Ratchet	
SWT15-15	CAT19-15	Collar Removal Tool for Six-Wing®, 5/32", with Box Ratchet	
SWT15-15-1	CAT19-15-1	Collar Removal Tool for Six-Wing®, 5/32", 1" Extension with Box Ratchet	
SWT15-18	CAT19-18	Collar Removal Tool for Six-Wing®, 3/16", with Box Ratchet	
SWT15-18-1	CAT19-18-1	Collar Removal Tool for Six-Wing®, 3/16", 1" Extension with Box Ratchet	
SWT15-25	CAT19-25	Collar Removal Tool for Six-Wing®, 1/4", with Box Ratchet	
SWT15-25-1	CAT19-25-1	Collar Removal Tool for Six-Wing®, 1/4", 1" Extension with Box Ratchet	
ZRDA80-18	RR40A18SP	3/16" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-18S,	RR40A18S-SP	3/16" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-22	RR40A21SP	7/32" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-22S,	RR40A21S-SP	7/32" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-25	RR40A25SP	1/4" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA8025S,	RR40A25S-SP	1/4" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-28	RR40A28SP	9/32" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-28S,	RR40A28S-SP	9/32" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-31	RR40A31SP	5/16" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-31S,	RR40A31S-SP	5/16" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-34	RR40A34SP	11/32" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-34S,	RR40A34S-SP	11/32" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-37	RR40A37SP	3/8" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-37S,	RR40A37S-SP	3/8" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-43	RR40A43SP	7/16" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-43S,	RR40A43S-SP	7/16" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDA80-50	RR40A50SP	1/2" Integral Socket Roller Ratchet - Low Profile, LONG Handle	
ZRDA80-50S	RR40A50S-SP	1/2" Integral Socket Roller Ratchet - Low Profile, SHORT Handle	
ZRDS18	RRQC40-18	3/16" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS22	RRQC40-21	7/32" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS25	RRQC40-25	1/4" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS28	RRQC40-28	9/32" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS31	RRQC40-31	5/16" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS34	RRQC40-34	11/32" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS37	RRQC40-37	3/8" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDS43	RRQC40-43	7/16" Integral Socket Replacement Spindle, for RR40, or ZRDS Wrenches	
ZRDW80	RRZ80NS	RR40 Roller Ratchet handle with clutch, but no spindle.	
ZRDW80-250	RR40SP	Standard Roller Ratchet with 1/4" Sq Dr, and Through-Hole - LONG Handle	
ZRDW80S-250	RR40S-SP	Standard Roller Ratchet with 1/4" Sq Dr, and Through-Hole - SHORT Handle	

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