

Precision THREAD

helical thread inserts



A quick, easy solution that saves you time & money

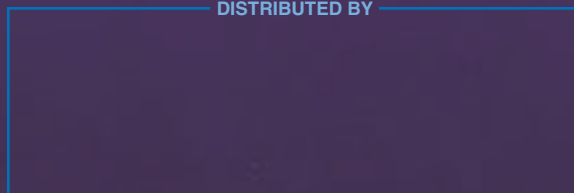
CHRISLYNN

HELICAL

INSERTS

PRECISION

DISTRIBUTED BY



Materials Available

- 18-8 Stainless (Standard)
- Phosphor Bronze
- X 750 Inconel
- 316 Stainless



Precision thread helical inserts meet or exceed most applicable specifications, including: **MS 122076 series, 124651 series, 21208, 21209, 33537, Mil-1-8846 and Mil-F-5577.**

Precision Thread Helical Inserts

The Precision insert system was devised as a simple method of repairing stripped or damaged threads in any metal or valuable parts. Inserts are also used in new products such as die castings or plastics, where excessive stress on threads could cause damage or failure.

Precision inserts are helical coils of diamond shaped 18-8 stainless steel wire which meets or exceeds AMS-7245 specification. Inserts are sized to provide a precisely controlled interference fit in an oversized tapped hole. The tap used

for this purpose is the same pitch as the original thread, but has a larger diameter. When the insert is installed, the hole is returned to its original size.

Because the insert provides an enlarged bearing area, the restored fastening is stronger than the original. It is also more durable, since the stainless steel thread is generally tougher than the original material. Precision inserts are corrosion resistant and their 22-microinch or better surface finish provides a smooth-running, wear-resistant fastening.



Why Precision Thread Helical Inserts?

Precision inserts are used when alternate methods of repairing a threaded hole are inconvenient, impractical or impossible. The Precision system is much easier than plugging a damaged hole with weld bead, redrilling and tapping. It's usually more practical than using an oversized bolt.

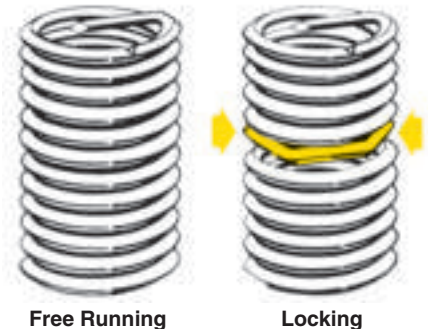


Compensation effect corrects angle and pitch error

Replacement of the entire damaged part could well be impossible as well as costly and time-consuming.

While the Precision insert offers an expedient solution to an immediate problem, its benefits don't end there. Almost all threaded fasteners contain minor errors in pitch of threaded form which tend to concentrate the load on some threads. The free coils of the helical thread insert can flex to accommodate form and pitch variations, thus distributing the load most efficiently over all threads.

Precision inserts are made in all standard thread sizes and in two basic types...free-running and locking. The locking type features a crimped turn which provides an exceptionally strong grip on the mating bolt. Locking inserts can be used to eliminate the need for lock washers or other locking devices.



The design is particularly recommended for applications which require a constant locking torque.

The Precision system is supplied with easy-to-use tooling which facilitates installation in almost any location. The taps, inserts and tools are interchangeable with other helical insert systems.

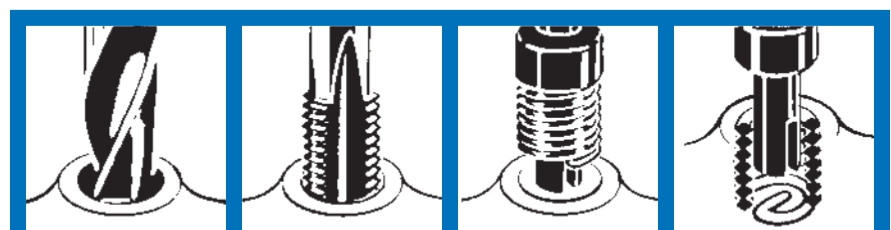
Simple Installation

The first step in creating a new, stronger thread is cleaning up the original, damaged threads. This is done with a standard drill, the size of which is indicated on the Precision package. The hole is then tapped with an oversize (STI)* tap provided in each kit. Kits do not include drills. Drills are available through your Precision Helical Thread Insert distributor. The free diameter of the Precision insert is larger than the new threaded hole, but it is easily "wound" into place with the inserting tool provided.

Once in place, the insert tends to spring back to its original diameter, giving it a

very strong grip in the hole. Finally, the driving tang is broken off by tapping downward with the end of the inserting

tool. If necessary, inserts can be removed, using one of the extracting tools shown on page eight of this brochure.



Drill

Tap

Install

Tang Removal

Precision THREAD

Thread Repair Sets

NOTE: All kits contain tap, tool, and inserts. Drills not included.



Master Range Kit



Single Repair Kit

AMERICAN

Mini Kits				Order No.
UNC	6-32	8-32	10-24	87902
UNF	6-40	8-36	10-32	87903
UNC	1/4-20	5/16-18	3/8-16	87900
UNF	1/4-28	5/16-24	3/8-24	87901

METRIC

Mini Kits			Order No.
M4x.7	M5x.8	M6x1	87905
M6x1	M8x1	M10x1	87906
M8x1.25	M10x1.5	M12x1.75	87907

Master Kits			Order No.
UNC	1/4-20	5/16-18	87910
3/8-16	7/16-14	1/2-13	
UNF	1/4-28	5/16-24	87911
3/8-24	7/16-20	1/2-20	

Master Kits			Order No.
COARSE	M5x.8	M6x1	87915
M8x1.25	M10x1.5	M12x1.75	
FINE	M8x1	M10x1	87916
M10x1.25	M11x1	M12x1.5	

Big Boy Kits			Order No.
UNC	5/8-11	3/4-10	87912
UNF	5/8-18	3/4-16	87913

Big Boy Kits			Order No.
M14x2	M16x2	M18x2.5	87917
M14x1.5	M16x1.5	M18x1.5	87918



Total Kit - Combination

Total Kit American	Order No.
WITHOUT LOCK	87923
WITH LOCK	87925

Contains:

- 1 - 87910 Master Kit
- 1 - 87911 Master Kit
- 1 - 87912 Big Boy Kit
- 1 - 87913 Big Boy Kit

Total Kit Metric	Order No.
WITHOUT LOCK	87927
WITH LOCK	87929

Contains:

- 1 - 87915 Master Kit
- 1 - 87916 Master Kit
- 1 - 87917 Big Boy Kit
- 1 - 87918 Big Boy Kit

Total Kit Combination	Order No.
WITHOUT LOCK	87920
WITH LOCK	87924

Contains:

- 1 - 87910 Master Kit
- 1 - 87911 Master Kit
- 1 - 87915 Master Kit
- 1 - 87916 Master Kit

Single-Size Repair Kits

NOTE: All kits contain tap, tool, and inserts. Drills not included.

UNC

Size	Single Size Kit	Inserts Per Kit	REPLACEMENT PARTS			
			HSS Tap	Insert Package	Installation Tool	Drill Size
2 - 56	82100	12	86100	83100	87000	$3/32$
3 - 48	82102	12	86102	83102	87002	36
4 - 40	82104	12	86104	83104	87004	31
5 - 40	82106	12	86106	83106	87006	29
6 - 32	82108	12	86108	83108	87008	25
8 - 32	82110	12	86110	83110	87010	$11/64$
10 - 24	82112	12	86112	83112	87012	$13/64$
12 - 24	82114	12	86114	83114	87014	$15/64$
$1/4$ - 20	82116	12	86116	83116	87016	$17/64$
$5/16$ - 18	82118	10	86118	83118	87018	$21/64$
$3/8$ - 16	82120	10	86120	83120	87020	$25/64$
$7/16$ - 14	82122	6	86122	83122	87022	$29/64$
$1/2$ - 13	82124	6	86124	83124	87024	$17/32$
$1/2$ - 12	82125	6	86125	83125	87024	$17/32$
$9/16$ - 12	82127	6	86127	83127	87027	$19/32$
$5/8$ - 11	82129	6	86129	83129	87029	$21/32$
$3/4$ - 10	82131	4	86131	83131	87031	$25/32$
$7/8$ - 9	82133	4	86133	83133	87033	$29/32$
1 - 8	82135	4	86135	83135	87035	$11/32$
$11/8$ - 7	82138	4	86138	83138	87038	$15/32$
$11/4$ - 7	82140	4	86140	83140	87040	$19/32$
$13/8$ - 6	82142	4	86142	83142	87041	$113/32$
$11/2$ - 6	82144	4	86144	83144	87043	$117/32$

METRIC - COARSE

Size	Single Size Kit	Inserts Per Kit	REPLACEMENT PARTS			
			HSS Tap	Insert Package	Installation Tool	Drill Size
M2x0.4	82150	12	86150	83150	87050	45
M2.2x0.45	82151	12	86151	83151	87000	42
M2.5x0.45	82152	12	86152	83152	87003	37
M3x0.5	82153	12	86153	83153	87053	$1/8$
M3.5x0.6	82154	12	86154	83154	87054	27
M4x0.7	82155	12	86155	83155	87010	$11/64$
M5x0.8	82156	12	86156	83156	87013	$13/64$
M6x1	82157	12	86157	83157	87016	$1/4$
M7x1	82158	12	86158	83158	87018	$9/32$
M8x1.25	82160	10	86160	83160	87019	$21/64$
M9x1.25	82162	10	86162	83162	87020	$3/8$
M10x1.5	82165	10	86165	83165	87021	$13/32$
M11x1.5	82168	6	86168	83168	87022	$29/64$
M12x1.75	82171	6	86171	83171	87024	$31/64$
M14x2	82173	6	86173	83173	87027	$37/64$
M16x2	82175	6	86175	83175	87029	$21/32$
M18x2.5	82178	5	86178	83178	87031	$47/64$
M20x2.5	82181	5	86181	83181	87032	$13/16$
M22x2.5	82184	4	86184	83184	87033	$57/64$
M24x3	82187	4	86187	83187	87035	$31/32$

UNF

Size	Single Size Kit	Inserts Per Kit	REPLACEMENT PARTS			
			HSS Tap	Insert Package	Installation Tool	Drill Size
3 - 56	82103	12	86103	83103	87003	37
4 - 48	82105	12	86105	83105	87005	31
6 - 40	82109	12	86109	83109	87009	25
8 - 36	82111	12	86111	83111	87010	17
10 - 32	82113	12	86113	83113	87013	$13/64$
$1/4$ - 28	82117	12	86117	83117	87016	$17/64$
$5/16$ - 24	82119	10	86119	83119	87019	$21/64$
$3/8$ - 24	82121	10	86121	83121	87021	$25/64$
$7/16$ - 20	82123	6	86123	83123	87024	$29/64$
$1/2$ - 20	82126	6	86126	83126	87027	$33/64$
$9/16$ - 18	82128	6	86128	83128	87029	$37/64$
$5/8$ - 18	82130	6	86130	83130	87031	$41/64$
$3/4$ - 16	82132	4	86132	83132	87032	$49/64$
$7/8$ - 14	82134	4	86134	83134	87035	$57/64$
1 - 12	82136	4	86136	83136	87038	$11/64$
1 - 14	82137	4	86137	83137	87038	$11/64$
$11/8$ - 12	82139	4	86139	83139	87039	$15/32$
$11/4$ - 12	82141	4	86141	83141	87041	$19/32$
$13/8$ - 12	82143	4	86143	83143	87043	$113/32$
$11/2$ - 12	82145	4	86145	83145	87044	$117/32$

METRIC - FINE

Size	Single Size Kit	Inserts Per Kit	REPLACEMENT PARTS			
			HSS Tap	Insert Package	Installation Tool	Drill Size
M8x1	82159	10	86159	83159	87019	$21/64$
M9x1	82161	10	86161	83161	87020	$3/8$
M10x1	82163	10	86163	83163	87022	$13/32$
M10x1.25	82164	10	86164	83164	87021	$13/32$
M11x1	82166	6	86166	83166	87024	$7/16$
M11x1.25	82167	6	86167	83167	87024	$29/64$
M12x1.25	82169	6	86169	83169	87024	$31/64$
M12x1.5	82170	6	86170	83170	87024	$31/64$
M14x1.5	82172	6	86172	83172	87027	$9/16$
M16x1.5	82174	6	86174	83174	87031	$21/32$
M18x1.5	82176	5	86176	83176	87032	$23/32$
M18x2	82177	5	86177	83177	87031	$23/32$
M20x1.5	82179	5	86179	83179	87033	$13/16$
M20x2	82180	5	86180	83180	87033	$13/16$
M22x1.5	82182	4	86182	83182	87035	$57/64$
M22x2	82183	4	86183	83183	87035	$57/64$
M24x1.5	82185	4	86185	83185	87038	$31/32$
M24x2	82186	4	86186	83186	87035	$31/32$
M26x1.5	82187X	4	86187X	83187X	87038	$13/64$
M27x1.5	82188	4	86188	83188	87038	$15/64$
M27x2	82189	4	86189	83189	87038	$13/32$
M27x3	82190	4	86190	83190	87038	$13/32$

All kits and insert packages contain inserts that are $11/2$ times the diameter of the insert.

Giant Metric

NEW

NOTE: All kits contain tap, tool, and inserts. Drills not included.

KITS

Thread Size	Kit Number	Insert Quantity
M28x1.5	82191	4
M30x1.5	82192	4
M30x2	82193	4
M30x3.5	82194	4
M33x2	82195	4
M33x3.5	82196	4
M34x1.5	82197	4
M36x1.5	82198	4
M36x2	82199	4
M36x3	82200	4
M36x4	82201	4
M39x4	82202	4
M42x3	82206	4
M42x4.5	82203	4
M45x4.5	82204	2
M48x3	82209	2
M52x3	82210	2
M52x5	82215	2
M54x3	82211	2
M56x4	82208	2
M64x3	82213	2
M64x4	82212	2

REPLACEMENT PARTS

Insert Part Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
83191	87039	86191	81090	1 ¹ / ₈
83192	87040	86192	81092	1 ¹³ / ₆₄
83193	87040	86193	81092	1 ¹³ / ₆₄
83194	87039	86194	81094	1 ⁷ / ₃₂
83195	87041	86195	81095	1 ²¹ / ₆₄
83196	87041	86196	81096	1 ¹¹ / ₃₂
83197	87043	86197	81097	1 ²³ / ₆₄
83198	87043	86198	81098	1 ⁷ / ₁₆
83199	87045	86199	81098	1 ⁷ / ₁₆
83200	87043	86200	81099	1 ²⁹ / ₆₄
83201	87042	86201	81060	1 ¹⁵ / ₃₂
83202	87044	86202	N/A	1 ³⁷ / ₆₄
83206	87046	86206	81061	1 ¹¹ / ₁₆
83203	87046	86203	81061	1 ¹¹ / ₁₆
83204	87047	86204	81062	1 ¹³ / ₁₆
83209	87048	86209	81062	1 ¹⁵ / ₁₆
83210	87309	86210	81210	2 ³ / ₃₂
83215	87309	86215	81215	2 ³ / ₃₂
83211	87309	86211	81211	2 ⁵ / ₃₂
83208	87310	86208	81208	2 ¹ / ₄
83213	87312	86213	81213	2 ⁹ / ₁₆
83212	87312	86212	81212	2 ⁹ / ₁₆

Giant "8" Pitch

NEW

Thread Size	Kit Number	Insert Quantity
1 ¹ / ₈ -8	82301	4
1 ¹ / ₄ -8	82302	4
1 ³ / ₈ -8	82303	4
1 ¹ / ₂ -8	82304	2
1 ⁵ / ₈ -8	82305	2
1 ³ / ₄ -8	82306	2
1 ⁷ / ₈ -8	82307	2
2-8	82308	2
2 ¹ / ₈ -8	82309	2
2 ¹ / ₄ -8	82310	2
2 ³ / ₈ -8	82311	2
2 ¹ / ₂ -8	82312	2
2 ⁵ / ₈ -8	82313	2
2 ³ / ₄ -8	82314	2
2 ⁷ / ₈ -8	82315	2
3-8	82316	1
3 ¹ / ₈ -8	82317	1
3 ¹ / ₄ -8	82318	1
3 ³ / ₈ -8	82319	1
3 ¹ / ₂ -8	82320	1

Insert Part Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
83301	87301	86301	81101	1 ⁹ / ₆₄
83302	87302	86302	81086	1 ¹ / ₄
83303	87303	86303	81103	1 ³ / ₈
83304	87304	86304	81104	1 ¹ / ₂
83305	87305	86305	NA	1 ⁵ / ₈
83306	87306	86306	NA	1 ³ / ₄
83307	87307	86307	NA	1 ⁷ / ₈
83308	87308	86308	NA	2
83309	87309	86309	NA	2 ¹ / ₈
83310	87310	86310	NA	2 ¹ / ₄
83311	87311	86311	NA	2 ³ / ₈
83312	87312	86312	NA	2 ¹ / ₂
83313	87313	86313	NA	2 ⁵ / ₈
83314	87314	86314	NA	2 ³ / ₄
83315	87315	86315	NA	2 ⁷ / ₈
83316	87316	86316	NA	3
83317	87317	86317	NA	3 ¹ / ₈
83318	87318	86318	NA	3 ¹ / ₄
83319	87319	86319	NA	3 ³ / ₈
83320	87320	86320	NA	3 ¹ / ₂



UNC KITS - LEFT

Thread Size	Kit Number	Insert Quantity
1/4-20	82116LH	8
5/16-18	82118LH	8
3/8-16	82120LH	8
7/16-14	82122LH	6
1/2-13	82124LH	6
5/8-11	82129LH	4
3/4-10	82131LH	4
7/8-9	82133LH	4
1-8	82135LH	4

REPLACEMENT PARTS

Insert Part Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
83116LH	87116LH	86116LH	81016	17/64
83118LH	87118LH	86118LH	81018	21/64
83120LH	87120LH	86120LH	81020	25/64
83122LH	87122LH	86122LH	81022	29/64
83124LH	87124LH	86124LH	81024	17/32
83129LH	87129LH	86129LH	81080	21/32
83131LH	87131LH	86131LH	81032	25/32
83133LH	87133LH	86133LH	81033	29/32
83135LH	87135LH	86135LH	81035	11/32

UNF KITS - LEFT

Thread Size	Kit Number	Insert Quantity
1/4-28	82117LH	8
5/16-24	82119LH	8
3/8-24	82121LH	8
7/16-20	82123LH	6
1/2-20	82126LH	6
5/8-18	82130LH	4
3/4-16	82132LH	4
7/8-14	82134LH	4
1-14	82137LH	4

REPLACEMENT PARTS

Insert Part Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
83117LH	87117LH	86117LH	81016	17/64
83119LH	87119LH	86119LH	81018	21/64
83121LH	87121LH	86121LH	81020	25/64
83123LH	87123LH	86123LH	81022	29/64
83126LH	87126LH	86126LH	81021	33/64
83130LH	87130LH	86130LH	81025	41/64
83132LH	87132LH	86132LH	81027	49/64
83134LH	87134LH	86134LH	81034	57/64
83137LH	87137LH	86137LH	81036	11/64

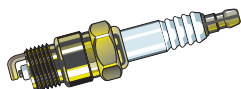
METRIC KITS - LEFT

Thread Size	Kit Number	Insert Quantity
M6x1	82157LH	10
M8x1	82159LH	10
M8x1.25	82160LH	10
M10x1.25	82164LH	8
M10x1.5	82165LH	8
M12x1.25	82169LH	8
M12x1.75	82171LH	8
M14x1.5	82172LH	8
M14x2	82173LH	8
M16x1.5	82174LH	6
M16x2	82175LH	6
M18x1.5	82176LH	6
M18x2.5	82178LH	6
M20x1.5	82179LH	4
M20x2.5	82181LH	4
M22x1.5	82182LH	4
M24x2	82186LH	2
M24x3	82187LH	2

REPLACEMENT PARTS

Insert Part Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
83157LH	87116LH	86157LH	81064	1/4
83159LH	87119LH	86159LH	81018	21/64
83160LH	87119LH	86160LH	81018	21/64
83164LH	87121LH	86164LH	81072	13/32
83165LH	87121LH	86165LH	81072	13/32
83169LH	87124LH	86169LH	81076	31/64
83171LH	87124LH	86171LH	81076	31/64
83172LH	87127LH	86172LH	81077	9/16
83173LH	87127LH	86173LH	81023	37/64
83174LH	87131LH	86174LH	81080	21/32
83175LH	87129LH	86175LH	81080	21/32
83176LH	87132LH	86176LH	81081	23/32
83178LH	87131LH	86178LH	81082	47/64
83179LH	87133LH	86179LH	81085	13/16
83181LH	87132LH	86181LH	81085	13/16
83182LH	87135LH	86182LH	81034	57/64
83186LH	87135LH	86186LH	81093	31/32
83187LH	87135LH	86187LH	81093	31/32

Spark Plug



INSERT KITS

Thread Size	Kit Number	Insert Quantity	Insert Length
10x1	88001	6	1/2
12x1.25	88003	6	1/2
		6	3/4
14x1.25	88006	6	3/8
		NOT INCLUDED	7/16
			1/2
		6	3/4
18x1.5	88011	6	1/2
7/8-18	88013	6	1/2
		6	5/8

REPLACEMENT PARTS

Insert Package Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
88032	87021	88020	81072	13/32
88034	87024	88021	81076	31/64
88036				
88046	87027	88022	81077	9/16
88047				
88048				
88050				
88051	87032	88023	81081	23/32
88056	87033	88024	81034	57/64
88058				

N.P.T. Pipe Thread



INSERT KITS

Thread Size	Kit Number	Insert Quantity
1/8-27	88210	8
1/4-18	88212	8
3/8-18	88214	8
1/2-14	88216	6
3/4-14	88218	6

REPLACEMENT PARTS

Insert Package Number	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
88230	87022	88220	81049	3/8
88232	87027	88222	81021	33/64
88234	87029	88224	81080	21/32
88236	87031	88226	81085	13/16
88238	87035	88228	81036	11/64

British Insert Kits



BSW

Thread Size	Kit Number	Insert Quantity
1/8-40	82710	12
3/16-24	82712	12
1/4-20	82716	12
5/16-18	82718	10
3/8-16	82720	10
7/16-14	82722	6
1/2-12	82724	6
5/8-11	82729	6
3/4-10	82731	4
7/8-9	82733	4
1-8	82735	4

BSF

Thread Size	Kit Number	Insert Quantity
1/4-26	82617	12
5/16-22	82619	10
3/8-20	82621	10
7/16-18	82623	6
1/2-16	82626	6
5/8-14	82630	6
3/4-12	82632	4
7/8-11	82634	4
1-10	82636	4

BSP PIPE

Thread Size	Kit Number	Insert Quantity
1/8-28	88310	12
1/4-19	88311	12
3/8-19	88312	10
1/2-14	88313	6
5/8-14	88314	6
3/4-14	88315	4
7/8-14	88316	4
1-11	88317	4



Call For Replacement Parts

Also Available:

ROCK SOLID



E-Z FIX



WOOD & PLASTICS

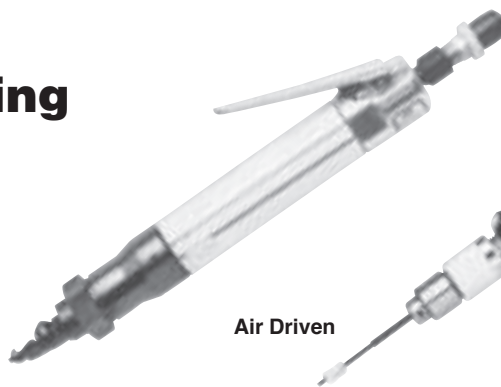


Call For Pricing



Call For Pricing

Strip Feed Inserts & Tooling



Air Driven



Electrically Driven



Combo Tool



Prewinder



Extractor



STI Taps



STI Gages

**? Does Your Maintenance Dept.
Have All The
Tools For...**



**Stock the
TOTAL KITS
For Thread Repair**

16 to 20 sets/cabinet

**EACH SET CONTAINS:
1 HSS STI TAP
1 INSTALL TOOL
1 TUBE OF INSERTS**

**Note: Drills may be
added on request**

**Cabinet Locks Are
Available See Page 3**

8

#87920 1/4 - 20 to 1/2 - 13 Coarse
1/4 - 28 to 1/2 - 20 Fine
M5 to M12 Coarse
M8 to M12 Fine

#87923 1/4 - 20 to 7/8 - 9
1/4 - 28 to 7/8 - 14

#87927 M5 to M18 Coarse
M8 to M18 Fine

Combination
American/Metric
20 Sets

All American
16 Sets

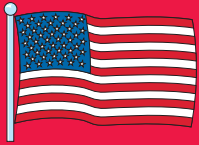
All Metric
16 Sets

BREAKDOWNS



ROCK SOLID

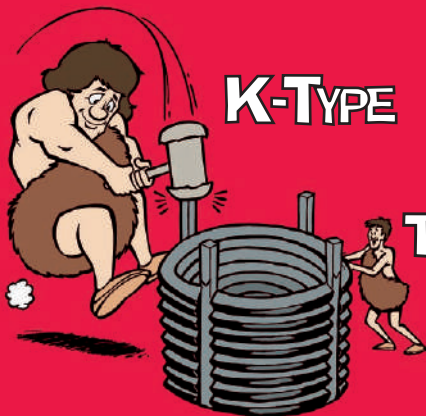
THREADED INSERTS



Made in the
U.S.A.



In God We Trust



K-TYPE

**MAKE YOUR
THREAD REPAIRS
SOLID AS A**

ROCK



DISTRIBUTED BY



CHRISLYNN

THREADED

INSERTS

PRECISION

*The Giant in
the Insert
Industry*



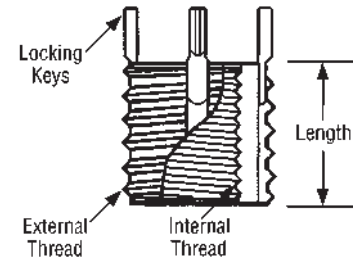
MS/NAS style inserts are produced to the following standards:

MS51830	NAS1395	NA0149
MS51831	NA0146	NA0150
MS51832	NA0147	NA0151
NAS1394	NA0148	

Call for part numbers and pricing on all certified requirements.

Rock Solid Inserts

A solid insert that is threaded on the outside with wedges (keys) attached to the top of the insert. After the part is re-threaded, the insert is screwed into the part and the wedges are driven down into the tapped threads to keep the insert from turning in either direction.



Perfect Installations using the **NEW CORRECTOR TOOL**



AFTER DRILLING & TAPPING:

Engage insert keys into vertical slots of the tool



Screw insert into part and flush with the top of part



Lift – Rotate tool
Hole fits over the keys –
Drive down as far as possible



Turn tool until timing mark lines up with key –
Drive until keys even with top of insert

Materials Available

- A. Carbon Steel - C1215 or equivalent
- B. Stainless Steel - 303
- C. Stainless Steel - 316
- D. A286 Stainless
- E. 4141 Alloy

Diameters Available

- A. American - #2 to 1 1/2"
- B. Metric - M2 to M24

Types Available

- A. Free Running
- B. Locking

Wall Thicknesses Available

- A. Thin Wall
- B. Heavy-Duty Wall
- C. Extra-Heavy-Duty Wall
- D. Solid Blank (Outside Thread Only)
- E. Miniatures

"Why?"

Rock Solid Inserts

1. Only **Standard** Drills and Tap required.
2. Can be used in most materials... aluminum, magnesium, cast iron, carbon & stainless steel and plastic.

3. Simple installation compared to helical wire inserts.
4. Near **impossible** for the insert to turn after installation.
5. Near **impossible** to cross thread while installing.
6. Adhesive not required to hold insert in place.
7. Rarely affected by hot or cold temperatures because it is held in place mechanically.
8. Easy to remove.

Master Range - Repair Kits

M-KIT (MINI KIT)



C-KIT (COMPLETE KIT)

THIN WALL

HEAVY DUTY

M-Kit Without Drill & Tap		C-Kit With Drill & Tap	M-Kit Without Drill & Tap		C-Kit With Drill & Tap
UNC		64969	64970	64962	64972
1/4-20 5/16-18 3/8-16 7/16-14 1/2-13				← Sizes	
UNF		64961	64971	64963	64973
1/4-28 5/16-24 3/8-24 7/16-20 1/2-20				← Sizes	
METRIC COARSE		64964	64974	64965	64975
M5x.08 M6x1 M8x1.25 M10x1.5 M12x1.75				← Sizes	
METRIC FINE		N/A	N/A	64966	64976
M4x.07 M8x1 M10x1.25 M12x1.25 M14x1.5				← Sizes	

Total Range - Repair Kits

CONTAINS:

- 1 - 64972 American Coarse
- 1 - 64973 American Fine
- 1 - 64975 Metric Coarse
- 1 - 64976 Metric Fine

NEW

Order No.

WITHOUT LOCK

64967

WITH LOCK

64968



Total Kit - Combination

NOTE: Total Kit contains heavy duty inserts with tap, drill & tool for each thread size

Assortment Kits - Inserts Only

THIN WALL - AMERICAN

Carbon Steel	64900
303 Stainless	64901

HEAVY-DUTY WALL AMERICAN

Carbon Steel	64905
303 Stainless	64906



THIN WALL - METRIC

Carbon Steel	64910
303 Stainless	64911

HEAVY-DUTY WALL METRIC

Carbon Steel	64915
303 Stainless	64916

CONTAINS:

- 12 - 10-24
- 12 - 1/4-20
- 10 - 5/16-18
- 10 - 3/8-16
- 6 - 7/16-14
- 6 - 1/2-13
- 12 - 10-32
- 12 - 1/4-28
- 10 - 5/16-24
- 10 - 3/8-24
- 6 - 7/16-20
- 6 - 1/2-20

CONTAINS:

- 12 - M5x.08
- 12 - M6x1
- 10 - M8x1.25
- 10 - M8x1
- 10 - M10x1.5
- 10 - M10x1.25
- 6 - M12x1.75
- 6 - M12x1.25

Single Size - Repair Kits

M-KIT (MINI KIT)

CONTAINS: (for each thread size)

1 - Tool

1 - Package of Inserts

THIN WALL - AMERICAN

KITS

Inside Thread	Outside Thread	Insert Quantity	M-Kit Part Number	C-Kit Part Number
10-24	5/16-18	4	68921	69921
10-32			68121	69121
1/4-20	3/8-16	4	68922	69922
1/4-28			68122	69122
5/16-18	7/16-14	4	68923	69923
5/16-24			68123	69123
3/8-16	1/2-13	3	68924	69924
3/8-24			68124	69124
7/16-14	9/16-12	3	68925	69925
7/16-20			68125	69125
1/2-13	5/8-11	3	68926	69926
1/2-20			68126	69126

HEAVY-DUTY WALL - AMERICAN

KITS

Inside Thread	Outside Thread	Insert Quantity	M-Kit Part Number	C-Kit Part Number
8-32	5/16-18	4	68900	69900
10-24	3/8-16	4	68901	69901
10-32			68101	69101
1/4-20	7/16-14	4	68902	69902
1/4-28			68102	69102
5/16-18	1/2-13	4	68903	69903
5/16-24			68103	69103
3/8-16	9/16-12	3	68904	69904
3/8-24			68104	69104
7/16-14	5/8-11	3	68905	69905
7/16-20			68105	69105
1/2-13	3/4-16	3	68906	69906
1/2-20			68106	69106
9/16-12	3/4-16	3	68907	69907
9/16-18			68107	69107
5/8-11	7/8-14	2	68908	69908
5/8-18			68108	69108
3/4-10	1 1/8-12	2	68909	69909
3/4-16			68109	69109
7/8-9	1 1/4-12	2	68910	69910
7/8-14			68110	69110
1-8	1 3/8-12	2	68911	69911
1-12			68111	69111
1-14			68112	69112
1 1/8-7	1 1/2-12	2	68913	69913
1 1/8-12	1 1/2-12		68113	69113
1 1/4-7	1 5/8-12	2	68914	69914
1 1/4-12	1 5/8-12		68114	69114
1 1/2-6	1 7/8-12	2	68916	69916
1 1/2-12	1 7/8-12		68116	69116

C-KIT (COMPLETE KIT)

CONTAINS: (for each thread size)

1 - Tool 1 - Drill

1 - Tap 1 - Package of Inserts

REPLACEMENT PARTS



Refill Package	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
65921	67721	63100	81017	I
66121	67821			
65922	67722	63101	81019	Q
66122	67822			
65923	67723	63102	81026	X
66123	67823			
65924	67724	63103	81022	29/64
66124	67824			
65925	67725	63104	81021	33/64
66125	67825			
65926	67726	63105	81023	37/64
66126	67826			

REPLACEMENT PARTS



Refill Package	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
65900	67700	63100	81017	I
65901	67701	63101	81019	Q
66101	67801			
65902	67702	63102	81026	X
66102	67802			
65903	67703	63103	81022	29/64
66103	67803			
65904	67704	63104	81021	33/64
66104	67804			
65905	67705	63105	81023	37/64
66105	67805			
65906	67706	63106	81078	45/64
66106	67806			
65907	67707	63106	81078	45/64
66107	67807			
65908	67708	63107	81084	53/64
66108	67808			
65909	67709	63108	81091	1 1/16
66109	67809			
65910	67710	63109	81039	1 3/16
66110	67810			
65911	67711	63110	81059	1 5/16
66111	67811			
66112	67811			
65913	67713	63113	81098	1 7/16
66113	67813			
65914	67714	63114	81114	1 9/16
66114	67814			
65916	67716	63115	81062	1 13/16
66116	67816			

Single Size - Repair Kits

M-KIT (MINI KIT)

CONTAINS: (for each thread size)

1 - Tool

1 - Package of Inserts

THIN WALL - METRIC

KITS

Inside Thread	Outside Thread	Insert Quantity	M-Kit Part Number	C-Kit Part Number
M5x.8	M8x1.25	4	68951	69951
M6x1	M10x1.25	4	68952	69952
M8x1.25	M12x1.25	4	68953	69953
M8x1			68153	69153
M10x1.5	M14x1.5	3	68955	69955
M10x1.25			68155	69155
M12x1.75	M16x1.5	3	68956	69956
M12x1.25			68156	69156

HEAVY-DUTY WALL - METRIC

KITS

Inside Thread	Outside Thread	Insert Quantity	M-Kit Part Number	C-Kit Part Number
M4x.7	M8x1.25	4	68963	69963
M5x.8	M10x1.25	4	68964	69964
M6x1	M12x1.25	4	68965	69965
M8x1.25	M14x1.5	4	68966	69966
M8x1			68166	69166
M10x1.5	M16x1.5	3	68967	69967
M10x1.25			68167	69167
M12x1.75	M18x1.5	3	68969	69969
M12x1.25			68169	69169
M14x2	M20x1.5	3	68970	69970
M14x1.5			68170	69170
M16x2	M22x1.5	2	68971	69971
M16x1.5			68171	69171
M18x1.5	M24x1.5	2	68172	69172
M20x2.5	M30x2	2	68973	69973
M20x1.5			68173	69173
M22x1.5	M32x2	2	68174	69174
M24x3	M33x2	2	68975	69975
M24x2			68175	69175

MINIATURE KITS - AMERICAN & METRIC (303 Stainless Only)

KITS

Inside Thread	Outside Thread	Insert Quantity	M-Kit Part Number	C-Kit Part Number
2-56	8-32	4	68283	69283
4-40	10-32	4	68284	69284
6-32	12-28	4	68285	69285
8-32	1/4-28	4	68286	69286
M2x0.4	4x0.7	4	68382	69382
M3x0.5	5x0.8	4	68384	69384
M4x0.7	6x0.75	4	68386	69386

C-KIT (COMPLETE KIT)

CONTAINS: (for each thread size)

1 - Tool 1 - Drill

1 - Tap 1 - Package of Inserts

REPLACEMENT PARTS



Refill Package	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
65951	67751	63163	81017	I
65952	67752	63164	81071	11/32
65953	67753	63165	81029	27/64
66153	67853			
65955	67755	63166	81030	1/2
66155	67855			
65956	67756	63167	81023	37/64
66156	67856			

REPLACEMENT PARTS



Refill Package	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
65963	67763	63163	81017	I
65964	67764	63164	81071	11/32
65965	67765	63165	81029	27/64
65966	67766	63166	81030	1/2
66166	67866			
65967	67767	63167	81023	37/64
66167	67867			
65969	67769	63169	81080	21/32
66169	67869			
65970	67770	63170	81082	47/64
66170	67870			
65971	67771	63171	81085	13/16
66171	67871			
66172	67772	63172	81034	57/64
65973	67773	63173	81089	13/32
66173				
66174	67774	63174	81039	13/16
65975	67775	63175	81094	17/32
66175				

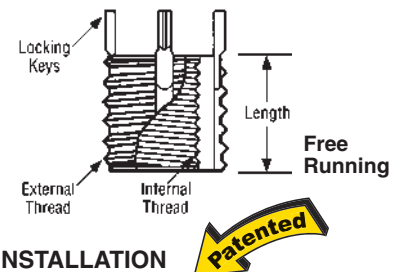
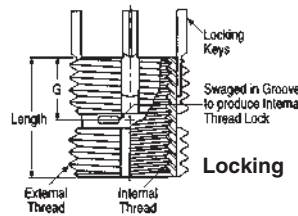
REPLACEMENT PARTS



Refill Package	Tool Part Number	Tap Part Number	Drill Part Number	Drill Size
65283	67712M	63090	81006	#29
65284	67713M	63091	81191	#20
65285	67714M	63092	81192	3/16
65286	67715M	63093	81193	#1
65382	67716M	63095	81006	#29
65384	67718M	63097	81009	#17
65386	67719M	63098	81198	7/32

Rock Solid - Thread Repair Inserts

NOTE: Tap size is the same as insert outside diameter.



THIN WALL - AMERICAN

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
10-24	5/16-18	65921	66321	71321			.31	67721	I
10-32		66121	66521	71521				67821	
1/4-20	3/8-16	65922	66322	71322			.37	67722	Q
1/4-28		66122	66522	71522				67822	
5/16-18	7/16-14	65923	66323	71323	CALL	CALL	.43	67723	X
5/16-24		66123	66523	71523				67823	
3/8-16	1/2-13	65924	66324	71324	FOR	FOR	.50	67724	29/64
3/8-24		66124	66524	71524				67824	
7/16-14	9/16-12	65925	66325	71325	QUOTE	QUOTE	.56	67725	33/64
7/16-20		66125	66525	71525				67825	
1/2-13	5/8-11	65926	66326	71326			.62	67726	37/64
1/2-20		66126	66526	71526				67826	

HEAVY DUTY - AMERICAN

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
8-32	5/16-18	65900	66300	71300			.31	67700	I
10-24	3/8-16	65901	66301	71301			.31	67701	Q
10-32		66101	66501	71501				67801	
1/4-20	7/16-14	65902	66302	71302			.37	67702	X
1/4-28		66102	66502	71502				67802	
5/16-18	1/2-13	65903	66303	71303			.43	67703	29/64
5/16-24		66103	66503	71503				67803	
3/8-16	9/16-12	65904	66304	71304			.50	67704	33/64
3/8-24		66104	66504	71504				67804	
7/16-14	5/8-11	65905	66305	71305			.62	67705	37/64
7/16-20		66105	66505	71505				67805	
1/2-13	3/4-16	65906	66306	71306			.62	67706	45/64
1/2-13	11/16-11	N/A	76306	77306				67726 C	41/64
1/2-20	3/4-16	66106	66506	71506				67806	45/64
1/2-20	11/16-11	N/A	76506	77506	CALL	CALL		67826 C	41/64
9/16-12	3/4-16	65907	66307	71307			.81	67707	45/64
9/16-18		66107	66507	71507	FOR	FOR		67807	
5/8-11	7/8-14	65908	66308	71308			.87	67708	53/64
5/8-18		66108	66508	71508	QUOTE	QUOTE		67808	
3/4-10	1 1/8-12	65909	66309	71309			1.12	67709	1 1/16
3/4-16		66109	66509	71509					
7/8-9	1 1/4-12	65910	66310	71310			1.25	67710	1 3/16
7/8-14		66110	66510	71510					
1-8	1 3/8-12	65911	66311	71311			1.37	67711	1 5/16
1-12		66111	66511	71511					
1-14		66112	~	~					
1 1/8-7	1 1/2-12	65913	~	~			1.62	67713	1 7/16
1 1/8-12		66113	~	~					
1 1/4-7	1 5/8-12	65914	~	~			1.81	67714	1 9/16
1 1/4-12		66114	~	~					
1 1/2-6	1 7/8-12	65916	~	~			2.00	67716	1 13/16
1 1/2-12		66116	~	~					

Rock Solid - Thread Repair Inserts

EXTRA HEAVY DUTY - AMERICAN

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
6-32	5/16-18	65931	66331				.31	67731	I
8-32	3/8-16	65932	66332				.31	67732	Q
10-24	7/16-14	65933	66333				.31	67733	X
10-32		66133	66533						
1/4-20	1/2-13	65934	66334				.37	67734	29/64
1/4-28		66134	66534						
5/16-18	9/16-12	65935	66335				.43	67735	33/64
5/16-24		66135	66535						
3/8-16	5/8-11	65936	66336				.50	67736	37/64
3/8-24		66136	66536	CALL	CALL	CALL			
7/16-14	3/4-16	65937	66337				.62	67737	45/64
7/16-20		66137	66537	FOR	FOR	FOR			
1/2-13	7/8-14	65938	66338				.68	67738	53/64
1/2-20		66138	66538	QUOTE	QUOTE	QUOTE			
9/16-12	7/8-14	65939	66339				.81	67739	53/64
9/16-18		66139	66539						
5/8-11	1-12	65940	66340				.87	67740	15/16
5/8-18		66140	66540						
3/4-10	1 1/4-12	65941	66341				1.12	67741	1 3/16
3/4-16		66141	66541						
7/8-9	1 3/8-12	65942	66342				1.25	67742	1 5/16
7/8-14		66142	66542						
1-8	1 1/2-12	65943	66343				1.37	67743	1 7/16
1-12		66143	66543						

THIN WALL - METRIC

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
M5x.8	M8x1.25	65951	66351	71351			8.0	67751	6.9
M6x1	M10x1.25	65952	66352	71352			10.0	67752	8.8
M8x1.25	M12x1.25	65953	66353	71353	CALL	CALL	12.0	67753	10.8
M8x1		66153	66553	71553				67853	
M10x1.5	M14x1.5	65955	66355	71355	FOR	FOR	14.0	67755	12.8
M10x1.25		66155	66555	71555				67855	
M12x1.75	M16x1.5	65956	66356	71356	QUOTE	QUOTE	16.0	67756	14.75
M12x1.25		66156	66556	71556				67856	

HEAVY DUTY - METRIC

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
M4x.7	M8x1.25	65963	66363	71363			8.0	67763	6.9
M5x.8	M10x1.25	65964	66364	71364			10.0	67764	8.8
M6x1	M12x1.25	65965	66365	71365			12.0	67765	10.8
M8x1.25	M14x1.5	65966	66366	71366	CALL	CALL	14.0	67766	12.8
M8x1		66166	66566	71566				67866	
M10x1.5	M16x1.5	65967	66367	71367	FOR	FOR	16.0	67767	14.75
M10x1.25		66167	66567	71567				67867	
M12x1.75	M18x1.5	65969	66369	71369	QUOTE	QUOTE	18.0	67769	16.75
M12x1.25		66169	66569	71569				67869	
M14x2	M20x1.5	65970	66370	71370			20.0	67770	18.75
M14x1.5		66170	66570	71570				67870	

Rock Solid - Thread Repair Inserts

HEAVY DUTY - METRIC *Continued*

INSERT SIZE		PART NUMBER					INSTALLATION		
Inside Thread	Outside Thread	Carbon Steel	303 SST	303 SST Locking	316 SST	A286 SST	Insert Length	Tool Number	Tap Drill
M16x2	M22x1.5	65971	66371	71371			22.0	67771	20.5
M16x1.5		66171	66571	71571				67871	
M18x1.5	M24x1.5	66172	66572	71572	CALL	CALL	24.0	67772	22.5
M20x2.5	M30x2	65973	66373	71373			30.0	67773	28.0
M20x1.5		66173	66573	71573	FOR	FOR			
M22x1.5	M32x2	66174	66574	71574			32.0	67774	30.0
M24x3	M33x2	65975	66375	71375	QUOTE	QUOTE	33.0	67775	31.0
M24x2		66175	66575	71575					

SOLID - AMERICAN (OUTSIDE THREAD ONLY)

PART NUMBER				
Outside Thread	Carbon Steel	303 SST	Tool Number	Tap Drill
5/16-18	66601	66401	67701 B	I
3/8-16	66602	66402	67702 B	Q
7/16-14	66603	66403	67703 B	X
1/2-13	66604	66404	67704 B	29/64
9/16-12	66605	66405	67705 B	33/64
5/8-11	66606	66406	67706 B	37/64
3/4-16	66607	66407	67707 B	45/64
7/8-14	66608	66408	67708 B	53/64
1-12	66609	66409	67709 B	15/16
1 1/8-12	66610	66410	67710 B	1 1/16
1 1/4-12	66611	66411	67711 B	1 3/16
1 3/8-12	66612	66412	67712 B	1 5/16

SOLID - METRIC (OUTSIDE THREAD ONLY)

PART NUMBER				
Outside Thread	Carbon Steel	303 SST	Tool Number	Tap Drill
M8x1.25	66621	66421	67721 B	6.9
M10x1.25	66622	66422	67722 B	8.8
M12x1.25	66623	66423	67723 B	10.8
M14x1.5	66624	66424	67724 B	12.8
M16x1.5	66625	66425	67725 B	14.75
M18x1.5	66626	66426	67726 B	16.75
M20x1.5	66627	66427	67727 B	18.75
M22x1.5	66628	66428	67728 B	20.5
M24x1.5	66629	66429	67729 B	22.5
M30x2	66630	66430	67730 B	28.0
M32x2	66631	66431	67731 B	30.0
M33x2	66632	66432	67732 B	31.0

MINIATURE - AMERICAN (303 SST) (Meets MS Spec)

PART NUMBER				
Inside Thread	Outside Thread	Non Lock Insert	Locking Insert	Tool Number
2-56	8-32	76283	77283	67712
4-40	10-32	76284	77284	67713
6-32	12-28	76285	77285	67714
8-32	1/4-28	76286	77286	67715

MINIATURE - METRIC (303 SST) (Meets MS Spec)

PART NUMBER				
Inside Thread	Outside Thread	Non Lock Insert	Locking Insert	Tool Number
M2x0.4	M4x0.7	76382	77382	67716
M2.5x0.45	M4.5x0.75	76383	77383	67717
M3x0.5	M5x0.8	76384	77384	67718
M4x0.7	M6x0.75	76386	77385	67719

Spark Plug Kits



NOTE: Kit contains Tap, Tool, Package of inserts.

INSERT SIZE		INSERT LENGTH & QUANTITIES INCLUDED PER KIT				INSTALLATION				
Inside Thread	Kit Part Number	3/8"	7/16"	1/2"	3/4"	Tool Part Number	Tap Drill	Drill Part Number	Tap Part Number	Sealing Ring
M10x1	RSS 10	6	0	0	0	67855	1/2	81030	63166	SR 10
M12x1.25	RSS 12	0	0	3	3	67856	37/64	81023	63167	SR 12
M14x1.25	RSS 14	2	2	2	2	67806	45/64	81078	63106	SR 14

SOLID AS A **ROCK** THREAD REPAIRS

