

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

REM400

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

REM100-8P, RE100-8T, REM100-8CF, REM102-10





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

<u>Type</u> 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	W IDTH (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	
Nominal Diameter	W іртн (W)	HEAD HEIGHT (H)	Handle Length (L)	12° Offset Handle	Straight Handle	
5/32	0.42	0.35	5.6	REM 100-56E	REM 100-56ES	
3/16	0.42	0.35	5.6	REM 100-56E	REM 100-56ES	
1/4	0.56	0.35	5.6	REM 100-8E	REM 100-8ES	
5/16	0.67	0.35	6	REM 100-10E	REM 100-10ES	
3/8	0.79	0.40	7	REM 100-12E	REM 100-12ES	
	Nominal DIAMETER 5/32 3/16 1/4 5/16	Nominal DIAMETER Width (W) 5/32 0.42 3/16 0.42 1/4 0.56 5/16 0.67 3/8 0.79	Nominal DIAMETER WIDTH (W) HEAD HEIGHT (H) 5/32 0.42 0.35 3/16 0.42 0.35 1/4 0.56 0.35 5/16 0.67 0.35 3/8 0.79 0.40	Nominal DIAMETER Width (W) HEAD HEIGHT (H) HANDLE LENGTH (L) 5/32 0.42 0.35 5.6 3/16 0.42 0.35 5.6 1/4 0.56 0.35 5.6 5/16 0.67 0.35 6 3/8 0.79 0.40 7	Nominal DIAMETER Width (W) Head Height (H) Handle Length (L) 12° Offset Handle 5/32 0.42 0.35 5.6 REM 100-56E 3/16 0.42 0.35 5.6 REM 100-56E 1/4 0.56 0.35 5.6 REM 100-8E 5/16 0.67 0.35 6 REM 100-10E 3/8 0.79 0.40 7 REM 100-12E	

*Larger sizes to -24 available on request



Crow-Foot Series and 90° Offset Series

When removing collars in limited access areas, these variations offer much needed versatility. The Crow-Foot and 90° Offset versions 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 will be pleased to work with you and make a tool recommendation.



REM 100-8CFP Crow Foot Style, Open End



REM 100-8CF Crow-Foot Style

Crow-Foot Series

Crow Foot	CROW FOOT OPEN END	SQUARE DRIVE	Width (W)	Неіднт (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





REM 102-8

90° Offset Style

90° Offset	Crow Foot Open End	Square Drive	Width (W)	Неіднт (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	3/8"	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



90° Offset Style

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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



12 Piece Set: SAVI-568-HL 1/4" Square Drive





6 Piece Set: SAVI-1012 3/8" Square Drive



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

Savi-Socket Collar Removal Tools

						AVAILABLE SETS			
Nominal Collar Size	Collar "Dash" Number	SQUARE DRIVE SIZE	TOP OF COLLAR DIA. (MM)*	TOP OF COLLAR DIA. (IN.)*	INDIVIDUAL SAVI-SOCKET PART NUMBER	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 & 3/16	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 dian	neter where so	cket just fits o	over the top of the	ne collar					

OMAR Series

The OMAR Series socket is a sure way to remove Hi-Lok®, Hi-Lite®, or similar aluminum collars. Its jaws ensure grip even on soft, damaged, or rounded collars. They are fully adjustable to any power hand tool with a reverse fuction and a 3/8" drive. A hex key set screw is included as an anti-FOD measure.

- Powerful Grip
- Tailored to Specific Sizes
- Suited to soft or damaged collars





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	7/8	3/4	OMAR 100-8	OMAR 102-8
-10	3/4*	3/4	OMAR 100-10	OMAR 102-10
-12	1**	1	OMAR 100-12	OMAR 102-12

^{*}Sleeveless

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. When screwed counter-clockwise onto a collar, it draws it in until tight and unscrews the collar. This system is an excellent solution for steel and titanium as well as aluminum collars.

A hex key set screw is also included as an anti-FOD measure.

- Strong Grip
- Tailored to Sizes





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

Replaces ATSK3581 Series sockets

^{**}Removes similar collar types

Six-Wing® Tool & Socket Series

Six Wing® Tool

The Six-Wing® frangible collar is characterized by its six-faceted, semi-spline arrangement of wings around the collar base. These collars are used in high strength applications typical of 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







Six-Wing® Tool and Socket





	PIN DIAMETER	Pin Size (Inches)	OVERALL LENGTH (L)	SOCKET HEIGHT (S)	Socket Diameter (D)	SOCKET PART NUMBER	COMPLETE TOOL PART NUMBER
ij	-5	5/32	4.25	0.50	0.43	CAT18-15	CAT19-15
SOCKE	-6	3/16	4.25	0.50	0.43	CAT18-18	CAT19-18
	-8	1/4	4.25	0.60	0.54	CAT18-25	CAT19-25
AR	-10	5/16	5.50	0.70	0.67	CAT18-31	CAT19-31
9	-12	3/8	5.50	0.72	0.77	CAT18-37	CAT19-37
STANDARD	-14	7/16	5.50	0.80	0.92	CAT18-43	CAT19-43
SOCKET	-5	5/32	4.25	1.00	0.43	CAT18-15-1	CAT19-15-1
Ö	-6	3/16	4.25	1.00	0.43	CAT18-18-1	CAT19-18-1
	-8	1/4	4.25	1.00	0.54	CAT18-25-1	CAT19-25-1
	-10	5/16	5.50	1.25	0.67	CAT18-31-1	CAT19-31-1
EXTENDED	-12	3/8	5.50	1.25	0.77	CAT18-37-1	CAT19-37-1
Ж	-14	7/16	5.50	1.25	0.92	CAT18-43-1	CAT19-43-1
	Other sizes availa	able on request					

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 Other sizes availa	7/16 ble on request	T201X37-6





REM400 (PATENTED)

The Patented REM400 Collar Removal Tool is a refinement of the original REM300. Designed for rapid removal of collars from Threaded Pins, it is suited for use with Aluminum, Steel and Titanium Collars.

The unique cam-driven jaw closes automatically when operated in the counter-clockwise direction, quickly gripping collars and unscrewing them. The collars are retained in the jaws until the tool rotation is reversed (collars will not drop where they are not wanted). Simply switching the tool rotation to clock-wise, opens the jaws and allows the collar to fall freely.

> **US PATENT** # 6134992



Hi-Lok® Pliers

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.

While both the ZHP-100 and the ATSK3579 are best suited to aluminum collars, specific application will determine preference.

ZHP100

AT2979U

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.

ATSK3579

Similar to the ZHP100, this plier has a more aggressive offset of about 60°. The jaw serrations are perpendicular to the collar seating surface when the handles are laid flat, but angle at 30° if the flat part of the head is rested on the collar seating surface.

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







