

TIME-SERT®

SCREW THREAD INSERTS



TIME-SERT®

PROFESSIONAL THREAD REPAIR SYSTEM
SCREW THREAD INSERTS AMERICAN & METRIC SIZES

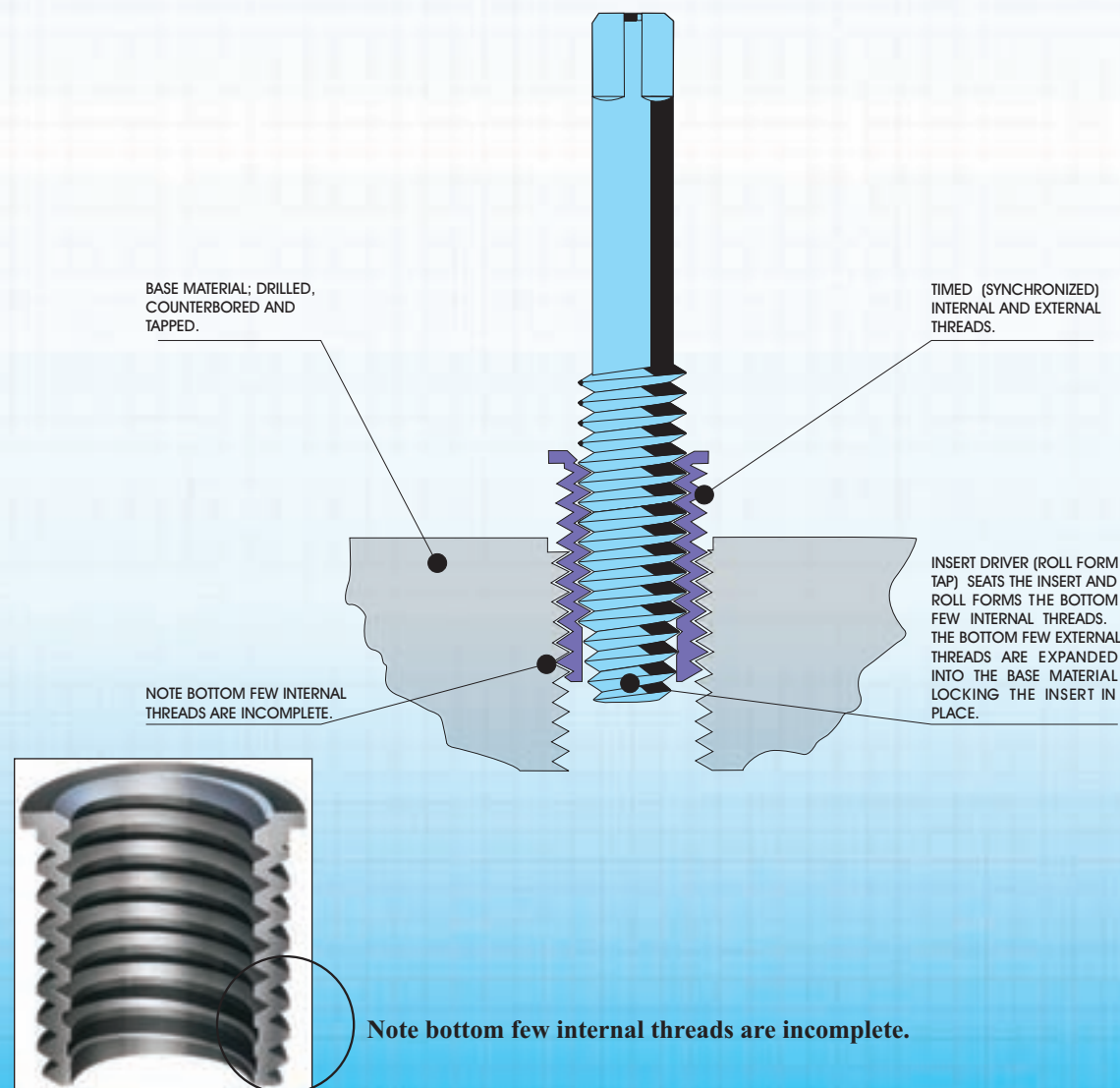
ADVANTAGES WHICH ARE CONVINCING:

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® 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® 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.



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 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 Inch Taps M5 to M12 Time-Sert taps M5 - M11 wrench number T12 P/N C67209

SCREW EXTRACTORS



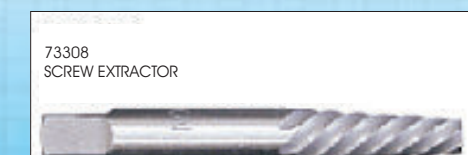
Removes broken bolts 5/8 to 7/8. If removing a Time-Sert insert, this tool will remove inserts from 1/2 to 9/16 inch or 12mm to 14mm metric.



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.

USEFUL TOOLS

TAP GUIDES



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



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.

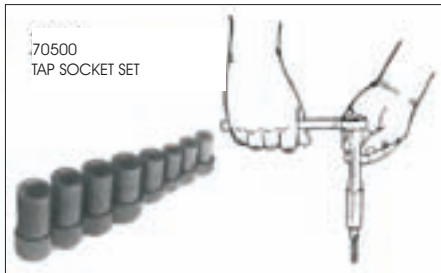
AMERICAN TAP GUIDES

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

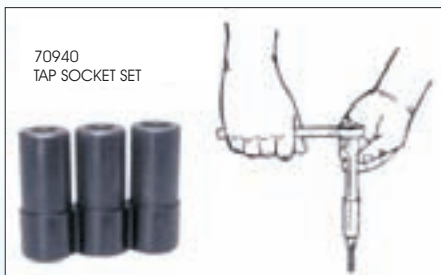
METRIC TAP GUIDES

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

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". Also fits 1/8" NPT taps and metric tap thru 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.

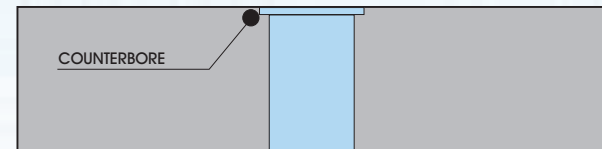
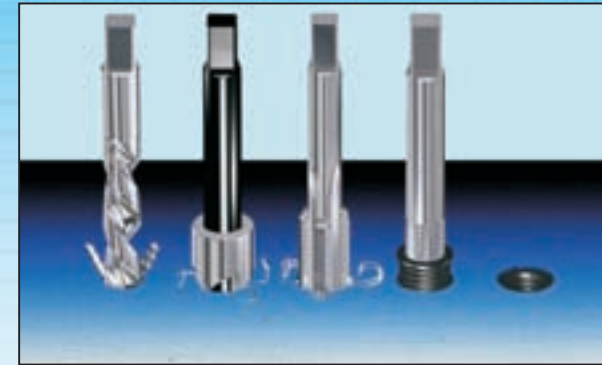


Lightweight, Compact, LED Light. Depress the pocket clip to illuminate. The bright LED bulb lasts up to 100,000 hours. Comes equipped with 2 common replaceable 3 volt batteries, CR2016. Overall length 4 1/2".



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

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 equivalent.

TAPER PIPE

INSERT	DRILL	C.BORE	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 90° CSK	.942
3/4-14	1 3/32	1.093	1.300 90° CSK	1.194

INCH

INSERT	DRILL	C.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
5/16 - 18	21/64	.328	.430 .085	.388
5/16 - 24	P	.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
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	DRILL	C.BORE	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	P	.323	.409 .080	.369
M8 x 1.25	P	.323	.419 .080	.381
M9 x 1.25	U	.368	.440 .080	.422
M10 x 1.0	13/32	.406	.466 .080	.349
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)

MINI MASTER

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

INCH

METRIC

INCH

METRIC

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 PART NO. 0010	CARBON STEEL PART NO. 0020	CARBON STEEL PART NO. 1000	CARBON STEEL PART NO. 1001
STAINLESS STEEL PART NO. 0011	STAINLESS STEEL PART NO. 0021	STAINLESS STEEL PART NO. 1002	STAINLESS STEEL PART NO. 1003

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 STEEL PART NO. 1208

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 <i>BSBP Honda Motors</i>	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.

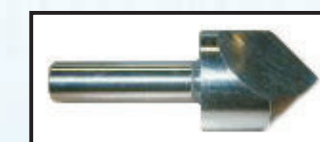
Time-Sert does sell these tools separately if needed.

90 degree CounterSink for the 1/2-14 taper pipe kit p/n 22145.

Description: 90 degree countersink 1" diameter

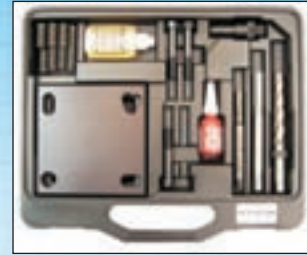
90 degree CounterSink for the 3/4-14 taper pipe kit p/n 24145.

Description: 90 degree countersink 1 1/2 " diameter



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.

METRIC 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

METRIC KITS		INSERT LENGTH		INSERTS	
SIZE	PART NO.	MM	INCHES	CARBON STEEL PART NO.	STAINLESS STEEL PART NO.
M3x0.5	1305	4.3	.169	13051	13052
		6.0	.240	13053	13054
M4x0.7	1407	4.0	.157	14077	—
		6.0	.240	14071	14072
		8.0	.320	14073	14074
M5x0.8	1508	7.6	.300	15081	15082
		10.0	.400	15083	15084
		12.0	.470	15085	—
M6x1.0	1610	8.0	.315	16105	16106
		9.4	.370	16101	16102
		12.0	.470	16103	16104
		17.0	.669	16107	—
		19.0	.748	16109	—
M7x1.0	1710	10.0	.400	17101	—
		14.0	.550	17103	—
M8x1.0	1810	7.5	.295	18100	—
		11.7	.460	18101	—
M8x1.25	1812	8.0	.315	—	18128
		9.0	.360	181210	—
		11.7	.460	18121	18122
		14.0	.550	18129	—
		16.2	.640	18123	18124
		18.0	.708	18127	—
M8x1.75 GM Rare	1817	16.2	.640	18173	—
M9x1.25	1912	13.0	.510	19121	—
		18.0	.710	19123	—
		22.0	.866	19127	—
M10x1.0	1010	6.2	.244	10100	—
		8.0	.315	10105	—
		9.0	.360	10101	—
		15.0	.600	10103	—
M10x1.25	1012	9.0	.354	10127	—
		14.0	.550	10121	10122
		16.2	.650	10123	—
		20.0	.800	10125	10126
		25.0	.984	10129	—
M10x1.5	1015	9.4	.370	10157	—
		11.0	.433	101511	—
		14.0	.550	10151	10152
		17.0	.669	101517	—
		20.0	.800	10153	10154
		22.0	.866	101522	—
		24.5	.960	10155	—
M11x1.25	1112	22.0	.870	11123	—
		28.0	1.100	11121	—
M11x1.5	1115	16.0	.630	11151	—
		22.0	.870	11153	—
		30.0	1.180	11155	—

Bold text are insert lengths supplied in kits

METRIC KITS		INSERT LENGTH		INSERTS	
SIZE	PART NO.	MM	INCHES	CARBON STEEL PART NO.	STAINLESS STEEL PART NO.
M12x1.25	1212	9.0	.360	12121	—
		11.0	.430	12129	—
		15.0	.600	12123	12124
		24.0	.950	12125	12126
M12x1.5	1215	6.7	.263	12157	—
		9.2	.360	12151	—
		16.2	.640	12153	12152
		24.0	.950	12155	12154
		30.0	1.180	12159	12160
M12x1.75	1217	10.0	.400	12177	—
		12.0	.472	12170	—
		16.2	.640	12171	12172
		24.0	.950	12173	12174
		30.0	1.180	12179	—
M13x1.5	1315	14.0	.551	13151	—
		19.0	.748	13153	—
		24.0	.950	13155	—
		28.0	1.102	13157	—
M14x1.5	1415	6.6	.260	14151	—
		9.4	.370	14153	—
		12.7	.500	14155	—
		17.8	.700	14157	—
		24.0	.950	14158	—
		28.0	1.100	14159	—
M14x2.0	1420	12.0	.472	14201	—
		18.0	.710	14203	—
		24.0	.950	14205	—
		30.0	1.180	14207	—
M16x1.5	1615	7.0	.270	16151	—
		12.7	.500	16153	—
		24.0	.950	16155	—
M16x2.0	1620	16.0	.630	16200	16202
		24.0	.950	16201	16204
		32.0	1.250	16203	16206
M18x1.5	1815	10.0	.400	18151	—
		18.3	.720	18153	—
		27.0	1.060	18155	—
M20x1.5	2015	9.0	.354	20150	—
		12.0	.472	20151	—
		17.0	.669	20153	—
		30.0	1.180	20155	—
M22x1.5	2215C	10.0	.400	22151	—
		15.0	.590	22153	—
		20.0	.800	22155	—
M24x1.5	2415C	7.6	.300	24150	—
		10.0	.400	24151	—
		15.0	.590	24153	—
		20.0	.800	24155	—
		30.0	1.200	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

INCH KITS	PART NO.	INSERT LENGTH		INSERTS	
		INCHES	MM	CARBON STEEL	STAINLESS STEEL
4-40	0440	.200	5.0	04401	04402
6-32	0632	.250	6.3	06321	06322
8-32	0832	.250 .320	6.3 8.0	08321 08323	08322 08324
10-24	0024	.240 .300 .370	6.1 7.6 9.4	00240 00241 00243	00246 00242 00244
10-32	0032	.240 .300 .370	6.1 7.6 9.4	00320 00321 00323	— 00322 00324
12-24	0124	.300 .370 .472	7.6 9.4 12.0	01241 01243 01245	01242 01244 01246
1/4-20	0140	.280 .380 .500	7.1 9.4 12.7	01400 01401 01403	— 01402 01404
1/4-28	0148	.280 .380 .500	7.1 9.4 12.7	01480 01481 01483	01486 01482 01484
5/16-18	0561	.350 .450 .620 .750	8.9 11.4 15.7 19.0	05610 05611 05613 05615	— 05612 05614 —
5/16-24	0562	.350 .450 .620 .750	8.9 11.4 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 13.2 15.7 19.0 22.8 25.4 30.4	03818 03819 03811 03813 03815 038190 03810 03817	038182 038192 03812 03814 03816 — 038102 —
3/8-24	0382	.300 .350 .520 .750	7.6 8.9 13.2 19.0	— 03825 03821 03823	03820 — 03822 03824

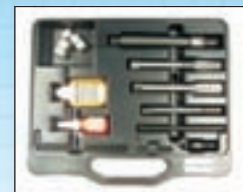
Bold text are insert lengths supplied in kits

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

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. 11110
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 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



Kit Part No. 2415C
Insert Part No. 24150

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

M6x1.0 Extended kit



This tooling has no counterbore.
The hole must be at least 8mm or .315 inches for the tap to access the hole
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



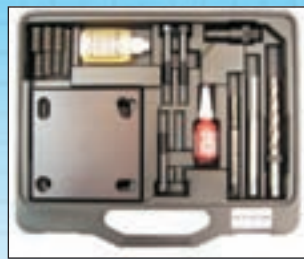
The core drill included will allow a 16.2mm length insert to be installed deeper than the standard kit.
Kit Includes
Core drill, tap, driver,
5 inserts of the no flange
16.2mm length.
Kit Part number 1812ECORE

MANUFACTURER KITS

DRAIN PAN APPLICATIONS

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

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 Insert P/N 11155
J-42385-871 Bushing

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 Commodore 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



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



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

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 number12121

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

M14x1.5 Volkswagen, Chrysler...

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

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



Drain Pans Kits

SPARK PLUG KITS



4412
Standard repair



4412E
Deep hole repair

Spark plug kits do not contain inserts, order separately.

KIT CONTENTS
Step Tap
Wrench
Seat Cutter
Insert driver

SPARK PLUG TYPES		WASHER SEAT		TAPER SEAT					
		Washer seat spark plugs seal with a washer on plug.		Sealer must be used when installing taper seat inserts.					
KIT SIZE		PART NO.		LENGTH MM		INCHES		PART NO.	
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		4212		9.0		.360		42121	
				15.0		.600		42123	
				17.5		.690		42125	
M14 X 1.25 Standard Kit		4412		7.0		.270		44121	
				8.0		.320		44123	
				9.4		.370		44125	
M14 X 1.25 Deep Hole Kit		4412E		11.0		.430		44127	
				13.5		.530		44113	
				15.0		.600		44129	
				16.8		.660		44111	
				23.0		.905		44112	
M18 X 1.5		4815		10.0		.400		48151	
				18.3		.720		48153	
7/8-18		4718		11.0		.430		47181	
				20.0		.780		47183	
				24.5		1.000		47185	

M14x1.25 Aluminum Inserts	WASHER SEAT		PART NO.	TAPER SEAT		PART NO.
	MM	INCHES		MM	INCHES	
Aluminum Inserts <i>For kits 4412 & 4412E</i>	7.0	.270	44121A	7.0	.270	44181A
	8.0	.320	44123A	10.0	.400	44183A
	9.4	.370	44125A	13.5	.530	44184A
	11.0	.430	44127A	15.7	.620	44185A
	13.5	.530	44113A	16.8	.660	44186A
	15.0	.600	44129A	24.0	.950	44187A
	16.8	.660	44111A			
	23.0	.905	44112A			

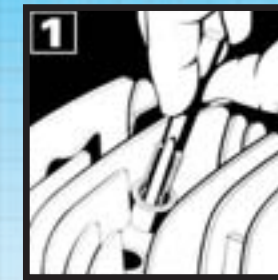
SPARK PLUG THREAD REPAIR

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.



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



2 Use the wrench provided, place wrench over tap and tap new threads. Continue to tap through until the cutting edges are approximately 1/4 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.



3 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.

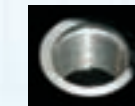
This operation is the same for the taper seat inserts.



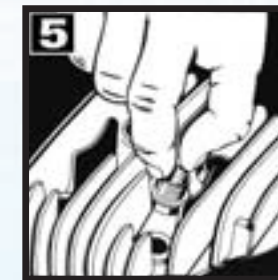
4 Using the wrench rotate the seat cutter. After a few turns lift the seat cutter to inspect the seat. Repeat operation until the seat is completely cleaned up. Remove the step tap from the hole.



Good Seat Complete



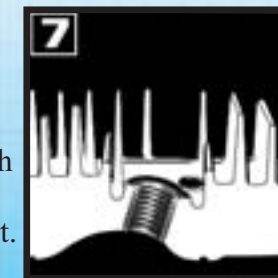
Bad Seat incomplete



5 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. Screw the insert onto the driver then into the prepared hole.



6 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.



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

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



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



SEALER

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



INSERT DRIVER OIL

This oil is superior for installing inserts. PART NO. 6010



COPPER ANTI- SEIZE

Recommended for use on spark plug with aluminum insert. PART NO. 37229



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

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