FYS TECHNOLOGY CO.,LTD

KEY LOCKING THREAD INSERT

- **Inch & Metric**
- **Thin Wall & Heavy Duty**
- **Stainless & Carbon Steel**



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Introduction Of Key Locking Thread Insert

KEY LOCKING THREAD INSERT

Thread Repair Inserts

FYS Technology Co.,Ltd was established in 2004 .Since that time our fastening systems have been successfully integrated into numerous applications within many different industries in the world.We provide local support for innovative,high quality fastening systems supplied globally to the strictest environmental and working conditions.

Key locking thread inserts are available in carbon and stainless steel, both inch and metric series, and are supplied in Thin wall, Heavy Duty styles. Featuring a key-locking action that prevents rotation due to vibration or torsion .

Features :

- Installed with standard drills and taps
- Easy installation and to remove
- May be used in a variety of materials: aluminum, magnesium, cold rolled steel
- Passivated to enhance corrosion-resistance and finish
- Counter bored internal thread on Inch Series ; counter sunk internal thread on Metric Series

Typical Applications :

- Trucks, RVs
- Machinery, Small Engines
- Molds, Tool and Die
- MRO Tasks

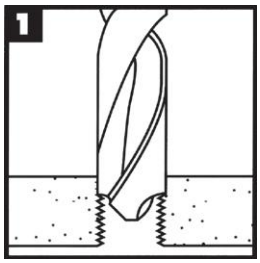


Installation And Removal

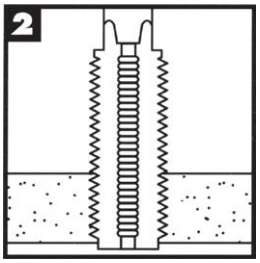
Key locking thread inserts are very easy to install and remove , the procedures as follows:



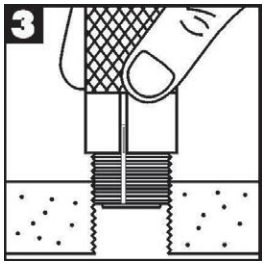
Installation



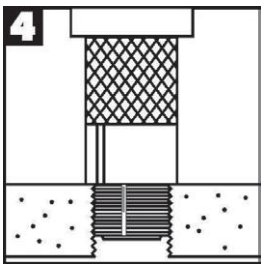
Drill out old threads with a standard drill. Note: Drill is oversize — see charts for proper dimensions. Chamfer the hole with a standard countersink (82°-100°).



Tap new threads with a standard tap. See charts for proper size and depth.

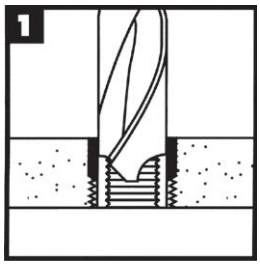


Screw in the insert until slightly below surface.

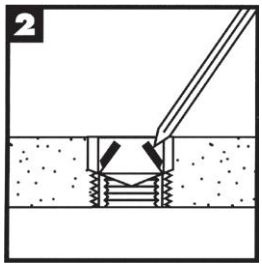


Drive keys down with several hammer taps on the proper installation tool.

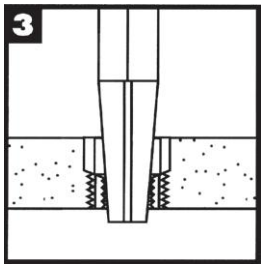
Removal



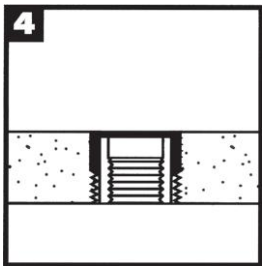
Drill out material between keys and internal thread with standard drill to specified depth



Deflect keys inward and break off.

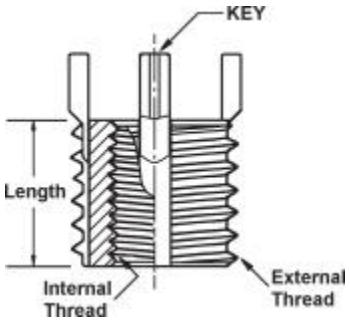


Remove insert using an E-Z OUT or similar type tool.



Same size replacement insert may be installed in the original hole.

Carbon And Stainless Steel Key Locking Thread Insert



Material: In Carbon Steel - C1215 or equivalent
In Stainless Steel - 303 or equivalent
Keys - 302 CRES or equivalent

Finish: Carbon Steel - Zinc Phosphate
Stainless Steel - Passivated

Tolerances: ±.010 inch or ±.25 mm unless specified otherwise.

Dimensions: Are in inches except metric inserts are in millimeters. Metric/Inch inserts have a metric internal thread while all other dimensions are in inches.

Keys: Inserts with an internal thread size of 5/16 or M7 and larger have 4 locking keys,smaller sizes have 2 locking keys.

Tap Drill Hole Tolerance: Inch - .234 to .500 = +.004/-.001
Inch - Over .500 = +.005/-.001
Metric - 6.90 to 10.80 = +.100/-.025
Metric - Over 12.80 = +.130/-.025



Technical Parameters：

Thin wall — Metric Series

Insert					Installation					Removal	
								Thread Tap		Drill	
Carbon Steel Part No.	Stainless Steel Part No.	Internal Thread Class 6H	External Thread Class 6g	Length in.	Installation Tool Part No.	Tap Drill Size	C'Sink Diameter +.25/-.00	Size Class 6H	Min Depth	Size	Depth
25847	26347	M2-0.4	M4-0.7	3.0	24697	3.4	4.1	M4-0.7	4.0	2.8	2.0
25848	26348	M2.5-0.45	M4.5-0.75	3.8	24698	3.9	4.6	M4.5-0.75	5.0	3.0	2.0
25849	26349	M3-0.5	M5-0.8	4.25	24699	4.4	5.1	M5-0.8	5.5	3.5	2.25
25950	26350	M4-0.7	M6-0.75	5.25	24750	5.5	6.1	M6-0.75	6.5	4.6	2.5
25951	26351	M 5-0.8	M8-1.25	8.0	24751	6.9	8.25	M8-1.25	9.5	5.50	4.00
25952	26352	M6-1	M10-1.25	10.0	24752	8.8	10.25	M10-1.25	11.5	7.50	4.75
25953	26353	M8-1.25	M12-1.25	12.0	24753	10.8	12.25	M12-1.25	13.5	9.50	4.75
26153	26553	M8-1									
25955	26355	M10-1.5	M14-1.5	14.0	24755	12.8	14.25	M14-1.5	15.5	11.50	4.75
26155	26555	M10-1.25									
25956	26356	M12-1.75	M16-1.5	16.0	24756	14.75	16.25	M16-1.5	17.5	13.50	4.75
26156	26556	M12-1.25									

Heavy Duty — Metric Series

Insert					Installation					Removal	
								Thread Tap		Drill	
Carbon Steel Part No.	Stainless Steel Part No.	Internal Thread Class 6H	External Thread Class 6g	Length in.	Installation Tool Part No.	Tap Drill Size	C'Sink Diameter +.25/-.00	Size Class 6H	Min. Depth	Size	Depth
25963	26363	M4-.7	M8-1.25	8.0	24763	6.90	8.25	M8-1.25	9.5	5.50	4.00
25964	26364	M5-.8	M10-1.25	10.0	24764	8.80	10.25	M10-1.25	12.5	7.50	4.75
25965	26365	M6-1	M12-1.25	12.0	24765	10.80	12.25	M12-1.25	14.5	9.50	4.75
25966	26366	M8-1.25	M14-1.5	14.0	24766	12.80	14.25	M14-1.5	16.5	11.50	4.75
26166	26566	M8-1									
25967	26367	M10-1.5	M16-1.5	16.0	24767	14.75	16.25	M16-1.5	18.5	13.50	4.75
26167	26567	M10-1.25									
23596	26369	M12-1.75	M18-1.5	18.0	24769	16.75	18.25	M18-1.5	20.5	15.50	4.75
26169	26569	M12-1.25									
25970	26370	M14-2	M20-1.5	20.0	24770	18.75	20.25	M20-1.5	22.5	17.50	4.75
26170	26570	M14-1.5									
25971	26371	M16-2	M22-1.5	22.0	24771	20.50	22.25	M22-1.5	24.5	17.75	6.35
26171	26571	M16-1.5									
26172	26572	M18-1.5	M24-1.5	24.0	24772	22.50	24.25	M24-1.5	26.5	19.75	6.35
25973	26373	M20-2.5	M30-2	30.0	24773	28.00	30.25	M30-2	34.5	25.75	6.35
26173	26573	M20-1.5									
26174	26574	M22-1.5	M32-2	32.0	24774	30.00	32.25	M32-2	36.5	27.75	6.35
25975	26375	M24-3	M33-2	33.0	24775	31.00	33.25	M33-2	37.5	28.75	6.35
26175	26575	M24-2									

Thin wall — Inch Series

Insert					Installation					Removal	
								Thread Tap		Drill	
Carbon Steel Part No.	Stainless Steel Part No.	Internal Thread Class 3B	External Thread (Mod.) Class 2A	Length in.	Installation Tool Part No.	Tap Drill Size	C'Sink Diameter +.010/-.000	Size Class 2B	Min. Depth	Size	Depth
25921	26321	10-24	5/16-18	0.31	24721	I	0.32	5/16-18	0.37	7/32	1/8
26121	26521	10-32									
25922	26322	1/4-20	3/8-16	0.37	24722	Q	0.38	3/8-16	0.43	9/32	3/16
26122	26522	1/4-28									
25923	26323	5/16-18	7/16-14	0.43	24723	X	0.44	7/16-14	0.50	11/32	3/16
26123	26523	5/16-24									
25924	26324	3/8-16	1/2-13	0.50	24724	29/64	0.51	1/2-13	0.56	13/32	3/16
26124	26524	3/8-24									
25925	26325	7/16-14	9/16-12	0.56	24725	33/64	0.57	9/16-12	0.62	15/32	3/16
26125	26525	7/16-20									
25926	26326	1/2-13	5/8-11	0.62	24726	37/64	0.63	5/8-11	0.68	17/32	3/16
26126	26526	1/2-20									

Heavy Duty — Inch Series

Insert					Installation					Removal	
								Thread Tap		Drill	
Carbon Steel Part No.	Stainless Steel Part No.	Internal Thread Class 3B	External Thread (Mod.) Class 2A	Length in.	Installation Tool Part No.	Tap Drill Size	C'Sink Diameter +.010/-.000	Size Class 2B	Min. Depth	Size	Depth
25900	26300	8-32	5/16-18	0.31	24700	I	0.32	5/16-18	0.37	7/32	1/8
25901	26301	10-24	3/8-16	0.31	24701	Q	0.38	3/8-16	0.37	9/32	1/8
26101	26501	10-32									
25902	26302	1/4-20	7/16-14	0.37	24702	X	0.44	7/16-14	0.43	11/32	3/16
26102	26502	1/4-28									
25903	26303	5/16-18	1/2-13	0.43	24703	29/64	0.51	1/2-13	0.50	13/32	3/16
26103	26503	5/16-24									
25904	26304	3/8-16	9/16-12	0.50	24704	33/64	0.57	9/16-12	0.56	15/32	3/16
26104	26504	3/8-24									
25905	26305	7/16-14	5/8-11	0.62	24705	37/64	0.63	5/8-11	0.68	17/32	3/16
26105	26505	7/16-20									
25906	26306	1/2-13	3/4-16	0.62	24706	45/64	0.76	3/4-16	0.68	21/32	3/16
26106	26506	1/2-20									
25907	26307	9/16-12	3/4-16	0.81	24707	45/64	0.76	3/4-16	0.94	21/32	3/16
26107	26507	9/16-18									
25908	26308	5/8-11	7/8-14	0.87	24708	53/64	0.88	7/8-14	1.00	25/32	5/16
26108	26508	5/8-18									
25909	26309	3/4-10*	11/8-12	1.12	24709	1 1/16	1.14	1 1/8-12	1.31	31/32	5/16
26109	26509	3/4-16*									
25910	26310	7/8-9*	11/4-12	1.25	24710	1 3/16	1.27	1 1/4-12	1.44	1 3/32	5/16
26110	26510	7/8-14*									
25911	26311	1-8*	13/8-12	1.37	24711	1 5/16	1.39	1 3/8-12	1.56	1 7/32	5/16
26111	26511	1-12*									
26112	—	1-14*									