## TIME-SERT® Screw thread inserts

THIN WALL SELF LOCKING SOLID BUSHING POSITIVE PLACEMENT

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## TIME-SERT\*

#### PROFESSIONAL THREAD REPAIR SYSTEM SCREW THREAD INSERTS AMERICAN & METRIC SIZES

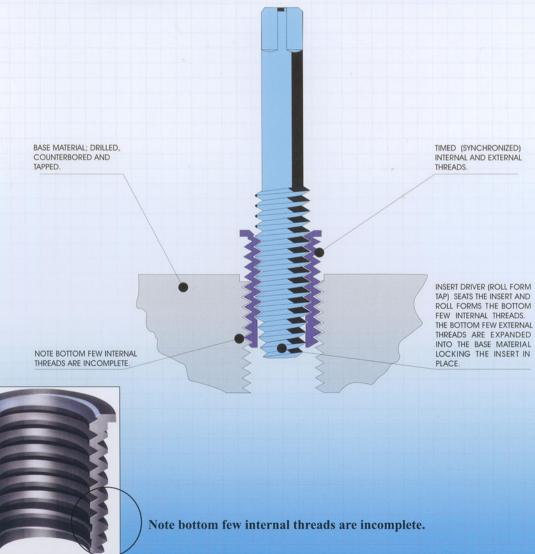
#### ADVANTAGES WHICH ARE CONVINCING:

**TIME-SERT**° is a solid bushing insert. This guarantees easy installation and allows for full load use of tapped hole, ensuring protection against stress and vibration.

**TIME-SERT**° is thin walled due to synchronized internal external threads. Thin cross sectional area allows for installation in areas of limited space and clearance material.

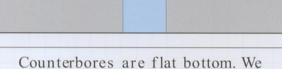
**TIME-SERT**<sup>°</sup> has **positive placement.** Having a flange on the top of the insert will insure that the insert will have positive placement and cannot wind down into the newly repaired hole.

**TIME-SERT**<sup>°</sup> is self locking. On installation the bottom internal threads of the insert are cold rolled to expand the mating external threads into the base material locking the insert in place. Locking mechanism is at the bottom of the insert.



## ENGINEERING DATA





Counterbores are flat bottom. We recommend step drills for production applications.

Use of a cutting fluid is recommended for drilling, counterboring and tapping.

Oil must be used on the insert driver.

Tool kits are designed for a suitable tap wrench, or power tools such as: drill press, electric or air hand drills and tappers.

Carbon steel inserts are phosphate coated. Stainless steel inserts are 303 or equilvalent.

#### TAPER PIPE

COUNTERBORE

INSERT	DRILL		C.E	TAP	
SIZE	DRILL	SIZE	MIN. DIA.	MIN. DEPTH	MAJOR DIA.
1/8-27	13/32	.406	.466	.055	.449
1/4-18	37/64	.578	.668	.075	.638
3/8-18	23/32	.718	.837	.075	.794
1/2-14	55/64	.859	1.000	<b>90°</b> сsк	.942
3/4-14	1 3/32	1.093	1.300	90° сsк	1.194

INICILL						
INCH	INSERT	DRIL	L	C.E	BORE	TAP
	SIZE	DRILL	SIZE	MIN. DIA.	MIN. DEPTH	MAJOR DIA.
	4 - 40	#31	.120	.170	.055	.147
	6 - 32	#26	.147	.218	.070	.182
	8 - 32	#17	.173	.241	.065	.208
	10 - 24	13/64	.203	.288	.075	.247
	10 - 32	13/64	.203	.274	.075	.234
	12 - 24	#1	.228	.307	.075	.265
	1/4 - 20	17/64	.265	.352	.075	.319
	1/4 - 28	G	.261	.340	.075	.300
~	1/4 - 32	G	.261	.340	.075	.287
1	5/16 - 18	21/64	.328	.430	.085	.388
	5/16 - 24	Р	.323	.410	.080	.368
	3/8 - 16	X	.397	.495	.085	.460
	3/8 - 24	W	.386	.473	.080	.432
	7/16 - 14	29/64	.453	.571	.110	.534
	7/16 - 20	29/64	.453	.547	.085	.506
	1/2 - 13	33/64	.515	.648	.110	.604
	1/2 -20	33/64	.515	.610	.085	.569
	9/16 - 12	19/32	.593	.711	.130	.675
	9/16 -18	37/64	.578	.668	.110	.638
211011	5/8 - 11	21/32	.656	.787	.135	.748
	5/8 - 18	41/64	.640	.740	.110	.701
	3/4 - 10	25/32	.781	.935	.135	.885
	3/4 - 16	49/64	.765	.870	.110	.835

METRIC

	INSERT	DR	ILL	C.E	TAP	
	SIZE	DRILL	SIZE	MIN. DIA.	MIN. DEPTH	MAJOR DIA.
	M3 x 0.5	1/8	.125	.170	.055	.140
	M4 x 0.7	# 19	.166	.226	.065	.194
	M5 x 0.8	# 8	.199	.279	.075	.238
	M6 x 1.0	D	.246	.319	.075	.290
	M7 x 1.0	L	.290	.351	.075	.330
	M8 x 1.0	Р	.323	.409	.080	.369
	M8 x 1.25	Р	.323	.419	.080	.381
	M9 x 1.25	U	.368	.440	.080	.422
	M10 x 1.0	13/32	.406	.466	.080	.440
	M10 x 1.25	13/32	.406	.500	.085	.463
-	M10 x 1.5	13/32	.406	.500	.085	.474
	M11 x 1.25	29/64	.453	.542	.085	.503
	M11 x 1.5	29/64	.453	.552	.085	.516
	M12 x 1.25	31/64	.484	.560	.085	.540
	M12 x 1.5	31/64	.484	.595	.085	.552
	M12 x 1.75	1/2	.500	.605	.110	.567
	M13 x 1.5	17/32	.531	.612	.085	.594
	M14 x 2.0	37/64	.578	.685	.110	.660
	M14 x 1.5	37/64	.578	.668	.110	.634
	M16 x 1.5	21/32	.656	.743	.110	.713
	M16 x 2.0	21/32	.656	.787	.115	.741
	M18 x 1.5	23/32	.718	.837	.125	.794
	M20 x 1.5	51/64	.797	.925	.120	.890
	M22 x 1.5	7/8	.875	.950	.100	.940
	M24 x 1.5	24.5	.963	1.030	.750	1.010

## MASTER SETS

EACH SET CONTAINS 5 COMPLETE TOOL KITS AND 20 INSERTS OF EACH SIZE (TOTAL 100 INSERTS) METRIC

## MINI MASTER

EACH SET CONTAINS 3 COMPLETE TOOL KITS AND 20 INSERTS OF EACH SIZE (TOTAL 60 INSERTS )

INCH

#### METRIC

INCH		METRIC	C. P. Com Los
COARSE	FINE	COARSE	FINE
1/4-20	1/4-28	M5 x 0.8	M5 x 0.8
5/16-18	5/16-24	M6 x 1.0	M6 x 1.0
3/8-16	3/8-24	M8 x 1.25	M8 x 1.25
7/16-14	7/16-20	M10 x 1.5	M10 x 1.25
1/2-13	1/2-20	M12 x 1.75	M12 x 1.5
CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
PART NO. 0010	PART NO. 0020	PART NO. 1000	PART NO. 1001
STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL

COARSE	FINE	COARSE	FINE	
1/4-20	1/4-28	M6 x 1.0	M6 x 1.0	
5/16-18	5/16-24	M8 x 1.25	M8 x 1.25	
3/8-16	3/8-24	M10 x 1.5	M10 x 1.25	
CARBON STEEL PART NO. 1203	CARBON STEEL PART NO. 1204	CARBON STEEL PART NO. 1201	CARBON STEEL PART NO. 1202	
STAINLESS STEEL PART NO. 1205	STAINLESS STEEL PART NO. 1206	STAINLESS STEEL PART NO. 1207	STAINLESS STEE PART NO. 1208	

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#### METRIC THREAD REPAIR KITS AND INSERTS

KIT CONTENTS Drill Counterbore Cutting tap Insert driver Five (5) steel inserts



Bol	d text are	insert	lengths s	supplied in	kits
METRI	C KITS		ert Igth	INSEF CARBON STEEL	RTS STAINLESS STEEL
SIZE	PART NO	MM	INCHES	PART NO.	PART NO.
M3x0.5	1305	4.3	.169	13051	13052
		6.0	.240	13053	13054
M4x0.7	1407	4.0 <b>6.0</b>	.157 .240	14077 14071	14072
	1407	8.0	.320	14073	14074
		7.6	.300	15081	15082
M5x0.8	1508	10.0	.400	15083	15084
		12.0	.470	15085	
		8.0 <b>9.4</b>	.315 .370	16105 16101	16106 16102
		12.0	.470	16103	16102
M6x1.0	1610	17.0	.669	16107	
		19.0	.748	16109	
		10.0	.400	17101	
M7x1.0	1710	14.0 18.0	.550 .708	17103 17105	
		20.0	.800	17107	
M8x1.0	1810	7.5	.295	18100	
WOXT.0	1010	11.7	.460	18101	
		8.0 9.0	.315	181210	18128
		10.0	.400	18125	
M8x1.25	1812	11.7	.460	18121	18122
		14.0	.550	18129	18126
		16.2 18.0	.640	18123 18127	18124 181226
		20.0	.800	181213	181224
M8x1.75 GM Rare	1817	16.2	.640	18173	
		9.0	.360	19120	
M9x1.25	1912	13.0	.510	19121	
		18.0 22.0	.710	19123 19127	
		6.2	.244	10100	
M10x1.0	1010	8.0	.315	10105	
in oxit.o	1010	9.0	.360	10101	10102
		<b>15.0</b> 9.0	.600	10103	10104
		14.0	.550	10127	10122
M10x1.25	1012	16.2	.650	10123	10124
		20.0	.800	10125	10126
		25.0	.984	10129	
		11.0	.433	10157	
		14.0	.550	10151	10152
M10x1.5	1015	17.0	.669	101517	10154
		20.0	.800	10153	10154
		24.5	.960	10155	
M11x1.25	1112	22.0	.870	11123	
1011121.25	1112	28.0	1.100	11121	
M11.1.7.5	11115	16.0	.630	11151	
M11x1.5	1115	22.0	.870	11153	
		00.0	1.100	11100	

#### Bold text are insert lengths supplied in kits

METRI	C KITS		ert Gth	INSE CARBON STEEL	RTS STAINLESS STEEL
SIZE	PART NO	MM	INCHES	PART NO.	PART NO.
M12x1.25	1212	9.0 11.0 <b>15.0</b> 24.0	.360 .430 <b>.600</b> .950	12121 12129 12123 12125	12124 12126
M12x1.5	1215	6.7 9.2 <b>16.2</b> 24.0 30.0	.263 .360 <b>.640</b> .950 1.180	12157 12151 12153 12155 12155 12159	12152 12154 12160
M12x1.75	1217	10.0 12.0 <b>16.2</b> 24.0 30.0	.400 .472 <b>.640</b> .950 1.180	12177 12170 12171 12173 12173 12179	12172 12174
M13x1.5	1315	14.0 <b>19.0</b> 24.0 28.0	.551 <b>.748</b> .950 1.102	13151 13153 13155 13155 13157	
M14x1.5	1415	6.6 9.4 12.7 <b>17.8</b> 24.0 28.0	.260 .370 .500 <b>.700</b> .950 1.100	14151 14153 14155 14157 14158 14158 14159	
M14x2.0	1420	12.0 <b>18.0</b> 24.0 30.0	.472 .710 .950 1.180	14201 14203 14205 14207	
M16x1.5	1615	7.0 <b>12.7</b> 24.0 32.0	.270 .500 .950 1.250	16151 16153 16155 16157	16150 16152 16154
M16x2.0	1620	16.0 <b>24.0</b> 32.0 38.0	.630 <b>.950</b> 1.250 1.496	16200 16201 16203 16205	16202 16204 16206
M18x1.5	1815	10.0 15.0 <b>18.3</b> 27.0	.400 .590 <b>.720</b> 1.060	18151 18157 18153 18155	
M20x1.5	2015	9.0 12.0 <b>17.0</b> 30.0	.354 .472 .669 1.180	20150 20151 20153 20155	
M22x1.5	2215C	<b>10.0</b> 15.0 20.0	<b>.400</b> .590 .800	22151 22153 22155	
M24x1.5	2415C	7.6 10.0 15.0 20.0 30.0	.300 .400 .590 .800 1.180	24150 24151 24153 24155 24155 24157	

#### INCH THREAD REPAIR KITS AND INSERTS

**KIT CONTENTS** 

Drill Counterbore Cutting tap Insert driver Five (5) steel inserts



#### Bold text are insert lengths supplied in kits

INSERTS					
INCH	I KITS	INSER		CARBON STEEL	STAINLESS STEEL
SIZE	PART NO.	INCHES	MM	PART NO.	PART NO.
4-40	0440	.200	5.0	04401	04402
6-32	0632	.250	6.3	06321	06322
8-32	0832	<b>.250</b> .320	<b>6.3</b> 8.0	08321 08323	08322 08324
10-24	0024	.240 <b>.300</b> .370	6.1 <b>7.6</b> 9.4	00240 00241 00243	00246 00242 00244
10-32	0032	.240 <b>.300</b> .370	6.1 <b>7.6</b> 9.4	00320 00321 00323	00326 00322 00324
12-24	0124	.300 <b>.370</b> .472	7.6 <b>9.4</b> 12.0	01241 01243 01245	01242 01244 01246
1/4-20	0140	.280 . <b>380</b> .500 .750 1.000	7.1 <b>9.4</b> 12.7 19.0 25.4	01400 01401 01403 01405 01407	01402 01404 01408 01409
1/4-28	0148	.280 <b>.380</b> .500	7.1 <b>9.4</b> 12.7	01480 01481 01483	01486 01482 01484
1/4-32	0142	.180 <b>.250</b> .380 .500	4.5 <b>6.3</b> 9.4 12.7	01421 01423 01425 01427	01422 01424 01426 01428
5/16-18	0561	.350 .450 .620 .750	8.9 <b>11.4</b> 15.7 19.0	05610 05611 05613 05615	05617 05612 05614 05616
5/16-24	0562	.350 <b>.450</b> .620 .750	8.9 <b>11.4</b> 15.7 19.0	05620 05621 05623 05625	05622 05624
3/8-16	0381	.312 .400 .520 .620 .750 .900 1.000 1.200	7.9 10.0 <b>13.2</b> 15.7 19.0 22.8 25.4 30.4	03818 03819 03811 03813 03815 03815 038190 03810 03817	038182 038192 03812 03814 03816  038102
3/8-24	0382	.300 .350 <b>.520</b> .750	7.6 8.9 <b>13.2</b> 19.0	03825 03821 03823	03820  03822 03824

#### Bold text are insert lengths supplied in kits

		INSE	RTS		
INCH	і кітѕ	INSER		CARBON STEEL	STAINLESS STEEL
SIZE	PART NO.	INCHES	MM	PART NO.	PART NO.
7/16-14	0761	.400 . <b>600</b> .870 1.000 1.250 1.500	10.0 <b>15.2</b> 22.0 25.4 31.7 38.0	07610 07611 07613 076135 07615 07617	07612 07614 07619 07618
7/16-20	0762	.250 .370 .480 .600 .870 1.000 1.370	6.3 9.4 12.2 <b>15.2</b> 22.0 25.4 34.7	07629 076320 07627 07621 07623 076231 07625	07622 07624
1/2-13	0121	.400 . <b>650</b> 1.000 1.250 1.500	10.0 <b>16.5</b> 25.4 31.7 38.0	01217 01211 01213 01219 01215	01212 01214
1/2-20	0122	.400 .500 <b>.650</b> 1.000 1.370	10.0 12.7 <b>16.5</b> 25.4 34.7	01225 01220 01221 01223 01227	01222 01224
9/16-12	0961	<b>.750</b> 1.120 1.500	<b>19.0</b> 28.4 38.0	09611 09615 09617	
9/16-18	0968	.350 .450 <b>.750</b> 1.120	8.9 11.4 <b>19.0</b> 28.4	09687 09685 09681 09683	
5/8-11	0581	.500 <b>.850</b> 1.250 1.500	12.7 <b>21.6</b> 31.7 38.0	05810 05811 05813 03415	05812 05814
5/8-18	0588	.320 .450 <b>.850</b> 1.250	8.1 11.4 <b>21.6</b> 31.7	05881 05887 05883 05885	
3/4-10	0341	.750 <b>1.100</b> 1.500	19.0 <b>28.0</b> 38.0	03415 03411 03413	
3/4-16	0346	.650 <b>1.100</b> 1.500	16.5 <b>28.0</b> 38.0	03460 03461 03463	

## DRAIN PAN APPLICATIONS

All kits include all the tools plus 5 inserts and tap guide.



#### 1/2-13 Drain Pan Kit Part number 0121C Insert Part No.01217 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts .400 length

1/2-20 Aluminum Drain Pan Kit Part number 0122A Insert Part No.01225 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts .400 length

#### **FORD Drain Pan**

1/2-20 "TIN PANS ONLY" Kit Part number 0765 Insert Part No.07629 This kit reduces the hole size from "1/2-20 to 7/16-20" Contains: Cbore, Driver tools, 5 inserts, 5 drain plugs with washers

**3/4-16 Drain Pan** Kit Part number 0346C Insert Part No.03460 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts .650 length

3/4-10 Drain Pan Kit Part number 0341C Insert Part No.03415 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts .750 length

M10x1.5 Drain Pan Kit Part number 1015A Insert Part No.10157 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts 9.4mm length

M12x1.25 Drain Pan Kit Part number 1212C Insert Part number 12121 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts 9mm length

M12x1.5 Drain Pan Kit Part number 1215C Insert Part No.12151 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts 9.2mm length

M12x1.75 Drain Pan Kit Part number 1217C Insert Part No.12170 Contains:Drill, Cbore, Tap, Driver, Tapguide, 5 inserts 12mm length



Drain Pans Kits

#### M14x1.5 Volkswagen, Chrylser... Same as the 1415C but has a longer insert 12.7mm

Same as the 1415C but has a longer insert 12.7mm Kit Part number **1415A** Insert Part No.14155 Contains:Drill, Cbore,Tap, Driver, Tapguide, 5 inserts 12.7mm length

#### M14x1.5 "Aluminum Pans" Kit Part number 1415C Insert Part No.14153

Kit Part number 1415C Insert Part No.14153 This kit can restore any aluminum drain pan back to it's original size Contains:Drill, Cbore,Tap, Driver, Tapguide, 5 inserts 9.4mm length

#### Honda and Acura Drain Pan Repair

**"Tin Pans Only"** Kit Part number 1485 Insert Part No.12151 This kit reduces the hole size from M14 x 1.5 to M12 x 1.5

M14x1.25 Drain Pan Kit Part number 14125A Insert Part No.44127 Contains:Drill, Cbore, Tap, Driver, Tap guide, 5 inserts 11mm length

M16x1.5 Drain Pan Kit Part number 1615C Insert Part No.16153 Contains:Drill, Cbore, Tap, Driver, Tap guide, 5 inserts 12.7mm length

M18x1.5 Drain Pan Kit Part number 1815C Insert Part No.18151 Contains:Drill, Cbore, Tap, Driver, Tap guide, 5 inserts 10mm length

M20x1.5 Drain Pan Kit Part number 2015A Insert Part No.20151 Contains:Drill, Cbore, Tap, Driver, Tap guide,5 inserts 12mm length

M22x1.5 Drain Pan Kit Part number 2215C Insert Part No.22151 Contains:Drill, Cbore,Tap, Driver, Tap guide,5 inserts 10mm length

M24x1.5 Drain Pan Kit Part number 2415C Insert Part No.24150 VW touareg length Contains:Drill, Cbore,Tap, Driver, Tap guide,5 inserts 7.6mm length

## SPARK PLUG KITS



		WA	ASHER S	EAT	TAPER SE	AT
Spark pl	Spark Plug Types		<b>N</b> - WA	SHER SEAT	TAPER SEAT	
			seat spark h a washei		Sealer must be u installing taper se	
		WASHE	R SEAT I	NSERTS	TAPER SEAT I	NSERTS
KIT SIZE	Part No.	LENGTH PART MM INCHES NO.			LENGTH MM INCHES	PART S NO.
1/4-32 RC engines	0142SP	4.5	.180	01421		
M10 x 1.0 Standard Kit	4010	9.0	.360	40101		
M10 x 1.0 Deep Hole Kit	4010E	15.0	.600	40103		
M12 x 1.25 Standard Kit	4212	9.0	.360	42121		
M12 x 1.25 Deep Hole Kit	4212E	15.0 17.5	.600 .690	42123 42125	21.0 .827	42126
M14 x 1.25 Standard Kit	4412	7.0 8.0	.270 .320	44121 44123	7.0 .270 10.0 .400	44181 44183
M14 x 1.25	4412E	9.4 11.0	.370	44125 44127		
	extended tools		.530	44113	15.7 .620	44185
for better rea repairing Spa	rkplugs in	15.0 16.8	.600 .660	44129 44111	16.8 .660	44186
holes 6" deep	or more.	23.0	.905	44112	24.0 .950	44187
M18 x 1.5	4815	10.0 18.3	.400 .720	48151 48153	10.0 .400	48181
7/8-18	4718	11.0 20.0 24.5	.430 .780 1.000	47181 47183 47185		

M14x1.25	WASH	ER SEAT	PART	TAPE	r seat	PART
Aluminum Inserts	MM	INCHES	NO.	MM	Inche	S NO.
Aluminum Inserts For kits 4412 & 4412E	7.0 8.0 9.4 11.0 13.5 15.0 16.8 23.0	.270 .320 .370 .430 .530 .600 .660 .905	44121A 44123A 44125A 44127A 44113A 44129A 44111A 44112A	7.0 10.0 13.5 15.7 16.8 24.0	.270 .400 .530 .620 .660 .950 Sealer requ Taper seat p/n 6020	the second s

#### FORD TRITON

Note: FORD TRITON M14x1.25 repair use P/N 5553 kit comes with all tools and 5 inserts Also used for 1.9 / 3.8 / 4.6 / 5.4 Liter engines Triton 3 Valve M16x1.5 use part #3221

#### SEAT RECONDITION KIT Used for worn or damaged seats



#### SPECIAL SEAT CUTTERS

For use on some taper seat spark plug repairs that have limited access to the spark plug hole. M14 x 1.25 PART NO. 44196 M18 x 1.5 PART NO. 48196 M14 x 1.25 Extended PART NO. 44196E

INSERT DRIVER OIL This oil is superior for installing PART NO. 6010 inserts.

#### **SEAT Recondition**

cutters These seat cutters can only be used with kit 4412 and 4412E. For reconditioning of worn

or damaged seats.

#### SEAT CUTTER GUIDE For use when the step tap cannot be threaded deep enough to allow use of the seat cutter. M14 x 1.25 PART NO. 44195

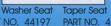


**COPPER ANTI- SEIZE** Recommended for use on spark plug with aluminum insert. PART NO. 37229



SEALER This sealer must be used when installing taper seat inserts. PART NO. 6020







## SPARK PLUG THREAD REPAIR

The following instructions for kit part numbers 4412 and 4412E.



KIT CONTENTS Step Tap Wrench Seat Cutter Insert driver

Spark plug kits do not contain inserts, order separately.



Start the step tap into the hole to be repaired keeping as straight as possible.



Use the wrench provided, place wrench over tap and tap new threads. Continue to tap through until the cutting edges are approximately <sup>1</sup>/<sub>4</sub> inch below surface. Leaving the tap 1/4 inch below the surface ensures that the seat cutter will not hit the back of the tap flutes.



Leave the step tap in the hole. Place the seat cutter over the shank. The seat cutter does two operations. First the seat cutter will cut the countersink for the flange of the insert, then it cuts a new seat for the sparkplug washer.

This operation is the same for the taper seat inserts.



Using the wrench rotate the seat cutter. After a few turns lift the seat cutter to inspect the seat. Repeat operation until the seat is completely cleaned up. Remove the step tap from the hole.



Good Seat Complete



Bad Seat incomplete



Make sure the hole is clean and dry. Lubricate the driver tool with Time-Sert driver oil. Screw the insert onto the prepared hole. If doing deep hole repairs: Lubricate the driver tool with Time-Sert driver oil or 30wt Oil. <u>Screw the insert onto the driver</u> then into the prepared hole.



Using the wrench provided rotate the driver into the insert. When the insert is seated the driver will tighten up. With increased pressure continue to rotate the driver through the insert until it loosens up. Then back the driver tool out of the insert.



Repair is complete. Solid steel threads are square to the reconditioned seat, insuring a good spark plug seal.

Note: <u>Taper seat inserts</u> These inserts are silver plated and require sealer p/n 6020 on the outside of the insert.

## MANUFACTURER KITS

#### GENERAL MOTORS



#### NORTH STAR 4.0/4.6 HEAD BOLT M11x1.5 HEAD BOLT Kit Part No. J-42385-500 Insert Part No. 11155

NORTH STAR 4.0/4.6 Oversize M11x1.5 HEAD BOLT BIG-SERT Second repair Kit P/N. J-42385-500BS Insert P/N J-42385-507BS

**L850 or "ECOTEC" 2.2 liter 4 cylinder** J-42385-500 kit with J-42385-871 Bushing Insert P/N 11155

NORTH STAR MAINBEARING 4.0/4.6 M10x1.5 MAIN BEARING Kit Part No. J-42385-300 Insert Part No. J-42385-514

**NORTH STAR 2000 HEAD BOLT M11x1.5 There are 2 depths of holes for this block** Kit Part No. J-42385-2000 Insert Part No. 11155

North Star 2004 HEAD BOLT M11x2.0 PV8 LH2 4.6 liter LXR Kit Part number J-42385-2030 Insert Part No. 112030

LL8 Straight 6 M11x2.0 Head Bolt 2002 -2004 GMC Envoy 2002-2004 Trail blazer Kit Part No. 4001 Insert Part No. 112030

#### PV6 M11x1.5 Head bolt LX5 3.5L 1999-2002 Oldsmobile Intrigue

2001-2002 Oldsmobile Aurora Kit Part No. 6001 Insert Part No. 11155

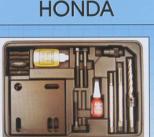
#### **General Motors GEN3**

M11x2.0 HEAD BOLT 1997-2004 C5 Corvette base model 1998-2002 Chevrolet Camaro Z28, SS 1998-2002 Pontiac Firebird Formula and Trans-Am 2004 Pontiac GTO 1999-2005 Holden Commodare as an option 1999-2005 Holden Statesman/Caprice 2001-2005 Holden Monaro Kit Part number J-42385-100 Insert p/n 112030

M10x 2.0 Main Bearing kit 5.7 V8 LS Kit Part number J-42385-120 Insert p/n 102022

#### M12x1.75 Drain plug

This kit will repair most GM aluminum drain pans Repairs : 1999-2004 CK Engine ASM V8/ LR4/4.8V,LM7/ 5.3T,LQ4/6.0U / 2003-2005 ST1 Engine / ASM-4.3L V6/ LU3/4.3X Kit contains: Drill, Cbore,Tap, Driver, Tapguide, 5 inserts 12mm length Kit Part number 1217C Insert p/n 12170



HONDA D16 HEAD BOLT M10x1.25 Headbolt 1996-2000 Civic 1988-1991 Civic/CRX 1992-1995 Civic/Del Sol Kit Part No. 4160 Insert Part No. 10129

#### HONDA Odyssey HEAD BOLT

M12x1.5 Headbolt For threads that start at approx. 51mm "Includes" 1999-2005 Odyssey 2003-2005 Pilot 1998-2005 Accord V6 1997-2003 3.0-3.2 CL 1999-2005 3.2TL 2001- 2005 MDX 2005 RL Kit Part No. 7220 Insert Part No. 12159

Honda Civic Hybrid Head Bolt M9x1.25 2003-2005 Kit Part No. 9210 Insert Part No. 19127

#### HONDA/ACURA HEAD BOLT

M11x1.5 for threads that start at approx. 57mm Honda B16 2002-2005 CR-V 2003-2005 Accord L4 2003-2005 Element 1999-2005 Civic SI 2002-2005 RSX 1986-2001 Integra 1986-1995 Legend 1991-2005 NSX 1996-2004 RL Kit Part No. 7111 Insert Part No. 11155

#### HONDA/ACURA HEAD BOLT Oversize

M11x1.5 BIG-SERT Second repair Honda B16 2002-2005 CR-V 2003-2005 Accord L4 2003-2005 Element 1999-2005 Civic SI 2002-2005 RSX 1986-2001 Integra 1986-1995 Legend 1991-2005 NSX 1996-2004 RL Kit Part No. 7111BS Insert Part No.J-42385-507BS

HONDA MOTORS Special Kit 1/8-28 BSBP Kit Part No. 0128 Insert Part number 01281

Honda and Acura M14x1.5 "TIN Pans Only" This kit reduces the hole size from M14 x 1.5 to M12 x 1.5 Kit Part number 1485 Insert Part No.12151

Honda and Acura M14x1.5 "Aluminum Pans" This kit can restore any aluminum drain pan back to it's original size Kit Part number 1415C Insert Part No.14153

Honda & Acura M10x1.25 Alternator bolt thread repair M10x1.25 Alternator bolt 1999-2005 Odyssey 2003-2005 Pilot 1998-2005 Accord V6 1997-2003 3.0-3.2 CL 1999-2005 3.2TL 2001- 2005 MDX 2005 RL Kit Part number 1012C Insert Part No. 10125

## MANUFACTURER KITS

#### FORD

#### FORD SPARKPLUG REPAIR M14x1.25 Triton 2 and 4 valve 1.9/3.8/4.6/5.4 liter engines



Kit Part No. 5553 Insert Part No 51459

#### FORD SPARKPLUG REPAIR M16x1.5 3 Valve Heads



Kit Part No. 3221 Insert Part No 32214

#### FORD HEAD BOLT 4.6/5.4 M11x1.5 HEAD BOLT



Kit Part No. 6111 Insert Part No. 11155

#### TOYOTA

#### Universal M11x1.5 head bolt kit



Kit Part No. 2200 Insert Part No 11155

We do not have a specific kit for Toyota head bolt. We commonly sell the Universal M11x1.5 for the Camry and Rav4 & Scion models which use the M11x1.5 head bolt.

#### Harley Davidson

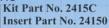
3/8-16 x 1.000 used in Harley Davidson Head Bolt Where depth of hole is 1.250 deep.



Kit Part No. 0381D Insert Part No 03810

#### VOLKSWAGEN

#### **VOLKSWAGEN** Touareg Drain Pan kit M24x1.5





#### **V.W & PORSCHE CASE** KIT FOR M10 x 1.5 CASE STUDS Kit Part No. 1085 Insert Part No. 10155



M14x1.5 Drain Pan Repair Contains:Drill, Cbore, Tap, Driver, Tapguide and 5 inserts of a 12.7mm length Kit Part number 1415A Insert Part No.14155



**Optional Tap Guide Plate** VW and Porsche 911 style. This plate is placed on top of the cylinder to ensure a straight tapped hole.



Plate Part No. 31084

VW SOLEX Carburetor M8x1.0 Kit P/N 1881

**VW SOLEX Carburetor** M11x1.0 Kit P/N 1181

**BMW** 

M10x1.5 24.5mm Head bolt application



Kit Part No. 1087 Insert Part No 10155

This tooling will install a M10x1.5x24.5mm length insert in a 6mm deep countersink.

#### SPECIAL APPLICATIONS

#### **DIESEL INJECTOR** M24 x 2.0 THREAD REPAIR KIT

Kit Part No. 2420 Insert Part No. 24201



BENDIX AIRCRAFT WHEEL 1/4-28 THREAD REPAIR KIT



Kit Part No. 01488 Insert Part No. 014888

#### **BENDIX AIRCRAFT WHEEL** 1/4-28 OVERSIZED THREAD REPAIR KIT



Kit Part No. 01489 Insert Part No. 014899

#### 10x1.5 30mm Flush Surface kit

Kit Part No. 1015D30 Insert Part No. 10159





This tooling has no counterbore. The hole must be at least 8mm or .315 inches for the tap to access the hol Kit Includes 6" extension drill, 4" tap, 4" driver, 5 inserts of a 17mm length. Kit Part number 1610E2

#### M8x1.25 CORE KIT



The core drill included will allow a special 11.7mm length no flange insert to be installed deeper than a standard kit. Kit Includes Core drill, , tap, driver, tap guide, 5 inserts of the 11.7mm no flange Kit Part number 1812CORE

#### M8x1.25 CORE KIT Extended



The core drill included will allow a 16.2mm length insert to be installed deeper than the standard kit. Kit Includes Core drill, tap, driver, 5 inserts of the no flange 16.2mm length. Kit Part number 1812ECORE

## UNIVERSAL HEAD BOLT KITS

Universal head bolt kits can be used in any application of bolt size listed below. A simple tool setup is all that is required.



Universal M10x1.5 head bolt Kit Part No.7580 Insert Part No. 10155 Includes 10 inserts of a M10x1.5x24.5mm length

Universal M10x1.25 head bolt Kit Part No.6250 Insert Part No. 10129 Includes 10 inserts of a M10x1.25x25mm length

Universal M11x1.5 head bolt Kit Part No.11110 Insert Part No. 11155 Includes 10 inserts of a M11x1.5x30mm length

Universal M11x1.25 head bolt Kit Part No.11125 Insert Part No. 11121 Includes 10 inserts of a M11x1.25x28mm length

Universal M12x1.5 head bolt Kit Part No.4800 Insert Part No. 12159 Includes 10 inserts of a M12x1.5x30mm length

Universal M12x1.25 head bolt Kit Part No.4700 Insert Part No. 12127 Includes 10 inserts of a M12x1.25x30mm length

Universal M12x1.75 head bolt Kit Part No.4900 Insert Part No. 12179 Includes 10 inserts of a M12x1.75x30mm length

Universal head bolt kits also available in oversize "BIG-SERT" versions.

### TAPER PIPE THREAD KITS

#### National Pipe Taper Thread (NPT)

#### **CARBON STEEL**



KIT SIZE	Part No.	INSERT PART NO.
1/8-27	0127	01271
1/8-28 BSBP Honda Motors	0128	01281
1/4-18	0118	01181
3/8-18	0318	03181
1/2-14	0214	02141
3/4-14	0414	04141



#### STAINLESS STEEL

KIT SIZE	Part No.	INSERT PART NO.		
1/8-27	0127S	01272		
1/4-18	0118S	01182		
3/8-18	0318S	03182		
1/2-14	0214S	02142		

#### NOTE: The 1/2-14 and 3/4-14 pipe kits do not have a counterbore

These kits do not include counterbore's.

Yes, the insert will stick up slightly without a counterbore but being a pipe application there should be no problem as the pipe fitting will not contact the flange of the insert. This is noted in the instructions and you may optionally use a standard 90 degree countersink to get the flange flush if so desired.

Time-Sert does sell these tools separately if needed. 90 degree CounterSink for the 1/2-14 taper pipe kit p/n 22145. Description: 90 degree countersink 1" diameter 90 degree CounterSink for the 3/4-14 taper pipe kit p/n 24145. Description: 90 degree countersink 1 1/2 " diameter



## **USEFUL TOOLS**

TAP GUIDES



Tap guides insure that the threads are square to the surface of the hole.

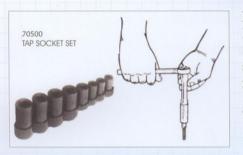


SIZE	Part No.
1/4-20	31420
1/4-28	31420
5/16-18	35168
5/16-24	35168
3/8-16	33816
3/8-24	33824
7/16-14	37164
7/16-20	37162
1/2-13	31213
1/2-20	31225
3/4-10	33415
3/4-16	33416

AMERICAN TAP GUIDES

METRIC TAP GUIDES							
SIZE	Part No.						
M6 x 1.0	36105						
M8 x 1.25	38125						
M10 x 1.0	30105						
M10 x 1.5	30155						
M10 X 1.25	30125						
M12 X 1.5	32155						
M12 X 1.25	32125						
M12 X 1.75	32175						
M14 X 1.5	34155						
M16 X 1.5	36155						
M18 X 1.5	38155						
M20 x 1.5	30215						
M22 x 1.5	32255						
M24 x 1.5	32455						

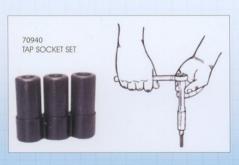
The lower portion of the tap guide should remain as square as possible to the engine surface. Turn the tap slowly while making sure the guide remains flush.



#### TAP SOCKET SETS

For Use in Restricted Areas

Ideal for use in areas where a T handle won't fit. Set of 8 sockets fits all number and fractional M.C.T.I. standard taps thru 1/2". A lso fits 1/8" NPT taps and metric tapsthru 12mm manufactured to M.C.T.I. Standards. Sockets contained on a vinyl holder. Time-Sert taps 4mm to 12mm metric / 4-40 to 1/2 inch Sockets #1 thru #4 use 1/4 drive, rest use 3/8 drive.



Three Larger Sizes in a Convenient Set The three largest tap sockets, are now packaged in a three piece set. Ideal for use where a T handle won't fit, especially in restricted areas. For larger, fractional M.C.T.I. standard taps. #9 socket is 5/8" (16mm), #10 is for 11/16" (18mm) and #11 is for 3/4". Sockets contained in a vinyl holder. Time-Sert taps 13mm to 16mm metric 5/8 to 3/4 inch. use 1/2 drive socket.



Lightweight, Compact, LED Light. Depress the pocket clip to illuminate. The bright LED bulb lasts up to 100,000 hours. Comes equipped with 2 common replaceable 3 volt batteries, CR2016. Overall length 4 <sup>1</sup>/<sub>2</sub>".



2 1/4" diameter mirror swivels to any position. Length extends from 10" to 14'

## **USEFUL TOOLS**

#### TAP WRENCHES



#### STRAIGHT TAP WRENCH

Straight Tap Wrench, Length 5 Inches, Hand Taps Capacity 1/16 to 1/4 Inch, Taps M1.5 to M6 wrench number 00 **P/N C67201** 

Straight Tap Wrench, Length 11 Inches, Hand Taps Capacity 5/32 to 1/2 Inch, Taps M4 to M12 Time-Sert taps 4-40 - 7/16 Inch, M3 - M11 Metric wrench number 5 **P/N C67202** 

Straight Tap Wrench, Length 15 Inches, Hand Taps Capacity 5/32 to 3/4 Inch, Taps M4 to M19 Time-Sert taps 1/4 - 9/16 Inch, M5 - M14 Metric wrench number 6 **P/N C67203** 

Straight Tap Wrench, Length 19 Inches, Hand Taps Capacity 1/4 to 1-1/8 Inch, Taps M12 to M28 wrench number 7 **P/N C67204** 

Straight Tap Wrench, Length 40 Inches, Hand Taps Capacity 3/4 to 1-5/8 Inch, Taps M19 to M40 wrench number 8 **P/N C67205** 



#### **T-HANDLE WRENCH**

T- handle wrench, Length 2-3/4 Hand Taps Capacity 1/16" to 1/4" Inch Taps M1.5 to M6. Time-Sert taps M3 - M5 wrench number T11 **P/N C67208** 

T-HANDLE WRENCH T- handle wrench, Length 3-5/8 Hand Taps Capacity 7/32" to 1/2" Inch Taps M5 to M12 Time-Sert taps M5 - M11 wrench number T12 **P/N C67209** 

#### SCREW EXTRACTORS



Removes broken bolts 5/8 to 7/8. If removing a Time-Sert insert, this tool will remove inserts from 1/2 to 9/16 inch or 12mm to 14mm metric.



Removes broken bolts 7/8 to 1-1/8. If removing a Time-Sert insert, this tool will remove inserts from 5/8 to 3/4 inch or 16mm to 20mm metric.



5 pc set 3/32 to 5/8 If removing a Time-Sert insert, this set will remove inserts from 4-40 to 7/16 or 4mm to 11mm metric.



Removes broken bolts 1-1/8 to 1-3/8. If removing a Time-Sert insert, this tool will remove our 3/4 pipe insert.

# BIGS-SERRET®

## SCREW THREAD INSERTS

## BIG-SERT® oversized repairs



**BIG-SERT**<sup>®</sup> IS A HEAVY WALL SOLID BUSHING. EASY TO INSTALL WITH POSITIVE PLACEMENT.

**BIG-SERT**<sup>®</sup> GIVES INCREASED LOAD PROTECTION FOR CRITICAL USE.

**BIG-SERT**<sup>®</sup> WILL REPAIR OVERSIZE HOLES WHICH HAVE PREVIOUSLY BEEN REPAIRED.

SOCKET WITH A METAL PIN

**NOTE:** BOTTOM FEW INTERNAL THREADS ARE INCOMPLETE. THE INSERT DRIVER (ROLL FORM TAP) SEATS THE INSERT AND COMPLETES THE BOTTOM THREADS. THIS PUSHES THE PIN OUT TO CONTACT THE THREADED HOLE. BACK OUT OF THE INSERT IS PREVENTED BY THE CAM LOCK EFFECT OF THE PIN.

#### **KIT CONTENTS**

DRILL COUNTERBORE TAP INSERT DRIVER FIVE (5) STEEL INSERTS



## **ENGINEERING DATA**

INCH	INSERT	DRILL	C. BORE	TAP
	SIZE	DRILL SIZE	MIN. MIN. DIA. DEPTH	MAJOR DIA.
	1/4-20	7.8mm .307	.355 .050	.359
	1/4-28	L .290	.330 .055	.330
	5/16-18	13/32 .406	.474 .085	.474
	5/16-24	13/32 .406	.474 .085	.474
	3/8-16	31/64 .484	.552 .085	.552
	3/8-24	31/64 .484	.552 .085	.552
	7/16-14	37/64 .578	.634 .085	.634
	7/16-24	37/64 .578	.634 .085	.634
	1/2-13	41/64 .640	.701 .085	.701
	1/2-20	41/64 .640	.701 .085	.701

INSERT	DR	ILL	C. E	C. BORE		
SIZE	DRILL	SIZE	MIN. DIA.	MIN. DEPTH	MAJOR DIA.	
M5x0.8	D	.246	.290	.050	.290	
M6x1.0	L	.290	.330	.085	.330	
M8x1.25	13/32	.406	.474	.085	.474	
M10x1.25	31/64	.484	.552	.085	.552	
M10x1.5	31/64	.484	.552	.085	.552	
M12x1.5	37/64	.578	.634	.085	.634	
M12x1.75	37/64	.578	.634	.085	.634	

## **KITS AND INSERTS**

	K	IT	INSERT LENGTH	INSERTS		KIT		INSERT	INSERTS
ICH	SIZE	PART#	INCHES MM	PART#	METRIC	SIZE	PART#	INCHES MM	PART#
NCH	4/4 00	5400	.380 9.4	54201	METRIC	OILL	TAILT#		
	1/4-20	5420	.500 12.7	54203		M5x0.8	5508	.300 7.6	55081
	1/4-28	5448	.380 9.4	54481				.394 10.0	55083
	1/4-20	0440	.500 12.7	54483		M6x1.0	5610	.370 9.4	56101
	5/16-18	3 5561	.450 11.4	55611				.470 12.0	56103 58121
	5/10-10	5 5501	.620 15.7	55613		M8x1.25	5812	.460 11.7	58123
	5/16-24	4 5562	.450 11.4	55621				.550 14.0	50123
	0/10 2	1 0002	.620 15.7	55623		M10x1.25	5012	.800 20.0	50123
	3/8-16	5381	.520 13.2	53811				.550 14.0	50151
	0/0/10	0001	.750 19.0	53813				.800 20.0	50153
	3/8-24	5382	.520 13.2	53821		M10x1.5	110x1.5 5015	.960 24.5	50155
	0,0	0002	.750 19.0	53823				.640 16.2	52121
	7/16-14	4 5761	.600 15.2	57611		M1,2x1.5	5215	.950 24.0	52123
			.870 22.0	57613		140.475	5047	.640 16.2	52171
	7/16-20	0 5762	.600 15.2	57621		M12x1.75	5217	.950 24.0	52173
			.870 22.0	57623		-			02110
	1/2-13	5121	.650 16.5	51211					
			1.00 25.4	51213					
	1/2-20	5122	.650 16.5	51221					
		OILL	1.00 25.4	51223					

METRIC

## SPARK PLUG M14 X 1.25



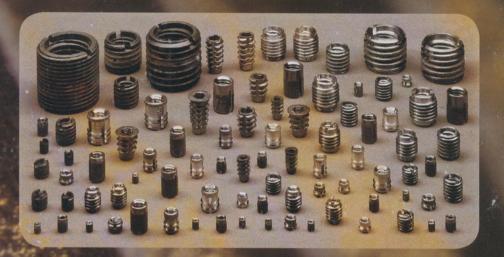
KIT PART NO. 5141 SEALER FOR HIGH TEMPERATURES MUST BE USED WHEN INSTALLING BIG-SERT SPARK PLUG INSERTS. PART NO. 6020

	INSE	RTS	WASHER SEAT	TAPERED SEAT	
KIT	LENGTH		DADTNO	DADT NO	
	INCHES	MM	PART NO.	PART NO.	
5141	.370	9.4	51401	n/a	
0141	.430	11.0	51403	51453	
5141E	.600	15.0	51405	51455	
Extended	.660	16.8	51407	51457	

KIT	FORD	TRITON WASHER SEAT		TAPERED SEAT		
5553	.660	16.8	n/a	51459		
KIT	FORD	ZTECH	Z-TECH			
5554	.950	24.0	4.0 n/a 51			

THE OUTSIDE OF THE BIG-SERT INSERT IS M18X1.5. THE STRIPPED HOLE MUST NOT BE LARGER THAN 16.3MM OR .640 INCHES.

## EZLOK THREADED INSERTS



FOR STRONG THREADS IN:

METAL

WOOD

PLASTIC



## E-ZLOK THREADED INSERTS FOR METAL

#### STRONG THREADS MADE EASY

ALL EZ LOK INSERTS INSTALL WITH STANDARD TOOLS

NO SPECIAL DRILLS... NO SPECIAL TAPS... NO SPECIAL INSTALLATION TOOLS

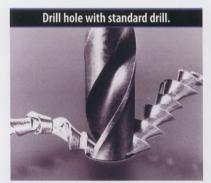
E-Z LOK external threads are standard size and pitch to permit use of standard drills and taps. No special tap sizes or installation tools are required.

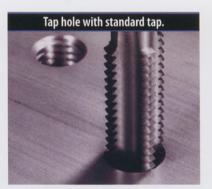
E-Z LOK inserts will not back out or vibrate loose. Immediately upon installation, microencapsulated adhesive begins to set and the newly installed insert can be fastened to within minutes. In addition, the adhesive seals against liquids and gases to pressures of 6,000 psi, and bonds to virtually all metals.

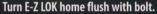
EASY REMOVAL Use a standard screw and bolt extractor to back out a damaged insert and then replace it with a new insert. Removal is simply a matter of overcoming the resistance to torque-out which has been produced by the thread locking material.



Power drive tools are available for high volume installation...See insert tables for catalog numbers and sizes.









#### WHAT'S THE DIFFERENCE?



Q: What's the difference between E-Z LOK and coil threaded inserts?

A: There are two primary differences: design and installation.

#### Design

As the name implies, coil inserts are steel wire coiled in a spring-like design. E-Z LOK threaded inserts are screw machined out of solid steel.

#### Installation

To install a coil insert, you must have a special drill, special tap, and special installation tool. If a tap breaks or the installation tool is misplaced, the coil inserts can't be installed until a new tap or installation tool is purchased. E-Z LOK threaded inserts have standard size/pitch threads so they can be installed using standard tools probably already in your toolbox. For example, to install an E-Z LOK 329-5 (which has a 1/2-13 external thread), you would simply drill the hole with a standard 27/64 drill and then tap the hole with a standard 1/2-13 tap. Once that's done, the insert is threaded into the hole like an ordinary fastener using a screwdriver, bolt and jam nut, or an E-Z LOK drive tool.

<b>COARSE T</b>	<b>HREAD SIZE</b>	ES					
EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.
329-004	4-40	10-32	.250	5/32	10-32	9/32	_
329-006	6-32	1/4-20	.280	7	1/4-20	11/32	500-006
329-008	8-32	5/16-18	.290	F	5/16-18	7/16	500-1
329-3	10-24	3/8-16	.406	5/16	3/8-16	15/32	500-2
329-4	1/4-20	7/16-14	.437	23/64	7/16-14	1/2	500-3
329-5	5/16-18	1/2-13	.484	27/64	1/2-13	9/16	500-4
329-6	3/8-16	9/16-12	.515	31/64	9/16-12	19/32	500-5
329-7	7/16-14	5/8-11	.656	17/32	5/8-11	23/32	500-6
329-8	1/2-13	3/4-10	.656	21/32	3/4-10	3/4	500-7
329-801	1/2-13	3/4-10	1.000	21/32	3/4-10	3/4	500-7
329-9	9/16-12	3/4-10	.656	21/32	3/4-10	3/4	500-7
329-10	5/8-11	7/8-9	.687	49/64	7/8-9	13/16	500-8
329-1018	5/8-11	7/8-9	1.125	49/64	7/8-9	1-1/4	500-8
329-12	3/4-10	1-8	.781	7/8	1-8	7/8	500-9
329-14	7/8-9	1-1/4-7	1.125	1-7/64	1-1/4-7	1-1/4	_
329-16	1-8	1-3/8-12	1.250	1-9/32	1-3/8-12	1-3/8	—

)

#### **FINE THREAD SIZES**

	LAD JILLJ						
EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.
329-332	10-32	3/8-16	.406	5/16	3/8-16	15/32	500-2
329-428	1/4-28	7/16-14	.437	23/64	7/16-14	1/2	500-3
329-524	5/16-24	1/2-13	.484	27/64	1/2-13	9/16	500-4
329-624	3/8-24	9/16-12	.515	31/64	9/16-12	19/32	500-5
329-720	7/16-20	5/8-11	.656	17/32	5/8-11	23/32	500-6
329-820	1/2-20	3/4-10	.656	21/32	3/4-10	3/4	500-7
329-918	9/16-18	3/4-10	.656	21/32	3/4-10	3/4	500-7
329-10F	5/8-18	7/8-9	.687	49/64	7/8-9	13/16	500-8
329-1216	3/4-16	1-8	.781	7/8	1-8	7/8	500-9
329-1414	7/8-14	1-1/4-7	1.125	1-7/64	1-1/4-7	1-1/4	_
329-1614	1-14	1-3/8-12	1.250	1-9/32	1-3/8-12	1-3/8	-

THIN WA	THIN WALL — COARSE THREAD SIZES										
EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.				
319-3	10-24	5/16-18	.312	1	5/16-18	.375	500-2				
319-4	1/4-20	3/8-16	.375	Q	3/8-16	.437	500-3				
319-5	5/16-18	7/16-14	.437	Х	7/16-14	.500	500-4				
319-6	3/8-16	1/2-13	.500	29/64	1/2-13	.560	500-5				
319-7	7/16-14	9/16-12	.560	33/64	9/16-12	.620	500-6				
319-8	1/2-13	5/8-11	.620	37/64	5/8-11	.680	500-7				

THIN WALL — FINE THREAD SIZES									
EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.		
319-332	10-32	5/16-18	.312	1	5/16-18	.375	500-2		
319-428	1/4-28	3/8-16	.375	Q	3/8-16	.437	500-3		
319-524	5/16-24	7/16-14	.437	Х	7/16-14	.500	500-4		
319-624	3/8-24	1/2-13	.500	29/64	1/2-13	.560	500-5		
319-720	7/16-20	9/16-12	.560	33/64	9/16-12	.620	500-6		
319-820	1/2-20	5/8-11	.620	37/64	5/8-11	.680	500-7		

EXTRA HI	EAVY WALL -	— COARSE TH	READ SIZES				
EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.
335-4	1/4-20	1/2-13	.484	27/64	1/2-13	9/16	500-3
335-5	5/16-18	9/16-12	.515	31/64	9/16-12	19/32	500-4
335-6	3/8-16	5/8-11	.656	17/32	5/8-11	23/32	500-5
335-8	1/2-13	7/8-9	.687	49/64	7/8-9	13/16	_
335-10	5/8-11	1-8	.781	7/8	1-8	7/8	—

<b>METRIC T</b>	METRIC THREAD SIZES — METRIC INTERNAL/METRIC EXTERNAL										
EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.				
450-3	M3-0.5	M6-1.0	6.5mm	5.1mm	M6-1.0	7.8mm	—				
450-4	M4-0.7	M8-1.25	7.5mm	6.9mm	M8-1.25	9.0mm	500-1				
450-5	M5-0.8	M8-1.25	7.5mm	6.9mm	M8-1.25	9.0mm	500-1				
450-6	M6-1.0	M10-1.5	10.5mm	8.6mm	M10-1.5	12.0mm	500-3				
450-8	M8-1.25	M12-1.75	12.5mm	10.4mm	M12-1.75	14.5mm	500-4				
450-10	M10-1.5	M16-2.0	17.0mm	14.0mm	M16-2.0	19.0mm	500-5				
450-12	M12-1.75	M16-2.0	17.0mm	14.0mm	M16-2.0	19.0mm	500-6				
450-16	M16-2.0	M24-3.0	20.0mm	21.0mm	M24-3.0	24.0mm	500-8				
450-20	M20-2.5	M36-4.0	30.0mm	33.0mm	M36-4.0	35.0mm	—				

METRIC THREAD SIZES — U.S. INTERNAL/METRIC EXTERNAL										
EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.			
550-006	6-32	M6-1.0	6.5 mm	5.1mm	M6-1.0	7.8mm	_			
550-008	8-32	M8-1.25	7.5 mm	6.9mm	M8-1.25	9.0mm	500-1			
550-1024	10-24	M8-1.25	7.5 mm	6.9mm	M8-1.25	12.0mm	500-2			
550-1032	10-32	M8-1.25	7.5 mm	6.9mm	M8-1.25	12.0mm	500-2			
550-1420	1/4-20	M10-1.5	10.5 mm	8.6mm	M10-1.5	14.5mm	500-3			
550-5	5/16-18	M12-1.75	12.5 mm	10.4mm	M12-1.75	14.5mm	500-4			
550-6	3/8-16	M16-2.0	17.0 mm	14.0mm	M16-2.0	19.0mm	500-5			
550-8	1/2-13	M16-2.0	17.0 mm	14.0mm	M16-2.0	19.0mm	500-7			

<b>METRIC T</b>	METRIC THREAD SIZES — METRIC INTERNAL/U.S. EXTERNAL										
EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.				
650-6	M6-1.0	3/8-16	.406	5/16	3/8-16	15/32	500-3				
650-8	M8-1.25	1/2-13	.484	27/64	1/2-13	9/16	500-4				
65010	M10-1.50	9/16-12	.515	31/64	9/16-12	19/32	500-5				
650-10F	M10-1.25	9/16-12	.515	31/64	9/16-12	19/32	500-5				
650-12	M12-1.75	3/4-10	.656	21/32	3/4-10	3/4	500-6				
650-14	M14-2.0	7/8-9	.687	49/64	7/8-9	13/16	500-7				
650-16	M16-2.0	1-8	.781	7/8	1-8	7-8	500-8				

EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size
SPARK PLUG SIZES					
329-1008	M10 -1.0	9/16-18	.453	33/64	9/16-18
329-1208	M12-1.25	5/8-18	.453	37/64	5/8-18
329-1212	M12-1.25	5/8-18	.703	37/64	5/8-18
750-14	M14 -1.25	M18-1.5	11.5mm	16.5mm	M18-1.5
329-1406	M14 -1.25	3/4-16	.328	11/16	3/4-16
329-1408	M14 -1.25	3/4-16	.453	11/16	3/4-16
329-1412	M14 -1.25	3/4-16	.703	11/16	3/4-16
329-1808	M18-1.5	1-12	.453	59/64	1-12
VW CASE SAVERS					
330-10 (Open)	M10-1.50	9/16-12	1.000	31/64	9/16-12
330-11 (Closed)	M10-1.50	9/16-12	1.000	31/64	9/16-12

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EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.
03-004	4-40	10-32	.250	5/32	10-32	9/32	_
03-006	6-32	1/4-20	.280	7	1/4-20	11/32	_
303-008	8-32	5/16-18	.290	F	5/16-18	7/16	500-1
303-3	10-24	3/8-16	.406	5/16	3/8-16	15/32	500-2
303-4	1/4-20	7/16-14	.437	23/64	7/16-14	1/2	500-3
303-5	5/16-18	1/2-13	.484	27/64	1/2-13	9/16	500-4
303-6	3/8-16	9/16-12	.515	31/64	9/16-12	19/32	500-5
303-7	7/16-14	5/8-11	.656	17/32	5/8-11	23/32	500-6
303-8	1/2-13	3/4-10	.656	21/32	3/4-10	3/4	500-7
303-10	5/8-11	7/8-9	.687	49/64	7/8-9	13/16	500-8
303-12	3/4-10	1-8	.781	7/8	1-8	7/8	500-9

#### FINE THREAD SIZES IN STAINLESS STEEL

EZ-LOK Part No.	Internal Thread	External Thread	Length in.	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.
303-332	10-32	3/8-16	.406	5/16	3/8-16	15/32	500-2
303-428	1/4-28	7/16-14	.437	23/64	7/16-14	1/2	500-3
303-524	5/16-24	1/2-13	.484	27/64	1/2-13	9/16	500-4
303-624	3/8-24	9/16-12	.515	31/64	9/16-12	19/32	500-5
303-720	7/16-20	5/8-11	.656	17/32	5/8-11	23/32	500-6
303-820	1/2-20	3/4-10	.656	21/32	3/4-10	3/4	500-7

METRIC T	METRIC THREAD SIZES IN STAINLESS STEEL — METRIC INTERNAL/METRIC EXTERNAL									
EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.			
453-3	M3-0.5	M6-1.0	6.5mm	5.1mm	M6-1.0	7.8mm	_			
453-4	M4-0.7	M8-1.25	7.5mm	6.9mm	M8-1.25	9.0mm	500-1			
453-5	M5-0.8	M8-1.25	7.5mm	6.9mm	M8-1.25	9.0mm	500-1			
453-6	M6-1.0	M10-1.5	10.5mm	8.6mm	M10-1.5	12.0mm	500-3			
453-8	M8-1.25	M12-1.75	12.5mm	10.4mm	M12-1.75	14.5mm	500-4			
453-10	M10-1.5	M16-2.0	17.0mm	14.0mm	M16-2.0	19.0mm	500-5			
453-12	M12-1.75	M16-2.0	17.0mm	14.0mm	M16-2.0	19.0mm	500-6			
453-16	M16-2.0	M24-3.0	20.0mm	21.0mm	M24-3.0	24.0mm	500-8			

METRIC T	METRIC THREAD SIZES IN STAINLESS STEEL— METRIC INTERNAL/U.S. EXTERNAL									
EZ-LOK Part No.	Internal Thread	External Thread	Length	Tap Drill Size	Tap Size	Minimum Full Thread Depth	Drive Tool Catalog No.			
653-6	M6-1.0	3/8-16	.406	5/16	3/8-16	15/32	500-3			
653-8	M8-1.25	1/2-13	.484	27/64	1/2-13	9/16	500-4			
653-10	M10-1.50	9/16-12	.515	31/64	9/16-12	19/32	500-5			
653-10F	M10-1.25	9/16-12	.515	31/64	9/16-12	19/32	500-5			
653-12	M12-1.75	3/4-10	.656	21/32	3/4-10	3/4	500-6			
653-14	M14-2.0	7/8-9	.687	49/64	7/8-9	13/16	500-7			
653-16	M16-2.0	1-8	.781	7/8	1-8	7/8	500-8			

#### **INSTALLATION VIDEO**



VISIT OUR WEBSITE AT WWW.EZLOK.COM TO VIEW A VIDEO DEMONSTRATING THE EASY 1-2-3 INSTALLATION OF E-Z LOK THREADED INSERTS



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Prepackaged kits containing a range of sizes are available. Note: Because E-Z LOK inserts install with standard tools, our kits contain only inserts. Drills and taps are not included.

Kit Type	Kit Number	Quantity of Inserts	Insert Part Number	Internal Thread	External Thread
		10	329-3	10-24	3/8-16
Coarse Thread	EZ C107	10	329-4	1/4-20	7/16-14
		10	329-5	5/16-18	1/2-13
#10 to 7/16"		10	329-6	3/8-16	9/16-12
		8	329-7	7/16-14	5/8-11
		10	329-3	10-24	3/8-16
Coarse Thread		10	329-4	1/4-20	7/16-14
	EZ C108	10	329-5	5/16-18	1/2-13
#10 to 1/2"		10	329-6	3/8-16	9/16-12
		6	329-8	1/2-13	3/4-10
Coarse Thread 1/2" to 1"		6	329-8	1/2-13	3/4-10
	EZ C816	7	329-10	5/8-11	7/8-9
	EZ (010	7	329-12	3/4-10	1-8
		2	329-16	1-8	1-3/8-12
		10	329-332	10-32	3/8-16
Fine Thread	EZ F107	10	329-428	1/4-28	7/16-14
	EZ F107	10	329-524	5/16-24	1/2-13
#10 to 7/16"		10	329-624	3/8-24	9/16-12
		8	329-720	7/16-20	5/8-11
		10	329-332	10-32	3/8-16
Fine Thread	EZ F108	10	329-428	1/4-28	7/16-14
	LZ F 100	10	329-524	5/16-24	1/2-13
#10 to 1/2"		10	329-624	3/8-24	9/16-12
		6	329-820	1/2-20	3/4-10
		6	329-820	1/2-20	3/4-10
Fine Thread	F7 F016	7	329-10F	5/8-18	7/8-9
1/2" to 1"	EZ F816	7	329-1216	3/4-16	1-8
1/2 10 1		2	329-1614	1-14	1-3/8-12

CARBON S	TEEL THRE	AD INSERTS	FOR METAL	METRIC	
Kit Type	Kit Number	Quantity of Inserts	Insert Part Number	Internal Thread	External Thread
M3-0.5 to M8-1.25	EZ M100	10 10 10 10	450-3 450-4 450-5 450-6	M3-0.5 M4-0.7 M5-0.8 M6-1.0	M6-1.0 M8-1.25 M8-1.25 M10-1.5
M8-1.25 to M16-2.0	EZ M200	10 10 10 8 5	<u>450-8</u> 450-8 450-10 450-12 450-16	<u>M8-1.25</u> M8-1.25 M10-1.5 M12-1.75 M16-2.0	M12-1.75 M12-1.75 M16-2.0 M16-2.0 M24-3.0
Coarse Thread #10 to 1/2"	EZ M508	10 10 10 10 6	550-3 550-4 550-5 550-6 550-8	10-24 1/4-20 5/16-18 3/8-16 1/2-13	M10-1.5 M12-1.75 M12-1.75 M16-2.0 M16-2.0
Metric Thread M6 to M12	EZ M612	10 10 10 10 6	650-6 650-8 650-10 650-12	M6-1.0 M8-1.25 M10-1.5 M12-1.75	3/8-16 1/2-13 9/16-12 3/4-10

Kit Type	Kit Number	Quantity of Inserts	Insert Part Number	Internal Thread	External Thread
		10	303-3	10-24	3/8-16
Coarse Thread		10	303-4	1/4-20	7/16-14
303 Stainless	EZ C303	10	303-5	5/16-18	1/2-13
#10 to 1/2"		10	303-6	3/8-16	9/16-12
		6	303-8	1/2-13	3/4-10
Fine Thread 303 Stainless #10 to 1/2"		10	303-332	10-32	3/8-16
		10	303-428	1/4-28	7/16-14
	EZ F303	10	303-524	5/16-24	1/2-13
		10	303-624	3/8-24	9/16-12
		6	303-820	1/2-20	3/4-10
		10	453-3	M3-0.5	M6-1.0
M3-0.5		10	453-4	M4-0.7	M8-1.25
to	EZ M103	10	453-5	M5-0.8	M8-1.25
M8-1.25		10	453-6	M6-1.0	M10-1.5
		10	453-8	M8-1.25	M12-1.75
10 1 25		10	453-8	M8-1.25	M12-1.75
M8-1.25	F7 11202	10	453-10	M10-1.5	M16-2.0
to M16-2.0	EZ M203	8	453-12	M12-1.75	M16-2.0
		5	453-16	M16-2.0	M24-3.0
		10	653-6	M6-1.0	3/8-16
Metric Thread	F7 14(12	10	653-8	M8-1.25	1/2-13
M6 to M12	EZ M613	10	653-10	M10-1.5	9/16-12
110 10 1112		6	653-12	M12-1.75	3/4-10

#### ULTRASONIC INSERTS—TAPERED

#### **DESIGNED FOR USE IN THERMOPLASTICS**

- TAPERED DESIGN REDUCES INSTALLATION TIME
- INSTALL ULTRASONICALLY OR WITH HEAT DRIVER
- SUPERIOR TORQUE/PULL OUT RESISTANCE
- UNC AND METRIC THREADS
- SINGLE AND DOUBLE VANE

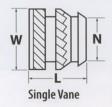


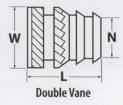
TAPERED	SINGLE VAI	NE					
Part Number.	Internal Thread	Overall Length (L)	Insert Diameter (W)	Pilot Diameter (N)	Rec. Hole Size* (D)	Rec. Hole Size* (S)	Minimum Wall Thickness
TH-002-SV	2-56	.115	.136	.122	.123	.118	.080
TH-004-SV	4-40	.135	.172	.157	.159	.153	.093
TH-006-SV	6-32	.150	.220	.203	.206	.199	.116
TH-008-SV	8-32	.185	.250	.230	.234	.226	.133
TH-124-SV	10-24	.225	.296	.272	.277	.267	.159
TH-132-SV	10-32	.225	.296	.272	.277	.267	.159
TH-420-SV	1/4-20	.300	.375	.354	.363	.349	.194
TH-428-SV	1/4-28	.300	.375	.354	.363	.349	.194
TH-518-SV	5/16-18	.335	.469	.439	.448	.431	.245
TH-316-SV	3/8-16	.375	.563	.530	.540	.523	.293
TH-324-SV	3/8-24	.375	.563	.530	.540	.523	.293
TH-M25-SV	M2.5-0.4	.135	.172	.157	.159	.153	.093
TH-M30-SV	M3-0.5	.150	.220	.203	.206	.199	.116
TH-M40-SV	M4-0.7	.185	.250	.230	.234	.226	.133
TH-M50-SV	M5-0.8	.265	.328	.308	.315	.303	.171
TH-M60-SV	M6-1.0	.300	.375	.354	.363	.349	.194

\* Hole size requirements may vary depending on a number of factors, including material and tools. We recommend that you test your particular application before ordering. We gladly supply free samples.

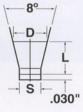
TAPERED	<b>DOUBLE VA</b>	NE			TAPERED DOUBLE VANE										
Part Number.	Internal Thread	Overall Length (L)	Insert Diameter (W)	Pilot Diameter (N)	Rec. Hole Size* (D)	Rec. Hole Size* (S)	Minimum Wall Thickness								
DV-002-TH	2-56	.188	.136	.115	.123	.107	.080								
DV-004-TH	4-40	.219	.172	.144	.159	.141	.093								
DV-006-TH	6-32	.250	.220	.190	.206	.185	.116								
DV-008-TH	8-32	.312	.250	.212	.234	.208	.133								
DV-124-TH	10-24	.375	.297	.251	.277	.246	.159								
DV-132-TH	10-32	.375	.297	.251	.277	.246	.159								
DV-420-TH	1/4-20	.500	.375	.332	.363	.321	.194								
DV-428-TH	1/4-28	.500	.375	.332	.363	.321	.194								
DV-518-TH	5/16-18	.562	.469	.406	.448	.401	.245								
DV-316-TH	3/8-16	.625	.563	.493	.540	.488	.293								
DV-M25-TH	M2.5-0.4	.219	.172	.144	.159	.141	.093								
DV-M30-TH	M3-0.5	.250	.220	.190	.206	.185	.116								
DV-M40-TH	M4-0.7	.312	.250	.212	.234	.208	.133								
DV-M50-TH	M5-0.8	.438	.328	.283	.315	.278	.171								
DV-M60-TH	M6-1.0	.500	.375	.332	.363	.321	.194								

\* Hole size requirements may vary depending on a number of factors, including material and tools. We recommend that you test your particular application before ordering. We gladly supply free samples.





Hole depth should be a minimum of .030" greater than the length of the insert in blind holes.



E-Z LOK ULTRASONIC INSERTS - STRAIGHT

#### ULTRASONIC INSERTS—STRAIGHT

#### **DESIGNED FOR USE IN THERMOPLASTICS**

- STRAIGHT DESIGN PERMITS THINNER BOSS WALLS
- INSTALL ULTRASONICALLY OR WITH HEAT DRIVER
- SUPERIOR TORQUE/PULL OUT RESISTANCE
- FLUSH AND FLANGED DESIGNS

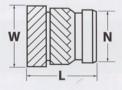


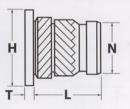
STRAIGHT	r Flush						
Part Number.	Internal Thread	Overall Length (L)	Insert Diameter (W)	Head Diameter (H)	Pilot Diameter (N)	Rec. Hole Size*	Minimum Wall Thickness
HI-002-WH	2-56	.157	.141	N/A	.123	.126	.051
HI-004-WH	4-40	.226	.181	N/A	.154	.157	.063
HI-006-WH	6-32	.281	.214	N/A	.185	.189	.071
HI-008-WH	8-32	.321	.248	N/A	.218	.220	.083
HI-124-WH	10-24	.375	.278	N/A	.249	.252	.102
HI-132-WH	10-32	.375	.278	N/A	.249	.252	.102
HI-420-WH	1/4-20	.500	.341	N/A	.312	.315	.130
HI-428-WH	1/4-28	.500	.341	N/A	.312	.315	.130
HI-518-WH	5/16-18	.500	.403	N/A	.374	.378	.177
HI-524-WH	5/16-24	.500	.403	N/A	.374	.378	.177
HI-316-WH	3/8-16	.500	.494	N/A	.465	.469	.236
HI-324-WH	3/8-24	.500	.494	N/A	.465	.469	.236

\* Hole size requirements may vary depending on a number of factors, including material and tools. We recommend that you test your particular application before ordering. We gladly supply free samples."

STRAIGH	T FLANGED						
Part Number.	Internal Thread	Overall Length (L+T)	Insert Diameter (W)	Head Diameter (H)	Pilot Diameter (N)	Rec. Hole Size*	Minimum Wall Thickness
FL-256-HI	2-56	.178	.141	.187	.123	.126	.051
FL-440-HI	4-40	.250	.181	.218	.154	.157	.063
FL-632-HI	6-32	.311	.214	.250	.185	.189	.071
FL-832-HI	8-32	.357	.248	.281	.218	.220	.083
FL-124-HI	10-24	.418	.278	.312	.249	.252	.102
FL-132-HI	10-32	.418	.278	.312	.249	.252	.102
FL-420-HI	1/4-20	.553	.341	.375	.312	.315	.130
FL-428-HI	1/4-28	.553	.341	.375	.312	.315	.130
FL-518-HI	5/16-18	.553	.403	.437	.374	.378	.177
FL316-HI	3/8-16	.563	.494	.551	.465	.469	.236

\* Hole size requirements may vary depending on a number of factors, including material and tools. We recommend that you test your particular application before ordering. We gladly supply free samples.





Flanged

#### FOR CORED OR DRILLED HOLES IN PLASTIC

Diamond-knurled press inserts are designed to replace molded-in inserts and threads in thermoset plastics.



- INSTALL COLD
- SHARPLY REDUCE THE COST OF MOLDINGS
   CUT REJECT WASTE CAUSED BY MISALIGNED
   AND FAULTY INSERTS
- ELIMINATE THE NEED TO "CHASE" THREADS AFTER MOLDING
- INSTALL PROPERLY WITHOUT A PRECISE HOLE DEPTH







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BRASS —	FLUSH				
EZ-LOK Part No.	Internal Thread	A ±.010″	B ±.010″	L ±.010″	Starting Hole Size*
240-000-BR	0-80	.094	.104	.125	.094 (3/32)
240-002-BR	2-56	.125	.135	.156	.125 (1/8)
240-004-BR	4-40	.156	.166	.188	.156 (5/32)
240-006-BR	6-32	.187	.199	.250	.188 (3/16)
240-008-BR.250	8-32	.218	.230	.250	.219 (7/32)
240-008-BR	8-32	.218	.230	.313	.219 (7/32)
240-332-BR.250	10-32	.250	.262	.250	.250 (1/4)
240-332-BR	10-32	.250	.262	.375	.250 (1/4)
240-3-BR	10-24	.250	.262	.375	.250 (1/4)
240-4-BR	1/4-20	.312	.326	.500	.313 (5/16)
240-5-BR	5/16-18	.375	.389	.563	.375 (3/8)
240-6-BR	3/8-16	.437	.451	.625	.438 (7/16)
240-M3-BR	M3-0.5	.156	.166	.188	.156 (5/32)
240-M3.5-BR	M3.5-0.6	.187	.199	.250	.188 (3/16)
240-M4-BR	M4-0.7	.218	.230	.313	.219 (7/32)
240-M5-BR	M5-0.8	.250	.262	.375	.250 (1/4)
240-M6-BR	M6-1.0	.312	.326	.500	.313 (5/16)

BRASS —	- FLANGED				
EZ-LOK Part No.	Internal Thread	A ±.010″	B ±.010″	L ±.010″	Starting Hole Size*
260-002-BR	2-56	.187	.135	.156	.125 (1/8)
260-004-BR	4-40	.218	.166	.188	.156 (5/32)
260-006-BR	6-32	.249	.199	.250	.188 (3/16)
260-008-BR	8-32	.280	.230	.313	.219 (7/32
260-332-BR	10-32	.312	.262	.375	.250 (1/4)
260-4-BR	1/4-20	.375	.326	.500	.313 (5/16)
260-5-BR	5/16-18	.437	.389	.563	.375 (3/8)
260-6-BR	3/8-16	.500	.451	.625	.438 (7/16)

BRASS —	BRASS — FLANGED — REVERSED SLOT							
EZ-LOK Part No.	Internal Thread	A ±.010″	B ±.010″	L ±.010″	Starting Hole Size*			
260-002-RS	2-56	.187	.135	.156	.125 (1/8)			
260-004-RS	4-40	.218	.166	.188	.156 (5/32)			
260-006-RS	6-32	.249	.199	.250	.188 (3/16)			
260-008-RS	8-32	.280	.230	.313	.219 (7/32)			
260-332-RS	10-32	.312	.262	.375	.250 (1/4)			
260-4-RS	1/4-20	.375	.326	.500	.313 (5/16)			

STAINLESS STEEL — FLUSH									
EZ-LOK Part No.	Internal Thread	A ±.010″	B ±.010″	L ±.010″	Starting Hole Size*				
240-002-CR	2-56	.125	.135	.156	.125 (1/8)				
240-004-CR	4-40	.156	.166	.188	.156 (5/32)				
240-006-CR	6-32	.187	.199	.250	.188 (3/16)				
240-008-CR	8-32	.218	.230	.313	.219 (7/32)				
240-332-CR	10-32	.250	.262	.375	.250 (1/4)				
240-4-CR	1/4-20	.312	.326	.500	.313 (5/16)				
240-5-CR	5/16-18	.375	.389	.563	.375 (3/8)				
240-6-CR	3/8-16	.437	.451	.625	.438 (7/16)				

STAINLESS STEEL — FLANGED									
EZ-LOK Part No.	Internal Thread	A ±.010″	В ±.010″	L ±.010″	Starting Hole Size*				
260-002-CR	2-56	.187	.135	.156	.125 (1/8)				
260-004-CR	4-40	.218	.166	.188	.156 (5/32)				
260-006-CR	6-32	.249	.199	.250	.188 (3/16)				
260-008-CR	8-32	.280	.230	.313	.219 (7/32)				
260-332-CR	10-32	.312	.262	.375	.250 (1/4)				
260-4-CR	1/4-20	.375	.326	.500	.313 (5/16)				

\* Hole size requirements may vary depending on a number of factors, including material and tools. We recommend that you test your particular application before ordering. We gladly supply free samples.



External knife threads provide superior holding power in hard and soft woods, particle board and all wood products. Use wherever field assembly or disassembly could lead to thread erosion or stripping. The long pilot ensures straight driving into a drilled hole. Install with screwdriver, bolt and nut, tapping head, or E-Z LOK driving tool.



BRASS KNIFE THREAD INSERTS — FOR HARD WOOD									
Internal Thread	Length	Major Diameter External Thread	Hole* Size	Drive Tool Catalog Number					
4-40	.375	.350	1/4″	_					
6-32	.375	.350	1/4″	500-006					
8-32	.375	.350	1/4″	500-1					
10-24	.500	.453	3/8″	500-2					
10-32	.500	.453	3/8″	500-2					
1/4-20	.500	.453	3/8″	500-3					
1/4-28	.500	.453	3/8″	500-3					
5/16-18	.625	.600	1/2″	500-4					
5/16-24	.625	.600	1/2″	500-4					
3/8-16	.625	.600	1/2″	500-5					
3/8-24	.625	.600	1/2″	500-5					
M3-0.5	.375	.350	1/4″	500-006					
M4-0.7	.375	.350	1/4″	500-1					
M5-0.8	.500	.453	3/8″	500-2					
M6-1.0	.500	.453	3/8″	500-3					
M8-1.25	.625	.600	1/2″	500-4					
	Internal Thread 4-40 6-32 8-32 10-24 10-32 1/4-20 1/4-28 5/16-18 5/16-24 3/8-16 3/8-24 M3-0.5 M4-0.7 M5-0.8 M6-1.0	Internal Thread         Length           4-40         .375           6-32         .375           8-32         .375           10-24         .500           10-32         .500           1/4-20         .500           1/4-28         .500           5/16-18         .625           3/8-16         .625           3/8-16         .625           3/8-24         .625           M3-0.5         .375           M4-0.7         .375           M5-0.8         .500	Internal ThreadLengthMajor Diameter External Thread4-40.375.3506-32.375.3508-32.375.35010-24.500.45310-32.500.4531/4-20.500.4531/4-28.500.4535/16-18.625.6003/8-16.625.6003/8-16.625.6003/8-24.625.600M4-0.7.375.350M5-0.8.500.453M6-1.0.500.453	Internal ThreadLengthMajor Diameter External ThreadHole* Size4-40.375.3501/4"6-32.375.3501/4"8-32.375.3501/4"10-24.500.453.38"10-32.500.453.38"1/4-20.500.453.38"1/4-28.500.453.38"1/4-28.500.453.38"5/16-18.625.6001/2"5/16-24.625.6001/2"3/8-16.625.6001/2"3/8-24.625.6001/2"M3-0.5.375.3501/4"M4-0.7.375.3501/4"M5-0.8.500.453.3/8"M6-1.0.500.453.3/8"					

STAINLESS STEEL KNIFE THREAD INSERTS — FOR WOOD								
EZ-LOK Part No.	Internal Thread	Length	Major Diameter External Thread	Hole* Size	Drive Tool Catalog Number			
400-008-CR	8-32	.375	.350	1/4″	500-1			
400-3-CR	10-24	.500	.453	3/8″	500-2			
400-4-CR	1/4-20	.500	.453	3/8″	500-3			

\*Hole size requirements may vary depending on material and tools. We recommend that you test before ordering. We gladly supply free samples.

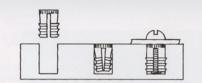
DIE CAST	HEX DRIVE T	HREAD INSER	TS — FOR S	OFT WOOD/	MDF/PAR <u>TIC</u>	LE BOARD
EZ-LOK Part No.	Design	Internal Thread	Length	Hole* Size	Hex Dimensions	Drive Tool. Catalog Number
800832-10	Flush	8-32	10mm	6mm	M4	8500
801024-13	Flush	10-24	13mm	7mm	M5	8600
801032-13	Flush	10-32	13mm	7mm	M5	8600
801420-13	Flush	1/4-20	13mm	9mm	M6	9000
801420-20	Flush	1/4-20	20mm	9mm	M6	9000
851618-20	Flush	5/16-18	20mm	11mm	M8	9100
851618-25	Flush	5/16-18	25mm	11mm	M8	9100
800610-13	Flush	M6-1.0	13mm	9mm	M6	9000
800610-20	Flush	M6-1.0	20mm	9mm	M6	9000
808125-13	Flush	M8-1.25	13mm	11mm	M8	9100
808125-20	Flush	M8-1.25	20mm	11mm	M8	9100
900832-10	Flanged	8-32	10mm	6mm	M4	8500
901024-11	Flanged	10-24	11mm	7mm	M5	8600
901024-20	Flanged	10-24	20mm	7mm	M5	8600
901032-11	Flanged	10-32	11mm	7mm	M5	8600
901032-13	Flanged	10-32	13mm	7mm	M5	8600
901032-20	Flanged	10-32	20mm	7mm	M5	8600
901420-13	Flanged	1/4-20	13mm	9mm	M6	9000
901420-20	Flanged	1/4-20	20mm	9mm	M6	9000
901420-25	Flanged	1/4-20	25mm	9mm	M6	9000
951618-13	Flanged	5/16-18	13mm	11mm	M8	9100
951618-25	Flanged	5/16-18	25mm	11mm	M8	9100
903816-13	Flanged	3/8-16	13mm	12mm	M10	9200
903816-25	Flanged	3/8-16	25mm	12mm	M10	9200
900610-13	Flanged	M6-1.0	13mm	9mm	M6	9000
900610-20	Flanged	M6-1.0	20mm	9mm	M6	9000
908125-13	Flanged	M8-1.25	13mm	11mm	M8	9100
908125-20	Flanged	M8-1.25	20mm	11mm	M8	9100

An inexpensive insert for use in ready-to-assemble furniture, drawer pulls and wherever ease of assembly or avoidance of thread stripping is desired. Install with hex drive wrench or E-Z LOK drive tool.



\*Hole size requirements may vary depending on material and tools. We recommend that you test before ordering. We gladly supply free samples.

## E-ZLOK BRASS FINSERTS FOR PLASTIC & WOOD



Finserts provide strong metal threads in wood, composition board and thermoplastics such as nylon, polystyrene, cellulose acetate and cycolac. By distributing stress over a greater surface area, firm permanent fastening is ensured. The fins give higher holding strength in softer materials. Available with one, two or three fins for varying material thickness, Finserts prevent splintering, splitting and thread pullout.

		.188 .		<ul> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>		.375 ↓	→ A → C	<b>4</b>   <b>4</b>   <b>4</b>		.563		* *B	
		<b>170 SERIES</b> 170-006, 170-008, 170-332			<b>270 SERIES</b> 270-006, 270-008, 270-332, 270-3, 270-4			<b>370 SERIES</b> 370-332, 370-4, 370-5					
Thread Size	Dash Number	A	В	с	Starting Hole Size	A	В	с	Starting Hole Size	A	В	c	Starting Hole Size
6-32	006	.210	.237	.189	.205 (#5)	.210	.237	.189	.205 (#5)	_			_
8-32	008	.236	.263	.215	.234 (15/64)	.236	.263	.215	.234 (15/64)	_	_	_	_
10-32	—332	.263	.290	.242	.261 (G)	.263	.290	.242	.261 (G)	.347	.368	.318	.344 (11/32)
10-24	—3	-	_	_		.263	.290	.242	.261 (G)	_	_	—	
1/4-20	4	_	_	_	_	.330	.357	.309	.328 (21/64)	.409	.431	.381	.406 (13/32)
5/16-18	—5	-	-	-	—	—	—	—	—	.471	.493	.443	.469 (15/32)



## THREAD KITS Co. Industrial Product Catalog



- Perma -Coil® Helically Coiled Inserts
- Perma-Coil®Thread Repair Kits
- S.T.I. Taps & Tooling
- Tangless® Inserts
- Perma-Kee Solid Inserts
- Time-Sert®
- Perma-Rivet

## IND2014



Founded in 1984, Thread Kits Company is a leading global manufacturer and supplier of quality thread repair products for nearly 30 years. Our original product –Perma-Coil—is a registered trademark name in the U.S. and several foreign countries, and has become a recognized name in the automotive, industrial, aerospace and production rebuilder industries.

At Thread Kits Company, we pride ourselves on producing a quality product, with prompt, courteous service and providing Our customers with reasonable prices.

## **Perma-Coil® Inserts**



### **TANGED INSERTS**

- Meets or exceeds all applicable military, aerospace and commercial standards
- Complete range of unified and metric sizes, locking and free-running, bulk and strip feed
- Minimize thread wear
- Reduce installed costs
- Quality and Reliability

Helically– coiled Perma-Coil® Inserts are coiled from 304 stainless steel wire with a diamondshaped cross section to create a precision screw thread. Designed to be slightly oversized in diameter, they compress as they are inserted into the prepared hole to achieve maximum surface contact with parent thread. Each coil automatically adjusts to create maximum contact with each individual thread members, This combination of tension and friction securely grips the wall of the parent material providing a strong permanent thread.

Strong, lightweight and highly wear resistant, Perma-Coil inserts are available in Locking or Free-Running form. Selections include unified coarse, fine threads, metric inserts, spark plug and pipe thread, in bulk or strip feed reels.







#### INSERT MATERIALS:

- ⇒ 304 Stainless Steel (standard) satisfies most application requirements for strength corrosion resistance and temperature capability per AS7245 spec for normal applications to 800°F.
- ⇒ Phosphor Bronze is ideal for salt water applications and has superior corrosion resistance per AS7247 spec.
- ⇒ Inconel-750 is for higher temperature capability and reliability applications. Environments up to 1000°F per AS7246 spec.
- ⇒ Other Materials Available, please inquire.

#### PLATINGS AND COATINGS:

- \* Dry Film Lubriicant per AS5272.
- \* **Silver** per AMS2410,2411 or 2412.
- \* Cadium per AMS-QQ-P416
- \* **Coatings** available please inquire.





HIGH SPEED STEEL S.T.I. TAP

## Perma-Coil® Thread Repair Kit & Combo Kit

Perma-Coil ® Kits contain all the necessary tools to repair stripped , worn or damaged threads. Our Inserts are designed and Perma–Coil kits are available in inch, metric, spark plug and pipe thread series. All kits have a quantity of inserts, high quality carbon steel tap and an metal threaded installation tool. Kit is also available as a combo kit offering a high speed steel tap as part of the combo.

## Perma-Coil® S.T.I. Taps

#### STRAIGHT FLUTE PLUG



Perma-Coil S.T.I. (Screw Thread Insert) Taps are designed specifically to create internal threads that will accommodate a Perma-Coil Insert. Perma-Coil S.T.I. Taps can be used in a range of materials including aluminum, magnesium, steel, plastics and other matters. Kit taps are available in high quality carbon steel as well as high speed steel. High speed steel taps are available in four styles.





## **Perma-Coil®Tooling**



**KIT TOOL** 



#### **Manual Tools**

Perma-Coil® offer a complete line of tooling, gages, tang-break-off tools and extracting tools.. For production runs, prototype work, salvage and repair to complete the needs for your application.



THREAD GAGE



**EXTRACTING TOOL** 



HAND INSTALLTION TOOL

#### **Power Tools**



For higher volume production, we offer Electric & Pneumatic **ELECTRIC MANDREL** 



FRONT END ASSEMBLY

power to



PNEUMATIC POWER TOOL



ELECTRONIC POWER **INSTALLATION TOOL** 

### Tangless® Inserts & Tooling



#### **Tangless Inserts®**

- FOD-Free Design: No tangs to break off, retrieve or lose.
- Approved for use on military programs by NASM8846, NAS1130, and NA0276.
- Cost Reduction: Significantly decreases installation and inspection time.
- Bi-Directional design eliminates insert orientation requirements.
- Quick, non-destructive removal prevents damage to the parent material.

NASM8846, and were added to NASM8846, the procurement standard for helical coil inserts to give you the option to use the Tangless design on military programs. Paragraph 6.3.1 of NASM8846 states "The decision to select tanged inserts or tangless inserts shall be made by the design activity."

Tangless® Inserts are designed to replace tanged helical coil inserts as specified in NASM122076 and NASM124651 series (standard thread) and NASM21209 (locking thread); they install in standard STI tapped holes per MS33537. Installed inserts provide a finished thread meeting the requirements of FED-STD H28/2 and accept standard bolts or screws (MIL-S-7742) or UNJ (MIL-S-8879).

#### **TANGLESS® TOOLS**

Tangless® Inserts may be installed by hand or power tooling with the same mandrel assembly

- Tooling utilizes a "blade" that applies torque to a notch in the end of the coil of installation
- Installation depth can be adjusted easily for virtually any application.
- Driving blades (pawls) are replaceable and increase the overall life of the tool.(One pawl fits all systems)



\*Tangless® is a registered trademark of Advanex Inc.



## **Perma-KEE SOLID INSERTS**



#### THREAD REPAIR INSERTS



Perma-Kee keylocking threaded inserts are used to quickly repair stripped, damaged or worn out threads. Threaded insert products are also used in original equipment where they strengthen threads in soft metal like magnesium or aluminum.

Our threaded inserts are easy to install and remove. No specialty drills, taps or pre-winder tools are required. The keys are driven down into the threads of the surrounding base material, locking the insert in place.

- Solid, one-piece threaded insert construction provides a high degree of pull-out strength
- Keys supply a positive mechanical lock against rotation

Easy threaded insert installation and removal

- Installed with standard drills and taps
- No pre-winder tool required
- No tang to break off

• May be used in many types of materiaL

MS/NAS Style threaded inserts are produced to the following standards:

MS51830	NAS1395	NA0149
MS51831	NA0146	NA0150
MS51832	NA0147	NA0151
MS51394	NA0148	

- Miniature, Lightweight, Heavy Duty and Extra Heavy Duty threaded insert types with Non-locking and Self-locking internal threads
- Full range of Inch and Metric sizes in coarse or fine pitch threads
- Inserts for <u>specific uses</u> are available in floating, blind end, solid and cast-in configurations.
- <u>Industrial Style Threaded</u> inserts can be purchased in bulk quantities or kits.



TIME-SERT® PRODUCTS AVAILABLE PLEASE INQUIRE ABOUT CATALOG



PERMA-RIVET PRODUCTS AVAILABLE PLEASE INQUIRE ABOUT CATALOG

# THREAD KITS CO.



**PERMA-COIL®** HELICALLY COILED INSERTS AND THREAD REPAIR KITS

## **PERMA-COIL**<sup>®</sup> Thread Repair Kits, Insert Packs

Perma-Coil® helically coiled inserts are made of stainless steel wire that has been rolled to a carefully controlled

thread form. When installed. Perma-Coil® inserts adjust to a tapped hole, becoming a functional thread with a strength exceeding the original.

Perma-Coil<sup>®</sup> inserts and repair kits are designed to repair stripped threads in a variety of metals. Aluminum, aluminum alloys, steel, and cast iron. If the original threads can be

stripped, Perma-Coil<sup>®</sup> inserts can repair them. By following the detailed instructions enclosed in every Perma-Coil® kit, even an inexperienced do-it-yourselfer can repair stripped threads, permanently.

INSERT PACKS Thread Repair Inserts Only



FINE THREAD REPAIR KITS Thread Repair Inserts Tap Insert Prewinder Installation Tool



## MECHANIC'S MASTER THREAD REPAIR KITS

designed for the professional mechanic, These kits. Perma-Coil® contain the most popular sizes used in automotive and light truck applications. Each kit contains 30 Perma-Coil® helically coiled inserts, 5 taps, and 5 installation tools. (Fine thread kits contain 5 pre-winding tools. Metric thread kits contain 3 prewinding tools.)



1208 FMK Mechanic's Master Fine Thread Repair Kit	1208 CMK Mechanic's Master <i>Coarse Thread Repair Kit</i>	1221 MMK Mechanic's Master Metric Thread Repair Kit (Fits most popular Euopean and Japanese metric thread sizes)
Thread Size	Thread Size	Thread Size
1/4 - 28	1/4 - 20	5 x 0.8mm
5/16 - 24	5/16 - 18	6 x 1.0mm
3/8 - 24	3/8 - 16	8 x 1.25mm
7/16 - 20	7/16 - 14	10 x 1.25mm
1/2 - 20	1/2 - 13	10 x 1.5mm

#### THREAD REPAIR MADE EASY



1. Drill out damaged threads. 2. Tap new threads.



3. Install new Perma-Coil® insert. (Prewinding tool shown is used for fine thread applications only.)



4. Remove tang from insert. You now have a permanently repaired thread.



COARSE & METRIC

THREAD REPAIR KITS

Thread Repair Inserts Tap Installation Tool

# PERMA-PLUG® SPARK PLUG REPAIR KIT

## Can Be Used With Taper Seat Or Gasket Type Spark Plugs.

Works in Aluminum and Cast Iron

No Drilling Needed

Easy Installation

Permanent Repair

				SHITHEACH INSERT	1/2" REACH INSERT	are HEACH WINEPT	COMPLETE AIT
and Ca	ast Iror				Prosecution Prosecution Prosecution Prove Association Provide Asso	Prime Car 221 (a) 221	Perma- 2200 2714 x 594 x
		Inserts		2214-5	2216.11	22144	
	Short	Normal	Long				
	Ex	panding To	ool				
		Piloted Tap	)				

PERMA - PLUG

### **COMPLETE DISPLAY CENTER: Part No. 1400-1**

M14 - 1.25 x 3/4" Long Reach Insert	2214 - L	4
M14 - 1.25 x 1/2" Normal Reach Insert	2214 - N	4
M14 - 1.25 x 3/8" Short Reach Insert	2214 - S	4
M14 - 1.25 Perma Plug Kit	2200 - 14	3
Description	Part No.	Qty

Size	Kit P/N	Reach	Insert Per Kit	Tap P/N	Tool P/N	Reach	Insert Pkg P/N	Insert Qty.
		Short	1			Short	2214 - S	1
M14 - 1.25	2200 - 14	Normal	1	2258 - 14	2294 - 14	Normal	2214 - N	1
		Long	1			Long	2214 - L	1

## **INDIVIDUAL THREAD REPAIR KITS**

### **INCH SERIES - COARSE**

		REPAIR	KITS*		REPLACEMEN	T PARTS		BULK INSERTS	
_	THREAD SIZE	REPAIR KIT* PART NO.	INSERTS PER PACK	KIT TOOL	KIT TAP	PACKAGED** INSERTS	QTY. INSERTS	PERMA-COIL <sup>®</sup> PART NUMBER	DRILL SIZE
	4-40	1208-014	12	1172-014	1428-014	208-014	12	208 C04-0168	1/8
1	5-40	1208-015	12	1172-015	1428-015	208-015	12	208 C05-0188	9/64
	6-32	1208-016	12	1182-016	1428-016	208-016	12	208 C06-0207	5/32
	8-32	1208-018	12	1182-018	1428-018	208-018	12	208 C08-0246	11/64
	10-24	1208-101	12	1182-101	1428-101	208-101	12	208 C1-0285	13/64
	12-24	1208-102	12	1182-102	1428-102	208-102	12	208 C2-0324	15/64
	1/4-20	1208-104	12	1182-104	1428-104	208-104	12	208 C4-0375	17/64
	5/16-18	1208-105	12	1182-105	1428-105	208-105	12	208 C5-0469	21/64
	3/8-16	1208-106	12	1182-106	1428-106	208-106	12	208 C6-0562	25/64
	7/16-14	1208-107	6	1182-107	1428-107	208-107	6	208 C7-0656	29/64
	1/2-13	1208-108	6	1182-108	1428-108	208-108	6	208 C8-0750	17/32
	9/16-12	1208-109	6	1182-109	1428-109	208-109	6	208 C9-0844	19/32
8	5/8-11	1208-110	6	1182-110	1428-110	208-110	6	208 C10-0938	21/32
-	3/4-10	1208-112	4	1182-112	1428-112	208-112	4	208 C12-1125	25/32
	7/8-9	3208-C14	6	1182-114	1043-14CP3	108-114	1	208-C14-1312	29/32
	1-8	3208-C16	6	1182-116	1043-16CP3	108-116	1	208-C16-1500	1 1/32
	1 1/8-7	3208-C18	5	1182-118	1043-18CP3	108-118	1	208 C18-1688	1 11/64
	1 1/4-7	3208-C20	4	1182-120	1043-20CP3	108-120	1	208-C20-1875	1 19/64
	1 3/8-6	3208-C22	4	1182-122	1043-22CP3	108-122	1	208 C22-2062	1 27/64
	1 1/2-6	3208-C24	4	1182-124	1043-24CP3	108-124	1	208 C24-2250	1 35/64

### **INCH SERIES - FINE**

10-32	1208-201	12	1172-201	1428-201	208-201	12	208 F1-0285	13/64
1/4-28	1208-204	12	1172-204	1428-204	208-204	12	208 F4-0375	17/64
5/16-24	1208-205	12	1172-205	1428-205	208-205	12	208 F5-0469	21/64
3/8-24	1208-206	12	1172-206	1428-206	208-206	12	208 F6-0562	25/64
7/16-20	1208-207	6	1172-207	1428-207	208-207	6	208 F7-0656	29/64
1/2-20	1208-208	6	1172-208	1428-208	208-208	6	208 F8-0750	33/64
9/16-18	1208-209	6	1172-209	1428-209	208-209	6	208 F9-0844	37/64
5/8-18	1208-210	6	1172-210	1428-210	208-210	6	208 F10-0938	41/64
3/4-16	1208-212	4	1172-212	1428-212	208-212	4	208 F12-1125	49/64
7/8-14	3208-F14	6	1039-14F	1043-14FP3	108-214	1	208 F14-1312	57/64
1-14	3208-F164	6	1039-164F	1043-164FP3	108-2164	1	208 F164-1500	1 1/64
1-12	3208-F16	6	1039-16F	1043-16FP3	108-216	1	208 F16-1500	1 1/64
1 1/8-12	3208-F18	5	1039-18F	1043-18FP3	108-218	1	208 F18-1688	1 5/32
1 1/4-12	3208-F20	4	1039-20F	1043-20FP3	108-220	1	208 F20-1875	1 9/32
1 3/8-12	3208-F22	4	1039-22F	1043-22FP3	108-222	1 *	208 F22-2062	1 13/32
1 1/2-12	3208-F24	4	1039-24F	1043-24FP3	108-224	1	208 F24-2250	1 17/32

 Perma-Coil<sup>®</sup> repair kits include: Inserts, Installation Tool, and Tap
 \* Perma Coil<sup>®</sup> insert packs contain inserts only The above packs and insert bags contain inserts whose length is 1-1/2 times their diameter. (For example, the 1/4-20 inserts is 3/8" long.) Other sizes and lengths are available

## **SPARK PLUG SERIES - WIRE TYPE INSERTS**

The Perma-Coil<sup>®</sup> spark plug series includes a full range of individually packaged kits and inserts. They have application in all types of engines and are available in 10, 12, 14, and 18mm sizes. Each kit includes the appropriate reamer/tap and installation tool for all sizes except the 18mm. For the 18mm, you choose the reach and quantity of Perma-Coil<sup>®</sup> stainless steel inserts required. **Do not use Perma-Coil<sup>®</sup> wire spark plug inserts to repair taper seat spark plug ports**.

THREAD SIZE	REACH	KIT PART NO.	INSERT PER KIT	INSERT PACK PART NO.	INSERTS PER PACK	TAP PART NO.	TOOL PART NO.	BULK INSERT PART NO.
10-1.0mm	1/2"	1210-410*	_	410-500	6	1458-100	1094-100	SP1010-01-0500
12-1.25mm	1/2"	1212-412*	_	412-500	6	1458-123	1094-123	SP1213-01-0500
	3/4"	_	_	412-750	6	_	_	SP1213-01-0750
14-1.25mm	3/8"	1214-414*	_	414-375	6	1458-143	1094-143	SP1413-01-037
	7/16"	-	-	414-438	6	_	-	SP1413-01-043
	1/2"	_	_	414-500	6	_	_	SP1413-01-0500
	3/4"	_	_	414-750	6	_	_	SP1413-01-075
18-1.50mm	1/2"	1218-500	6	418-500	6	1458-185	1094-185	SP1815-01-050

\* NOTE: 10mm, 12mm, and 14mm spark plug kits contain tap and installation tool ONLY - NO inserts in kit. Purchase packages of inserts separately. Same tools are applicable regardless of insert reach.

### **METRIC SERIES - COARSE**

	OLINEO	OUAI						
	REPAIR	KITS*		REPLACEMENT	PARTS		BULK INSERTS	
THREAD SIZE	REPAIR KIT* PART NO.	INSERTS PER PACK	KIT TOOL	KIT TAP	PACKAGED** INSERTS	QTY. INSERTS	PERMA-COIL® PART NUMBER	DRILL
M3 X 0.5	1221-303	12	1287-303	1448-303	206-303	12	206 M3C-0045	1/8
M4 X 0.7	1221-304	12	1287-304	1448-304	206-304	12	206 M4C-0060	11/64
M5 X 0.8	1221-305	12	1287-305	1448-305	206-305	12	206 M5C-0075	13/64
M6 X 1	1221-306	12	1287-306	1448-306	206-306	12	206 M6C-0090	1/4
M7 X 1	1221-307	12	1289-307	1448-307	206-307	12	206 M7C-0105	9/32
M8 X 1.25	1221-308	12	1289-308	1448-308	206-308	12	206 M8C-0120	21/64
M9 X 1.25	1221-309	12	1289-309	1448-309	206-309	12	206 M9C-0135	3/8
M10 X 1.5	1221-310	12	1289-310	1448-310	206-310	12	206-M10C-0150	13/32
M11 X 1.5	1221-311	6	1289-311	1448-311	106-311	6	206 M11C-0165	29/64
M12 X 1.75	3221-M12C	6	1289-312	5043-120CP4	106-312	6	206 M12C-0180	31/64
M14 X 2	3221-M14C	6	1289-314	5043-140CP4	106-314	6	206 M14C-0210	37/64
M16 X 2	3221-M16C	6	1289-316	5043-160CP4	106-316	6	206 M16C-0240	21/32
M18 X 2.5	3221-M18C	6	1289-318	5043-180CP4	106-318	6	206 M18C-0270	47/64
M20 X 2.5	3221-M20C	6	1289-320	5043-200CP4	106-320	6	206 M20C-0300	13/16

#### **METRIC SERIES - FINE**

M8 X 1.0	1221-M8F	6	1287-608	1448-608	106-608	6	206 M8F-0120	21/64
M10 X 1.0	1221-M1010	6	1287-61010	1448-61010	106-61010	6	206 M1010-0150	13/32
M10 X 1.25	3221-M10F	12	1287-610	1448-610	106-610	12	206 M10F-0150	13/32
M11 X 1.0	1221-M11F	6	1287-611	1448-611	106-611	6	206 M11F-0165	7/16
M11X1.25	1221-M1125	6	1287-61125	1448-61125	106-61125	6	206 M1125-0165	29/64
M12 X 1.25	3221-M12F	6	1287-612	5043-120FP4	106-612	6	206 M12F-0180	31/64
M12 X 1.5	3221-M1215	6	1287-61215	5043-1215FP4	106-61215	6	206 M1215-0180	31/64
M14 X 1.5	3221-M14F	6	1287-614	5043-140FP4	106-614	6	206 M14F-0210	9/16
M16 X 1.5	3221-M16F	6	1287-616	5043-160FP4	106-616	6	206 M16F-0240	21/32

## **PIPE THREAD SERIES**

	REPAIR PACKS			REPLACEM	BULK INSERTS			
THREAD SIZE	PIPE THREAD INSERT KIT NO.	INSERTS PER PACK	INSTALLATION TOOL PART NO.	TAP PART NO.	INSERT BAG NO.	INSERTS PER BAG	PERMA-COIL® PART NUMBER	DRILL SIZE
1/8-27	3218-2	12	1189-2	1188-2P	318-2	12	218-2	3/8
1/4-18	3218-4	12	1189-4	1188-4P	318-4	12	218-4	33/64
3/8-18	3218-6	10	1189-6	1188-6P	318-6	10	218-6	21/32
1/2-14	3218-8	10	1189-8	1188-8P	318-8	10	218-8	13/16
3/4-14	3218-12	10	1189-12	1188-12P	318-12	10	218-12	1 1/64
1-11 1/2	3218-16	6	1189-16	1188-16P	318-16	6	218-16	1 9/32

## SPECIAL APPLICATIONS

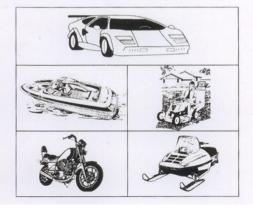
	REPAIR	KITS*		REPLACEMENT		BULK INSERTS		
THREAD SIZE	REPAIR KIT* PART NO.	INSERTS PER PACK	KIT TOOL	KIT TAP	PACKAGED** INSERTS	QTY. INSERTS	PERMA-COIL® PART NUMBER	DRILL SIZE
7/8-20	3208-1420	10	1037-1420	1043-1420P2	208-1420	1	208 1420-0330	57/64
1-20	3208-1620	10	1037-1620	1043-1620P2	208-1620	1	208 1620-0325	1 1/64
11/16-16	3424-1250	9	1424-1	1043-1116	324-1116-1250	3	208 1116-1250	45/64
1/4-24	1208-404	12	1182-404	1428-404	208-404	12	208 424-0500	17/64
3/8-20	1208-406	6	1172-406	1428-406	208-406	6	208 620-0375	25/64

## **SPECIFICATIONS**

Perma-Coil<sup>®</sup> inserts and tools meet all applicable industrial and military specifications. They may be used on all military and government trucks, aircraft and other vehicles covered by MS 21208 and MS 21209; also NAS 1222 specifications for helically coiled wire inserts.

### WHERE?

Use Perma-Coil<sup>®</sup> Replacement Kits to repair threads on your car, boat, lawn equipment, motorcycle, snowmobile and other recreational vehicles, appliances, plumbing and heating equipment and anywhere metal threads become stripped, crossed or otherwise damaged.



# Perma-Coil®

## DISPLAYS



1208-5

#### COMPLETE DISPLAY CENTER NO. 1208-5 INCH COARSE AND SPARK PLUGS

INCLUDES ONE EACH:



1221-3

#### DISPLAY CENTER NO. 1221-3 METRIC THREADS

#### INCLUDES ONE EACH:

1208-107         7/16-14         REPAIR KIT         1221-310         M10 x 1.5         REPAIR KIT           1208-108         1/2-13         REPAIR KIT         3221-M10F         M10 x 1.25         REPAIR KIT           2200-14*         M14x 1.25         REPAIR KIT         3221-M12C         M12 x 1.75         REPAIR KIT	
3221-M12F M12 x 1.25 REPAIR KIT	
INSERT PACKS	
208-104 1/4-20 INSERT PACK	
208-105 5/16-18 INSERT PACK 206-305 M5 x .8 INSERT PACK	K
208-106 3/8-16 INSERT PACK 206-306 M6 x 1.0 INSERT PACK	K
208-107 7/16-14 INSERT PACK 206-308 M8 x 1.25 INSERT PACK	K
208-108 1/2-13 INSERT PACK 206-310 M10 x 1.5 INSERT PACK	K
2214-S* 14mm x 3/8 INSERT PACK 106-610 M10 x 1.25 INSERT PACK	K
2214-N* 14mm x 1/2 INSERT PACK 106-312 M12 x 1.75 INSERT PACK	K
2214-L* 14mm x 3/4 INSERT PACK 106-612 M12 x 1.25 INSERT PACK	K

\*SOLID TYPE PERMA-PLUG INSERTS



1208-1

#### COMPLETE DISPLAY CENTER: 1208-1 INCH COARSE THREADS

#### INCLUDES ONE EACH:

1208-014	4-40	REPAIR KIT
1208-015	5-40	REPAIR KIT
1208-016	6-32	REPAIR KIT
1208-018	8-32	REPAIR KIT
1208-101	10-24	REPAIR KIT
1208-102	12-24	REPAIR KIT
1208-104	1/4-20	REPAIR KIT
1208-105	5/16-18	<b>REPAIR KIT</b>
1208-106	3/8-16	REPAIR KIT
1208-107	7/16-14	REPAIR KIT
1208-108	1/2-13	REPAIR KIT
1208-109	9/16-12	REPAIR KIT
1208-110	5/8-11	REPAIR KIT
1208-112	3/4-10	REPAIR KIT

#### **INSERT PACKS**

208-014	4-40	<b>INSERT PACK</b>
208-015	5-40	<b>INSERT PACK</b>
208-016	6-32	<b>INSERT PACK</b>
208-018	8-32	<b>INSERT PACK</b>
208-101	10-24	<b>INSERT PACK</b>
208-102	12-24	<b>INSERT PACK</b>
208-104	1/4-20	<b>INSERT PACK</b>
208-105	5/16-18	<b>INSERT PACK</b>
208-106	3/8-16	<b>INSERT PACK</b>
208-107	7/16-14	<b>INSERT PACK</b>
208-108	1/2-13	<b>INSERT PACK</b>
208-109	9/16-12	<b>INSERT PACK</b>
208-110	5/8-11	<b>INSERT PACK</b>
208-112	3/4-10	<b>INSERT PACK</b>



1208-2

#### DISPLAY CENTER NO. 1208-2 INCH FINE THREADS

#### INCLUDES ONE EACH:

1208-201	10-32	REPAIR KIT
1208-204	1/4-28	REPAIR KIT
1208-205	5/16-24	<b>REPAIR KIT</b>
1208-206	3/8-24	REPAIR KIT
1208-207	7/16-20	REPAIR KIT
1208-208	1/2-20	<b>REPAIR KIT</b>
1208-210	5/8-18	<b>REPAIR KIT</b>

#### **INSERT PACKS**

208-201	-	10-32	<b>INSERT PACK</b>
208-204		1/4-28	INSERT PACK
208-205		5/16-24	INSERT PACK
208-206		3/8-24	INSERT PACK
208-207		7/16-20	INSERT PACK
208-208		1/2-20	INSERT PACK
208-210		5/8-18	<b>INSERT PACK</b>

# **Perma-Coil®**

## **INTERCHANGEABILITY LIST**

KITS								
Size	Helicoil <sup>®</sup> #	Perma-Coil <sup>®</sup> #						
INCH SERIES - COARSE								
12-24	5521-1	1208-102						
8-32	5521-2	1208-018						
10-24	5521-3	1208-101						
1/4-20	5521-4	1208-104						
5/16-18	5521-5	1208-105						
3/8-16	5521-6	1208-106						
7/16-14	5521-7	1208-107						
1/2-13	5521-8	1208-108						
9/16-12 5/8-11	5521-9	1208-109						
3/4-10	5521-10 5521-12	1208-110 1208-112						
3/4-10	INCH SERIES - F							
10-32	5528-3	1208-201						
1/4-28	5528-4	1208-204						
5/16-24	5528-5	1208-205						
3/8-24	5528-6	1208-206						
7/16-20	5528-7	1208-207						
1/2-20 5/8-18	5528-8 5528-10	1208-208						
	0010 10	1208-210						
	ETRIC SERIES - C							
M5 x 0.8	5546-5	1221-305						
M6 x 1.0	5546-6	1221-306						
M8 x 1.25	5546-8	1221-308						
M10 x 1.5	5546-10	1221-310						
M12 x 1.75	5546-12	3221-M12C						
	METRIC SERIES -	FINE						
M10 x 1.25	5543-10	3221-M10F						
M12 x 1.25	5543-12	3221-M12F						
SPAR	K PLUG SERIES	(Wire Type)						
M14 x 1.25	5523-14	1214-414						
M18 x 1.25	5523-18	1218-500						
SPAR	K PLUG SERIES (	(Solid Type)						
M14 x 1.25	5334-14	2200-14						
W14 A 1.20	0004-14	2200-14						

<b>INSERT PACKAGES</b>							
Helicoil <sup>®</sup> #	Perma-Coil <sup>®</sup> #						
INCH SERIES - COARSE							
R1185-1 R1185-2 R1185-3 R1185-4 R1185-5 R1185-6 R1185-7 R1185-8 R1185-9 R1185-10 R1185-12	208-102 208-018 208-101 208-104 208-105 208-106 208-107 208-108 208-109 208-110 208-112						
INCH SERIES	- FINE						
R1191-3 R1191-4 R1191-5 R1191-6 R1191-7 R1191-8 R1191-10 <b>METRIC SERIES</b> R1084-5 R1084-5 R1084-6 R1084-8 R1084-10 R1084-10 R1084-12	206-305 206-306 206-308 206-310 106-312						
METRIC SERIE							
R4649-10 R4649-12	106-610 106-612						
SPARK PLUG SERIE R512 R513-10 R513-13 R514-6 SPARK PLUG SERIE R5326-L	<b>ES (Wire Type)</b> 414-375 414-750 414-500 418-500						
R5326-N R5326-S	2214-N 2214-S						

# THREAD KITS CO.

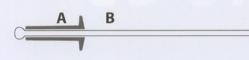
# Perma-Rivet<sup>®</sup>

**BLIND RIVETS AND TOOLS** 

## erma R

## Installation

Perma-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 faster. 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 Perma-Rivet® Part No. P60928 for countersink drilling.
- 2. Open the handle of the rivet tool and insert the rivet mandrel in the nosepiece of the tool.
- 3. Place the rivet body in the predrilled hole. Then squeeze the rivet tool handles until the rivet mandrel breaks off.

## **Rivet Materials**

In order to meet a variety of requirements for strength, corrosion and rust consideration and application materials, Perma-Rivets® are offered in specific materials and material combinations.

Туре	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 strength: 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.

## Selecting the Correct Perma-Rivet®

Thread Kits Company offers a full line of headed rivets for general consumer and industrial applications. The materials and manufacturing processes used to head rivet bodies increase their shear and tensile values over a stamped eyelet-style rivet. Perma-Rivets® are used to fasten together two or more pieces of material of varying thickness. The rivet body alloy, in addition to being chosen for strength requirements, should also be selected for compatibility with the material to be joined to avoid galvanic corrosion caused by coupling dissimilar metals.

## **Rivet Styles**



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 buttonhead, countersunk or large flange head styles

## **Closed End**

countersunk head styles.

Specially configured with a cup shaped end that forms a tight seal, Perma-Rivet® closed end rivets are much stronger than open end rivets. They are available in button head, and

## **T-Rivets**

Made for structural and high stress applications. They feature a hardened steel mandrel which splits the rivit body into a trifurcated shape. This provides high clamping strength even in thin or fragile material.

## **Head Styles**





Low profile design and neat appearance, this style is very versatile and most commonly used. The head size is twice the diameter of the rivet body. It provides enough bearing surface for all applicatons except soft or brittle material.

## Large Flange

Features twice the under-head bearing surface as the buttonhead style. It is ideal for fasteing soft or brittle materials to a rigid backing surface.

## Countersunk

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

## Displays

	121-11	Pack Display	10121		P/N P5835
Part	Code	Grip	Rivet	Display	Package
No.	No.	Range	Diameter	Quantity	Quantity
Steel Rive	et / Steel Ma	andrel			
P57438	SB4-2	1/16 - 1/8	1/8	5	25
P57442	SB4-4	3/16 - 1/4	1/8	5	20
P57446	SB4-6	5/16 - 3/8	1/8	5	15
Aluminum	n Rivet / Alu	minum Mano	drel		
P57473	AB4-2A	1/16 - 1/8	1/8	5	25
P57477	AB4-4A	3/16 - 1/4	1/8	5	20
P57480	AB4-6A	5/16 - 3/8	1/8	5	15
P57487	AB6-2A	Up to 1/8	3/16	5	15
P57488	AB6-4A	1/8 - 1/4	3/16	5	15
P57490	AB6-6A	1/4 - 3/8	3/16	5	15
Back Up	Plates				
P57660	SS-8	1/8 Hole	Steel	3	40
P57661	AS-8	1/8 Hole	Aluminum	3	30
P57662	AS-10	3/16 Hole	Aluminum	3	30
Tools					
P39000	GR12			4	

Perma-Rivet

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P5856



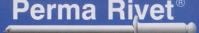
Part	Code	Grip	Rivet	Display
No.	No.	Range	Diameter	Quantit
Steel Rive	et / Steel Ma	andrel		
P59438	SB4-2	1/16 - 1/8	1/8	3
P59439	SC4-2	1/16 - 1/8	1/8	2
P59442	SB4-4	3/16 - 1/4	1/8	6
P59443	SC4-4	3/16 - 1/4	1/8	3
P59446	SB4-6	5/16 - 3/8	1/8	4
P59447	SB4-8	3/8 - 1/2	1/8	3
Aluminum	n Rivet / Alu	minum Mand	rel	
P59473	AB4-2A	1/16 - 1/8	1/8	2
P59477	AB4-4A	3/16 - 1/4	1/8	4
P59480	AB4-6A	5/16 - 3/8	1/8	2
P59488	AB6-4A	1/8 - 1/4	3/16	3
P59490	AB6-6A	1/4 - 3/8	3/16	2
Tools			1 paint has	
P39000	GR12			2

Note: Shop pack boxes contain 100 Perma-Rivets



Perma-Rivet Plastic Rivet Display P/N P58								
Part	Grip	Rivet	Display	Package				
No.	Range	Diameter	Qty.	Qty.				
P57712	.059177	5.0mm	2	25				
P57714	.118177	5.0mm	2	25				
P57715	.118236	5.0mm	2	25				
P57720	.236394	5.0mm	2	25				
P57721	.157335	6.0mm	2	25				
P57732	.157236	6.3mm	2	25				
P57735	.157236	6.3mm	2	25				
P57736	.157394	6.3mm	2	25				
P57737	.157394	6.3mm	2	25				
P57741	.315472	6.3mm	2	25				
P57747	.098197	6.6mm	2	25				
P57748	.098197	6.6mm	2	25				
P57752	.098236	7.0mm	2	25				
Tools								
P48005	KL-2 Plastic	Rivet Setter	4					

P5870



All Perma-Rivet<sup>®</sup> sizes are available in 100-piece Shop Packs and 500-piece Pro Packs. Back-up washers are available in 100-piece Shop Packs and Thrift Packs.

				ated Steel Riv Steel Mandre			inless Steel R Steel Mandre		Stainl	nless Steel F ess Steel Ma	
Rivet	Head	Grip	Code	100 pc.	500 pc.	Code	100 pc	500 pc.	Code	100 pc.	500 p
Dia	Dia	Range	No.	Shop Pack No.	Pro Pack No.	No.	Shop Pack No.	Pro Pack No.	No.	Shop Pack No.	Pro Pack
'EN END	RIVETS	110 10 1/0	SB3-2	P59435	DC0425						
3/32	3/16	Up to 1/8			P60435					1	
	3/16	1/8 to 1/4	SB3-4	P59436	P60436						
	1/4	1/32 to 1/16	SB4-1	P59437	P60437						
	1/4	1/16 to 1/8	SB4-2	P59438	P60438	SSB4-2	P59560	P60560	SSB4-2S	P59540	P6054
	.220	1/16 to 1/8	SC4-2	P59439	P60439						
	3/8	1/16 to 1/8	SBL4-2	P59440	P60440						
1/8	1/4	1/8 to 3/16	SB4-3	P59441	P60441	SSB4-3	P59561	P60561	SSB4-3S	P59541	P6054
	.220	1/8 to 3/16								C. S.	
	1/4	3/16 to 1/4	SB4-4	P59442	P60442	SSB4-4	P59562	P60562	SSB4-4S	P59542	P6054
	.220	3/16 to 1/4	SC4-4	P59443	P60443						
	3/8	3/16 to 1/4	SBL4-4	P59444	P60444						
	1/4	1/4 to 5/16	SB4-5	P59445	P60445						36.05.05
	1/4	5/16 to 3/8	SB4-6	P59446	P60446	SSB4-6	P59563	P60563	SSB4-6S	P59543	P6054
	1/4	3/8 to 1/2	SB4-8	P59447	P60447	SSB4-8	P59573	P60573	SSB4-8S	P59544	P6054
	5/16	1/16 to 1/8	SB5-2	P59448	P60448	SSB5-2	P59564	P60564	SSB5-2S	P59545	P6054
	5/16	1/8 to 3/16	SB5-3	P59449	P60449	00002	1 00004	1 00004	0000-20	1 00040	1 000-
5/32	5/16	3/16 to 1/4	SB5-4	P59450	P60450	SSB5-4	P59565	P60565	SSB5-4S	P59546	P6054
5152	5/16		SB5-6								
		1/4 to 3/8	SB3-0	P59451	P60451	SSB5-6	P59566	P60566	SSB5-6S	P59547	P6054
	5/16	3/8 to 1/2	0000	050450	D00450	00000	DEOCOZ	Deeser	0000000	D50540	DOOD
	3/8	1/16 to 1/8	SB6-2	P59453	P60453	SSB6-2	P59567	P60567	SSB6-2S	P59548	P6054
	3/8	1/8 to 1/4	SB6-4	P59454	P60454	SSB6-4	P59568	P60568	SSB6-4S	P59549	P6054
	5/8	1/8 to 1/4	SBL6-4	P59455	P60455						
	3/8	1/4 to 3/8	SB6-6	P59456	P60456	SSB6-6	P59569	P60569	SSB6-6S	P59550	P6055
	5/8	1/4 to 3/8	SBL6-6	P59457	P60457						
3/16	3/8	3/8 to 1/2	SB6-8	P59458	P60458	SSB6-8	P59570	P60570	SSB6-8S	P59551	P6055
	5/8	3/8 to 1/2	SBL6-8	P59459	P60459						
	3/8	1/2 to 5/8	SB6-10	P59460	P60460						
	5/8	1/2 to 5/8	SBL6-10	P59461	P60461						100
	3/8	5/8 to 3/4	SB6-12	P59462	P60462						ne hes
	5/8	5/8 to 3/4	SBL6-12	P59463	P60463			l contraction			
	1/2	1/16 to 1/4	SB8-4	P59464	P60464						
1/4	1/2	1/4 to 3/8	SB8-6	P59465	P60465			GRAMMET AUVET BRANCE ALUM, NUMETO	DO ALTER		
	1/2	3/8 to 1/2	SB8-8	P59466	P60466			P5	9526		
	1/2	5/8 to 3/4	SB8-12	P59467	P60467				10 10 10 10 10 10 10 10 10 10 10 10 10 1		
OSED E	ND RIVE		00012	1 00407	1 00401			100	RIVETS		
JOOLD L	.236	1/16 to 1/8					WARDEN WARDEN TO THE OWNER			Transie deserves	-
						A		Porm	a-Rivet <sup>©</sup>		
	.236	1/8 to 3/16					STOCK OF POURS	Perm	amper	Contraction of the second	
1/0	.236	3/16 to 1/4				A	Mart Load and Martinet 100 Array Mart Martinet Array	-		P59526	
1/8	.236	3/16 to 1/4				1. 2	P595				
2.712	.236	1/4 to 5/16				11.	90694 5	9526 ·	THE PLANE	100 HIVETS	
	.236	3/8 to 1/2				1 11	100 MIN	STOCK	NO P59488		
	5/16	1/16 to 1/8						OUANTT RIVET 65	TY 100		
	5/16	1/8 to 3/16				11	Perma	Rivet	P59488	rma-Rivet®	
5/32	5/16	1/8 to 3/16				1					
	5/16	1/16 to 1/4						, <b>"</b> ''	0694"59488" 5 100 HIVETS		
	5/16	3/16 to 5/16						Pe	rma-Rivet®		
	3/8	1/8 to 1/4	SB6-4CLD	P59640	P60640						
3/16	3/8	1/4 to 3/8									
	3/8	3/8 to 1/2									
4/4	1/2	1/8 to 1/4	SB8-4CLD	P59642	P60642						
1/4	1/2	1/4 to 3/8	JEC ICED								
RIVETS	174		the second second second								
	.510	1/32 to 9/64									
1/4	.510	9/64 to 3/16									
1/4	.510	9/64 to 3/16 33/64 to 5/8									

Perma-Rivet® CODE EXPLANATION - EXAMPLE: CODE NO. ABL6-4A

A BL		6	4	A	
Rivet Material	Head Style	Rivet Diameter	Max. Grip Length	Mandrel Material	
A - Aluminum S - Carbon Steel SS - Stainless Steel	B - Buttonhead BL - Buttonhead, Large Flange C - Countersunk	in 32nds of an inch 6/32 - 3/16"	in 16ths of an inch 4/16-1/4"	A - Aluminum S - Stainless Steel CLD - Closed End Blank - Steel	

## **Ordering Information**

Rivet Dia	Head Dia	Grip Range	Aluminum Rivet Aluminum Mandrel			Aluminum Rivet Steel Mandrel			Copper Rivet Steel Mandrel		
			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
OPEN EN	D RIVETS	STE DESK					a na shekara a shekar				
3/32	3/16	Up to 1/8	AB3-2A	P59470	P60470	AB3-2	P59503	P60503			
0/02	3/16	1/8 to 1/4	AB3-4A	P59471	P60471	AB3-4	P59504	P60504			
	1/4	1/32 to 1/16	AB4-1A	P59472	P60472	AB4-1	P59505	P60505			
	1/4	1/16 to 1/8	AB4-2A	P59473	P60473	AB4-2	P59506	P60506	CB4-2	P59571	P6057
	.220	1/16 to 1/8	AC4-2A	P59474	P60474	AC4-2	P59507	P60507			
	3/8	1/16 to 1/8	ABL4-2A	P59475	P60475	ABL4-2	P59508	P60508			
1/8	1/4	1/8 to 3/16	AB4-3A	P59476	P60476	AB4-3	P59509	P60509			
	.220	1/8 to 3/16				AC4-3	P59510	P60510			
	1/4	3/16 to 1/4	AB4-4A	P59477	P60477	AB4-4	P59511	P60511	CB4-4	P59572	P6057
	.220	3/16 to 1/4				AC4-4	P59512	P60512			
	3/8	3/16 to 1/4	ABL4-4A	P59478	P60478	ABL4-4	P59513	P60513			
	1/4	1/4 to 5/16	AB4-5A	P59479	P60479	AB4-5	P59514	P60514			
	1/4	5/16 to 3/8	AB4-6A	P59480	P60480	AB4-6	P59515	P60515			
	1/4	3/8 to 1/2	AB4-8A	P59481	P60481	AB4-8	P59516	P60516			
	5/16	1/16 to 1/8	AB5-2A	P59482	P60482	AB5-2	P59517	P60517			
	5/16	1/8 to 3/16	AB5-3A	P59483	P60483	AB5-3	P59518	P60518			
5/32	5/16	3/16 to 1/4	AB5-4A	P59484	P60484	AB5-4	P59519	P60519			
5152	5/16	1/4 to 3/8	AB5-6A	P59485	P60485	AB5-6	P59520	P60520			
	5/16	3/8 to 1/2	AB5-8A	P59485	P60485	AB5-8	P59520	P60520			
	3/8		AB5-0A AB6-2A	P59486 P59487	P60487	AB5-0 AB6-2	P59521	P60521			
		1/16 to 1/8	AB6-2A AB6-4A		6-1			P60522 P60523			
	3/8	1/8 to 1/4		P59488	P60488	AB6-4	P59523				
	5/8	1/8 to 1/4	ABL6-4A	P59489	P60489	ABL6-4	P59524	P60524			
	3/8	1/4 to 3/8	AB6-6A	P59490	P60490	AB6-6	P59525	P60525		STAR STAR	
	5/8	1/4 to 3/8	ABL6-6A	P59491	P60491	ABL6-6	P59526	P60526			
3/16	3/8	3/8 to 1/2	AB6-8A	P59492	P60492	AB6-8	P59527	P60527			
	5/8	3/8 to 1/2	ABL6-8A	P59493	P60493	ABL6-8	P59528	P60528			
	3/8	1/2 to 5/8	AB6-10A	P59494	P60494	AB6-10	P59529	P60529	In the second	ADDE	1.1.1.1.1.1
	5/8	1/2 to 5/8	ABL6-10A	P59495	P60495	ABL6-10	P59530	P60530			
	3/8	5/8 to 3/4	AB6-12A	P59496	P60496	AB6-12	P59531	P60531			
	5/8	5/8 to 3/4	ABL6-12A	P59497	P60497	ABL6-12	P59532	P60532			
	1/2	1/16 to 1/4	AB8-4A	P59498	P60498	AB8-4	P59533	P60533			
1/4	1/2	1/4 to 3/8	AB8-6A	P59499	P60499	AB8-6	P59534	P60534			
	1/2	3/8 to 1/2				AB8-8	P59535	P60535			
	1/2	5/8 to 3/4	AB8-12A	P59500	P60500	AB8-12	P59536	P60536			
LOSED	END RIVE	TS	and and the state of	- Biographic		and the second					
	.236	1/16 to 1/8	AB4-2ACLD	P59620	P60620	AB4-2CLD	P59590	P60590			
	.236	1/8 to 3/16				AB4-3CLD	P59604	P60604			
	.236	3/16 to 1/4	AB4-4ACLD	P59621	P60621	AD4-4CLD	P59592	P60592			
1/8	.236	3/16 to 1/4				AC4-4CLD	P59593	P60593			
	.236	1/4 to 5/16				AB4-5CLD	P59608	P60608	CB4-5CLD	P59644	P6064
	.236	3/8 to 1/2				AB4-8CLD	P59595	P60595			
	5/16	1/16 to 1/8				AB5-2CLD	P59596	P60596			
	5/16	1/8 to 3/16				AB5-3CLD	P59609	P60609			1
5/32	5/16	1/8 to 3/16				AC5-3CLD	P59607	P60607			
	5/16	1/16 to 1/4	AB5-4ACLD	P59622	P60622						
	5/16	3/16 to 5/16				AB5-5CLD	P59597	P60597			
	3/8	1/8 to 1/4	AB6-4ACLD	P59624	P60624	AB6-4CLD	P59599	P60599			
3/16	3/8	1/4 to 3/8				AB6-6CLD	P59605	P60605			
0/10	3/8	3/8 to 1/2				AB6-8CLD	P59601	P60601			
	1/2	1/8 to 1/4				AB8-4CLD	P59606	P60606	6		
1/4	1/2	1/8 to 1/4 1/4 to 3/8				AB8-6CLD	P59603	P60603			1
<b>T-RIVETS</b>		114 10 010				THE OULD	1 00000	1 00000			
	.510	1/32 to 9/64				AD8-140T	P59580	P60580			
1/4	.510	9/64 to 3/16				AD8-187T	P59581	P60581			
		0.0.100.10				1.00 1011					

BACK-UP WASHERS										
			100 pc. Pack	Thrift Pack						
Hole Size	Material	Code No.	Part No.	Part No.	Pkg./Qty.					
1/8	Steel	SS-8	P59660	P57660	40					
1/8	Aluminum	AS-8	P59661	P57661	30					
3/16	Aluminum	AS-10	P59662	P57662	30					

Back-up washers are .056" - .062" thick. They are used when fastening soft materials or to compensate for oversize holes where access to both sides of work is possible

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## <u>Perma Rivet</u>®

## **Thrift Packs**

Perma-Rivet<sup>®</sup> offers nine of the most popular size rivets, packaged in a sturdy, clear plastic, resealable clamshell. Great for do-it-yourself use.



## P57473 AB4-2A Perma-Rivet<sup>®</sup>

Grip Range: 1/16" - 1/8" Material: Aluminum

## Perma-Rivet® THRIFT PACKS - OPEN END RIVETS

				Rivet /landrel	Aluminu Aluminun		
Rivet Diameter	Head Diameter	Grip Range	Part No.	Code No.	Part No.	Code No.	Package Quantity
1/8	1/4	1/16 - 1/8	P57438	SB4-2	P57473	AB4-2A	25
	1/4	3/16 - 1/4	P57442	SB4-4	P57477	AB4-4A	20
	1/4	5/16 - 3/8	P57446	SB4-6	P57480	AB4-6A	15
3/16	3/8	Up to 1/8			P57487	AB6-2A	15
	3/8	1/8 - 1/4			P57488	AB6-4A	15
	3/8	1/4 - 3/8			P57490	AB6-6A	15



## SPECIAL APPLICATION RIVETS

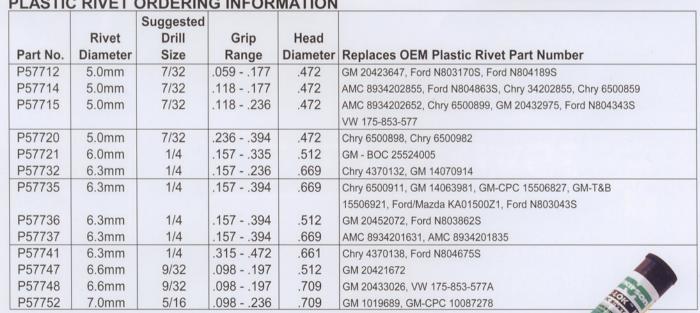
Rivet Head Diameter Diameter A			Steel Rivet Steel Mandrel P/N Code No.		Aluminum Rivet Aluminum Mandrel P/N Code No.		Aluminum Rivet Steel Mandrel P/N Code No.		Stainless Steel Rivet Steel Mandrel P/N Code No.	
SHOP PAC	:KS - 100 P	ER BOX								
1/8	1/4	Aluminum Trim Channel Rivet			P59477	AB4-4A				
1/4	.510	Window Regulator Rivet					P59580	AD8-140T		
1/4	.510	Outside Door Handle Rivet					P59581	AD8-187T		
1/4	.510	Glass Stop Rivet					P59582	AD8-620T		
5/32	5/16	Swivel Emblem Trunk Lock Rivet					P59607	AC5-3CLD		
1/4	1/2	Bumper Rivet	P59800	SB8-4038						
3/16	3/8	Bumper Fascia Rivet	P59801	SB6-6025						
1/8	13/64	Std. Aluminum Trim Clip Rivet			P59802	ABN4-3A				
1/8	13/64	Long Aluminum Trim Clip Rivet			P59803	ABN4-4A				
1/8	13/64	Std. Stainless Trim Clip Rivet							P59804	SSBN4-3
1/8	.318	Rear Window Gasket Rivet					P59805	ABL4-3318		
1/8	1/4	Multi Purpose Rivet					P59806	ABL4-3		
PRO PAC	(S - 500 PE	RBOX								
1/8	1/4	Aluminum Trim Channel Rivet			P60477	AB4-4A	1			
1/4	.510	Window Regulator Rivet					P60580	AD8-140T		
1/4	.510	Outside Door Handle Rivet					P60581	AD8-187T		
1/4	.510	Glass Stop Rivet					P60582	AD8-620T		
5/32	5/16	Swivel Emblem Trunk Lock Rivet		A DE ANTA			P60607	AC5-3CLD		
1/4	1/2	Bumper Rivet	P60800	SB8-4038						
3/16	3/8	Bumper Fascia Rivet	P60801	SB6-6025						
1/8	13/64	Std. Aluminum Trim Clip Rivet			P60802	ABN4-3A			510	1.1
1/8	13/64	Long Aluminum Trim Clip Rivet			P60803	ABN4-4A			CTT DE L	
1/8	13/64	Std. Stainless Trim Clip Rivet							P60804	SSBN4-3
1/8	.318	Rear Window Gasket Rivet					P60805	ABL4-3318		
1/8	1/4	Multi Purpose Rivet					P60806	ABL4-3		

## Plastic Perma-Rivets<sup>®</sup>

Plastic Perma-Rivets® are the same precision-moulded allnylon rivets used on today's automobiles, both for original equipment and replacement parts. They are ideal for nonconductive and non-corrosive environments. Plastic Perma-Rivets® fasten plastic-to-plastic, plastic-to-metal and plastic-to-fiberglass. As they set, three "legs" form to securely lock the components in place and prevent pullout, leaving an attractive finished appearance.

- Precision-moulded, all-nylon
- Secure lock prevents pull-out
- Fasten plastic-to-plastic, plastic-tometal or plastic-to-fiberglass





### PLASTIC RIVET ORDERING INFORMATION

## KL-2 Plastic Rivet Setter / P48005



This long-reach tool is exactly what is needed for today's hard to reach spots, especially in automotive applications such as flexible bumpers, wheel wells, license plate brackets and bumper reinforcements. In addition to the tool's long reach, it offers one-stroke setting and a universal nosepiece that sets all plastic rivets.





The GR-12 is our most popular rivet tool providing both quality and durability. The high leverage handles are designed to have superior pulling power along with it easy one hand operation. The GR-12 sets rivets up to 3/16" diameter and comes with four interchangeable nosepieces (3/32", 1/8", 5/32", 3/16") and wrench. Replacement jaws sold separate.

## Pivot-Head S401 / P39005

The S401 Pivot-Head rivet tool features a 360° rotating head designed for easy access to hard to reach applications. This patented tool is constructed of hardened steel and cast aluminum for longer life. The S401 also includes builtin threaded nosepiece storage holes and a service wrench. The S401 sets up to 3/16" steel rivets. Replacement jaws sold separate.



H1 / P39010

The H1 professional grade rivet tool is our most powerful hand riveter, taking the hard work out of setting large diameter blind rivets. With its unique collapsible handle design, the H1 handles extend to to provide excellent leverage and permits working a foot beyond natural reach. The H1 easily sets from 1/8" to 1/4" diamter Perma-Rivets in all alloys. Furnished with standard nosepieces to set up to 1/4", wrendhes and plastic storage case. Replacement parts sold separate.

## TC702 / P39040

The TC702 is a perfect medium-duty tool for the do-it-yourselfer or occasional user, setting all 1/8" - 5/32" steel, and 3/16" all aluminum Perma-Rivets. Nosepieces and wrench included. No replacement parts available.

