

Recoil® Tangless® Inserts

Advanced Wire
Thread Inserts



Recoil® Tangless® Inserts – Next Step in Wire Thread Insert Evolution

Save time and reliably meet a wide range of installation challenges with Recoil® Tangless® Inserts. These advanced inserts offer all of the strength and easy installation characteristics of standard Recoil wire thread inserts, but with a big plus: no tang to break off post-installation. Like standard Recoil thread inserts, once installed, these Tangless designs share the load over the entire bolt and hole, improving joint strength and pull-out resistance.

Increased Installation Speed

- No tang to break off post-insert installation, eliminating a stage in the installation process; ideal for automatic installation in high volume applications
- No tang to retrieve post-insert installation, eliminating the requirement for vacuuming or extraction (and counting) displaced tangs
- Bi-directional design eliminates insert orientation, eliminating the need for time-consuming insert checking prior to each installation

Installation Adjustment and Removal Flexibility

- Tangless inserts are easily adjusted or removed after initial installation; just re-insert the installation tool, then wind or insert the removal tool, and unwind the insert
- Tangless inserts removal tools never touch the application, ensuring no damage occurs; an improvement over outmoded insert removal techniques



Foreign object damage (FOD) – Free

- Eliminating loose tangs that can potentially damage the finished product.

Combined with all the benefits of standard Recoil® wire thread inserts

Wire thread inserts strengthen threads, giving applications a longer life. Each insert shares the load over the entire bolt and hole, improving holding or pull-out resistance. With a Recoil insert installed, a more even distribution of load and stress is achieved.

Recoil® Tangless® Insert Options

Free-Running Tangless® Inserts

Free-Running Tangless® inserts are quick and easy to install, even when using basic hand tooling. These proven inserts create high-strength threads in even soft, low-strength materials. Free-Running Tangless® inserts are available in both imperial and metric versions, UNC and UNF.



Locking Tangless® Inserts

Locking Tangless inserts are designed to retain screws or bolts under the most severe vibration or varying temperature conditions. These inserts consist of a series of uniquely designed locking chords which, upon the engagement of a screw or bolt, deflect radially to permit the installation of the bolt. Upon bolt entry, these straight segments are flexed outwardly, creating pressure on the bolt. This pressure is applied between the flanks of the bolt thread so that the contact area is maximized. Locking inserts are available in both imperial and metric versions, UNC and UNF.



Strip Feed Tangless® Inserts

Strip feed Tangless inserts, designed to be used in combination with Recoil pneumatic installation tooling, deliver optimal production efficiency by providing for increased installation cycles and reduced operator fatigue. Each insert is retained in a plastic strip which is passed through a slot in the front-end assembly nozzle, indexing the insert to the installation mandrel.



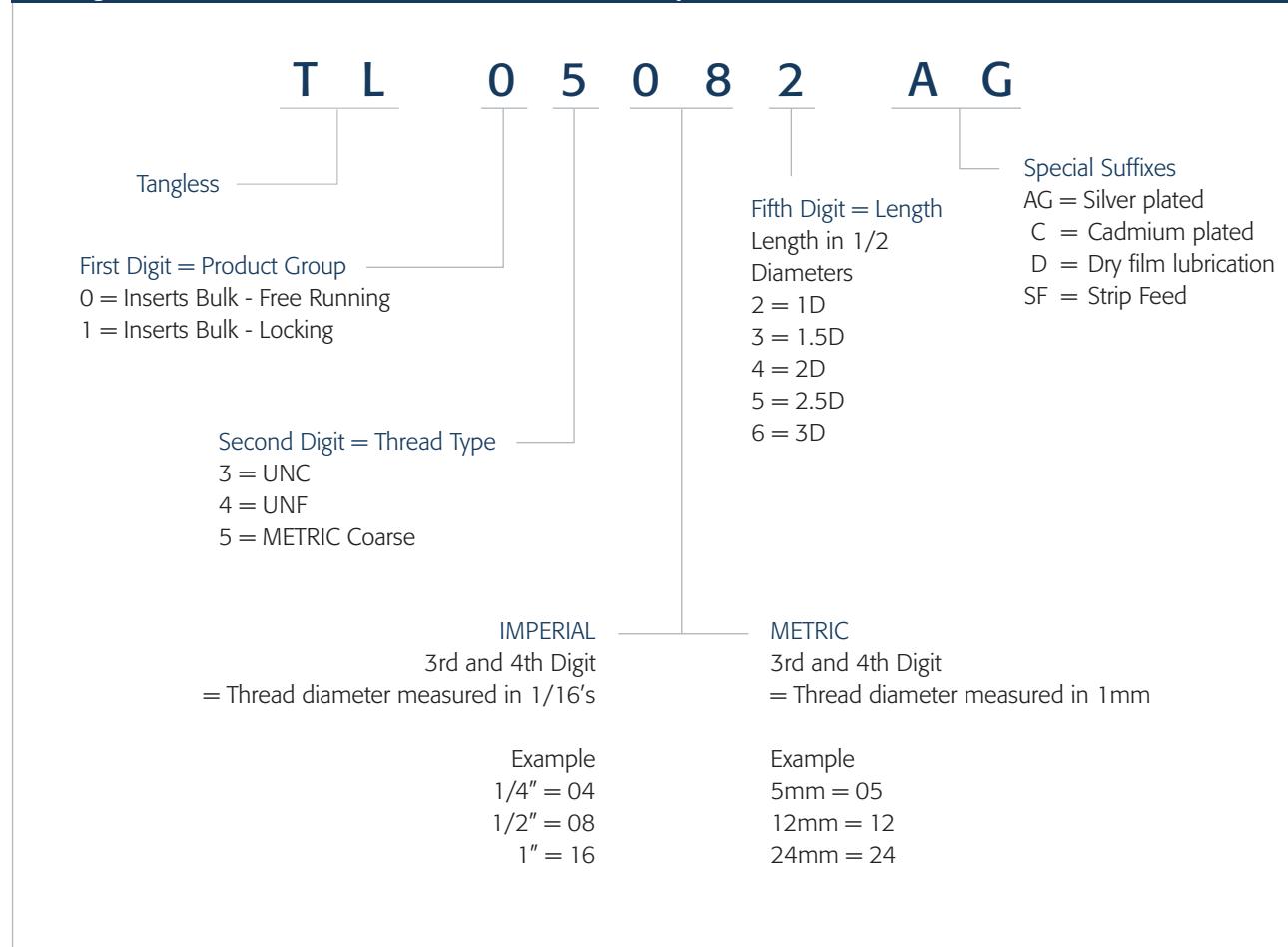
Tangless® Inserts are designed to replace tanged helical coil inserts as specified in MA3279 through MA3281 (standard thread) and MA3329 through MA3331 (locking thread). Inch MS122076 through to MS124690 (free running) and NASM21209 (locking). They install in standard STI tapped holes per MA1567 and MIL-I-8846. Installed inserts provide a finished thread meeting the requirements of FED-STD-H28, M Profile, Tolerance Classes 4H or 5H, as well as ISO metric thread specifications, and accept standard or MJ profile bolts or screws.

Recoil Threaded Insert Part Number System

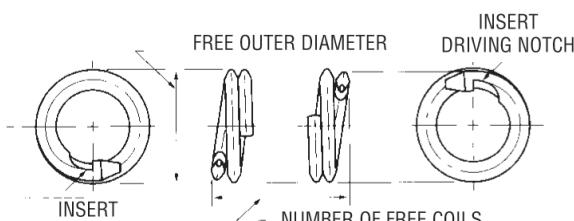
The Recoil insert product part numbering system uses a logically structured 5-digit part number. Suffixes are typically added to differentiate between special or non-standard features. This guide defines the structure of Recoil part numbers and may be used as a reference to identify a Recoil insert from its part number.

*Refer to Recoil Technical Catalog for tap and gauge information.

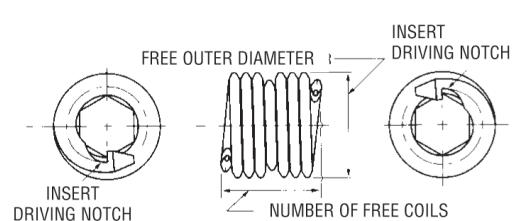
Diagram of Recoil Insert Part Number Example



Free-Running Inserts



Locking Inserts



Material: Type 304 Stainless steel per MA1565 and AS7245
Surface Texture: ASNI B46.1.

Inch Tangless Series

Free-Running Bulk (UNC)

UNC			LENGTH	
Size	Part Number	Cross Reference	In.	D
#2-56	TL03522	2TNC-02C-0086	0.086	1D
	TL03523	2TNC-02C-0129	0.129	1.5D
	TL03524	2TNC-02C-0172	0.172	2D
#4-40	TL03542	2TNC-04C-0112	0.112	1D
	TL03543	2TNC-04C-0168	0.168	1.5D
	TL03544	2TNC-04C-0224	0.224	2D
#6-32	TL03562	2TNC-06C-0138	0.138	1D
	TL03563	2TNC-06C-0207	0.207	1.5D
	TL03564	2TNC-06C-0276	0.276	2D
#8-32	TL03582	2TNC-2C-0164	0.164	1D
	TL03583	2TNC-2C-0246	0.246	1.5D
	TL03584	2TNC-2C-0328	0.328	2D
#10-24	TL03602	2TNC-3C-0190	0.19	1D
	TL03603	2TNC-3C-0285	0.285	1.5D
	TL03604	2TNC-3C-0380	0.38	2D
1/4-20	TL03042	2TNC-4C-0250	0.25	1D
	TL03043	2TNC-4C-0375	0.375	1.5D
	TL03044	2TNC-4C-0500	0.5	2D

Locking Bulk (UNC)

UNC			LENGTH	
Size	Part Number	Cross Reference	In.	D
#2-56	TL13522	2TLC-02C-0086	0.086	1D
	TL13523	2TLC-02C-0129	0.129	1.5D
	TL13524	2TLC-02C-0172	0.172	2D
#4-40	TL13542	2TLC-04C-0112	0.112	1D
	TL13543	2TLC-04C-0168	0.168	1.5D
	TL13544	2TLC-04C-0224	0.224	2D
#6-32	TL13562	2TLC-06C-0138	0.138	1D
	TL13563	2TLC-06C-0207	0.207	1.5D
	TL13564	2TLC-06C-0276	0.276	2D
#8-32	TL13582	2TLC-2C-0164	0.164	1D
	TL13583	2TLC-2C-0246	0.246	1.5D
	TL13584	2TLC-2C-0328	0.328	2D
#10-24	TL13602	2TLC-3C-0190	0.19	1D
	TL13603	2TLC-3C-0285	0.285	1.5D
	TL13604	2TLC-3C-0380	0.38	2D
1/4-20	TL13042	2TLC-4C-0250	0.25	1D
	TL13043	2TLC-4C-0375	0.375	1.5D
	TL13044	2TLC-4C-0500	0.5	2D

Free-Running Bulk (UNF)

UNF			LENGTH	
Size	Part Number	Cross Reference	In.	D
#10-32	TL04602	2TNF-3C-0190	0.19	1D
	TL04603	2TNF-3C-0285	0.285	1.5D
	TL04604	2TNF-3C-0380	0.38	2D
1/4-28	TL04042	2TLF-4C-0250	0.25	1D
	TL04043	2TLF-4C-0375	0.375	1.5D
	TL04044	2TLF-4C-0500	0.5	2D
5/16-24	TL04052	2TNF-5C-0312	0.312	1D
	TL04053	2TNF-5C-0469	0.468	1.5D
	TL04054	2TNF-5C-0625	0.624	2D
3/8-24	TL04062	2TNF-6C-0375	0.375	1D
	TL04063	2TNF-6C-0562	0.563	1.5D
	TL04064	2TNF-6C-0750	0.75	2D

Locking Bulk (UNF)

UNF			LENGTH	
Size	Part Number	Cross Reference	In.	D
#10-32	TL14602	2TLF-3C-0190	0.19	1D
	TL14603	2TLF-3C-0285	0.285	1.5D
	TL14604	2TLF-3C-0380	0.38	2D
1/4-28	TL14042	2TLF-4C-0250	0.25	1D
	TL14043	2TLF-4C-0375	0.375	1.5D
	TL14044	2TLF-4C-0500	0.5	2D
5/16-24	TL14052	2TLF-5C-0312	0.312	1D
	TL14053	2TLF-5C-0469	0.468	1.5D
	TL14054	2TLF-5C-0625	0.624	2D
3/8-24	TL14062	2TLF-6C-0375	0.375	1D
	TL14063	2TLF-6C-0562	0.563	1.5D
	TL14064	2TLF-6C-0750	0.75	2D

Stripfeed Series

Free-Running Stripfeed (UNC)

UNC			LENGTH	
Size	Part Number	Cross Reference	In.	D
#2-56	TL03522SF	2TNC-02C-0086SF	0.086	1D
	TL03523SF	2TNC-02C-0129SF	0.129	1.5D
	TL03524SF	2TNC-02C-0172SF	0.172	2D
#4-40	TL03542SF	2TNC-04C-0112SF	0.112	1D
	TL03543SF	2TNC-04C-0168SF	0.168	1.5D
	TL03544SF	2TNC-04C-0224SF	0.224	2D
#6-32	TL03562SF	2TNC-06C-0138SF	0.138	1D
	TL03563SF	2TNC-06C-0207SF	0.207	1.5D
	TL03564SF	2TNC-06C-0276SF	0.276	2D
#8-32	TL03582SF	2TNC-2C-0164SF	0.164	1D
	TL03583SF	2TNC-2C-0246SF	0.246	1.5D
	TL03584SF	2TNC-2C-0328SF	0.328	2D
#10-24	TL03602SF	2TNC-3C-0190SF	0.19	1D
	TL03603SF	2TNC-3C-0285SF	0.285	1.5D
	TL03604SF	2TNC-3C-0380SF	0.38	2D
1/4-20	TL03042SF	2TNC-4C-0250SF	0.25	1D
	TL03043SF	2TNC-4C-0375SF	0.375	1.5D
	TL03044SF	2TNC-4C-0500SF	0.5	2D

Locking Stripfeed (UNC)

UNC			LENGTH	
Size	Part Number	Cross Reference	In.	D
#2-56	TL13522SF	2TLC-02C-0086SF	0.086	1D
	TL13523SF	2TLC-02C-0129SF	0.129	1.5D
	TL13524SF	2TLC-02C-0172SF	0.172	2D
#4-40	TL13542SF	2TLC-04C-0112SF	0.112	1D
	TL13543SF	2TLC-04C-0168SF	0.168	1.5D
	TL13544SF	2TLC-04C-0224SF	0.224	2D
#6-32	TL13562SF	2TLC-06C-0138SF	0.138	1D
	TL13563SF	2TLC-06C-0207SF	0.207	1.5D
	TL13564SF	2TLC-06C-0276SF	0.276	2D
#8-32	TL13582SF	2TLC-2C-0164SF	0.164	1D
	TL13583SF	2TLC-2C-0246SF	0.246	1.5D
	TL13584SF	2TLC-2C-0328SF	0.328	2D
#10-24	TL13602SF	2TLC-3C-0190SF	0.19	1D
	TL13603SF	2TLC-3C-0285SF	0.285	1.5D
	TL13604SF	2TLC-3C-0380SF	0.38	2D
1/4-20	TL13042SF	2TLC-4C-0250SF	0.25	1D
	TL13043SF	2TLC-4C-0375SF	0.375	1.5D
	TL13044SF	2TLC-4C-0500SF	0.5	2D

Free-Running Stripfeed (UNF)

UNF			LENGTH	
Size	Part Number	Cross Reference	In.	D
#10-32	TL04602SF	2TNF-3C-0190SF	0.19	1D
	TL04603SF	2TNF-3C-0285SF	0.285	1.5D
	TL04604SF	2TNF-3C-0380SF	0.38	2D
1/4-28	TL04042SF	2TLF-4C-0250SF	0.25	1D
	TL04043SF	2TLF-4C-0375SF	0.375	1.5D
	TL04044SF	2TLF-4C-0500SF	0.5	2D
5/16-24	TL04052SF	2TNF-5C-0312SF	0.312	1D
	TL04053SF	2TNF-5C-0469SF	0.468	1.5D
	TL04054SF	2TNF-5C-0625SF	0.624	2D
3/8-24	TL04062SF	2TNF-6C-0375SF	0.375	1D
	TL04063SF	2TNF-6C-0562SF	0.563	1.5D
	TL04064SF	2TNF-6C-0750SF	0.75	2D

Locking Stripfeed (UNF)

UNF			LENGTH	
Size	Part Number	Cross Reference	In.	D
#10-32	TL14602SF	2TLF-3C-0190SF	0.19	1D
	TL14603SF	2TLF-3C-0285SF	0.285	1.5D
	TL14604SF	2TLF-3C-0380SF	0.38	2D
1/4-28	TL14042SF	2TLF-4C-0250SF	0.25	1D
	TL14043SF	2TLF-4C-0375SF	0.375	1.5D
	TL14044SF	2TLF-4C-0500SF	0.5	2D

Metric Tangless® Series

Free-Running Bulk (Metric Coarse)

METRIC COARSE			LENGTH	
Size	Part Number	Cross Reference	mm	D
M3-0.5	TL05032	2TNM-3X.5C-3	3	1D
	TL05033	2TNM-3X.5C-4.5	4.5	1.5D
	TL05034	2TNM-3X.5C-6	6	2D
M4-0.7	TL05042	2TNM-4X.7C-4	4	1D
	TL05043	2TNM-4X.7C-6	6	1.5D
	TL05044	2TNM-4X.7C-8	8	2D
M5-0.8	TL05052	2TNM-5X.8C-5	5	1D
	TL05053	2TNM-5X.8C-7.5	7.5	1.5D
	TL05054	2TNM-5X.8C-10	10	2D
M6-1.0	TL05062	2TNM-6X1C-6	6	1D
	TL05063	2TNM-6X1C-9	9	1.5D
	TL05064	2TNM-6X1C-12	12	2D
M8-1.25	TL05082	2TNM-8X1.25C-8	8	1D
	TL05083	2TNM-8X1.25C-12	12	1.5D
	TL05084	2TNM-8X1.25C-16	16	2D
M10-1.5	TL05102	2TNM-10X1.5C-10	10	1D
	TL05103	2TNM-10X1.5C-15	15	1.5D
	TL05104	2TNM-10X1.5C-20	20	2D

Locking Bulk (Metric Coarse)

METRIC COARSE			LENGTH	
Size	Part Number	Cross Reference	mm	D
M3-0.5	TL15032	2TLM-3X.5C-3	3	1D
	TL15033	2TLM-3X.5C-4.5	4.5	1.5D
	TL15034	2TLM-3X.5C-6	6	2D
M4-0.7	TL15042	2TLM-4X.7C-4	4	1D
	TL15043	2TLM-4X.7C-6	6	1.5D
	TL15044	2TLM-4X.7C-8	8	2D
M5-0.8	TL15052	2TLM-5X.8C-5	5	1D
	TL15053	2TLM-5X.8C-7.5	7.5	1.5D
	TL15054	2TLM-5X.8C-10	10	2D
M6-1.0	TL15062	2TLM-6X1C-6	6	1D
	TL15063	2TLM-6X1C-9	9	1.5D
	TL15064	2TLM-6X1C-12	12	2D
M8-1.25	TL15082	2TLM-8X1.25C-8	8	1D
	TL15083	2TLM-8X1.25C-12	12	1.5D
	TL15084	2TLM-8X1.25C-16	16	2D
M10-1.5	TL15102	2TLM-10X1.5C-10	10	1D
	TL15103	2TLM-10X1.5C-15	15	1.5D
	TL15104	2TLM-10X1.5C-20	20	2D

Free-Running Stripfeed (Metric Coarse)

METRIC COARSE			LENGTH	
Size	Part Number	Cross Reference	mm	D
M3-0.5	TL05032SF	2TNM-3X.5C-3SF	3	1D
	TL05033SF	2TNM-3X.5C-4.5SF	4.5	1.5D
	TL05034SF	2TNM-3X.5C-6SF	6	2D
M4-0.7	TL05042SF	2TNM-4X.7C-4SF	4	1D
	TL05043SF	2TNM-4X.7C-6SF	6	1.5D
	TL05044SF	2TNM-4X.7C-8SF	8	2D
M5-0.8	TL05052SF	2TNM-5X.8C-5SF	5	1D
	TL05053SF	2TNM-5X.8C-7.5SF	7.5	1.5D
	TL05054SF	2TNM-5X.8C-10SF	10	2D
M6-1.0	TL05062SF	2TNM-6X1C-6SF	6	1D
	TL05063SF	2TNM-6X1C-9SF	9	1.5D
	TL05064SF	2TNM-6X1C-12SF	12	2D
M8-1.25	TL05082SF	2TNM-8X1.25C-8SF	8	1D
	TL05083SF	2TNM-8X1.25C-12SF	12	1.5D
	TL05084SF	2TNM-8X1.25C-16SF	16	2D
M10-1.5	TL05102SF	2TNM-10X1.5C-10SF	10	1D
	TL05103SF	2TNM-10X1.5C-15SF	15	1.5D
	TL05104SF	2TNM-10X1.5C-20SF	20	2D

Locking Stripfeed (Metric Coarse)

METRIC COARSE			LENGTH	
Size	Part Number	Cross Reference	mm	D
M3-0.5	TL15032SF	2TLM-3X.5C-3SF	3	1D
	TL15033SF	2TLM-3X.5C-4.5SF	4.5	1.5D
	TL15034SF	2TLM-3X.5C-6SF	6	2D
M4-0.7	TL15042SF	2TLM-4X.7C-4SF	4	1D
	TL15043SF	2TLM-4X.7C-6SF	6	1.5D
	TL15044SF	2TLM-4X.7C-8SF	8	2D
M5-0.8	TL15052SF	2TLM-5X.8C-5SF	5	1D
	TL15053SF	2TLM-5X.8C-7.5SF	7.5	1.5D
	TL15054SF	2TLM-5X.8C-10SF	10	2D
M6-1.0	TL15062SF	2TLM-6X1C-6SF	6	1D
	TL15063SF	2TLM-6X1C-9SF	9	1.5D
	TL15064SF	2TLM-6X1C-12SF	12	2D
M8-1.25	TL15082SF	2TLM-8X1.25C-8SF	8	1D
	TL15083SF	2TLM-8X1.25C-12SF	12	1.5D
	TL15084SF	2TLM-8X1.25C-16SF	16	2D
M10-1.5	TL15102SF	2TLM-10X1.5C-10SF	10	1D
	TL15103SF	2TLM-10X1.5C-15SF	15	1.5D
	TL15104SF	2TLM-10X1.5C-20SF	20	2D

Recoil Tangless Tooling Options

There are four ways to install Tangless inserts, with the optimal selection being based on the type of application and how many inserts you are installing.



Hand Prewinder Tooling

This tool is ideal for installing inserts in small production runs or in areas where compressed air or electricity are not available. This tool also offers a quicker alternative to the simple hand installation tool and is suitable for use with both free running and locking inserts.

Inch Prewinder Table

		Part Number
UNC 2-56	Free Running & Locking	TL53521
	Replacement Pawl	TL53522
UNC 4-40	Free Running & Locking	TL53541
	Replacement Pawl	TL53542
UNC 6-32	Free Running & Locking	TL53561
	Replacement Pawl	TL53562
UNC 8-32	Free Running & Locking	TL53581
	Replacement Pawl	TL53582
UNC 10-24	Free Running & Locking	2KPHC-3
	Replacement Pawl	2KIPC-3
UNC 1/4-20	Free Running & Locking	2KPHC-4
	Replacement Pawl	2KIPC-4
UNF 10-32	Free Running & Locking	TL54601
	Replacement Pawl	TL54602
UNF 1/4-28	Free Running & Locking	TL54041
	Replacement Pawl	TL54042
UNF 5/16-24	Free Running & Locking	2KPHF-5
	Replacement Pawl	2KIPF-5
UNF 3/8-24	Free Running & Locking	2KPHF-6
	Replacement Pawl	2KIPF-6

Metric Prewinder Table

		Part Number
M2.5 x 0.45	Free Running & Locking	TL55251
	Replacement Pawl	TL55252
M3 x 0.5	Free Running & Locking	TL55031
	Replacement Pawl	TL55032
M4 x 0.7	Free Running & Locking	TL55041
	Replacement Pawl	TL55042
M5 x 0.8	Free Running & Locking	TL55051
	Replacement Pawl	TL55052
M6 x 1	Free Running & Locking	TL55061
	Replacement Pawl	TL55062
M8 x 1.25	Free Running & Locking	TL55081
	Replacement Pawl	TL55082
M10 x 1.25	Free Running & Locking	TL55101
	Replacement Pawl	TL55102
M12 x 1.75	Free Running & Locking	TL55121
	Replacement Pawl	TL55122

Recoil® Tangless® Tooling Options

Hand/Electric Tooling

Recoil HEX KHE Series tooling can be used in either manual or electric mode. The electric version uses a small motor to install fasteners at a much higher rate than a manual installation tool or pre-winder tool. This tool is ideal for installation of medium-to-large quantities of inserts. To employ an electric KHE Series tool in electric mode, you will need to select a power supply and drivers from the chart below.

Power Supply and Installation Drivers

Size	Part Number
Install Driver #2 - #8	SB-400C
Install Driver #10 - 1/4"	SB-650C
Power Supply	SBT-50



Hand Installation

Description	Part Number
Plastic Star-Style Handle*	PW3SK
Metal Gage-Style Handle	TL5000

Hex Electric Tool* - KHE Series

Hex Installation Tool	
Size	Part Number
Inch	
UNC #2-56	TL53527
UNC #4-40	TL53547
UNC #6-32	TL53567
UNC #8-32	TL53587
UNC #10-24	2KHEC-3
UNC 1/4-20	TL53047
UNF #10-32	TL54607
Metric	
M2-0.4	2KHEM-F2
M2.5-0.45	TL55257
M3-0.5	TL55037
M4-0.7	TL55047
M5-0.8	TL55057
M6-1.0	TL55067
M8-1.25	TL55087
M10-1.5	TL55107
M12-1.75	TL55127

Hex Installation Tool Spare Mandrel

Size	Part Number
Inch	
UNC #2-56	TL53527M
UNC #4-40	TL53547M
UNC #6-32	TL53567M
UNC #8-32	TL53587M
UNC #10-24	2KHEC-3M
UNC 1/4-20	TL53047M
UNF #10-32	TL54607M

Hex Installation Tool Spare Pawl

Size	Part Number
Inch	
UNC #2-56	TL53522
UNC #4-40	TL53542
UNC #6-32	TL53562
UNC #8-32	TL53582
UNC #10-24	2KIPC-3
UNC 1/4-20	TL53042
UNF #10-32	TL54602
Metric	
M2.5-0.45	TL55252
M3-0.5	TL55032
M4-0.7	TL55042
M5-0.8	TL55052
M6-1.0	TL55062
M8-1.25	TL55082
M10-1.5	TL55102
M12-1.75	TL55122

* RECOIL Electric HEX Installation Tool Includes:

- Mandrel
- Pawl
- Pin
- Spring
- Star-Styled Handle (gage-style handle is optional)

Recoil Tangless Tooling Options

Hand/Electric Tooling

Hex Electric Tool - KHE Series

Hex Installation Tool
Locking

Size	Part Number
Inch	
UNF #10-32	TL54607L
Metric	
M2-0.4	N/A
M2.5-0.45	2KHEM-L2.5
M3-0.5	2KHEM-L3
M4-0.7	2KHEM-L4
M5-0.8	2KHEM-L5
M6-1.0	2KHEM-L6
M8-1.25	2KHEM-L8
M10-1.5	2KHEM-L10
M12-1.75	2KHEM-L12

Hex Installation Tool
Locking Spare Mandrel

Size	Part Number
Inch	
UNF #10-32	TL54607LM
Metric	
M2-0.4	N/A
M2.5-0.45	2KHEM-L2.5M
M3-0.5	2KHEM-L3M
M4-0.7	2KHEM-L4M
M5-0.8	2KHEM-L5M
M6-1.0	2KHEM-L6M
M8-1.25	2KHEM-L8M
M10-1.5	2KHEM-L10M
M12-1.75	2KHEM-L12M

Removal Electric Tool - KRT Series

Removal Tools

Size	Part Number
Inch	
UNC #2-56	TL53523
UNC #4-40	TL53543
UNC #6-32	TL53563
UNC #8-32	TL53583
UNC #10-24	2KRTC-3
UNC 1/4-20	2KRTC-4
UNF #10-32	TL54603
UNF 1/4-28	2KRTC-4
UNF 5/16-24	2KRTC-5
UNF 3/8-24	2KRTC-6
Metric	
M2-0.4	2KRTM-2
M2.5-0.45	2KRTM-2.5
M3-0.5	2KRTM-3
M4-0.7	2KRTM-4
M5-0.8	2KRTM-5
M6-1.0	2KRTM-6
M8-1.25	2KRTM-8
M10-1.5	2KRTM-10
M12-1.75	2KRTM-12

Removal Spare Pawls

Size	Part Number
Inch	
UNC #2-56	TL53524
UNC #4-40	TL53544
UNC #6-32	TL53564
UNC #8-32	TL53584
UNC #10-24	2KRPC-3
UNC 1/4-20	2KRPC-4
UNF #10-32	TL54604
UNF 1/4-28	2KRPF-4
UNF 5/16-24	2KRPF-5
UNF 3/8-24	2KRPF-6
Metric	
M2-0.4	2KRPM-2
M2.5-0.45	2KRPM-2.5
M3-0.5	2KRPM-3
M4-0.7	2KRPM-4
M5-0.8	2KRPM-5
M6-1.0	2KRPM-6
M8-1.25	2KRPM-8
M10-1.5	2KRPM-10
M12-1.75	2KRPM-12



Recoil Tangless Tooling Options

Air Tooling

Recoil pneumatic powered installation tooling uses a standard air supply to install fasteners at a much higher rate than a manual installation tool or prewinder tool. This tool is ideal for installation of medium-to-large quantities of inserts, especially when used in combination with strip feed.

To install using air tooling all you need is:

Air Motor and Adapter NR-HL 1409 (M2.5 to M6) and (2-56 to 1/4")
NR-HL 1410 (M8 to M12)

Front End Assembly Choose from the table below depending on your thread form and diameter



Inch Front End Assembly Table

	Part Number
UNC 2-56	TL53520
UNC 4-40	TL53540
UNC 6-32	TL53560
UNC 8-32	TL53580
UNC 10-24	2KPAC-3
UNC 1/4-20	TL53040
UNF 10-32	TL54600
UNF 1/4-28	TL54040
UNF 5/16-24	TL54050
UNF 3/8-24	TL54060

Metric Front End Assembly Table

	Part Number
M2.5 x 0.45	TL55250
M3 x 0.5	TL55030
M4 x 0.7	TL55040
M5 x 0.8	TL55050
M6 x 1	TL55060
M8 x 1.25	TL55180
M10 x 1.5	2KPAM-10
M12 x 1.75	2KPAM-12

Inch Front End Assembly Mandrel

	Part Number
UNC 2-56	TL53520M
UNC 4-40	TL53540M
UNC 6-32	TL53560M
UNC 8-32	TL53580M
UNC 10-24	2KPAC-3M
UNC 1/4-20	TL53040M
UNF 10-32	TL54600M
UNF 1/4-28	TL54040M
UNF 5/16-24	TL54050M
UNF 3/8-24	TL54060M

Metric Front End Assembly Mandrel

	Part Number
M2.5 x 0.45	TL55250M
M3 x 0.5	TL55030M
M4 x 0.7	TL55040M
M5 x 0.8	TL55050M
M6 x 1	TL55060M
M8 x 1.25	TL55180M
M10 x 1.25	2KPAM-10M
M12 x 1.75	2KPAM-12M



Recoil Tangless Tooling Options

Spare Pawls & Kits - 2KIP Series

Inch Front End Assembly Spare Pawl

	Part Number
UNC 2-56	TL53522
UNC 4-40	TL53542
UNC 6-32	TL53562
UNC 8-32	TL53582
UNC 10-24	2KIPC-3
UNC 1/4-20	TL53042
UNF 10-32	TL54602
UNF 1/4-28	TL54042
UNF 5/16-24	TL54052
UNF 3/8-24	TL54062

Metric Front End Assembly Spare Pawl

	Part Number
M2 x 0.4	2KIPM-2
M2.5 x 0.45	TL55252
M3 x 0.5	TL55032
M4 x 0.7	TL55042
M5 x 0.8	TL55052
M6 x 1	TL55062
M8 x 1.25	TL55082
M10 x 1.5	2KIPM-10
M12 x 1.75	2KIPM-12

Inch Front End Assembly Spare Pawl Kits

	Part Number
UNC 2-56	TL53522K
UNC 4-40	TL53542K
UNC 6-32	TL53562K
UNC 8-32	TL53582K
UNC 10-24	2KIPC-3K
UNC 1/4-20	TL53042K
UNF 10-32	TL54602K
UNF 1/4-28	TL54042K
UNF 5/16-24	TL54052K
UNF 3/8-24	TL54062K

Metric Front End Assembly Spare Pawl Kits

	Part Number
M2 x 0.4	2KIPM-2K
M2.5 x 0.45	TL55252K
M3 x 0.5	TL55032K
M4 x 0.7	TL55042K
M5 x 0.8	TL55052K
M6 x 1	TL55062K
M8 x 1.25	TL55082K
M10 x 1.5	2KIPM-10K
M12 x 1.75	2KIPM-12K

RECOIL Pawl Kit Includes:

- 1 Pawl (2KIP Series)
- 2 Springs (2KSPr Series)
- 2 Pins (2KIPN Series)

Alcoa Fastening Systems & Rings



Camloc™



For more than 120 years, the name Alcoa has been recognized worldwide as a strong leader in product quality and customer support. These strengths are found in every product manufactured for Alcoa Fastening Systems & Rings, offering the greatest breadth and depth of fastening system solutions in the industry.

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