EmhartAftermarket 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[®] 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

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- 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

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www.emhart.com

Table of Contents

| | | The second |
|--|---|-------------------|
| - | Heli-Coil Introduction5 | TOTAL F |
| T | Inch Thread Repair Kits6 | |
| # 1 EEE | Metric Thread Repair Kits | nie = |
| | Master Thread Repair Sets – Inch & Metric | _ |
| | Spark Plug & Sav-A-Thread Master Sets | |
| | Special Applications | |
| 100 | Oxygen Sensor, Motorcycle, Pipe Thread, | III: |
| | Sav-A-Thread Quick Repair | En 10 |
| | Application Guide11 | |
| | Packaged Inserts & Tooling | |
| | Bulk Inserts – Inch, Metric, Pipe Thread, Spark Plug, | |
| *** | Sav-A-Thread | |
| | Heli-Coil Point-of-Purchase Displays | |
| | Drill-Out | * |
| Secretaria de Prince Albi | Stud Repair Sets | |
| THE PARTY NAMED IN COLUMN TWO IS NOT THE PARTY N | Chase 'em Back, Sav-A-Stud Plus, Spindle Saver | and on the second |
| | POP Rivet Introduction | CHAR. |
| | Rivet Ordering Information | |
| POP | POP Point-of-Purchase Displays | |
| DESCRIPTION OF THE PERSON OF T | Thrift Packs, PowerLink 30, Custom Rivets | |
| | Manual & Power Rivetools | O CL |
| - | Selection Guides – Manual Tool, Power Tool, | |
| 1 | Interchangeable Nosepieces, Replacement Jaws23 | |
| - | Plastic Rivets | |
| | Sheet Metal | W. |
| | Well-Nut | |
| a de | | |
| | | 2 |
| - | | |
| | | |
| | | |
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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

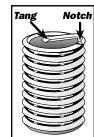
thru 1-1/2), Inch Fine (#10 thru 1-1/2), Metric Coarse (M3 thru M20), Metric Fine (M8 thru M18), Spark Plug (10mm, 12mm, 14mm, 18mm & 7/8"), and Pipe Thread (1/8" thru 1").

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

Heli-Coil Stainless Steel Inserts

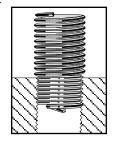
Heli-Coil inserts are precision formed coils of extremely hard stainless steel

(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 COAI | 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 | А А А | 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 | |



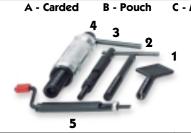














| INCH FINE | | | | | Kit Contents | and Rep | lacement Part | | |
|-------------------------|-----------------|---------------------|--------------------|-----------------|----------------------------------|--------------|--------------------------------|----------------------------|---------------|
| 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 |

^{*}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 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 | B B B | 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 | |

^{*}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 |

[†]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 | its 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.

Swart to the control of the control

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 |
| Cummins Head Bolt 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 |
| | JJZ1-10 |
| 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 |
| | |
| Detroit Diesel Series"92 Head Bolt/Main Bearing | |
| 11/16-11 | 5575-11 |
| Mack-Scania Head Bolt M14x1.5 | 5544-14 |
| American Bosch APE Die 1/4-20 | sel Fuel Pumps 5401-4-1-SL |
| SPARK PLUG HOLE THREA | ADS |
| SIZE | HELI-COIL KIT PART NO. |
| Wire Insert* | |
| 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 |
|-----------|--|
| <u>0.</u> | SIZE |
| | Motorcycle 7 M6x1, M8x1.2 M10x1.25 (2 I |
| _ | Cam Screw (|
| _ | Guide,Oil Pui Timer Mount |
| | 1/4-24 Front/Rear B |
| | 3/8-20 |
| | Head Bolt 7/16-16 |
| _ | Drain Plug - 1/2-13 |
| | Drain Plug - 1/2-20 |
| _ | <i>Timing Plug</i> 5/8-18 |
| _ | Generator Ca 5/16-18 |
| | Transmission |
| | 5/16-18 Japanese M |
| | 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 | APPLICATIONS |
|--------------------------|---------------------------|
| TITICAL MOTORCICLE | HELI-COIL |
| SIZE | KIT PART NO. |
| Motorcycle Thread Repa | air Set |
| M6x1, M8x1.25 and | |
| M10x1.25 (2 lengths) | 4650 |
| Cam Screw Cover, Tappo | 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 | |
| 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

^{*}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 | Length | 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 | Lightweight : 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 | Very high strength. Applications where corrosion resistance is not a major factor. |
| Copper | Electrical conductivity |

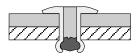
TYPES & STYLES

Rivet Types

There are three basic rivet types available for automotive use.

Open End

Designed for a wide range of applications, they resemble

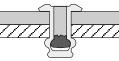


conventional tubular rivets when set, but retain the mandrel within the rivet body for added strength. Open end rivets are available in a variety of materials in dome, countersunk or large flange head styles.

Closed End

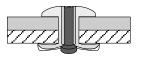
Specially configured with a cup shaped end that forms a tight seal, POP closed end

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

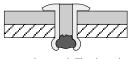


steel mandrel which splits the rivet body into a trifurcated shape. This provides high clamping strength even in thin or fragile material.

Head Styles

Dome Head

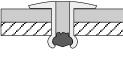
Low profile design and neat appearance, this style is very ver-



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

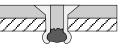
Features twice the under-head bearing surface as the dome style. It's ideal for



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 | END RIV | 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 1/6 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 | | inum Rivet um Mandrel | | | St. Steel Rivet Steel 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 | ack | | | | | • | | |
| 1/8 1/4 1/4 1/4 5/32 1/4 3/16 | 1/4 .510 .510 .510 5/16 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 | | | | | • | • |

[•] Open-End Rivets • Closed-End Rivets

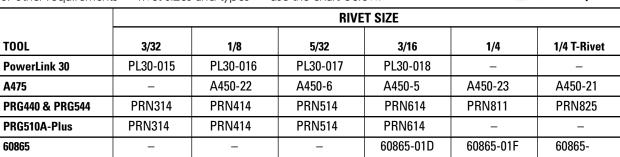
POWER TOOL/RIVET GUIDE

| | | <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 | | | | | | | | |

^{*}PRG111 – no replacement parts available



Nosepieces

Plastic Expansion Rivets



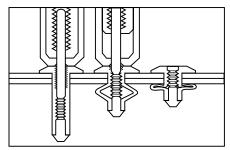
materials in a broad range of applications.

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-

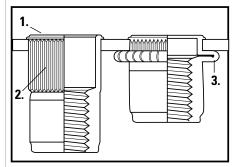
fessional, to use bolts and machine screws in place of weaker sheet metal screws even when you can get to only one side of the work.

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

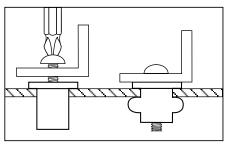
- Includes Kwikset POP-Nut Sheet Metal Insert Tool and 10 pieces of assorted inserts
- Metric Kit includes M4, M5, M6, M8 inserts and mandrels P/N6799*
- Inch Kit includes 8-32, 10-24, 10-32, 1/4-20, and 5/16-18 inserts and mandrels P/N6798*
- Durable molded box for storage and quick access

*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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POP TUCKER WARREN

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Your global resource for precision formed stainless steel wire inserts.



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