

# 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.

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HELI-COIL

POP

DRILL-OUT

CHASE 'EM BACK

# Metric Thread Repair Kits

Heli-Coil has all you need in metric thread repair items. Available from stock are Metric Coarse kits in sizes M3 through M20 and Metric Fine kits in

sizes M8 through M20. All Metric kits contain a Heli-Coil tap, installation tool, a quantity of inserts and complete instructions.

METRIC 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.	
M3x0.5 x 4.5mm	5546-3	B	12	2087-3	7751-3	5	R1084-3	12	1/8
M4x0.7 x 6.0mm	5546-4	A	12	2087-4	3747-4	3	R1084-4	12	11/64
M5x0.8 x 7.5mm*†	5546-5	A	12	570-5	3747-5	3	R1084-5	12	13/64
M6x1 x 9.0mm*†	5546-6	A	12	570-6	3747-6	3	R1084-6	12	1/4
M7x1 x 10.5mm	5546-7	A	12	570-7	3747-7	2	R1084-7	12	9/32
M8x1.25 x 12.0mm*†	5546-8	A	12	570-8	8747-8	2	R1084-8	12	21/64
M9x1.25 x 13.5mm	5546-9	A	12	570-9	8747-9	2	R1084-9	12	23/64
M10x1.5 x 15.0mm*	5546-10	A	12	570-10	8747-10	2	R1084-10	12	13/32
M11x1.5 x 16.5mm	5546-11	A	6	580-11	8747-11	3	R1084-11	6	29/64
M12x1.75 x 18.0mm	5546-12	A	6	2087-12	8747-12	2	R1084-12	6	31/64
M14x2 x 21.0mm	5546-14	B	6	2087-14	3747-14	2	R1084-14	6	37/64
M16x2 x 24.0mm	5546-16	B	6	2087-16	3747-16	2	R1084-16	6	21/32
M18x2.5 x 27.0mm	5546-18	B	6	2087-18	3747-18	2	R1084-18	6	47/64
M20x2.5 x 30.0mm	5546-20	B	4	2087-20	3747-20	2	R1084-20	4	13/16

\*Sizes included in Master Thread Repair Set - Part No. 5626-150

†Sizes included in Master Thread Repair Set - Part No. 5626-125

A - Carded B - Pouch



METRIC 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.	
M8x1 x 12.0mm	5542-8	A	12	573-8	4835-8	3	R4255-8	12	21/64
M10x1 x 15.0mm	5542-10	A	12	573-10	4835-10	3	R4255-10	12	13/32
M11x1 x 16.5mm	5542-11	A	6	573-11	4835-11	3	R4255-11	6	7/16
M10x1.25 x 15.0mm†	5543-10	A	12	575-10	8640-10	3	R4649-10	12	13/32
M11x1.25 x 16.5mm	5543-11	A	6	4944-11	8640-11	3	R4649-11	6	29/64
M12x1.25 x 18.0mm	5543-12	A	6	4944-12	4640-12	3	R4649-12	6	31/64
M12x1.5 x 18.0mm	5544-12	A	6	4976-12	8973-12	3	R3745-12	6	31/64
M14x1.5 x 21.0mm	5544-14	B	6	4976-14	4973-14	3	R3745-14	6	9/16
M16x1.5 x 24.0mm	5544-16	B	6	4976-16	4973-16	3	R3745-16	6	21/32

†Sizes included in Master Thread Repair Set - Part No. 5626-125

# Applications Guide

## TYPICAL AUTOMOTIVE APPLICATIONS

SIZE	HELI-COIL KIT PART NO.
<b>Oil &amp; Transmission Pan Screws</b>	
1/4-20	5521-4
5/16-18	5521-5
<b>Cylinder Head Bolts</b>	
7/16-14	5521-7
1/2-13	5521-8
9/16-12	5521-9
M10x1.5	5546-10
M11x1.5	5546-11
M11x1.25	5543-11
M12x1.75	5546-12
<b>Exhaust Manifold Studs</b>	
1/4-20	5521-4
1/4-28	5528-4
5/16-18	5521-5
5/16-24	5528-5
3/8-16	5521-6
3/8-24	5528-6
7/16-14	5521-7
7/16-20	5528-7
1/2-20	5528-8
9/16-18	5528-9
5/8-18	5528-10
3/4-10	5521-12
M5x0.8	5546-5
M6x1	5546-6
M8x1.25	5546-8
M10x1.5	5546-10
M10x1.25	5543-10
<b>Starter Bolts</b>	
3/8-16	5521-6
M10x1.5	5546-10
<b>Alternator Bolts</b>	
5/16-18	5521-5
3/8-16	5521-6
M10x1.5	5546-10
<b>Drain Plugs</b>	
1/2-20	5528-8
5/8-18	5528-10
3/4-16	5528-12
7/8-14	5528-14
M12x1.75	5546-12
M14x1.5	5544-14
M16x1.5	5544-16
<b>Brake Caliper Bolts</b>	
M9x1.25	5546-9
M11x1.25	5543-11

## TYPICAL HEAVY DUTY APPLICATIONS

SIZE	HELI-COIL KIT PART NO.
<b>Aux. Transmission Cases (Fuller)</b>	
3/8-16	5521-6
5/16-18	5521-5
<b>Caterpillar Flywheel Bolts</b>	
3/4-16	5528-12
<b>Cummins Head Bolt</b>	
11/16-16	5559-11
<b>Caterpillar Pre-Combustion Chamber</b>	
3/4-12	4922-12
7/8-12	4922-141
1-12	4922-161
1 1/8-12	4922-18
1 1/4-12	4922-20
<b>Wheel Studs</b>	
3/4-10	5521-12
3/4-16	5528-12
<b>Motor Mounts/Bell Housing</b>	
1/2-13	5521-8
5/8-11	5521-10
<b>Oil Pan</b>	
7/16-14	5521-7
<b>Intake Manifolds</b>	
3/8-16	5521-6
<b>After Coolers</b>	
5/16-18	5521-5
<b>Valve Cover</b>	
3/8-16	5521-6
<b>Detroit Diesel Series "92" Block Head Bolt/Main Bearing</b>	
11/16-11	5575-11
<b>Mack-Scania Head Bolt</b>	
M14x1.5	5544-14
<b>American Bosch APE Diesel Fuel Pumps</b>	
1/4-20	5401-4-1-SL

## SPARK PLUG HOLE THREADS

SIZE	HELI-COIL KIT PART NO.
<b>Wire Insert*</b>	
10-1.0mm	5523-10
12-1.25mm	5523-12
14-1.25mm	5523-14
18-1.5mm	5523-18
7/8-18	550
<b>Sav-A-Thread**</b>	
M14x1.25	5334-14 or 5408-14 5409-14

\*For gasket type spark plug assemblies only.

\*\*For Taper seat or gasket type spark plug assemblies.

## TYPICAL MOTORCYCLE APPLICATIONS

SIZE	HELI-COIL KIT PART NO.
<b>Motorcycle Thread Repair Set</b>	
M6x1, M8x1.25 and M10x1.25 (2 lengths)	4650
<b>Cam Screw Cover, Tappet Guide, Oil Pump Stud and Timer Mounting</b>	
1/4-24	5540-4
<b>Front/Rear Brake Drum</b>	
3/8-20	5540-6
<b>Head Bolt</b>	
7/16-16	5540-7
<b>Drain Plug - Engine and Transmission</b>	
1/2-13	5521-8-2
<b>Drain Plug - Chain Case</b>	
1/2-20	5528-8-2
<b>Timing Plug</b>	
5/8-18	5528-10-2
<b>Generator Case Bolt</b>	
5/16-18	5521-5-2
<b>Transmission Cover</b>	
5/16-18	5521-5-3
<b>Japanese Motorcycle Head Bolt</b>	
M10x1.25	4647-10-1

## TYPICAL VOLKSWAGEN APPLICATIONS

SIZE	HELI-COIL KIT PART NO.
<b>VW Electro Magnetic</b>	
M8x1	5542-8-1
<b>Fuel Cut Off Jet</b>	
M11x1	5542-11-1
<b>VW Rabbit Head Bolt Threads</b>	
M11x1.25	5546-11-5
<b>VW Fuel Injection Head Sensor</b>	
M10x1	5542-10-1

## PIPE THREAD KITS

SIZE	HELI-COIL KIT PART NO.
1/8-27	5407-2
1/4-18	5407-4
3/8-18	5407-6
1/2-14	5407-8
3/4-14	5407-12
1-11 1/2	5407-16