

Emhart Aftermarket Products

Heli-Coil

Did you know...

Indy and NASCAR racing teams use Heli-Coil inserts.

A Boeing 747 has 250,000 Heli-Coil inserts as original equipment

There are 250,000 Heli-Coil inserts in every space shuttle.

Why?

All the above use lightweight, exotic materials and need strong threads.

What does this mean to you?

Today's cars are also made of light materials, such as aluminum, and tapped hole damage is a common occurrence. Stripping during removal of seized bolts, cross-threading and wear from constant assembly and disassembly and corrosion can also cause thread damage. For these reasons companies like General Motors, Ford, Chrysler, Boeing, Pratt & Whitney, McDonnell-Douglas, NASA, Harley-Davidson, Caterpillar, Cummins, General Electric, Rolls-Royce, BMW, Porsche and many more, including the military, all use Heli-Coil inserts as original equipment in critical threaded areas of parts made of lightweight materials. They have found that the use of Heli-Coil inserts gives them a stronger and more reusable thread that resists the effects of corrosion.

The inserts offered in all of our Heli-Coil Thread Repair Kits are made of the same high quality stainless steel as the inserts used by these companies. The same technology that took us to the moon is available to fix the damaged threads on your car, truck, motorcycle, boat; anywhere they happen. This repair is better than the original thread. It is quick, easy, permanent and in almost all cases less expensive than replacing the part.

POP

POP Blind Rivets are available in a variety of sizes, types and materials combined with dome, countersunk or large-flange head styles. This makes POP blind rivets ideal for a wide range of riveting applications. They are the most popular rivets for automotive use. Also available from POP are Sheet Metal Inserts, a general purpose threaded insert with exceptionally strong torque-out and pull-out characteristics, POP Plastic Rivets, a one-piece, all-plastic expansion rivet, POP WELL-NUT Threaded Inserts, a flanged rubber bushing with brass threads molded into one end, and a variety of manual and power tools.

Drill-Out

Drill-Out is a drill bit and extractor in one. The drill bit is made from high quality tool steel that has been hardened and tempered giving it the ability to even drill into Grade 8 and stainless steel bolts. The extractor is made from hard, flexible die steel which allows it to bite into any bolt or stud without slipping or stripping.

Chase 'em Back™

The unique, patented hinge design of Chase 'em Back allows for the repair of damaged or corroded threads on most studs by attaching to the undamaged threads and working back through the damaged areas. Made from heat-treated steel, sets are available for the most common inch and metric thread sizes. Other sets include the 8-piece Sav-A-Stud Plus™ set for wheel stud repair and the 20-piece Spindle-Saver™ set for front wheel drive spindle repair.

HELI-COIL

POP

DRILL-OUT

CHASE 'EM BACK

Inch Thread Repair Kits

Heli-Coil has complete coverage of inch thread repair sizes. Available from stock are Inch Coarse kits in sizes #8 through 1-1/2" and Inch Fine kits in

sizes #10 through 1-1/2". Kits up to 3/4" are packaged in durable placon or vinyl pouches, and kits 7/8" and larger are packaged in sturdy metal cases and

contain the proper size high speed steel drill. All kits contain a Heli-Coil tap, installation tool, a quantity of inserts and detailed instructions.

INCH COARSE				Kit Contents and Replacement Parts					DRILL SIZE
THREAD SIZE + LENGTH	KIT PART NO.	KIT PKG. TYPE	INSERTS PER KIT	TAP PART NO.	INSTALLATION TOOL PART NO.	TOOL TYPE	PACKAGED INSERT PART NO.	PACKAGED INSERT QTY.	
8-32 x .246	5521-2	A	12	819-2	2288-2	2	R1185-2	12	11/64
10-24 x .285	5521-3	A	12	819-3	2288-3	2	R1185-3	12	13/64
12-24 x .324	5521-1	A	12	819-1	2288-1	2	R1185-1	12	15/64
1/4-20 x .375*	5521-4	A	12	819-4	5288-4	1	R1185-4	12	17/64
5/16-18 x .469*	5521-5	A	12	819-5	5288-5	1	R1185-5	12	21/64
3/8-16 x .562*	5521-6	A	12	819-6	5288-6	1	R1185-6	12	25/64
7/16-14 x .656*	5521-7	A	6	819-7	5288-7	1	R1185-7	6	29/64
1/2-13 x .750*	5521-8	A	6	819-8	5288-8	1	R1185-8	6	17/32
9/16-12 x .844	5521-9	B	6	819-9	2288-9	2	R1185-9	6	19/32
5/8-11 x .938	5521-10	B	6	819-10	5288-10	1	R1185-10	6	21/32
3/4-10 x 1.125	5521-12	B	4	819-12	2288-12	2	R1185-12	4	25/32
THE FOLLOWING KITS COME COMPLETE WITH HIGH SPEED STEEL DRILL BIT FOR 1/2" CHUCK.									
7/8-9 x 1.312	5521-14	C	6	8187-14	3724-14	2	K1185-14	1	29/32
1-8 x 1.500	5521-16	C	6	8187-16	3724-16	2	K1185-16	1	1-1/32
1-1/8-7 x 1.688	5521-18	C	5	8187-18	3724-18	2	K1185-18	1	1-5/32
1-1/4-7 x 1.875	5521-20	C	4	8187-20	3724-20	2	K1185-20	1	1-9/32
1-3/8-6 x 2.062	5521-22	C	4	8187-22	3724-22	2	K1185-22	1	1-13/32
1-1/2-6 x 2.250	5521-24	C	4	8187-24	3724-24	2	K1185-24	1	1-17/32

*Sizes included in Master Thread Repair Set - Part No. 5621



INCH FINE				Kit Contents and Replacement Parts					DRILL SIZE
THREAD SIZE + LENGTH	KIT PART NO.	KIT PKG. TYPE	INSERTS PER KIT	TAP PART NO.	INSTALLATION TOOL PART NO.	TOOL TYPE	PACKAGED INSERT PART NO.	PACKAGED INSERT QTY.	
10-32 x .285**	5528-3	A	12	821-3	2299-3	3	R1191-3	12	13/64
1/4-28 x .375**	5528-4	A	12	821-4	2299-4	3	R1191-4	12	17/64
5/16-24 x .469**	5528-5	A	12	821-5	6299-5	3	R1191-5	12	21/64
3/8-24 x .562**	5528-6	A	12	821-6	6299-6	3	R1191-6	12	25/64
7/16-20 x .656**	5528-7	A	6	821-7	6299-7	3	R1191-7	6	29/64
1/2-20 x .750**	5528-8	A	6	821-8	6299-8	3	R1191-8	6	33/64
9/16-18 x .844	5528-9	B	6	821-9	2299-9	3	R1191-9	6	37/64
5/8-18 x .938	5528-10	B	6	821-10	2299-10	3	R1191-10	6	41/64
3/4-16 x 1.125	5528-12	B	4	821-12	2299-12	3	R1191-12	4	49/64
THE FOLLOWING KITS COME COMPLETE WITH HIGH SPEED STEEL DRILL BIT FOR 1/2" CHUCK.									
7/8-14 x 1.312	5528-14	C	6	8193-14	535-14	4	K1191-14	1	57/64
1-14 x 1.500	5528-16	C	6	8193-16	535-16	4	K1191-16	1	1-1/64
1-12 x 1.500	5528-161	C	6	8193-161	535-161	4	K1191-161	1	1-1/64
1-1/8-12 x 1.688	5528-18	C	5	8193-18	535-18	4	K1191-18	1	1-5/32
1-1/4-12 x 1.875	5528-20	C	4	8193-20	535-20	4	K1191-20	1	1-9/32
1-3/8-12 x 2.062	5528-22	C	4	8193-22	535-22	4	K1191-22	1	1-13/32
1-1/2-12 x 2.250	5528-24	C	4	8193-24	535-24	4	K1191-24	1	1-17/32

*Sizes included in Master Thread Repair Set - Part No. 5621

Master Thread Repair Sets

These “Shop Sets” are the professional’s choice and are available in inch and metric — coarse and fine. The inch and metric Master Sets contain the most common thread repair sizes. All of these master sets come complete with a drill, tap, installation tool and a quantity of inserts for each size and complete instructions.



Inch Master Thread Repair Sets

There are two master sets for inch sizes. The coarse set contains five sizes: 1/4, 5/16, 3/8, 7/16 and 1/2. The fine set has six sizes: #10, 1/4, 5/16, 3/8, 7/16 and 1/2.

THREAD SIZE + LENGTH	PACKAGED INSERT PART NO.	INSERT QUANTITY	TAP PART NO.	INSTALLATION TOOL PART NO.	DRILL SIZE
PART NO. 5621 – INCH COARSE CONTENTS					
1/4-20 x .375	R1185-4	12	819-4	5288-4	17/64
5/16-18 x .469	R1185-5	12	819-5	5288-5	21/64
3/8-16 x .562	R1185-6	12	819-6	5288-6	25/64
7/16-14 x .656	R1185-7	6	819-7	5288-7	29/64
1/2-13 x .750	R1185-8	6	819-8	5288-8	17/32
PART NO. 5625 – INCH FINE CONTENTS					
10-32 x .285	R1191-3	12	821-3	2299-3	13/64
1/4-28 x .375	R1191-4	12	821-4	2299-4	17/64
5/16-24 x .469	R1191-5	12	821-5	2299-5	21/64
3/8-24 x .562	R1191-6	12	821-6	2299-6	25/64
7/16-20 x .656	R1191-7	6	821-7	2299-7	29/64
1/2-20 x .750	R1191-8	6	821-8	2299-8	33/64

Metric Master Thread Repair Sets

Two sets are available in metric sizes. The metric coarse set contains sizes M5, M6, M8 and M10x1.5 and the metric fine set contains sizes M5, M6, M8 and M10x1.25.

THREAD SIZE + LENGTH	PACKAGED INSERT PART NO.	INSERT QUANTITY	TAP PART NO.	INSTALLATION TOOL PART NO.	DRILL SIZE
PART NO. 5626-150 – METRIC COARSE CONTENTS					
M5x0.8 x 7.5mm	R1084-5	12	570-5	3747-5	13/64
M6x1 x 9.0mm	R1084-6	12	570-6	3747-6	1/4
M8x1.25 x 12.0mm	R1084-8	12	570-8	8747-8	21/64
M10x1.5 x 15.0mm	R1084-10	12	570-10	8747-10	13/32
PART NO. 5626-125 – METRIC FINE CONTENTS					
M5x0.8 x 7.5mm	R1084-5	12	570-5	3747-5	13/64
M6x1 x 9.0mm	R1084-6	12	570-6	3747-6	1/4
M8x1.25 x 12.0mm	R1084-8	12	570-8	3747-8	21/64
M10x1.25 x 15.0mm	R4649-10	12	575-10	8640-10	13/32



Packaged Inserts & Tooling



Heli-Coil inserts are packaged according to thread size for easy handling and display. The inserts are con-

tained in a sturdy, clear, plastic display box and marked with part number and thread size. The length of the inserts in inch and metric packages is 1-1/2 times the diameter of the bolt. This provides sufficient strength in most applications. Spark plug hole inserts are packaged in lengths corresponding to the various spark plug reaches. For shorter or longer lengths and volume applications, see page 13.

Thread Size + Length	Packaged Insert Part No.	Insert Qty.
INCH COARSE		
8-32x.246	R1185-2	12
10-24x.285	R1185-3	12
12-24x.324	R1185-1	12
1/4-20x.375	R1185-4	12
5/16-18x.469	R1185-5	12
3/8-16x.562	R1185-6	12
7/16-14x.656	R1185-7	6
1/2-13x.750	R1185-8	6
9/16-12x.844	R1185-9	6
5/8-11x.938	R1185-10	6
3/4-10x1.125	R1185-12	4
7/8-9x1.312	K1185-14	1
1-8x1.500	K1185-16	1
1-1/8-7x1.688	K1185-18	1
1-1/4-7x1.875	K1185-20	1
1-3/8-6x2.062	K1185-22	1
1-1/2-6x2.250	K1185-24	1
INCH FINE		
10-32x.285	R1191-3	12
1/4-28x.375	R1191-4	12
5/16-24x.469	R1191-5	12
3/8-24x.562	R1191-6	12
7/16-20x.656	R1191-7	6
1/2-20x.750	R1191-8	6
9/16-18x.844	R1191-9	6
5/8-18x.938	R1191-10	6
3/4-16x1.125	R1191-12	4
7/8-14x1.312	K1191-14	1
1-14x1.500	K1191-16	1
1-12x1.500	K1191-161	1
1-1/8-12x1.688	K1191-18	1
1-1/4-12x1.875	K1191-20	1
1-3/8-12x2.062	K1191-22	1
1-1/2-12x2.250	K1191-24	1

Thread Size	Length	Packaged Insert Part No.	Insert Qty.
METRIC COARSE			
M3x0.5	4.5	R1084-3	12
M4x0.7	6.0	R1084-4	12
M5x0.8	7.5	R1084-5	12
M6x1	9.0	R1084-6	12
M7x1	10.5	R1084-7	12
M8x1.25	12.0	R1084-8	12
M9x1.25	13.5	R1084-9	12
M10x1.5	15.0	R1084-10	12
M12x1.75	18.0	R1084-12	6
M14x2	21.0	R1084-14	6
M16x2	24.0	R1084-16	6
M18x2.5	27.0	R1084-18	6
M20x2.5	30.0	R1084-20	4

Thread Size	Reach	Packaged Insert Part No.	Insert Qty.
METRIC FINE			
M8x1	8.0	R4255-8-10	12
M10x1	15.0	R4255-10	12
M10x1.25	15.0	R4649-10	12
M11x1	11.0	R4255-11-10	6
M11x1.25	16.5	R4649-11	6
M12x1.25	18.0	R4649-12	6
M12x1.5	18.0	R3745-12	6
M14x1.5	21.0	R3745-14	6
M16x1.5	24.0	R3745-16	6

Spark Plug Sav-A-Thread Inserts

Thread Size	Reach	Packaged Insert Part No.	Insert Qty.
M14x1.25	Short	R5326-14S	1
M14x1.25	Normal	R5326-14N	1
M14x1.25	Long	R5326-14L	1

SAV-A-THREAD PRO SET

M14x1.25	Short	R5326-14S-6	6
M14X1.25	Normal	R5326-14N-6	6
M14X1.25	Long	R5326-14L-6	6

Spark Plug – Wire Inserts

Thread Size	Reach	Packaged Insert Part No.	Insert Qty.
10-1.0mm	1/2"	R474-4	6
12-1.25mm	1/2"	R482-1	6
	3/4"	R482-2	6
14-1.25mm	3/8"	R512	6
	7/16"	R513	6
18-1.5mm	1/2"	R513-13	6
	3/4"	R513-10	6
	.472	R513-20	6
7/8"	1/2"	R514-6	6
	1/2"-5/8"	R518-12	5

There are two types of industrial installation tools available:

1. **Steel kit tools** for 1/4, 5/16, 3/8, 7/16, 1/2 and 5/8 coarse thread sizes which can be used for medium production quantities.
2. **Prewinder type** installation tools for higher production quantities.



Prewinder Type Tools

Size	Part No.	Size	Part No.
INCH COARSE		INCH FINE	
8-32	7551-2	10-32	7552-3
10-24	7551-3	1/4-28	7552-4
12-24	7551-1	5/16-24	7552-5
1/4-20	7551-4	3/8-24	7552-6
5/16-18	7551-5	7/16-20	7552-7
3/8-16	7551-6	1/2-20	7552-8
7/16-14	7551-7	9/16-18	535-9
1/2-13	7551-8	5/8-18	535-10
9/16-12*	3724-9	3/4-16	535-12
5/8-11*	3724-10		
3/4-10*	3724-12		

Size	Part No.	Size	Part No.
METRIC COARSE		METRIC FINE	
M3x0.5	7751-3	M8x1	7755-8
M4x0.7	7751-4	M10x1	7755-10
M5x0.8	7751-5	M10x1.25	7756-10
M6x1	7751-6	M12x1.25	7756-12
M7x1	7751-7	M12x1.5	7753-12
M8x1.25	7751-8	M14x1.5	7753-14
M10x1.5	7751-10	M16x1.5	7753-16
M12x1.75	7751-12	M18x1.5	7753-18
M14x2	7751-14		
M16x2	7751-16		
M18x2.5	7751-18		
M20x2.5	7751-20		

Note: These industrial tools do not require a prewinder to facilitate installation. They are "T"-Type threaded mandrel tools.

One Piece Steel Kit Tools

Size	Part No.
1/4-20	2288-4
5/16-18	2288-5
3/8-16	2288-6
7/16-14	2288-7
1/2-13	2288-8
5/8-11	2288-10