

Keyserts (industrial grade keenserts)

Keyserts, also known as keenserts (industrial grade only), are solid, one piece, key-locking inserts used to repair damaged threads or for use in original equipment. The Keysert locking keys provide a positive mechanical lock which prevents rotation due to vibration or torsion. Keyserts are available in carbon or stainless steel, both in inch and metric series.

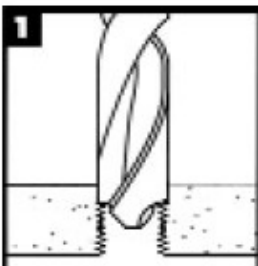
Thinwall, Heavy Duty, Extra Heavy Duty and Solid insert styles are available separately or in kits containing a range of sizes. Installation tools are also available separately or in a range kit.



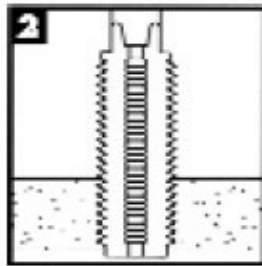
Features

- Installed with standard drills and taps
- Easy installation
- May be used in many materials; aluminum, magnesium, and cold rolled steel
- Easy to remove
- Typical Applications
 - Trucks, RV's
 - Machinery, Small Engine
 - Molds, Tool and Die
 - MRO Tasks
- Important Note
 - Keyserts are not recommended for use in brittle materials, like cast iron or plastic

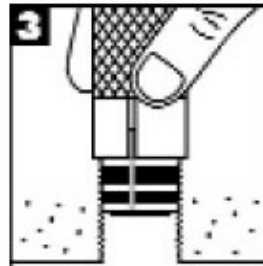
Installation



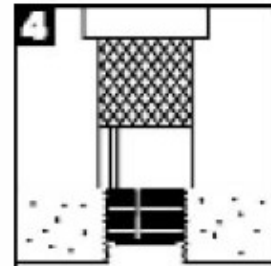
Drill out old threads with a standard drill.
Note: Drill is oversize - see charts for proper dimensions. Chamfer the hole with a standard countersink (82°-100°).



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.

Material: **STEEL** Inserts - C1215 or equivalent
 Keys - 302 Stainless Steel
 Finish: Carbon Steel Inserts - Zinc Phosphate and Ferrocoate 364-3 Oil
 Stainless Steel Inserts - Passivated
 Tolerances: +0.10 inch or +.25 mm unless specified otherwise.
 Keys: Inserts with internal thread size 5/16 or M7 and larger are furnished with 4 locking keys.

Material: **STAINLESS STEEL** Inserts - 303 Stainless Steel
 Keys - 302 Stainless Steel
 Finish: Carbon Steel Inserts - Zinc Phosphate and Ferrocoate 364-3 Oil
 Stainless Steel Inserts - Passivated
 Tolerances: +0.10 inch or +.25 mm unless specified otherwise.
 Keys: Inserts with internal thread size 5/16 or M7 and larger are furnished with 4 locking keys.

Thinwall Inserts Carbon Steel and Stainless Steel

Internal Thread Size	Steel Insert No.	Stainless Insert No.	*External Thread Size (Mod.)	Length	Installation Data				Removal Data	
					Tap Drill Size	C'Sink Dia.	Tap Size	Insert Tool Part No.	Drill Size	Depth
10-24	KI-73601	KI-73606	5/16-18	.31	"I"	.32	5/16-18	KS-72190	7/32"	1/8
10-32	KI-74601	KI-74606								
1/4-20	KI-73041	KI-73046	3/8-16	.37	"Q"	.38	3/8-16	KS-72250	9/32	3/16
1/4-28	KI-74041	KI-74046								
5/16-18	KI-73051	KI-73056	7/16-14	.43	"X"	.44	7/16-14	KS-72312	11/32	3/16
5/16-24	KI-74051	KI-74056								
3/8-16	KI-73061	KI-73066	1/2-13	.50	29/64	.51	1/2-13	KS-72375	13/32	3/16
3/8-24	KI-74061	KI-74066								
7/16-14	KI-73071	KI-73076	9/16-12	.56	33/64	.57	9/16-12	KS-72375	15/32	3/16
7/16-20	KI-74071	KI-74076								
1/2-13	KI-73081	KI-73086	5/8-11	.62	37/64	.63	5/8-11	KS-72500	17/32	3/16
1/2-20	KI-74081	KI-74086								

* For reference only.

Heavy Duty Inserts Carbon Steel and Stainless Steel

Internal Thread Size	Steel Insert No.	Stainless Steel No.	*External Thread Size (Mod.)	Length	Installation Data				Removal Data	
					Tap Drill Size	C'Sink Dia.	Tap Size	Insert Tool Part No.	Drill	
									Size	Depth
8-32	KI-73582	KI-73587	5/16-18	.31	"I"	.32	5/16-18	KS-70582	7/32	1/8
10-24	KI-73602	KI-73607	3/8-16	.31	"Q"	.38	3/8-16	KS-72190	9/32	1/8
10-32	KI-74602	KI-74607								
1/4-20	KI-73042	KI-73047	7/16-14	.37	"X"	.44	7/16-14	KS-72250	11/32	3/16
1/4-28	KI-74042	KI-74047								
5/16-18	KI-73052	KI-73057	1/2-13	.43	29/64	.51	1/2-13	KS-72312	13/32	3/16
5/16-24	KI-74052	KI-74057								
3/8-16	KI-73062	KI-73067	9/16-12	.50	33/64	.57	9/16-12	KS-72375	15/32	3/16
3/8-24	KI-74062	KI-74067								
7/16-14	KI-73072	KI-73077	5/8-11	.62	37/64	.63	5/8-11	KS-72375	17/32	3/16
7/16-20	KI-74072	KI-74077								
1/2-13	KI-73082	KI-73087	3/4-16	.81	45/64	.76	3/4-16	KS-72500	21/32	3/16
1/2-20	KI-74082	KI-74087								
9/16-12	KI-73092	KI-73097	3/4-16	.81	45/64	.76	3/4-16	KS-72500	21/32	3/16
9/16-18	KI-74092	KI-74097								
5/8-11	KI-73102	KI-73107	7/8-14	.87	53/64	.88	7/8-14	KS-72625	25/32	3/16
5/8-18	KI-74102	KI-74107								
3/4-10	KI-73122	KI-73127	1-1/8-12	1.12	1-1/16	1.14	1-1/8-12	KS-72875	31/32	5/16
3/4-16	KI-74122	KI-74127								
7/8-9	KI-73142	KI-73147	1-1/4-12	1.25	1-3/16	1.27	1-1/4-12	KS-72875	1-3/32	5/16
7/8-14	KI-74142	KI-74147								
1-8	KI-73162	KI-73167	1-3/8-12	1.37	1-5/16	1.39	1-3/8-12	KS-72100	1-7/32	5/16
1-12	KI-74162	KI-74167								
1-14	KI-74162-14	N/A								
1-1/8-7	KI-73182	N/A	1-1/2-12	1.62	1-7/16	1.52	1-1/2-12	KS-70182	1-11/32	5/16
1-1/8-12	KI-74182	N/A								
1-1/8-18	N/A	N/A								
1-1/4-7	KI-73202	N/A	1-5/8-12	1.81	1-9/16	1.64	1-5/8-12	KS-70202	1-15/32	5/16
1-1/4-12	KI-74202	N/A								
1-1/2-6	KI-73242	N/A	1-7/8-12	2.00	1-13/16	1.89	1-7/8-12	KS-70242	1-23/32	5/16
1-1/2-12	KI-74242	N/A								

Thinwall Metric Inserts Carbon Steel and Stainless Steel

Internal Thread Size	Steel Insert No.	Stainless Steel No.	*External Thread Size 6g	Length	Installation Data				Removal Data	
					Tap Drill Size	C'Sink Dia. +.25/-.00	Tap Size 6H	Insert Tool Part No.	Drill	
									Size	Depth
M5x0.8	KI-75051	KI-75056	M8x1.25	8.0	6.9	8.25	M8x1.25	KS-72190	5.50	4.00
M6x1.0	KI-75061	KI-75066	M10x1.25	10.0	8.8	10.25	M10x1.25	KS-72250	7.50	4.75
M8x1.0	KI-77081	KI-77086	M12x1.25	12.0	10.8	12.25	M12x1.25	KS-72312	9.50	
M8x1.25	KI-75081	KI-75086								
M10x1.25	KI-77101	KI-77106	M14x1.5	14.0	12.8	14.25	M14x1.5	KS-72375	11.50	
M10x1.5	KI-75101	KI-75106								
M12x1.25	KI-78121	KI-78126	M16x1.5	16.0	14.75	16.25	M16x1.5	KS-72500	13.50	
M12x1.75	KI-75121	KI-75126								

Heavy Duty Metric Inserts Carbon Steel and Stainless Steel

Internal Thread Size	Steel Part No.	Stainless Steel Part No.	*External Thread Size (Mod.)	Length	Installation Data				Removal Data	
					Tap Drill Size	C'Sink Dia.	Tap Size	Insert Tool Part No.	Drill	
									Size	Depth
M4x0.7	KI-75042	KI-75047	M8x1.25	8.0	6.90	8.25	M8x1.25	KS-71042	5.50	4.00
M5x0.8	KI-75052	KI-75057	M10x1.25	10.0	8.80	10.25	M10x1.25	KS-72190	7.50	4.75
M6x1.0	KI-75062	KI-75067	M12x1.25	12.0	10.80	12.25	M12x1.25	KS-72250	9.50	4.75
M8x1.0	KI-77082	KI-77087	M14x1.25	14.0	12.80	14.25	M14x1.55	KS-72312	11.50	4.75
M8x1.25	KI-75082	KI-75087								
M10x1.25	KI-77102	KI-77107	M16x1.5	16.0	14.75	16.25	M16x1.5	KS-72375	13.50	4.75
M10x1.5	KI-75102	KI-75107								
M12x1.25	KI-78122	KI-78127	M18x1.5	18.0	16.75	18.25	M18x1.5	KS-72500	15.50	4.75
M12x1.75	KI-75122	KI-75127								
M14x1.5	KI-77142	KI-77147	M20x1.5	20.0	18.75	20.25	M20x1.5	KS-71142	17.50	4.75
M14x2.0	KI-75142	KI-75147								
M16x1.5	KI-77162	KI-77167	M22x1.5	22.0	20.50	22.25	M22x1.5	KS-72625	17.75	6.35
M16x2	KI-75162	KI-75167	M22x1.5	22.0	20.50	22.25	M22x1.5	KS-72625	17.75	6.35
M18x1.5	KI-78182	KI-78187	M24x1.5	24.0	22.50	24.25	M24x1.5	KS-71182	19.75	6.35
M20x2.5	KI-75202	KI-75207	M30x2.0	30.0	28.00	30.25	M30x2.0	KS-72875	25.75	6.35
M20x1.5	KI-78202	KI-78207	M30x2.0	30.0	28.00	30.25	M30x2.0	KS-72875	25.75	6.35
M22x1.5	KI-78222	KI-78227	M32x2.0	32.0	30.00	32.25	M32x2.0	KS-72875	27.75	6.35
M24x2.0	KI-77242	KI-77247	M33x2.0	33.0	31.00	33.25	M33x2.0	KS-71242	28.75	6.35
M24x3.0	KI-75242	KI-75247	M33x2.0	33.0	31.00	33.25	M33x2.0	KS-71242	28.75	6.35