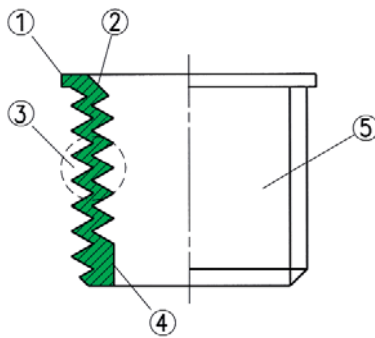


The TIME-SERT system is based on a solid steel bush machined from a solid piece of material. The thin-walled bush is press-fitted to the work-piece. Therefore, TIME-SERT is able to withstand high continuous strains as well as frequent tightening and undoing of screws.

The available bushes can be used with ISO, coarse-pitch, fine-pitch and unified threads.

TIME-SERT is universally applicable, e.g. in aluminium, brass, steel or casting materials.



Design Characteristics

1. Strong collar for positioning of the bush
2. Chamfered interior thread for an easy insertion of screw
3. Extremely thin wall due to synchronous path of thread
4. The lower 3 to 5 path of thread are not completely cut. These are pressed into the workpiece by non-cutting shaping
5. The bushes for spark plug threads are copper or silver plated for improved heat dissipation

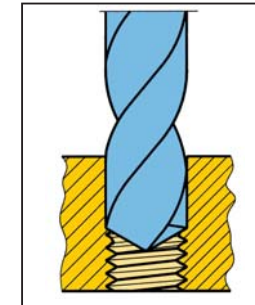
Areas of Application

- | | |
|---|---|
| <ul style="list-style-type: none"> ○ Motor
Spark plug threads, stud bolt threads ○ Aggregates
Servo pumps, alternators, attachment of air conditioning units ○ Transmission
Gearbox covers, mounting brackets ○ Differential
Stud bolts ○ Axles
Mounts, brackets ○ Chassis ○ Housings | <ul style="list-style-type: none"> ○ Repairs
Perfect thread repair of damaged or stripped threads, e.g. on machinery, production equipment, devices, appliances.. ○ Light-weight construction
Any area where light metal are used for weight-saving reasons, TIME-SERT provides a permanent and strong thread, e.g. in racing engines, chain saws, hand-held machines, ... ○ Food processing
Threads must be repaired or reinforced with stainless steel bushes in all areas of food processing where contact with food is possible, e.g. agitators, industrial kitchen appliances, stainless steel containers. |
|---|---|

Approved by leading automobile manufacturers

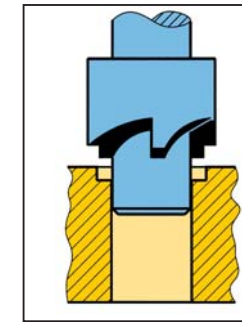


Repair of Metric and UNC Threads



Phase 1:

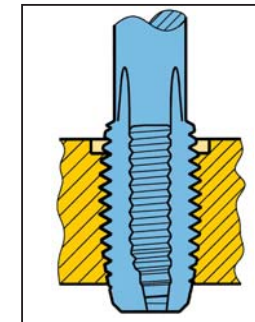
Drill out the damaged thread all the way to the bottom using a HSS drill bit **A**. Be sure to keep the borehole aligned.



Phase 2:

Machine the borehole with seat cutter **B** deep enough that the depth stop gets in contact with the workpiece.

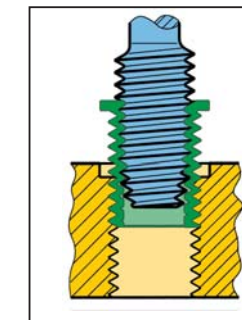
The depth limit stop is designed as a non-cutting contact edge, always assuring a uniformly countersunk seating depth.



Phase 3:

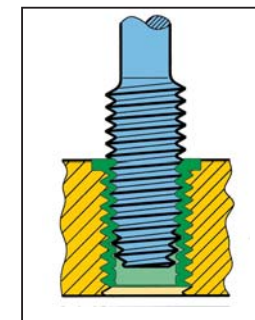
Using thread tap **C**, cut the thread for the TIME-SERT bush. Be sure to keep the bore-hole aligned.

Carefully clean the thread to remove all chips and cutting oil!



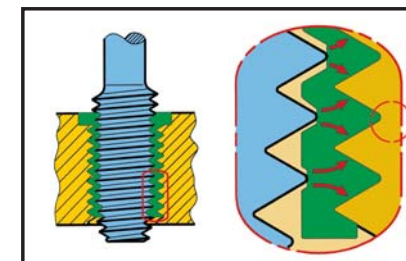
Phase 4:

Lubricate the tip of insertion tool **D** and screw in the bush by hand. The outer thread of the bush remains free of oil!



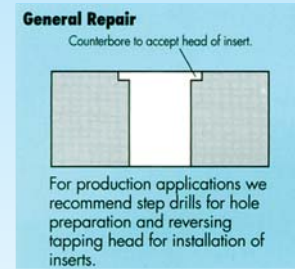
Phase 5:

Once the bush sits flush with the surface, the remaining threads are formed using the insertion tool **D**. The screw-in resistance increases noticeably.



Phase 6:

In this phase, the semi-finished threads of the bush are pressed outward. The insertion tool **D** presses excess material into the workpiece. The repair is complete when the tool can be turned with noticeably less resistance.



Universal Inserts (Shaded areas indicate inserts supplied with the kit.)

Size (mm)	Thread Pitch	Insert Length		Art. No.	Kits available
		Inches	mm		
4	0.7	.240	6.0	699.1098	699.1003
		.300	7.6	699.1100	
5	0.8	.400	10.0	699.1102	699.1002
		.370	9.4	699.1104	
6	1.0	.470	12.0	699.1106	699.1004
		.550	14.0	699.1109	
7	1.0	.460	11.7	699.1110	699.1005
		.460	11.7	699.1112	
8	1.25	.640	16.2	699.1114	699.1008
		.510	13.0	699.1115	
9	1.25	.710	18.0	699.11151	699.1019
		.360	9.0	699.1111	
10	1.0	.600	15.0	699.1113	699.1009
		.550	14.0	699.1116	
10	1.25	.650	16.2	699.1118	699.1010
		.800	20.0	699.1120	
10	1.5	.550	14.0	699.1122	699.1012
		.800	20.0	699.1124	
11	1.5	.960	24.5	699.1126	699.1013
		.630	16.0	699.1127	
11	1.25	.870	22.0	699.1128	699.1015
		.360	9.0	699.1130	
12	1.25	.600	15.0	699.1129	699.1015
		.650	16.2	699.1131	
12	1.5	.950	24.0	699.1132	699.1014
		.640	16.2	699.1134	
12	1.75	.950	24.0	699.1136	699.1016
		.260	6.6	699.1137	
14	1.5	.370	9.4	699.1138	699.1018
		.500	12.7	699.1139	
14	1.5	.700	17.8	699.11392	699.1018
		1.100	28.0	699.11393	

Size	Threads per Inch	Insert Length		Kits available	Art. No.
		Inches	mm		
#6	32	.250	6.3	N/A	699.1602
#8	32	.250	6.3		699.1603
#10	24	.370	9.4	699.1504	699.1605
		.300	7.6	699.1505	699.1606
1/4	20	.380	9.4	699.1506	699.1607
		.500	12.7		699.1608
1/4	28	.380	9.4	699.1507	699.1609
		.500	12.7		699.1610
5/16	18	.450	11.4	699.1508	699.1611
		.620	15.7		699.1612
5/16	24	.450	11.4	699.1509	699.1613
		.620	15.7		699.1614
3/8	16	.520	13.2		699.1615
		.620	15.7	699.1510	699.1616
3/8	24	.750	19.0		699.1617
		.520	13.2	699.1511	699.1618
7/16	14	.600	15.2	699.1512	699.1620
		.870	22.0		699.1621
7/16	20	.600	15.2	699.1513	699.1622
		.650	16.5	699.1514	699.1623
1/2	13	1.000	25.4		699.1624
		.650	16.5	699.1515	699.1626
9/16	18	.750	19.0	N/A	699.1632
5/8	11	.850	21.6	699.1516	699.1627
		1.250	31.7		699.1628
5/8	18	1.250	31.7	699.1518	699.1629
		.450	11.4		699.1631



Perfect Thread Repair and Reinforcement

