# **Emhart**Aftermarket Products



## **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

## **Product Portfolio**

Heli-Coil Products are manufactured to the same exacting quality systems required by the military, aerospace and automotive standards. The Danbury manufacturing facility has been certified ISO 9001 and QS 9000. We are committed to an ongoing and never ending process of quality improvement and total customer satisfaction.

Heli-Coil® – the most effective and universally accepted method of thread repair. Restores damaged threads to better than new condition. Available in a range of inch and metric thread sizes.

#### Heli-Coil Product Assortment

- Thread Kits Inch & Metric
- Master Thread Repair Sets

Inch

Metric

Spark Plug

Sav-A-Thread

Special Application Kits

Oxygen Sensor

Motorcycle

Pipe Thread

Recessed Spark Plug

- Packaged Inserts
- Bulk Inserts
- Point-of-Purchase Displays
- Drill-Out

Kits

Sets

**Displays** 

**POP**<sup>®</sup> Blind Rivet Systems – a high tech fastening system. Ideal for structural repairs, body and collision work and more. Rivets are available in various materials, types, sizes and styles for all types of fastening.

#### POP Product Assortment

- Point-of-Purchase Displays
- Bulk Rivets Assortments
   100 Piece Box
   500 Piece Box
- Thrift Packs
- Nosepieces & Jaws
- Rivetools

Manual

Power

- Plastic Rivets
- Sheet Metal Inserts
- WELL-NUT Inserts

**Drill-Out**® – 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 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.

#### **Drill-Out Product Assortment**

- Point-of-Purchase Displays
- 4-Piece Kits
- Individual tools

#### Chase 'em Back™

Four different sets available for common stud repair applications.

- Chase 'em Back
- Sav-A-Stud Plus
- Sav-A-Stud Plus-HD
- Spindle Saver

#### **Orders & Inquiries**

To inquire further about Emhart Aftermarket Products or to place an order, contact us at:

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Irvine, CA

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Fax: (949) 851-2099

Canada

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www.emhart.com

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# The Heli-Coil Thread Repair System

Heli-Coil has the most effective and universally accepted method of thread repair. Heli-Coil inserts quickly and permanently restore **stripped**, **worn or damaged threads** to their original size and condition.

The inserts work in any part or material; aluminum, magnesium, cast iron, bronze, etc.
The use of light weight (and soft) materials in fuel efficient cars means more thread damage...there is a Heli-Coil insert to repair virtually every application.

Damaged threads can be restored to better than new condition in spark plug ports, carburetor fuel inlets, transmission housings, oil drain plugs, exhaust and intake manifolds, head bolt holes, brake calipers and more! The Heli-Coil system makes all other thread repair methods obsolete: welding, plugging, oversized fasteners

and oversized drilling of mating parts. It's faster – you save time, increase your shop's repair capabilities and restore parts that otherwise would have to be scrapped.

Heli-Coil repairs are available in the following standard thread series and size ranges: **Inch Coarse** (#8

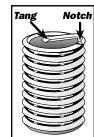
thru 1-1/2), Inch Fine (#10 thru 1-1/2), Metric Coarse (M3 thru M20), Metric Fine (M8 thru M18), Spark Plug (10mm, 12mm, 14mm, 18mm & 7/8"), and Pipe Thread (1/8" thru 1").

In addition to the above, custom sizes are available for various repairs.

#### Heli-Coil Stainless Steel Inserts

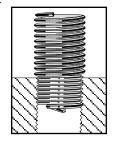
Heli-Coil inserts are precision formed coils of extremely hard stainless steel

(18-8) diamond shaped wire. When installed into a Heli-Coil tapped hole, the insert provides permanent conventional screw threads. The insert has a driving "tang" for installation which is notched for easy removal.



#### **The Retention Principle**

Heli-Coil inserts are larger in diameter before installation than the tapped hole. During installation, the inserting tool reduces the diameter of the leading coil so it can enter the



tapped hole. After the installation, each high tensile stainless steel coil expands outward against the tapped hole to permanently anchor the insert.

## Installation

#### Drill

Drill out the damaged threads using the drill size specified on the kit or set. Drill to sufficient depth to accommodate the insert length and bolt or screw being used.



#### Install

Use the installation tool supplied in the kit or set. Just wind the insert into the hole until the top coil is 1/4 - 1/2 turn into the tapped thread. Now you're back to the original size and the original size fastener can be used.



#### Tap

Use the Heli-Coil tap supplied in the kit or set. Check the size on the shank to make sure you have the right one. Tap the hole to sufficient depth to accommodate the insert length and bolt or screw being used.



#### Tang Removal

The tang must be removed to allow full passage of the bolt or screw through the insert. Place square (unchamfered) end of a punch on the tang and strike sharply. For inserts over 1/2", M14 and up, and all spark plug sizes, use long nose pliers. Holding the tang with the pliers, bend it alternately in and out until it comes free. **Note:** For **Spark Plug** repairs, **NO** drilling is necessary. The Heli-Coil spark plug kit contains a piloted reamer tap. With this tap, the damaged threads are removed and new threads are cut in one continuous operation.

#### **Stripped & Fixed**

When threads become stripped,

worn or damaged for any reason, the strength and reliability are greatly reduced. Potentially dangerous situations are eliminated when the



damaged thread is repaired with Heli-Coil inserts. The Heli-Coil threaded insert provides stronger, more reliable threads than the original tapped hole and at the same time eliminates the possibility of thread wear, corrosion, galling, seizing and rust.

## **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 COAL	RSE	INCH COARSE				Kit Contents and Replacement Parts				
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.	DRILL SIZE	
8-32 x .246 10-24 x .285 12-24 x .324	5521-2 5521-3 5521-1	A A A	12 12 12	819-2 819-3 819-1	2288-2 2288-3 2288-1	2 2 2	R1185-2 R1185-3 R1185-1	12 12 12	11/64 13/64 15/64	
1/4-20 x .375* 5/16-18 x .469* 3/8-16 x .562* 7/16-14 x .656*	5521-4 5521-5 5521-6 5521-7	A A A	12 12 12 6	819-4 819-5 819-6 819-7	5288-4 5288-5 5288-6 5288-7	1 1 1 1	R1185-4 R1185-5 R1185-6 R1185-7	12 12 12 6	17/64 21/64 25/64 29/64	
1/2-13 x .750* 9/16-12 x .844 5/8-11 x .938 3/4-10 x 1.125	5521-8 5521-9 5521-10 5521-12	A B B B	6 6 6 4	819-8 819-9 819-10 819-12	5288-8 2288-9 5288-10 2288-12	1 2 1 2	R1185-8 R1185-9 R1185-10 R1185-12	6 6 6 4	17/32 19/32 21/32 25/32	
THE FOLLOWING KI	TS COME COMP	LETE WITI	H HIGH SPEE	D STEEL DRILL	BIT FOR 1/2" CHUC	K.				
7/8-9 x 1.312 1-8 x 1.500 1-1/8-7 x 1.688	5521-14 5521-16 5521-18	C C	6 6 5	8187-14 8187-16 8187-18	3724-14 3724-16 3724-18	2 2 2	K1185-14 K1185-16 K1185-18	1 1 1	29/32 1-1/32 1-5/32	
1-1/4-7 x 1.875 1-3/8-6 x 2.062 1-1/2-6 x 2.250	5521-20 5521-22 5521-24	C C C	4 4 4	8187-20 8187-22 8187-24	3724-20 3724-22 3724-24	2 2 2	K1185-20 K1185-22 K1185-24	1 1 1	1-9/32 1-13/32 1-17/32	



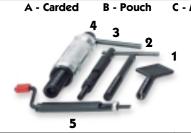














<b>INCH FINE</b>					Kit Contents	and Rep	lacement Part	cement Parts			
THREAD SIZE + LENGTH	KIT PART NO.	KIT PKG. TYPE	INSERTS PER KIT	TAP PART NO.	INSTALLATION TOOL PART NO.	TOOL TYPE	PACKAGED INSERT PART NO.	PACKAGED INSERT QTY.	DRILL SIZE		
10-32 x .285**	5528-3	Α	12	821-3	2299-3	3	R1191-3	12	13/64		
1/4-28 x .375**	5528-4	Α	12	821-4	2299-4	3	R1191-4	12	17/64		
5/16-24 x .469**	5528-5	Α	12	821-5	6299-5	3	R1191-5	12	21/64		
3/8-24 x .562**	5528-6	Α	12	821-6	6299-6	3	R1191-6	12	25/64		
7/16-20 x .656**	5528-7	Α	6	821-7	6299-7	3	R1191-7	6	29/64		
1/2-20 x .750**	5528-8	Α	6	821-8	6299-8	3	R1191-8	6	33/64		
9/16-18 x .844	5528-9	В	6	821-9	2299-9	3	R1191-9	6	37/64		
5/8-18 x .938	5528-10	В	6	821-10	2299-10	3	R1191-10	6	41/64		
3/4-16 x 1.125	5528-12	В	4	821-12	2299-12	3	R1191-12	4	49/64		
THE FOLLOWING KI	TS COME COMP	LETE WITI	H HIGH SPEE	D STEEL DRILL	BIT FOR 1/2" CHUC	K.	1		1		
7/8-14 x 1.312	5528-14	С	6	8193-14	535-14	4	K1191-14	1	57/64		
1-14 x 1.500	5528-16	С	6	8193-16	535-16	4	K1191-16	1	1-1/64		
1-12 x 1.500	5528-161	С	6	8193-161	535-161	4	K1191-161	1	1-1/64		
1-1/8-12 x 1.688	5528-18	С	5	8193-18	535-18	4	K1191-18	1	1-5/32		
1-1/4-12 x 1.875	5528-20	С	4	8193-20	535-20	4	K1191-20	1	1-9/32		
1-3/8-12 x 2.062	5528-22	С	4	8193-22	535-22	4	K1191-22	1	1-13/32		
1-1/2-12 x 2.250	5528-24	С	4	8193-24	535-24	4	K1191-24	1	1-17/32		

<sup>\*</sup>Sizes included in Master Thread Repair Set - Part No. 5621

## **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 COA	METRIC COARSE					Kit Contents and Replacement Parts				
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.	DRILL SIZE	
M3x0.5 x 4.5mm M4x0.7 x 6.0mm M5x0.8 x 7.5mm*† M6x1 x 9.0mm*†	5546-3 5546-4 5546-5 5546-6	B A A	12 12 12 12	2087-3 2087-4 570-5 570-6	7751-3 3747-4 3747-5 3747-6	5 3 3 3	R1084-3 R1084-4 R1084-5 R1084-6	12 12 12 12	1/8 11/64 13/64 1/4	
M7x1 x 10.5mm M8x1.25 x 12.0mm*† M9x1.25 x 13.5mm M10x1.5 x 15.0mm* M11x1.5 x 16.5mm M12x1.75 x 18.0mm	5546-7 5546-8 5546-9 5546-10 5546-11 5546-12	A A A A	12 12 12 12 12 6	570-7 570-8 570-9 570-10 580-11 2087-12	3747-7 8747-8 8747-9 8747-10 8747-11 8747-12	2 2 2 2 3 2	R1084-7 R1084-8 R1084-9 R1084-10 R1084-11 R1084-12	12 12 12 12 12 6	9/32 21/64 23/64 13/32 29/64 31/64	
M12x1.73 x 18.011111 M14x2 x 21.0mm M16x2 x 24.0mm M18x2.5 x 27.0mm M20x2.5 x 30.0mm	5546-14 5546-16 5546-18 5546-20	В В В В	6 6 6 4	2087-12 2087-14 2087-16 2087-18 2087-20	3747-12 3747-14 3747-16 3747-18 3747-20	2 2 2 2 2	R1084-14 R1084-16 R1084-18 R1084-20	6 6 6 4	37/64 21/32 47/64 13/16	

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

<sup>†</sup>Sizes included in Master Thread Repair Set - Part No. 5626-125

## **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 -	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 C	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 C	DARSE CON	TENTS		
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 FI	NE CONTEN	TS		
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



## **Spark Plug & Sav-A-Thread**



#### **Spark Plug**

Heli-Coil is the original spark plug port thread repair. These kits offer the highest quality and most durable repair available. They are the first choice of professional mechanics and engine rebuilders. Kits are available in sizes M10, M12, M14, M18, and 7/8". Each kit contains a piloted reamer tap (no drilling necessary), an installation tool, and a quantity of inserts. The M12 and M14 kits contain several insert lengths to accommodate

all spark plug reaches. Heli-Coil Spark Plug Inserts are the preferred method of repair specified by virtually all U.S. and foreign vehicle manufacturers.

**NOTE:** Do **NOT** use Heli-Coil wire inserts to repair taper seat spark plug ports.

				l	(it Contents and R	eplacement Part	S
THREAD SIZE	REACH	KIT PART NO.	INSERTS PER KIT	TAP PART NO.	INSTALLATION TOOL PART NO.	INSERT PKG. Part no.	INSERT QUANTITY
10-1.0mm	1/2"	5523-10	24	1030-10	4971-10	R474-4	6
12-1.25mm	1/2" 3/4"	5523-12	12 12	1030-12	4971-12	R482-1 R482-2	6 6
14-1.25mm	3/8" 7/16" 1/2" 3/4" .472	5523-14	6 6 6 6	1030-14	4971-14	R512 R513 R513-13 R513-10 R513-20	6 6 6 6
18-1.50mm	1/2"	5523-18	24	1030-18	4971-18	R514-6	6
7/8-18	1/2"-5/8"	550	10	549	548	K518-12	5

#### Sav-A-Thread

Sav-A-Thread is the easiest way to permanently repair stripped spark plug hole threads. Virtually all engines built today have aluminum cylinder heads. Combining this with the growing number of doit-yourselfers and the need for quick, easy, on-the-spot repairs makes Sav-A-Thread a must for every store and shop.

**NOTE:** Heli-Coil recommends removing the head before installation to insure chips do not enter cylinder.

- •Three insert lengths are available to accommodate all spark plug reaches.
- •Positive mechanical locking feature means the insert will never come out!
- The piloted reamer tap means no drilling is necessary and perfect alignment of the tapped hole.
- Available in kit or set for the do-ityourselfer and professional engine rebuilder.



Comple	te Kits				Kit Conter	nts and Repl	acement Parts	
SIZE	KIT PART NO.	REACH	INSERTS PER KIT	TAP PART NO.	TOOL PART NO.	REACH	INSERT PKG. PART NO.	INS. QTY.
		Short	1			Short	R5326-14S	1
M14x1.25	5334-14	Normal	1	5329-14	5332-14	Normal	R5326-14N	1
		Long	1			Long	R5326-14L	1
		Short	6			Short	R5326-14S-6	6
M14x1.25	5408-14	Normal	6	5329-14	5332-14	Normal	R5326-14N-6	6
		Long	6			Long	R5326-14L-6	6
M14x1.25	5409-14	Extended	_	5329-14-1	5332-14-1	Extended	Reach	

## **Special Applications**

#### **Custom Kits**

Custom application kits round out the complete line of Heli-Coil Thread Repair Kits. They are recommended by both domestic and foreign automakers and include kits for carburetors, various heavy duty applications, and several specially designed repairs for a number of Volkswagen models.

All kits contain a Heli-Coil tap, installation tool, a quantity of inserts, and detailed instructions. The American Bosch kit and Detroit Diesel kit also include high speed steel drill bits.

#### Motorcycle

Heli-Coil offers a complete range of kits and sets for the repair of damaged threads on motorcycles. The Heli-Coil Motorcycle Thread Repair Set contains M6, M8 and M10 sizes. Two lengths of M10 inserts are available: 15mm for most repairs and 25mm for head bolt repairs.

Also available are special sizes for specific Harley Davidson applications. All kits come with tap, installation tool, a quantity of inserts and complete instructions.



#### **Pipe Thread Kits**

Heli-Coil Pipe Thread Kits are available in a complete range of sizes for the most often occurring taper pipe thread failures, such as exhaust pipes on small engines. Each kit contains a high speed steel drill, tap, installation tool, a quantity of inserts, and complete instructions.

#### Oxygen Sensor Thread Repair Kit – Part No. 4833

Quickly and permanently restore damaged M18 x 1.5 oxygen sensor threads in exhaust manifolds with this kit. No drilling is necessary with the piloted reamer tap, resulting in perfect alignment of the new tapped hole. Corrosion resistant stainless steel inserts improve future serviceability. This application is easy to use, works in minutes, and eliminates exhaust manifold replacement. Perfect for the professional engine rebuilder and the do-it-yourselfer.

#### Sav-A-Thread® Quick Thread Repair

No special tools or taps are required

with this kit. Works with standard drill and taps. Inserts are made of carbon steel for strength and durability and zinc plated to resist corrosion. The locking pin aligns in insert slot and

broaches threads in parent material.

The pin breaks off easily for flush, clean repair, and the insert locks into place automatically for a permanent installation.

SWA-Tripe Co.

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Kit Contents and replacement parts

Thread Size	Insert Length	External Thread Size	Drill Size	Tap Size	Inserts Per Kit	Part No.		
INCH COARSE PACKAGED INSERTS								
6-32	.312"	5/16-18	17/64	5/16-18	10	20203		
8-32	.312"	5/16-18	17/64	5/16-18	10	20205		
10-24	.312"	5/16-18	17/64	5/16-18	10	20207		
1/4-20	.375"	3/8-16	21/64	3/8-16	8	20211		
5/16-18	.437"`	7/16-14	"W"	7/16-14	8	20213		
3/8-16	.500"	1/2-13	29/64	1/2-13	6	20215		
7/16-14	.562"	9/16-12	33/64	9/16-12	6	20217		
1/2-13	.625	5/8-18	37/64	5/8-18	6	20219		
INCH FINE PA	CKAGED IN	SERTS						
10-32	.312"	5/16-18	17/64	5/16-18	10	20208		
1/4-28	.375"	3/8-16	21/64	3/8-16	8	20212		
5/16-24	.437"	7/16-14	"W"	7/16-14	8	20214		
3/8-24	.500"	1/2-13	29/64	1/2-13	6	20216		
7/16-20	.562"	9/16-12	33/64	9/16-12	6	20218		
1/2-20	.625"	5/8-18	37/64	5/8-18	6	20220		
METRIC PACK	METRIC PACKAGED INSERTS							
M6X1	.375"	3/8-16	21/64	3/8-16	8	20504		
M8X1.25	.500"	1/2-13	29/64	1/2-13	6	20506		
M10X1.5	.562"	9.16-12	33/64	9/16-12	6	20508		
M12X1.75	.625"	5/8-18	37/64	5/8-18	6	20511		

## **Applications Guide**

TYPICAL AUTOMOTI	VE APPLICATIONS
SIZE	HELI-COIL KIT PART NO.
Oil & Transmission	Pan Screws
1/4-20	5521-4
5/16-18	5521-5
Cylinder Head Bolts	
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
Exhaust Manifold St	
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
Starter Bolts	
3/8-16	5521-6
M10x1.5	5546-10
Alternator Bolts	
5/16-18	5521-5
3/8-16	5521-6
M10x1.5	5546-10
Drain Plugs	
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
Brake Caliper Bolts	
M9x1.25	5546-9
M11x1.25	5543-11

TYPICAL HEAVY DUTY AF	
SIZE	HELI-COIL KIT PART NO.
Aux. Transmission Cases	(Fuller)
3/8-16	5521-6
5/16-18	5521-5
Caterpillar Flywheel Bolt 3/4-16	5528-12
<b>Cummins Head Bolt</b> 11/16-16	5559-11
Caterpillar Pre-Combusti	on Chamber
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
Wheel Studs	
3/4-10	5521-12
3/4-16	5528-12
Motor Mounts/Bell Housi	
1/2-13	5521-8
5/8-11	5521-10
	JJ21-10
Oil Pan	FF01 7
7/16-14	5521-7
<i>Intake Manifolds</i> 3/8-16	5521-6
After Coolers	
5/16-18	5521-5
Valve Cover	
3/8-16	5521-6
	<del></del>
Detroit Diesel Series"92 Head Bolt/Main Bearing	
11/16-11	5575-11
<b>Mack-Scania Head Bolt</b> M14x1.5	5544-14
<b>American Bosch APE Die</b> 1/4-20	sel Fuel Pumps 5401-4-1-SL
SPARK PLUG HOLE THREA	ADS
SIZE	HELI-COIL KIT PART NO.
Wire Insert*	<del></del>
10-1.0mm	5523-10
12-1.25mm	5523-12
14-1.25mm	5523-14
18-1.5mm	5523-18
7/8-18	550
Sav-A-Thread**	_
M14x1.25	5334-14 or
	5408-14 5400-14

	TYPICAL MO
0.	SIZE
	<b>Motorcycle</b> 3 M6x1, M8x1.2
	M10x1.25 (2   Cam Screw (
	Guide,Oil Pui Timer Mount
_	1/4-24 Front/Rear B
	3/8-20
	7/16-16
_	<b>Drain Plug -</b> 1/2-13
	<b>Drain Plug -</b> 1/2-20
	<i>Timing Plug</i> 5/8-18
	Generator Ca
_	5/16-18
_	<i>Transmission</i> 5/16-18
_	Japanese Me M10x1.25
_	TYPICAL VOI
	SIZE
	VW Electro I M8x1
	Fuel Cut Off
_	M11x1  VW Rabbit H
ps	M11x1.25
_	VW Fuel Inje
_	M10x1
<u>0.</u>	
	PIPE THREAD
	SIZE
	1/8-27
_	1/4-18 3/8-18
	1/2-14 3/4-14

TYPICAL MOTORCYCLE	APPI ICATIONS
TITIOAL MOTOROTOLL	HELI-COIL
SIZE	KIT PART NO.
Motorcycle Thread Repa	air Set
M6x1, M8x1.25 and	
M10x1.25 (2 lengths)	4650
Cam Screw Cover, Tapp	et
Guide, Oil Pump Stud and	d
Timer Mounting	
1/4-24	5540-4
Front/Rear Brake Drum	
3/8-20	5540-6
Head Bolt	
7/16-16	5540-7
Drain Plug - Engine and	Transmission
1/2-13	5521-8-2
Drain Plug - Chain Case	ı
1/2-20	5528-8-2
Timing Plug	
5/8-18	5528-10-2
Generator Case Bolt	
5/16-18	5521-5-2
Transmission Cover	
5/16-18	5521-5-3
Japanese Motorcycle H	ead Bolt
M10x1.25	4647-10-1
TYPICAL VOLKSWAGEN	APPLICATIONS
SIZE	HELI-COIL KIT PART NO.

SIZE	HELI-COIL KIT PART NO.	
VW Electro Magn	netic	
M8x1	5542-8-1	
Fuel Cut Off Jet		
M11x1	5542-11-1	
VW Rabbit Head	Bolt Threads	
M11x1.25	5546-11-5	
VW Fuel Injection	n Head Sensor	
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

5409-14

<sup>\*</sup>For gasket type spark plug assemblies only.
\*\*For Taper seat or gasket type spark plug assemblies.

## **Packaged Inserts & Tooling**



Thread

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.

**Packaged** 

Insert

Insert

Size + Length	Part No.	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 Oty.
METRIC CO	DARSE		
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

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 Oty.
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
	1/2"	R513-13	6
	3/4"	R513-10	6
	.472	R513-20	6
18-1.5mm	1/2"	R514-6	6
7/8"	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 COA	ARSE	INCH FIN	Е
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 C	OARSE	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

Part No.
2288-4
2288-5
2288-6
2288-7
2288-8
2288-10

## **Bulk Inserts**

Heli-Coil stainless steel inserts are available in bulk for higher quantity applications such as rebuilding or remanufacture. Each size comes in three different lengths:

- **Short** (length same as the diameter of the bolt or **screw**) for short thread engagement applications.
- Medium (length 1–1/2 times the diameter of the bolt or screw) – provides sufficient strength in most applications.
- Long (length two times the diameter of the bolt or screw) – provides higher strength in critical applications, (especially in magnesium).

(es	(especially in magnesium).							
Inch	Series	Coarse						
Size	Length	Part Number						
4-40	.112 .168 .224	1185-04CN 112 1185-04CN 168 1185-04CN 224						
6-32	.138 .207 .276	1185-06CN 138 1185-06CN 207 1185-06CN 276						
8-32	.164 .246 .328	1185-2CN 164 1185-2CN 246 1185-2CN 328						
10-24	.190 .285 .380	1185-3CN 190 1185-3CN 285 1185-3CN 380						
12-24	.216 .324 .432	1185-1CN 216 1185-1CN 324 1185-1CN 432						
1/4-20	.250 .375 .500	1185-4CN 250 1185-4CN 375 1185-4CN 500						
5/16-18	.312 .469 .625	1185-5CN 312 1185-5CN 469 1185-5CN 625						
3/8-16	.375 .562 .750	1185-6CN 375 1185-6CN 562 1185-6CN 750						
7/16-14	.438 .656 .875	1185-7CN 438 1185-7CN 656 1185-7CN 875						
1/2-13	.500 .750 1.00	1185-8CN 500 1185-8CN 750 1185-8CN 1000						
9/16-12	.562 .844 1.125	1185-9CN 562 1185-9CN 844 1185-9CN 1125						
5/8-11	.625 .938 1.250	1185-10CN 625 1185-10CN 938 1185-10CN 1250						
3/4-10	.750 1.125 1.500	1185-12CN 750 1185-12CN 1125 1185-12CN 1500						
7/8-9	.875 1.312 1.750	1185-14CN 875 1185-14CN 1312 1185-14CN 1750						

Inch Series Fine							
Size	Length	Part Number					
10-32	.190 .285 .380	1191-3CN 190 1191-3CN 285 1191-3CN 380					
1/4-28	.250 .375 .500	1191-4CN 250 1191-4CN 375 1191-4CN 500					
5/16-24	.312 .469 .625	1191-5CN 312 1191-5CN 469 1191-5CN 625					
3/8-24	.375 .562 .750	1191-6CN 375 1191-6CN 562 1191-6CN 750					
7/16-20	.438 .656 .875	1191-7CN 438 1191-7CN 656 1191-7CN 875					
1/2-20	.500 .750 1.00	1191-8CN 500 1191-8CN 750 1191-8CN 1000					
9/16-18	.562 .844 1.125	1191-9CN 562 1191-9CN 844 1191-9CN 1125					
5/8-18	.625 .938 1.250	1191-10CN 625 1191-10CN 938 1191-10CN 1250					
3/4-16	.750 1.125 1.500	1191-12CN 750 1191-12CN 1125 1191-12CN 1500					
7/8-14	.875 1.312 1.750	1191-14CN 875 1191-14CN 1312 1191-14CN 1750					
1-14	1.000 1.500	1191-16CN 1000 1191-16CN 1500					

1191-16CN 2000

1191-161CN 1000

1191-161CN 1500 1191-161CN 2000

2.000

1.000

1.500

2.000

1-12

SIZE	Lengui	rait Nullibei
M4X0.7	4.0 6.0 8.0	1084-4CN 040 1084-4CN 060 1084-4CN 080
M5x0.8	5.0 7.5 10.0	1084-5CN 050 1084-5CN 075 1084-5CN 100
M6x1	6.0 9.0 12.0	1084-6CN 060 1084-6CN 090 1084-6CN 120
M7x1	7.0 10.5 14.0	1084-7CN 070 1084-7CN 105 1084-7CN 140
M8x1.25	8.0 12.0 16.0	1084-8CN 080 1084-8CN 120 1084-8CN 160
M9x1.25	9.0 13.5 18.0	1084-9CN 090 1084-9CN 135 1084-9CN 180
M10x1.5	10.0 15.0 20.0	1084-10CN 100 1084-10CN 150 1084-10CN 200
M11x1.5	11.0 16.5 22.0	1084-11CN 110 1084-11CN 165 1084-11CN 220
M12x1.75	12.0 5 18.0 24.0	1084-12CN 120 1084-12CN 180 1084-12CN 240
M14x2	14.0 21.0 28.0	1084-14CN 140 1084-14CN 210 1084-14CN 280
M16x2	16.0 24.0 32.0	1084-16CN 160 1084-16CN 240 1084-16CN 320
M18x2.5	18.0 27.0 36.0	1084-18CN 180 1084-18CN 270 1084-18CN 360
M20x2.5	20.0 30.0 40.0	1084-20CN 200 1084-20CN 300 1084-20CN 400

**Metric Series Coarse** 

**Length Part Number** 

Size

Pipe Thread Series				
Size	Part No.			
1/8-27	327-2			
1/4-18	327-4			
3/8-18	327-6			
1/2-14	327-8			
3/4-14	327-12			
1–11-1/2	327-16			

#### **Metric Series Fine**

Size I	ength.	Part Number
M8x1	8.0 12.0 16.0	4255-8CN 080 4255-8CN 120 4255-8CN 160
M10x1	10.0 15.0 20.0	4255-10CN 100 4255-10CN 150 4255-10CN 200
M10x1.25	10.0 15.0 20.0	4649-10CN 100 4649-10CN 150 4649-10CN 200
M11x1	11.0 16.5 22.0	4255-11CN 110 4255-11CN 165 4255-11CN 220
M11x1.25	11.0 16.5 22.0	4649-11CN 110 4649-11CN 165 4649-11CN 220
M12x1.25	12.0 18.0 24.0	4649-12CN 120 4649-12CN 180 4649-12CN 240
M12x1.5	12.0 18.0 24.0	3745-12CN 120 3745-12CN 180 3745-12CN 240
M14x1.5	14.0 21.0 28.0	3745-14CN 140 3745-14CN 210 3745-14CN 280
M16x1.5	16.0 24.0 32.0	3745-16CN 160 3745-16CN 240 3745-16CN 320
M18x1.5	18.0 27.0 36.0	3745-18CN 180 3745-18CN 270 3745-18CN 360

#### **Spark Plug Series**

Reach	Part No.
1/2"	474-4
1/2"	482-1
3/4"	482-2
3/8"	512
7/16"	513
1/2"	513-13
3/4"	513-10
.472	513-20
1/2"	514-6
1/2"	518-12
5/8"	518-12
	1/2" 1/2" 3/4" 3/8" 7/16" 1/2" 3/4" .472 1/2"

#### Sav-A-Thread Series

Size	Reach	Part No.
M14x1.25	Short	5326-14S
M14x1.25	Normal	5326-14N
M14x1.25	Long	5326-14L

1185-16CN 1000

1185-16CN 1500

1185-16CN 2000

1.000

1.500

2.000

1-8

## POP® Blind Riveting Systems

POP is the world acknowledged leader in blind rivet fastening technology, and POP rivet tools are the state-of-the-art in design, performance and durability. In addition to being the industry's original manufacturer and pioneer, POP is constantly updating and improving its complete product line to keep pace with rapidly advancing automotive markets and the increasing needs of today's automotive service professionals

POP rivets are more effective and practical than other fastening methods such as welding, sheet metal screws, nuts and bolts, solid rivets and adhesives. They are ideal for repairs where access is limited to one side only. No surface preparation is required. The job can be done with no special skills. Almost any material can be fastened with POP rivets, especially plastics and sheet metal. The results are uniform and vibration proof.

## Installation

POP rivets consist of two parts: (A) rivet body and (B) setting mandrel. In operation, the mandrel is pulled back to expand the rivet body and form a tight vibration-free fastener. The mandrel breaks off automatically after the rivet is set.



- 1. After selecting the proper rivet, drill a hole corresponding to the diameter of the rivet through the materials to be fastened. When using counter-sunk head rivets a 120° countersunk bit is required. Use POP Part No. 60928 for countersink drilling.
- 2. Open the handle of the rivetool and insert the rivet mandrel in the nosepiece of the tool.
- Place the rivet body in the predrilled hole. Then squeeze the rivetool handles until the rivet mandrel breaks off.

#### Automotive repair, shop use

POP rivets provide an effective, high strength fastening technique. They're ideal for structural repairs, body and collision work, modifications, parts and accessory mounting and countless inshop and miscellaneous applications. The use of rivets in automotive assembly has increased significantly because of their strength and ease of use.

#### **Choose power or manual**

POP's rivet fastening system is one of the most versatile you can buy. It requires minimal capital investment and inventory. The rivets can be installed manually or by power tools. They're designed for simple operation and ease of use.

#### Wide application range

POP offers a complete range of rivets to meet almost every automotive, marine, small engine, hardware and shop application. POP rivets are available in various materials, types, sizes and styles for all types of fastening from plastics to dissimilar metals to pressure tight sealing.

#### **RIVET MATERIALS**

In order to meet a variety of requirements for strength, corrosion and rust considerations and application materials, POP rivets are offered in specific materials and material combinations.

TYPE	APPLICATION
All Steel	High strength: use with steel
Aluminum	<b>Lightweight</b> : Use with aluminum, areas susceptible to rust & corrosion
Alum./Steel	Combines features of both materials
All Stainless	Very high striength: Use with stainless & steel. Prevents corrosion or rust.
Stainless/Steel	<b>Very high strength.</b> Applications where corrosion resistance is not a major factor.
Copper	Electrical conductivity

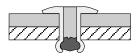
#### **TYPES & STYLES**

#### Rivet Types

There are three basic rivet types available for automotive use.

#### Open End

Designed for a wide range of applications, they resemble

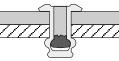


conventional tubular rivets when set, but retain the mandrel within the rivet body for added strength. Open end rivets are available in a variety of materials in dome, countersunk or large flange head styles.

#### **Closed End**

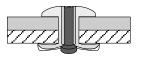
Specially configured with a cup shaped end that forms a tight seal, POP closed end

rivets are much stronger than open end rivets. They are available in dome and countersunk head styles.



#### **T-Rivets**

Made for structural and high stress applications. They feature a hardened

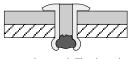


steel mandrel which splits the rivet body into a trifurcated shape. This provides high clamping strength even in thin or fragile material.

#### Head Styles

#### **Dome Head**

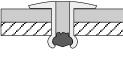
Low profile design and neat appearance, this style is very ver-



satile and most commonly used. The head size is twice the diameter of the rivet body. It provides enough bearing surface for all applications except soft or brittle material.

#### **Large Flange**

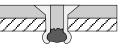
Features twice the under-head bearing surface as the dome style. It's ideal for



fastening soft or brittle materials to a rigid backing surface.

#### Countersunk

Designed with a 120° head profile for flush surface mounting applications.



## **Rivet Ordering Information**

All rivet sizes are available in these **500-piece Pro Pack** boxes to meet the increasing needs of today's automotive service professionals. POP also offers all rivet sizes and back-up plates packaged in **100-piece Shop Pack** boxes — convienient for body shop or service garage.





			Plated Steel Rivet Steel Mandrel			Stainless Steel Rivet Steel Mandrel			Stainless Steel Rivet Stainless Steel Mandrel		
Rivet Dia.	Head Dia. END RIV	Grip Range	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No.	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No.	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No
3/32	3/16	Up to 1/8	SD32	59435	60435		T		1		
3/32	3/16	1/8 to 1/4	SD32	59436	60436						
	1/4	1/32 to 1/16	SD41	59437	60437						
	1/4	1/16 to 1/8	SD42	59438	60438	SSD42	59560	60560	SSD42-S	59540	60540
	.220	1/16 to 1/8	SK42	59439 59440	60439 60440						
	3/8 1/4	1/16 to 1/8 1/8 to 3/16	SDL42 SD43	59440 59441	60440 60441	SSD43	59561	60561	SSD43-S	59541	60541
	.220	1/8 to 3/16									
1/8	1/4	3/16 to 1/4	SD44	59442	60442	SSD44	59562	60562	SSD44-S	59542	60542
	.220 3/8	3/16 to 1/4 3/16 to 1/4	SK44 SDL44	59443 59444	60443 60444						
	1/4	1/4 to 5/16	SD45	59445	60445						
	1/4	5/16 to 3/8	SD46	59446	60446	SSD46	59563	60563	SSD46-S	59543	60543
	1/4	3/8 to 1/2	SD48	59447	60447	SSD48	59573	60573	SSD48-S	59544	60544
	5/16 5/16	1/16 to 1/8 1/8 to 3/16	SD52 SD53	59448 59449	60448 60449	SSD52	59564	60564	SSD52-S	59545	60545
5/32	5/16	3/16 to 1/4	SD53	59450	60450	SSD54	59565	60565	SSD54-S	59546	60546
-,	5/16	1/4 to 3/8	SD56	59451	60451	SSD56	59566	60566	SSD56-S	59547	60547
	5/16	3/8 to 1/2									
	3/8	1/16 to 1/8	SD62	59453	60453	SSD62	59567	60567	SSD62-S	59548	60548
	3/8 5/8	1/8 to 1/4 1/8 to 1/4	SD64 SDL64	59454 59455	60454 60455	SSD64	59568	60568	SSD64-S	59549	60549
	3/8	1/4 to 3/8	SD66	59456	60456	SSD66	59569	60569	SSD66-S	59550	60550
	5/8	1/4 to 3/8	SDL66	59457	60457						
3/16	3/8	3/8 to 1/2	SD68 SDL68	59458	60458 60459	SSD68	59570	60570	SSD68-S	59551	60551
	5/8 3/8	3/8 to 1/2 1/2 to 5/8	SD610	59459 59460	60460						
	5/8	1/2 to 5/8	SDL610	59461	60461						
	3/8	5/8 to 3/4	SD612	59462	60462						
	5/8	5/8 to 3/4	SDL612	59463	60463						
1/4	1/2 1/2	1/16 to 1/4 1/4 to 3/8	SD84 SD86	59464 59465	60464 60465						
1/4	1/2	3/8 to 1/2	SD88	59466	60466						
	1/2	5/8 to 3/4	SD812	59467	60467						
CLOS	ED END F	RIVETS									
	.236	1/16 to 1/8									
	.236 .236	1/8 to 3/16 3/16 to 1/4									
1/8	.236	3/16 to 1/4 3/16 to 1/4									
., -	.236	1/4 to 5/16									
	.236	3/8 to 1/2									
	5/16	1/16 to 1/8									
5/32	5/16 5/16	1/8 to 3/16 1/8 to 3/16									
3/02	5/16	1/16 to 1/4									
	5/16	3/16 to 5/16									
	3/8	1/8 to 1/4	SD64H	59640	60640						
3/16	3/8 3/8	1/4 to 3/8 3/8 to 1/2									
1/4	1/2	1/8 to 1/4	SD84H	59642	60642						
T DN"	1/2	1/4 to 3/8									
T-RIV		1/00 / 0/07					1		I	I	
1/4	.510 .510	1/32 to 9/64 9/64 to 3/16									
		U/UT LU U/IU	1	1			1	ı	1	1	i .

Rivet Code Explanation – Example: Rivet Code No. AD42AH

A	D	4	2	Α	Н
Body Material	Head Style	Rivet Diameter	Max. Grip Length	Mandrel Material	Core Design*
A – Aluminum	D - Dome Head	in 32nds of	in 16ths of	A – Aluminum	H – Hollow
S – Carbon Steel	DL – Dome Head, Large Flange	an inch	an inch	S – Stainless Steel	Blank – Solid Core
SS – Stainless Steel	K – Countersunk	4/32 = 1/8"	2/16 = 1/8"	Blank – Steel	

**Rivet Ordering Information** 

			Aluminum Rivet Aluminum Mandrel				Aluminum Rivet Steel Mandrel			Copper Rivet Steel Mandrel		
Rivet Dia.	Head Dia.	Grip Range	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No.	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No.	Code No.	100 pc. Shop Pack No.	500 pc. Pro Pack No.	
OPEN	<b>END RIV</b>	ETS										
33/32	3/16 3/16	Up to 1/8 1/8 to 1/4	AD32-A AD34-A	59470 59471	60470 60471	AD32 AD34	59503 59504	60503 60504				
	1/4	1/32 to 1/16	AD41-A	59472	60472	AD41	59505	60505				
	1/4	1/32 to 1/10 1/16 to 1/8	AD41-A AD42-A	59472	60472	AD41	59506	60506	CD42	59571	60571	
	.220	1/16 to 1/8	AK42-A	59474	60474	AK42	59507	60507	0542	33371	00371	
	3/8	1/16 to 1/8	ADL42-A	59475	60475	ADL42	59508	60508				
	1/4	1/8 to 3/16	AD43-A	59476	60476	AD43	59509	60509				
	.220	1/8 to 3/16				AK43	59510	60510				
1/8	1/4	3/16 to 1/4	AD44-A	59477	60477	AD44	59511	60511	CD44	59572	60572	
	.220	3/16 to 1/4		50470	00470	AK44	59512	60512				
	3/8	3/16 to 1/4	ADL44-A	59478	60478	ADL44	59513	60513				
	1/4 1/4	1/4 to 5/16 5/16 to 3/8	AD45-A AD46-A	59479 59480	60479 60480	AD45 AD46	59514 59515	60514 60515				
	1/4	3/8 to 1/2	AD46-A AD48-A	59481	60481	AD48	59516	60516				
	5/16	1/16 to 1/8	AD52-A	59482	60482	AD52	59517	60517				
	5/16 5/16	1/16 to 1/8 1/8 to 3/16	AD52-A AD53-A	59483	60483	AD52 AD53	59517	60518				
5/32	5/16	3/16 to 1/4	AD53-A	59484	60484	AD54	59519	60519				
3,02	5/16	1/4 to 3/8	AD56-A	59485	60485	AD56	59520	60520				
	5/16	3/8 to 1/2	AD58-A	59486	60486	AD58	59521	60521				
	3/8	1/16 to 1/8	AD62-A	59487	60487	AD62	59522	60522				
	3/8	1/8 to 1/4	AD64-A	59488	60488	AD64	59523	60523				
	5/8	1/8 to 1/4	ADL64-A	59489	60489	ADL64	59524	60524				
	3/8	1/4 to 3/8	AD66-A	59490	60490	AD66	59525	60525				
	5/8	1/4 to 3/8	ADL66-A	59491	60491	ADL66	59526	60526				
3/16	3/8	3/8 to 1/2	AD68-A	59492	60492	AD68	59527	60527				
	5/8	3/8 to 1/2	ADL68-A	59493	60493	ADL68	59528	60528				
	3/8	1/2 to 5/8	AD610-A	59494	60494	AD610	59529	60529				
	5/8	1/2 to 5/8	ADL610-A	59495	60495	ADL610	59530	60530				
	3/8 5/8	5/8 to 3/4 5/8 to 3/4	AD612-A ADL612-A	59496 59497	60496 60497	AD612 ADL612	59531 59532	60531 60532				
1/4	1/2	1/16 to 1/4	AD84-A	59498	60498	AD84	59533	60533				
1/4	1/2 1/2	1/4 to 3/8 3/8 to 1/2	AD86-A	59499	60499	AD86 AD88	59534 59535	60534 60535				
	1/2	5/8 to 3/4	AD812-A	59500	60500	AD812	59536	60536				
CI USI	ED END F		71001271	00000	00000	710012	00000	00000				
CLUSI	.236	1/16 to 1/8	AD42AH	59620	60620	AD42H	59590	60590				
	.236	1/8 to 3/16	AU4ZAN	39020	00020	AD42H AD43H	59604	60604				
	.236	3/16 to 1/4	AD44AH	59621	60621	AD4311	59592	60592				
1/8	.236	3/16 to 1/4		00021	00021	AK44H	59593	60593				
., -	.236	1/4 to 5/16				AD45H	59608	60608	CD45H	59644	60644	
	.236	3/8 to 1/2				AD48H	59595	60595				
	5/16	1/16 to 1/8				AD52H	59596	60596				
	5/16	1/8 to 3/16				AD53H	59609	60609				
5/32	5/16	1/8 to 3/16				AK53H	59607	60607				
	5/16	1/16 to 1/4	AD54AH	59622	60622							
	5/16	3/16 to 5/16				AD55H	59597	60597				
	3/8	1/8 to 1/4	AD64AH	59624	60624	AD64H	59599	60599				
3/16	3/8	1/4 to 3/8				AD66H	59605	60605				
	3/8	3/8 to 1/2				AD68H	59601	60601				
1/4	1/2	1/8 to 1/4				AD84H	59606	60606				
	1/2	1/4 to 3/8				AD86H	59603	60603				
T-RIVI	ETS											
	.510	1/32 to 9/64				AD8140-T	59580	60580				
1/4	.510	9/64 to 3/16				AD8187-T	59581	60581				
-	.510	33/64 to 5/8				AD8620-T	59582	60582				

#### **BACK-UP PLATES**

			100 pc. Shop Pack	Thrif	t Packs
Hole Size	Material	Code No.	Part No.	Part No.	Qty./Pkg.
1/8	Steel	SBUP-4	59660	57660	40
1/8	Aluminum	ABUP-4	59661	57661	30
3/16	Aluminum	ABUP-6	59662	57662	30

In order to select the proper rivet for your application, follow the procedure below:

- Select rivet type according to application material and holding strength required. (Refer to Rivet Types, Page 17.)
- 2. Choose rivet head style best suited for your application. (See Head Styles, Page 17.)
- 3. Measure joint thickness to determine correct rivet length (Grip Range).
- 4. Select proper rivet diameter according to recommendations for hole size and strength required. (Larger rivets provide more strength.)

## **Thrift Packs**



#### **Thrift Packs**

The nine most popular rivet sizes are packaged in these reusable, easy-to-store boxes. Perfect for the do-it-your-selfer!

Rivet Head			Plated Sto Steel M		Alumin Aluminu	Qty. Per	
Dia.	Dia.	Grip Range	Part No.	Code No.	Part No.	Code No.	Pkg.
Rivet	Thrift Pa	cks – Open End	Rivets				
1/8	1/4 1/4 1/4	1/16 to 1/8 3/16 to 1/4 5/16 to 3/8	57438 57442 57446	SD42 SD44 SD46	57473 57477 57480	AD42-A AD44-A AD46-A	25 20 15
3/16	3/8 3/8 3/8	Up to 1/8 1/8 to 1/4 1/4 to 3/8			57487 57488 57490	AD62-A AD64-A AD66-A	15 15 15

## PowerLink 30™



Rivet materials and sizes included:

Kit Part No. 5880

Material	Diameter	Grip Range
Aluminum rivet/aluminum mandrel	3/16"	3/16-1/4"
Aluminum rivet/aluminum mandrel	1/8"	1/16-1/8"
Aluminum rivet/steel mandrel	3/16"	1/16-1/8"
Steel rivet/steel mandrel	1/8"	1/16-1/8"
Steel rivet/steel mandrel	1/8"	3/16-1/4"
Countersunk steel rivet/steel mandrel	1/8"	3/16-1/4"

#### **PowerLink 30 Rivetool Kit**

Contains one PowerLink  $30^{TM}$  rivetool, wrench and nosepieces for up to 3/16" rivets AND an assortment of six popular rivet sizes/materials, for a total of 200 rivets, in a durable storage case.

## **Custom Application Rivets**

POP has the most complete line of special application rivets. These include **T-Rivets** for window regulator and door handle applications, **Trim Rivets, Bumper Rivets, Rear Window Gasket Rivets, Swivel Emblem Trunk Rivets** and more.

Divet	Head	Steel Mandrel Aluminum Mandrel Steel M		num Rivet Mandrel							
Dia.	Dia.	Application	P/N	Code No.	P/N	Code No.	P/N	Code No.	P/N	Code No.	Use on/Equivalent to
Pro P	acks –	Custom Application Rivets – 50	0 Per F	Pack					•		
1/8 1/4 1/4 1/4 5/32 1/4 3/16	1/4 .510 .510 .510 .516 1/2 3/8	Aluminum Trim Channel Rivet Window Regulator Rivet Outside Door Handle Rivet Glass Stop Rivet Swivel Emblem Trunk Lock Rivet Bumper Rivet Bumper Fascia Rivet	60800 60801	SD84038 SD66025	60477	AD44-A	60580 60581 60582 60607	AD8140-T AD8187-T AD8620-T AK53H			For attaching molding channels with snap-in color trim GM #9436175, Ford #385189, Chrysler #6031115 Ford, Lincoln & Mercury cars & trucks #388047-S100 Ford #385323, Chrysler #6031091 GM #9432137, Chrysler #6032138 Ford #372820-S36, yellow zinc dichromate coated GM #9439719, Black oxide coated
1/8 1/8 1/8 1/8 1/8	13/64 13/64 13/64 .318 1/4	Std. Alum. Trim Clip Rivet Long Alum. Trim Clip Rivet Std. Stainless Trim Clip Rivet Rear Window Gasket Rivet Multi purpose Rivet			60802 60803	AD43-A-28 AD44-A-28	60805 60806	ADL43-318 ADL43	60804	SSD43-28	Used on trim clips Used on filler covered panels Used for high strength applications Fisher body #20325696 GM #9432552
1/8 1/4 1/4 1/4 5/32 1/4 3/16 1/8 1/8 1/8	1/4 .510 .510 .510 .510 5/16 1/2 3/8 13/64 13/64 .318 1/4	Customer Application Rivets – 10 Aluminum Trim Channel Rivet Window Regulator Rivet Outside Door Handle Rivet Glass Stop Rivet Swivel Emblem Trunk Lock Rivet Bumper Rivet Bumper Fascia Rivet Std. Alum. Trim Clip Rivet Long Alum. Trim Clip Rivet Std. Stainless Trim Clip Rivet Rear Window Gasket Rivet Multi Purpose Rivet	59800 59801	SD84038 SD66025	59477 59802 59803	AD44-A AD43-A-28 AD44-A-28	59580 59581 59582 59607 59805 59806	AD8140-T AD8187-T AD8620-T AK53H ADL43-318 ADL43	59804	SSD43-28	For attaching molding channels with snap-in color trim GM #9436175, Chrysler #6031115, Ford #385189 Ford, Lincoln & Mercury cars & trucks #388047-S100 Ford #385323, Chrysler #6031091 GM #9432137, Chrysler #6032138 Ford #372820-S36, yellow zinc dichromate coated GM #9439719, Black oxide coated Used on trim clips Used on filler covered panels Used for high strength applications Fisher body #20325696 GM #9432552

## **Manual Rivetools**

POP makes the easiest to use and most portable rivetools available on the market. They're the industry standard — world renowned for quality, craftsmanship and versatility. POP manual tools

are designed for shop, field or low-volume use where power is not practical or available. A single, firm squeeze is all it takes to set the smaller rivet sizes. All POP rivet tools are equipped with hardened tool steel jaws to provide durability and longer life as well as nosepieces to set 3/32" to 3/16" open end rivets.



#### **A475**

This PowerLink LeverLite comes ready to set 1/4" diameter POP rivets. Included is the nosepiece required to set tough T-Rivets. Features a durable, unitized body with adjustable stroke for fast, easy operation.





#### **PRG111**

An inexpensive hand tool for the do-it-yourselfer or occasional user. Designed to set 1/8" diameter rivets and some larger sizes. Ideal for the mechanic's tool box.

#### **PRG440\***

Durable, dependable push-type handoperated riveter sets most types and styles of POP rivets up to 1/4". Specially designed for use where lateral space is limited.

\*Special Tooling is required to set 1/4" Rivets (Use PRN 811 nosepiece, PRG 540-44 Jaws and PRG 740-7A Jaw Pusher).

#### PowerLink 30 P/N PowerLink 30

This revolutionary rivetool has up to twice the pulling power of other tools tested. The shorter grip is designed for one-hand operation, and the innovative soft handles contour to fit the hand. This rivetool includes wrench and nosepieces for up to 3/16" rivets.



## Pop Swivelhead Rivet Tool P/N 61946\*

- Rotates full 360° for easy access to any application
- Includes 3/32, 1/8, 5/32. and 3/16 nosepieces and wrench
- All steel construction for durability

\*Available late 2002

## **Power Rivetools**



#### PRG510A-Plus

Designed for high production and trouble-free operation. This pneumatic rivet tool is ideal for a variety of applications. Comes with everything needed to set 1/8" thru 3/16" rivet sizes.

#### 60865

Light duty hydraulic rivetool kit (85–90 psi maximum). This kit, contained in a sturdy, blow-molded box, comes complete with spare front-end parts and jaw lube and supplies nosepieces to set 3/16" and 1/4" rivets.





Heavy duty air hydraulic rivet tool designed to help increase productivity and avoid downtime. It is the leading choice for high volume, trouble-free operations. Sets a variety of rivet styles and materials up to 1/4" and has hardened steel jaws. Tool comes ready to set 1/4" rivet and includes a 3/16" conversion kit.

## **Selection Guides**

#### **MANUAL TOOL & RIVET GUIDE**

TOOL		VET ERIAL	RIVET DIAMETERS					TOOL	RIVET MATERIAL RIVET DIAMETERS								
	Rivet	Mandrel	3/32	7/64	1/8	5/32	3/16	1/4		Rivet	Mandrel	3/32	7/64	1/8	5/32	3/16	1/4
Power	Alum.	Alum.	•			• •	• •	•	A475	Alum.	Alum.	•		• •	• •	• •	• •
Link30	Alum.	Steel	•			• •	• •	•	_	Alum.	Steel	•		• •	• •	• •	• •
	Steel	Steel	•			•	•	•	&	Steel	Steel	•		•	•	•	•
PRG 111	Sťless	St'less				•			PRG	Sťless	St'less			•	•	•	
'''	Sťless	Steel				•			440	Sťless	Steel			• •	• •	• •	
	T-Rivets									T-Riv	ets					•	•

<sup>•</sup> Open-End Rivets • Closed-End Rivets

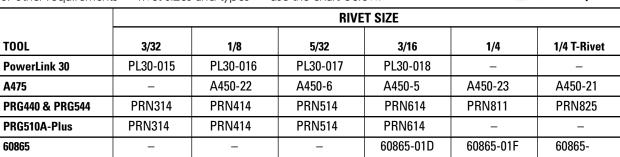
**POWER TOOL/RIVET GUIDE** 

		<u> </u>											
							DIAMETERS						
TOOL	RIVET MATERIAL		OPEN-END RIVETS					CLOSED-END SEALING RIVETS				T-RIVETS	
PRG510	Rivet	Mandrel	3/32	1/8	5/32	3/16	1/4	1/8	5/32	3/16	1/4	3/16	1/4
A-PLUS	Alum.	Alum.	• •	• •	• •	• • •	•	• •	• •	• •			
	Alum.	Steel	• •	• •	• •	• • •	•	• •	•	•	•	• •	• •
PRG 544	Steel	Steel	• •	• •	• •	• •	•				•		
	St'less	St'less		• •	•	• •		•	•	•			
60865	St'less	Steel		• •	•	• •							

PRG510A-Plus
 PRG544
 60865

#### **POP Rivetool Interchangeable Nosepieces**

POP Rivetools are furnished with nosepieces to set the most frequently used range of rivet sizes (see tool descriptions on page 21). To order additional nosepieces for other requirements — rivet sizes and types — use the chart below.



#### **Replacement Jaws**

nepiacement Jaws										
Replacement Jaws Stock No.	For Use With Tool Stock No.	Accommodates Rivet Diameters								
PL30-010	PowerLink 30	Up to 3/16"								
A450-2	A475	All								
PRG540-46	PRG440 & PRG544	Up to 3/16"								
PRG540-44	PRG440 & PRG544	1/4"								
PRG402-8A	PRG510A-Plus	Up to 3/16"								
60865-07	60865	All								

<sup>\*</sup>PRG111 – no replacement parts available



Nosepieces

## **Plastic Expansion Rivets**



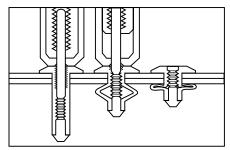
materials in a broad range of applications.

The POP Plastic Rivet quickly inserts from one side of the assembly, using standard rivet setting tools. As the tool pulls the pin through the body, it draws the panels together.

When set, the pin breaks off flush with the head, leaving an attractive, solid color finished appearance.

The POP Plastic Rivet will hold panels of a wide variety of materials, metal or plastic. It is particularly effective for soft materials such as rubber or padded fabrics.

Auto manufacturers use these rivets for many applications on today's automobiles. When necessary, these rivets must be replaced with plastic rivets that meet or exceed OEM specifications. POP Plastic Rivets are designed to meet these specifications.



- 1. Insert plastic rivet in assembly with Plastic Rivet Tool P/N 60930 engaging the pin.
- As tool pulls pin through body it folds legs in middle and draws panels together at same time.
- Pin is pulled to full extension after legs are clamped tight against the panel for a secure hold. The pin breaks off and is removed.

#### **Features:**

- Easy assembly from one side
- Draws mating panels together and clamps them securely without secondary washers.
- Prevents marring of soft, painted or other materials that are easily damaged
- Wide-flange design eliminates rivet pull-through in soft materials
- Provides secure clamping action
- Rivet pin is broken off during assembly for an attractive, solid color finished appearance
- Strong, lightweight, non-corrosive, non-conductive
- Available in a wide variety of sizes

#### **Applications:**

- Fascia strips and grill attachments
- License plate brackets
- · Exterior molding
- · Hi mount stop light
- · Door panel attachments

#### **Ordering Information**

POP offers plastic rivets for the most popular aftermarket applications. All sizes are packaged in reusable, plastic boxes. Each package contains 25 rivets.



PART NO.	RIVET DIA.	SUGGESTED DRILL SIZE	GRIP RANGE	HEAD DIA.	REPLACES OEM PLASTIC RIVET PART NUMBER
57712 57714 57715	5.0mm 5.0mm 5.0mm	7/32 7/32 7/32	.059177 .118177 .118236	.472 .472 .472	GM 20423647, Ford N803170S, Ford N804189S AMC 8934202855, Ford N804863S, Chry 34202855, Chry 6500859 AMC 8934202652, Chry 6500899, GM 20432975, Ford N804343S, VW 175-853-577
57720 57721 57732	5.0mm 6.0mm 6.3mm	7/32 1/4 1/4	.236394 .157335 .157236	.472 .512 .669	Chry 6500898, Chry 6500982 GM-BOC 25524005 Chry 4370132, GM 14070914
57735 57736 57737	6.3mm 6.3mm 6.3mm	1/4 1/4 1/4	.157236 .157394 .157394	.669 .512 .669	Chry 6500911, GM 14063981, GM-CPC 15506827, GM- T&B 15506921, Ford/Mazda KA01500Z1, Ford N803043S GM 20452072, Ford N803862S AMC 8934201631, AMC 8934201835
57741 57747 57748 57752	6.3mm 6.6mm 6.6mm 7.0mm	1/4 9/32 9/32 5/16	.315472 .098197 .098197 .098236	.661 .512 .709 .709	Chry 4370138, Ford N804675S GM 20421672 GM 20433026, VW 175-853-577A GM 1019689, GM-CPC 10087278

#### **Plastic Rivet Tool**

The POP Plastic Rivet Setting Tool P/N **60930**, is designed especially for setting POP Plastic Rivets. It was developed to set most plastic rivets in one stroke and you never need to

change the nosepiece. The POP Plastic Rivet Setter is suitable for utility needs as well as service or repair needs.



### POP-NUT®Sheet Metal Inserts



POP Sheet Metal Inserts are designed for use in any sheet material application. They allow the do-ityourselfer, as well as the automotive pro-

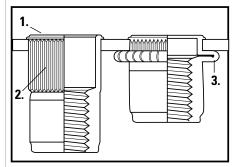
fessional, to use bolts and machine screws in place of weaker sheet metal screws even when you can get to only one side of the work.

POP Sheet Metal Inserts are knurled to keep them from spinning in the hole. When forced into the hole and set in place, the knurl engages the parent material providing high resistance to spinning due to over-torque or cross threading. The "bubble" of material over the backside means that the insert will not pull through; even when used

in thin material. POP Sheet Metal Inserts are made of cadmium-plated steel to provide strong, corrosion-resistant threads. Two different grip ranges are available to accommodate most applications. When installed, the low profile head is nearly flush so no countersinking is necessary.

Sheet Metal Inserts can be used to attach luggage racks, mud flaps, side moldings, rear window louvers, roof racks, ladders, grab bars, truck bed hand rails, wind deflection screens, custom ground effects, almost any accessory to sheet material.

Sheet Metal Inserts are stronger and more reliable than sheet metal screws and allow more flexibility in assembly and disassembly.



- 1. Low profile head means the insert is nearly flush. No countersinking necessary.
- Axial knurl keeps the insert from spinning in the hole.
- 3. "Bubble" of material provides high resistance to insert pull out.



POP offers general purpose threaded inserts for sheet metal fastening applications. These inserts are packaged in reusable plastic boxes. Ideal for body/customizing shop use as well as the do-it-yourselfer.

#### Mandrel/Nosepiece Sets

Each sheet metal insert thread size requires it's own mandrel/nosepiece set to facilitate installation.

Part No.	Thread Size
67933	6-32
67934	8-32
67935	10-24
67936	10-32
67937	1/4-20
67939	5/16-18
67941	3/8-16
67944	M5x0.8
67945	M6x1
67946	M8x1.25
67947	M10x1.5

#### **Ordering Information**

PART NO.	THREAD SIZE	DRILL Size	GRIP RANGE	PIECES PER BOX
57821	6-32	17/64	.020080	50
57822	8-32	17/64	.020080	50
57823	10-24	19/64	.020130	50
57824	10-32	19/64	.020130	50
57825	1/4-20	25/64	.027165	40
57827	5/16-18	17/32	.027150	25
57829	3/8-16	17/32	.027150	20
57836	6-32	17/64	.080130	50
57837	8-32	17/64	.080130	50
57838	10-24	19/64	.130225	50
57839	10-32	19/64	.130225	50
57840	1/4-20	25/64	.165260	40
57842	5/16-18	17/32	.150312	25
57844	3/8-16	17/32	.150312	20
57832	M5x0.8	19/64	0.5-3.3mm	50
57833	M6x1	25/64	0.7-4.2mm	40
57834	M8x1.25	17/32	0.7-3.8mm	25
57835	M10x1.5	17/32	0.7-3.8mm	20



#### Kwikset POP-Nut Sheet Metal Insert Tool P/N 67931\*

- Powerlink design for fast installation of POP-Nut sheet metal inserts
- Compact, slim-line design for easy carriage in pocket/tool belt
- Comfortable santoprene handle grip offers extra shock absorption
- Robust cast steel construction

#### Kwikset POP-Nut Sheet Metal Insert Kits

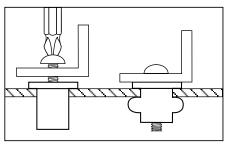
- Includes Kwikset POP-Nut Sheet Metal Insert Tool and 10 pieces of assorted inserts
- Metric Kit includes M4, M5, M6, M8 inserts and mandrels P/N6799\*
- Inch Kit includes 8-32, 10-24, 10-32, 1/4-20, and 5/16-18 inserts and mandrels P/N6798\*
- Durable molded box for storage and quick access

\*Due late 2002

## **WELL-NUT Threaded Inserts**



The WELL-NUT Threaded Insert is a flanged rubber bushing with a brass nut molded into one end. Tightening a conventional machine screw threaded in the brass nut causes the insert to expand against the inner side of thinwalled materials such as body panels, firewalls, etc., or against the sides of a blind hole in solid material — making a secure fastening.



- Place WELL-NUT insert all the way into predrilled hole until flange is firmly against mounting surface.
- 2. Pass machine screw through part to be fastened and tighten until snug.
- Provides a leak-proof seal
- No special tool required
- Muffles noise and absorbs shock

#### **Features:**

- Fastens in thin walls or blind holes
- Functions as a threaded insert or a fastener or BOTH
- · Seals against air or liquid leakage
- · Muffles noise
- Dampens vibration and shock
- · Ideal for mixed material fastening
- Removable
- Installs with conventional tools
- One-step installation

#### **Applications:**

- · Luggage carriers
- · Roof racks
- · License plate brackets
- · Mirror supports
- · Inner door panels
- Spoilers and other aerodynamic accessories
- · Ground effects
- Speaker housings
- Anywhere a leak-proof seal is required

#### **Ordering Information**

PART NUMBER	THREAD SIZE	DRILL SIZE	GRIP RANGE	PIECES PER BOX
57205	6-32	5/16	.015156	25
57207 57219	8-32 10-32	5/16 3/8	.015154 .015192	25 25
57220	M5x0.8	3/8	.015192	25
57243 57244	1/4-20 M6x1	1/2 1/2	.031187 .031187	20 20
57244	5/16-18	5/8	Up to .187	12
57256	M8x1.25	5/8	Up to .187	12
57259	3/8-16	3/4	.015437	6



POP WELL-NUTS are available in reusable, plastic boxes. No special tooling is required to set these inserts. Ideal for body shop use as well as the do-it-yourselfer.

## Creating the Future Worldwide

At **Emhart**, creating the future is about growth, about change and about taking risks. It is who we are and what we do. Our focus is to reduce the overall product assembly costs of our customers by anticipating needs and meeting those needs with technology and market-driven solutions.

Emhart is a global leader in the design and creation of unique assembly technologies, delivering depth and breadth of service and product through a flexible, cross-functional global organization.

#### **Owning the Customer's Total Experience**

We provide every customer with the capability to satisfy every aspect of fastening and assembly technology. From concept through installation, around the corner and around the globe, Emhart develops and delivers solutions for challenging assembly applications.

**Technology Optimization** 

Emhart has the ability to objectively match customer priorities, applications and manufacturing environment with the most appropriate assembly technology and fastening systems. We provide this capability through Application engineers, and Mobile, Stationary and Virtual Innovation Centers located around the world. Each is electronically linked, capable of sharing application data and new design concepts with each other as well as with our customers.

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