# **Recoil Pro XL Thread Repair Kits**

To watch our installation demo video visit **afsindustrial** on YouTube.

For more information on any of our Recoil products visit www.afsrrecoil.net

Everything You need for complete thread repair in one handy box



# **Kits Contents:**

15 Wire Thread Inserts, 1.5D Length

1 STI HSS Intermediate Tap

1 Installation Tool

1 Tang-break Tool

1 Drill-bit

Thread form and Size	RS Kit Part Number	Recoil Part Number	Replacement Pack RS Code	Replacement Pack Recoil Code	Inserts in Pack
UNC 1/4-20	703-7181	33048	244-8410	23043	10
UNC 5/16-18	703-7185	33058	244-8426	23053	10
UNC 3/8-16	703-7194	33068	244-8432	23063	10
UNF 1/4-28	703-7191	34048	244-8460	24043	10
UNF 5/16-24	703-7201	34058	245-5698	24053	10
UNF 3/8-24	703-7204	34068		24063	10
Metric M3-05	703-7153	35038	291-880	25033	10
Metric M4-0.7	703-7157	35048	291-896	25043	10
Metric M5-0.8	703-7166	35058	528-643	25053	10
Metric M6X1	703-7169	35068	528-659	25063	10
Metric M8X125	703-7163	35088	528-665	25083	10

## **Installation Tool**



#### The installation tool has been designed to accommodate a tap holder in the handle, so the same tool can be used for two functions in the thread repair process.



# STI Tap

Screw Thread Insert (STI) taps are special taps specifically used to prepare holes for installation of wire thread inserts.

## Tang- break Tool

For easy tang removal in blind holes. Magnetised to ensure no broken tangs are left in the application after installation.

Recoil inserts are formed from high quality stainless steel wire with a diamond shaped cross section, wound to the shape of a spring thread. Once the wire is wound into a helical coil and installed into a tapped hole, it provides a permanent and wear resistant thread in the parent material that is generally stronger than the original thread. The inserts are designed to be greater in diameter than the tapped hole and compress as they are installed. This allows maximum surface contact area with the tapped thread, safely and permanently anchoring the inserts into place. The insert's compensatory action shares the load over the entire bolt and hole, increasing pull out and torque out strength. With a Recoil insert in place, load and stress are more evenly distributed over the assembly.

# **Insert Dimensional information**

Information shown in mm	Metric				UNC			UNF			
	M3-0.5	M4-0.7	M5-0.8	M6-1	M8-1.25	1/4-20	5/16-18	3/8-16	1/4-28	5/16-24	3/8-24
Free Coil Dia. Min.	3.65	4.9	6	7.25	9.6	7.87	9.65	11.48	7.6	9.45	11
Free Coil Dia. Max.	4.35	5.6	6.8	7.95	10.25	8.38	10.16	11.99	7.8	9.65	11.2
Number of coils (+/- 0.25)	6.95	6.55	7.35	6.95	9.85	5.75	6.625	7.25	8.45	9.05	11.25
Nominal Length	4.5	6	7.5	6.75	12	9.5	11.9	14.3	9.5	11.9	14.3

#### Insert Material Type: Stainless 304

Max Temperature: Peak 425 C (800 F) Continuous 315 C (600F)