

Recoil® Kits and Hand Installation Tools

Trade Series Kit / Range Kit

Recoil's innovative and cost-effective thread repair kits are utilized worldwide in industrial and automotive maintenance situations. Each kit contains:

1. Combo tap and installation tool
- Tap wrench no longer required
2. Magnetic Tang Break Tool - for easy tang removal in blind holes
3. H.S.S. Drill



Trade Series Kit/Pro XL

Range Kit

Spark Plug Kit

Spark plug kits have pilot nose taps for accurate self alignment eliminating the need for drilling. The table below denotes the Recoil Insert Kit part numbers for each available thread size together with details of insert quantities included with each thread repair kit.



Spark Plug Kit

Recoil Tools

Howmet Fastening Systems supplies a range of associated Recoil tooling to facilitate Recoil insert installation. The advantage of the Recoil tooling system is its simplicity, versatility, and ease of use. The hand installation tooling range includes the manual installation tool, the semi production "Prewinder" type, as well as manual and spring operated tang break off tools.

Manual Installation Tool

The standard Recoil insert installation tool is the most practical and simple to use for general applications. This tool may be used to install 1D through to 3D length inserts, but care must be taken to ensure that the adjustable collar is correctly set to suit the particular type and length of the Recoil insert. If the collar is incorrectly set, the insert will not drive properly and the tool may slip off the tang as the insert enters the hole. For general use, the collar should be adjusted such that the insert tang is positioned mid-way along the slot with the insert coils compressed. This will allow the insert free movement to suit the parent material thread pitch during installation.

If the installation tool is used to break off the tang, then it must be lifted clear of the insert following installation and replaced into the insert at 90 degrees to its drive position. This ensures that the tool is correctly placed on the insert tang. Tap the tool sharply downward to produce a clean tang break.



Manual Installation Tool (Type 1)



Manual Installation Tool (Type 2)

Note: The manual installation tool is not recommended for the installation of locking inserts.

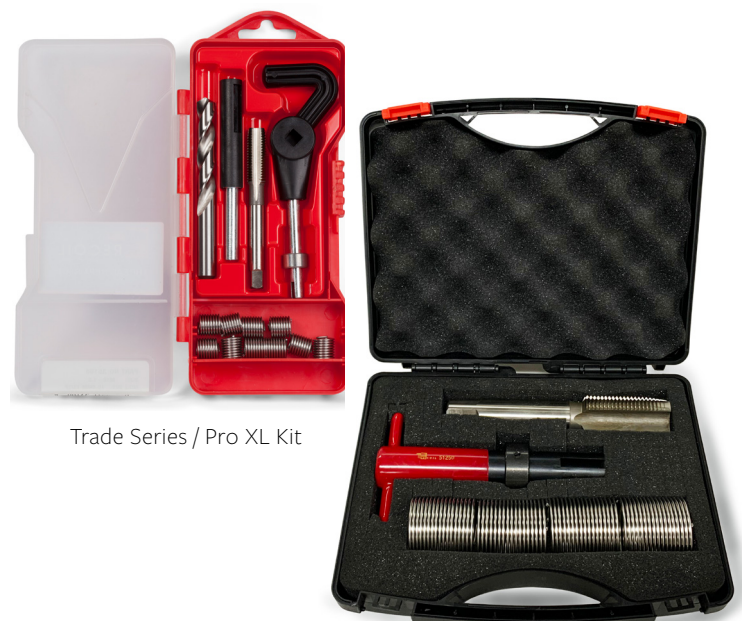
Recoil manual tools are not recommended for use with other brands of wire thread inserts.

* Tap Square is only suitable for non-ferrous alloys. Tap drive, tang break and drill only up to 1/2"

Recoil® Kits and Hand Installation Tool Part Numbers

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
Metric				
M2 - 0.4	35028 *	15	1	50061-20
M2.2 - 0.45	35018 *	15	1	50061-21
M2.5 - 0.45	35258 *	15	1	50069-21
M3 - 0.5	35038 *	15	1	50089-17
M3.5 - 0.6	35358 *	15	1	50095-15
M4 - 0.7	35048 *	15	1	50125-13
M5 - 0.8	35058 *	15	1	50156-9
M6 - 1	35068 *	15	1	50188-5
M7 - 1	35078 *	15	1	50219-4
M8 - 1	37088 *	15	1	50250-7
M8 - 1.25	35088 *	15	1	50250-7
M9 - 1	37098 *	10	1	50281-5
M9 - 1.25	35098 *	15	1	50281-5
M10 - 1	38108 *	10	1	50313-12
M10 - 1.25	37108 *	10	1	50313-4
M10 - 1.5	35108 *	10	1	50281-4
M11 - 1	38118 *	10	1	50344-4
M11 - 1.25	37118 *	10	1	50344-4
M11 - 1.5	35118 *	10	1	50344-4
M12 - 1.25	38128 *	10	1	50375-1
M12 - 1.5	37128 *	10	1	50375-1
M12 - 1.75	35128 *	10	1	50375-1
M13 - 1.25	38138	6	1	50375-0
M13 - 1.5	37138	6	1	50375-0
M13 - 1.75	35138	6	1	50375-0
M14 - 1.25	38148-1	6	1	50468-0
M14 - 1.5	37148	6	1	50438-0
M14 - 2	35148	6	1	50438-0
M15 - 1.5	37158	6	1	50438-0
M15 - 2	35158	6	1	50438-0
M16 - 1.5	37168	6	1	50500-0
M16 - 2	35168	6	1	50500-0
M18 - 1.5	38188	6	1	50591-0
M18 - 2	37188	6	1	50591-0
M18 - 2.5	35188	6	1	50591-0
M20 - 1.5	38208	5	1	50591-0
M20 - 2	37208	6	1	50591-0
M20 - 2.5	35208	6	1	50591-0
M22 - 1.5	38220	5	2	50688
M22 - 2	37220	5	2	50688
M22 - 2.5	35220	5	2	50688
M24 - 1.5	38240	5	2	50750
M24 - 2	37240	5	2	50750
M24 - 3	35240	5	2	50750
M26 - 1.5	38260	5	2	50875

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
Metric				
M27 - 1.5	38270	5	2	50875
M27 - 2	37270	5	2	50875
M27 - 3	35270	5	2	50875
M30 - 1.5	38300	5	2	51000
M30 - 2	37300	5	2	51000
M30 - 3	35300-3	5	2	51000
M30 - 3.5	35300	5	2	51000
M33 - 2	37330	5	2	51063
M33 - 3.5	35330	5	2	51063
M36 - 1.5	38360	4	2	51125
M36 - 3	37360	4	2	51125
M36 - 4	35360	4	2	51125
M39 - 2	38390	4	2	51250
M39 - 3	37390	4	2	51250
M39 - 4	35390	4	2	51250
M42 - 2	38420	4	2	51250
M42 - 3	37420	4	2	51250
M42 - 4	35420-4	4	2	51250
M42 - 4.5	35420	4	2	51250
M45 - 3	N/A		2	51250
M45 - 4.5	35450	4	2	51250
M48 - 3	N/A		2	51500
M48 - 4	N/A		2	51500
M48 - 5	N/A		2	51500
M52 - 3	N/A		2	51500
M52 - 5	N/A		2	51500



Trade Series / Pro XL Kit

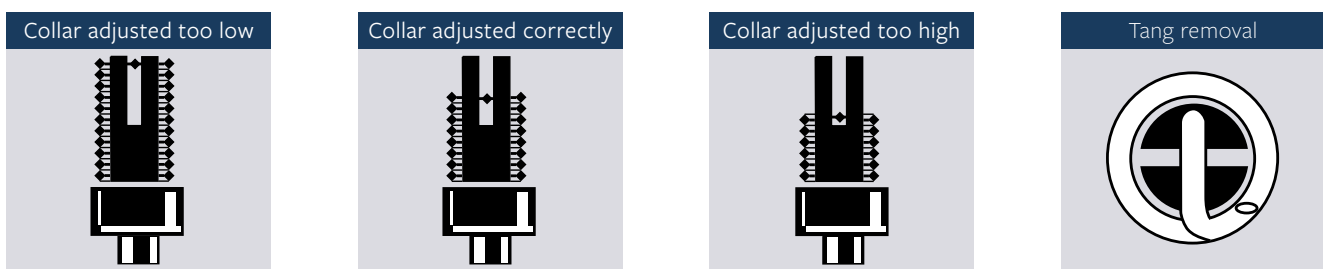
Recoil® Kits and Hand Installation Tool Part Numbers

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
BSW				
1/8 - 40	32028 *	15	1	50089-19
3/16 - 24	32038 *	15	1	50140-9
1/4 - 20	32048 *	15	1	50188-5
5/16 - 18	32058 *	15	1	50219-8
3/8 - 16	32068 *	10	1	50281-4
7/16 - 14	32078 *	10	1	50344-1
1/2 - 12	32088 *	10	1	50375-1
9/16 - 12	32098	6	1	50438-0
5/8 - 11	33108	6	1	50500-0
3/4 - 10	32128	6	1	50591-0
7/8 - 9	32140	5	2	50688
1" - 8	32160	5	2	50750
1 1/8 - 7	32180	5	2	50875
1 1/4 - 7	32200	5	2	51000
1 3/8 - 6	32220	5	2	50875
1 1/2 - 6	32240	5	2	51125
BA				
0BA	30508 *	15	1	50188-5
2BA	30528 *	15	1	50140-9
4BA	30548 *	15	1	50095-15
6BA	30568 *	15	1	50077-17
BSF				
3/16 - 32	30038 *	15	1	50156-9
1/4 - 26	30048 *	15	1	50188-5
5/16 - 22	30058 *	15	1	50250-5
3/8 - 20	30068 *	10	1	50281-5
7/16 - 18	30078 *	10	1	50344-4
1/2 - 16	30088 *	10	1	50375-1
9/16 - 16	30098	6	1	50438-0
5/8 - 14	30108	6	1	50500-0
3/4 - 12	30128	6	1	50591-0
7/8 - 11	30140	5	2	50688
1" - 10	30160	5	2	50750
1 1/4 - 9	30200	5	2	51000

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
BSC				
5/16 - 26	36508 *	15	1	50250-4
3/8 - 26	36608 *	10	1	50313-5
7/16 - 26	36708 *	10	1	50344-4
1/2 - 26	36808 *	10	1	50375-1
BSP				
1/8 - 28	31028 *	10	1	50313-5
1/4 - 19	31048	10	1	50438-0
3/8 - 19	31068	6	1	50500-0
1/2 - 14	31080	5	2	50688
5/8 - 14	31100	5	2	50875
3/4 - 14	31120	5	2	51125
1" - 11	31160	5	2	51125
NPT				
1/8 - 27	36028 *	10	1	50313-0
1/4 - 18	36048	10	1	50438-0
3/8 - 18	36068	6	1	50500-0
1/2 - 14	36080	5	2	50688
3/4 - 14	36120	5	2	50875
1 - 11 1/2	36160	5	2	51125
8 TPI UN				
1 1/8 - 8	36180	5	2	50875
1 1/4 - 8	36200	5	2	51000
1 3/8 - 8	36220	5	2	51063
1 1/2 - 8	36240	4	2	51125
1 5/8 - 8	36260	4	2	51250
1 3/4 - 8	36280	4	2	51250
1 7/8 - 8	36300	4	2	51500
2" - 8	36320	4	2	51500

* Drill and Magnetic Tangbreak Tool included in Kit

How to place the insert on the Hand Tool



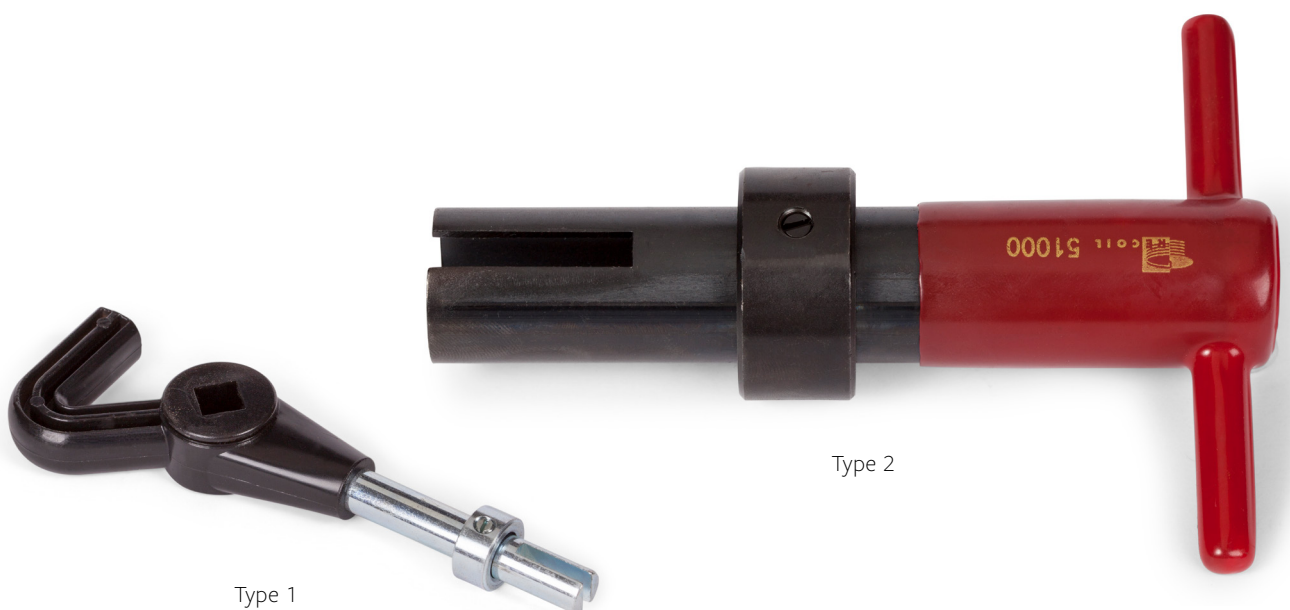
Recoil® Kits and Hand Installation Tool Part Numbers

* Drill and Magnetic Tangbreak Tool included in Kit

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
Unified Coarse				
#2 - 56	33528 *	15	1	50061-17
#3 - 48	33538 *	15	1	50069-17
#4 - 40	33548 *	15	1	50077-17
#5 - 40	33558 *	15	1	50089-18
#6 - 32	33568 *	15	1	50095-16
#8 - 32	33588 *	15	1	50125-14
#10 - 24	33608 *	15	1	50140-11
#12 - 24	33628 *	15	1	50156-10
1/4 - 20	33048 *	15	1	50188-10
5/16 - 18	33058 *	15	1	50219-8
3/8 - 16	33068 *	15	1	50281-4
7/16 - 14	33078 *	10	1	50344-3
1/2 - 13	33088 *	10	1	50375-2
9/16 - 12	33098	6	1	50438-0
5/8 - 11	33108	6	1	50500-0
11/16 - 11	33110	6	1	50500-0
3/4 - 10	33128	6	1	50591-0
7/8 - 9	33140	5	2	50688
1" - 8	33160	5	2	50750
1 1/8 - 7	33180	5	2	50875
1 1/4 - 7	33200	5	2	51000
1 3/8 - 6	33220	5	2	51063

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
Unified Coarse				
1 1/2 - 6	33240	4	2	51125

Thread Size / Pitch	Trade Series Kit	Trade Series No. of Inserts	Type	Installation Tool
Unified Fine				
#3 - 56	34538 *	15	1	50069-17
#4 - 48	34548 *	15	1	50077-17
#6 - 40	34568 *	15	1	50095-17
#8 - 36	34588 *	15	1	50125-14
#10 - 32	34608 *	15	1	50156-11
#12 - 28	34628 *	15	1	50156-10
1/4 - 28	34048 *	15	1	50188-10
5/16 - 24	34058 *	15	1	50250-8
3/8 - 24	34068 *	15	1	50313-6
7/16 - 20	34078 *	10	1	50344-8
1/2 - 20	34088 *	10	1	50375-3
9/16 - 18	34098	6	1	50438-0
5/8 - 18	34108	6	1	50500-0
3/4 - 16	34128	6	1	50591-0
7/8 - 14	34140	5	2	50688
1" - 12	34160	5	2	50750
1" - 14	34160-14	5	2	50750
1 1/8 - 12	34180	5	2	51000
1 1/4 - 12	34200	5	2	51063
1 3/8 - 12	34220	3	2	51125



Type 1

Type 2