



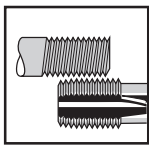
Recoil® Inserts

With a choice of free-running or screw-locking designs, Recoil® offers a broad range of thread insert systems to ensure the best match of product to the application. The standard Recoil free-running insert provides for easy installation of a female thread, delivering the necessary “holding power” for most applications. For particularly demanding or extreme high-vibration applications, Recoil offers a screw-locking design, which provides a superior locking function in the female thread.

How to Install Recoil Inserts



1. DRILL: Drill to clear out the damaged thread with drill size as specified on kit (if necessary).



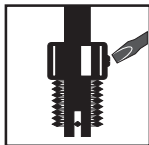
2. CHECK: Ensure tap thread matches bolt.



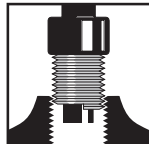
3. TAP: Place tap into tap wrench or use the square drive in the installation tool if provided. (Square drive tool only suitable for tapping non-ferrous alloys.)



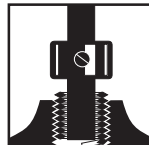
3a. TAP HOLE: Tap hole to the required depth using correct procedures (if unsure contact your dealer).



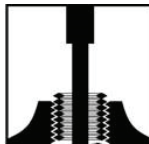
4. SET TOOL: Place insert on installation tool, positioning the adjustable top so that the insert tang is centered in the tang slot.



5. INSTALL: Wind insert in with light downward pressure until 1/4 to 1/2 turn below the surface.



6. TANG REMOVAL: Do not attempt to twist tang off with tool. Lift tool from tang, turn tool 90° and tap down sharply. Use Tang Break Tool where supplied. For sparkplug and large fine thread inserts, use long nose pliers to pull tang out.



Thread Repair Kits

Recoil offers a choice of repair kits to meet a wide range of repair options. Recoil Trade Series provides everything required to make a successful repair – drill bit, STI tap, installation tool, and three lengths of inserts – all packaged in a convenient kit. Trade Series kits are available to accommodate a wide range of Inch Coarse, Inch Fine, Metric Coarse, and Metric Fine uses.

Installation Tooling

Recoil offers a broad selection of installation tooling, providing easy, secure installation, for both manufacturing and repair applications. For the manufacturer, Recoil offers the choice of electrically powered tools, in addition to high-production volume pneumatic tools. Another Recoil innovation, the Work Arm System, combines strip-feed inserts with a pneumatic tool, to contribute to the efficiency and productivity of manufacturing operations.



Recoil® Bringing Versatility to a Range of Applications

Offering a wide variety of sizes, materials, finishes and coatings, Recoil® brand products are versatile enough to fit a broad range of applications. Recoil threaded inserts, installation tooling, taps, gauges, and thread-repair kits accommodate manufacturing and aftermarket applications in the automotive, aerospace, electronics, ship building, defense, power-generation and transportation industries. Manufactured in all

popular thread forms, Recoil inserts are engineered in accordance with stringent quality standards, including AS9100, ISO9001, TS16949, Boeing Certification, Mil Spec and others.

Competitively priced, Recoil products have been proven to deliver superior performance, durability, and value.

Arconic Fastening Systems



The name Arconic is recognised worldwide as a strong leader in product quality and customer support. These strengths are found in every product manufactured for Arconic Fastening Systems, offering the greatest breadth and depth of fastening system solutions in the industry.

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RECOIL® Series Part Number Range Inch



Recoil Range Inch Part Numbers

Thread Size/Pitch	Thread Repair Kit	Thread Repair INS / Kit	Installation Tools	Tangbreak Tools	Bulk Inserts					Packets				Taps				Extraction Tool	Drill Chart		Thread Size/Pitch		
					1D	1.5D	2D	2.5D	3D	1D	1.5D	2D	INS/Pkt	Taper	Inter	Bott	SP/Point		SP/Flute	MM		Inch	
UNC																				UNC			
#2-56	33528	15	*	50061-17	59060M	03522	03523	03524	03525	03526	23522	23523		10	43524	43525	43526	43528	43529	2.1	3/32	#2-56	
#3-48	33538	15	*	50069-17	59070M	03532	03533	03534	03535	03536		23533		10	43534	43535	43536	43538	43539	2.7	#36	#3-48	
#4-40	33548	15	*	50077-17	59080M	03542	03543	03544	03545	03546	23542	23543	23544	10	43544	43545	43546	43548	43549	50002	3.0	#31	#4-40
#5-40	33558	15	*	50089-18	59090M	03552	03553	03554	03555	03556	23552	23553	23554	10	43554	43555	43556	43558	43559	50002	3.4	#29	#5-40
#6-32	33568	15	*	50095-16	59100M	03562	03563	03564	03565	03566	23562	23563	23564	10	43564	43565	43566	43568	43569	50002	3.7	#25	#6-32
#8-32	33588	15	*	50125-14	59130M	03582	03583	03584	03585	03586	23582	23583	23584	10	43584	43585	43586	43588	43589	50002	4.4	11/64	#8-32
#10-24	33608	15	*	50140-11	59140M	03602	03603	03604	03605	03606	23602	23603	23604	10	43604	43605	43606	43608	43609	50002	5.0	13/64	#10-24
#12-24	33628	15		50156-10	59160M	03622	03623	03624	03625	03626	23622	23623		10	43624	43625	43626	43628	43629	50002	5.8	15/64	#12-24
1/4-20	33048	15	*	50188-10	59190M	03042	03043	03044	03045	03046	23042	23043	23044	10	43044	43045	43046	43048	43049	50002	6.7	17/64	1/4-20
5/16-18	33058	15	*	50219-8	59220M	03052	03053	03054	03055	03056	23052	23053	23054	10	43054	43055	43056	43058	43059	50002	8.3	21/64	5/16-18
3/8-16	33068	15	*	50281-4	59280M	03062	03063	03064	03065	03066	23062	23063	23064	10	43064	43065	43066	43068	43069	50002	9.9	25/64	3/8-16
7/16-14	33078	10	*	50344-3	59310M	03072	03073	03074	03075	03076	23072	23073	23074	10	43074	43075	43076	43078	43079	50003	11.5	29/64	7/16-14
1/2-13	33088	10	*	50375-2	59380M	03082	03083	03084	03085	03086	23082	23083	23084	10	43084	43085	43086	43088	43089	50003	13.0	17/32	1/2-13
9/16-12	33098	6		50438-0		03092	03093	03094	03095	03096	23092	23093		5	43094	43095	43096	43098	43099	50003	14.5	19/32	9/16-12
5/8-11	33108	6		50500-0		03102	03103	03104	03105	03106	23102	23103		5	43104	43105	43106	43108	43109	50003	16.5	21/32	5/8-11
11/16-11	33110	5		50500-0		03112	03113	03114	03115	03116		23113		5	43114	43115	43116			50003	18.0	45/64	11/16-11
3/4-10	33128	6		50591-0		03122	03123	03124	03125	03126	23122	23123		5	43124	43125	43126	43128	43129	50003	19.8	25/32	3/4-10
7/8-9	33140	5		50688		03142	03143	03144	03145	03146		23143		3	43144	43145	43146	43148	43149	50003	23.0	29/32	7/8-9
1"-8	33160	5		50750		03162	03163	03164	03165	03166		23163		3	43164	43165	43166	43168	43169	50003	26.0	11/32	1"-8
1 1/8-7	33180	5		50875		03182	03183	03184	03185	03186	23182	23183		1	43184	43185	43186			50004	29.5	15/32	1 1/8-7
1 1/4-7	33200	5		51000		03202	03203	03204	03205	03206	23202	23203		1	43204	43205	43206			50004	33.0	19/32	1 1/4-7
1 3/8-6	33220	5		51063		03222	03223	03224	03225	03226		23223		1	43224	43225	43226			50004	36.0	113/32	1 3/8-7
1 1/2-6	33240	4		51125		03242	03243	03244	03245	03246	23242	23243		1	43244	43245	43246			50004	39.0	117/32	1 1/2-6
UNF																					UNF		
#3-56	34538	15	*	50069-17	59070M	04532	04533	04534	04535	04536		24533		10	44534	44535	44536			5002	2.65	#37	#3-56
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#8-36	34588	15	*	50125-14	59130M	04582	04583	04584	04585	04586		24583		10	44584	44585	44586	44588	44589	50002	4.4	11/64	#8-36
#10-32	34608	15	*	50156-11	59160M	04602	04603	04604	04605	04606	24602	24603	24604	10	44604	44605	44606	44608	44609	50002	5.1	13/64	#10-32
#12-28	34628	15		50156-10	59160M	04622	04623	04624	04625	04626		24623		10	44624	44625	44626			50002	5.6	15/64	#12-28
1/4-28	34048	15	*	50188-10	59190M	04042	04043	04044	04045	04046	24042	24043	24044	10	44044	44045	44046	44048	44049	50002	6.6	17/64	1/4-28
5/16-24	34058	15	*	50250-8	59250M	04052	04053	04054	04055	04056	24052	24053	24054	10	44054	44055	44056	44058	44059	50002	8.2	21/64	5/16-24
3/8-24	34068	15	*	50313-6	59280M	04062	04063	04064	04065	04066	24062	24063	24064	10	44064	44065	44066	44068	44069	50002	9.8	25/64	3/8-24
7/16-20	34078	10	*	50344-8	59310M	04072	04073	04074	04075	04076	24072	24073	24074	10	44074	44075	44076	44078	44079	50003	11.5	29/64	7/16-20
1/2-20	34088	10	*	50375-3	59380M	04082	04083	04084	04085	04086	24082	24083	24084	10	44084	44085	44086	44088	44089	50003	13.0	33/64	1/2-20
9/16-18	34098	6		50438-0		04092	04093	04094															