

# Power Tools



The Recoil range of power tooling ensures consistent high volume thread insert installation for a variety of applications.

Recoil powered installation tools may be supplied for use with either a compressed air supply or via a stabilized low voltage power supply to suit your particular requirements. Both equipment types offer significant productivity gains for high volume insert use.

## Pneumatic Power Tooling

- Wide thread size range #2-56 through 3/4", or M2.5 through M16, coarse and fine
- Rugged and versatile air motor
- May be used with captive strip feed or bulk insert insertion
- Standard speed 1500 rpm
- Auto reverse on release of trigger

The complete pneumatic insert installation tool comprises three components:

- Air motor with single lever control to install and retract
- Adaptor - connect the motor to the insert drive nozzle - small and large types
- Front end assembly nozzle to suit the particular insert thread size

## Electric Power Tooling

- Size range #2-56 through 1/4", M2.5 through M8
- Auto reverse on installation
- Clean, lightweight, quiet
- Suitable for bulk insert only

Recoil offers two different types of air motors, the 56010 series and the NR-HL series. For further details please contact your Recoil distributor.

## Compressed Air Supply for Pneumatic Installation Tools

PRESSURE RECOMMENDATIONS										
FOR INSERT SIZE										
Inch	#2	#4	#5	#6	#8 #10	1/4"	5/16"	3/8"	7/16"	1/2"
Metric	M2 - 2.5	M2.5	M3	M3.5	M4, M5	M6, M7	M8	M10	-	M12
RECOMMENDED PRESSURE										
psi	25	20-30	25-30	40	45	50-60	60	70	70-80	90
bar	1.70	1.3-2.0	1.7-2.0	2.72	3.06	3.4-4.0	4.0	4.76	4.7-5.4	6.0
MPa	0.172	0.138-0.206	0.172-0.206	0.275	0.310	.344-0.413	0.413	0.482	0.482-0.551	0.620

If difficulty is encountered within the above settings, reduce the pressure until the optimum setting is found. It is imperative that a regulated moisture-free and filtered air supply is used with all Recoil pneumatic tooling. Reliability will be affected if an adequate and regulated air supply is not used with these tools. Guidelines for typical Recoil insert tool pressure requirements are shown above.

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## Recoil Inserts-Pneumatic Installation Tooling

The following table denotes the part numbers of all pneumatic installation tooling for the most popular thread size ranges.

THREAD SIZE	FRONT-END ASSEMBLY	MANDREL	NOZZLE	NR AIR MOTOR & ADAPTOR
	PART No.	PART No.	PART No.	PART No.
<b>UNC</b>				
2-56	53520	53529	53528	NR-HL 1409
4-40	M8551-04-15	M8553	M8557-04-15	NR-HL 1409
5-40	M8551-05-15	53559	53558	NR-HL 1409
6-32	M8551-06-15	M8553-06	M8557-06-15	NR-HL 1409
8-32	M8551-2-15	M8553-2	M8557-2-15	NR-HL 1409
10-24	M8551-3-15	M8553-3	M8557-3-15	NR-HL 1409
1/4-20	M8551-4-15	M8553-4	M8557-4-15	NR-HL 1409
5/16-18	M8251-5-15	M8253-5	M8257-5-15	NR-HL 1410
3/8-16	M8251-6-15	M8253-6	M8257-6-15	NR-HL 1410
7/16-14	M8251-7-15	53079	53087	NR-HL 1410
1/2-13	M8251-8-15	M8253-8	M8257-8-15	NR-HL 1410
5/8-11	53100	--	--	NR-HL 1410
3/4-10	53120	--	--	NR-HL 1410
<b>UNF</b>				
6-40	54560	54569	54568	NR-HL 1409
10-32	M8552-3-15	M8554-3	M8558-3-15	NR-HL 1409
1/4-28	M8552-4-15	54049	54048	NR-HL 1409
5/16-24	M8252-5-15	54059	54058	NR-HL 1410
3/8-24	54060	54069	54068	NR-HL 1410
7/16-20	M8252-7-15	M8254-7	M8258-7-15	NR-HL 1410
1/2-20	M8252-8-15	M8254-8	M8258-8-15	NR-HL 1410
5/8-18	M8252-9	M8254-9	M8258-9	NR-HL 1410
3/4-16	54120	--	--	NR-HL 1410
<b>METRIC COARSE</b>				
2.2 x .45	55010	55019	55018	NR-HL 1409
2.5 x .45	55250	55259	55258	NR-HL 1409
3 x .5	M8751-3-15	M8757-3	M8769-3-15	NR-HL 1409
3.5 x .6	M8751-3.5-15	55359	55358	NR-HL 1409
4 x .7	M8751-4-15	M8757-4	M8769-4-15	NR-HL 1409
5 x .8	M8751-5-15	M8757-5	M8769-5-15	NR-HL 1409
6 x 1	M8751-6-15	M8757-6	M8769-6-15	NR-HL 1409
7 x 1	55070	55079	55078	NR-HL 1410
8 x 1.25	M8751-8-15	M8757-8	M8769-8-15	NR-HL 1410
10 x 1.5	M8751-10-15	M8757-10	M8769-10-15	NR-HL 1410
12 x 1.75	M8751-12-15	M8757-12	M8769-12-15	NR-HL 1410
16 x 2	55160	M8757-16	M8769-16	NR-HL 1410
<b>METRIC FINE</b>				
8 x 1	57080	57089	57088	NR-HL 1410
10 x 1	58100	58109	58108	NR-HL 1410
10 x 1.25	57100	57109	57108	NR-HL 1410
12 x 1.25	58120	58129	58128	NR-HL 1410
12 x 1.5	57120	57129	57128	NR-HL 1410
14 x 1.5	M8753-14	M8774-14	M8773-14	NR-HL 1410



# Strip-Feed Inserts for Power Tools



To complete the Recoil power installation tools, Recoil has inserts available on strip (M2.5-M12, #2-5/16) to optimize production with increased installation cycles and reduced operator fatigue.

Recoil strip feed inserts provide many advantages such as:

- Minimized handling costs
- Faster, more economical assembly
- Positive inventory control

When used in combination with Recoil pneumatic installation tooling, 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.

Recoil Strip-Feed inserts are available in most common thread diameters and lengths in addition to the various surface finishes which are available on standard Recoil bulk inserts.

The table shows some commonly supplied Recoil Strip-Feed inserts and defines the typical quantity of inserts supplied per reel for each given thread size.

Additional insert diameters and lengths may be available to special order.

## Reference Table for Recoil Strip-Feed Inserts

INSERT PART NUMBERS	INSERT SIZE	INSERT LENGTH	NUMBER PER REEL	REEL TYPE
3542SF, 3543SF, 3544SF	4-40	1-2D	1000	Small
3562SF	6-32	1D	1000	Small
3563SF, 3564SF	6-32	1.5-2D	1000	Large
3582SF, 3583SF, 3584SF	8-32	1-2D	1000	Large
3602SF	10-24	1D	1000	Large
3603SF, 3604SF	10-24	1.5-2D	500	Large
3622SF, 3623SF	12-24	1-1.5D	500	Large
3042SF, 3043SF, 3044SF	1/4-20	1-1.5D	500	Large
3052SF, 3053SF, 3054SF	5/16-18	1-2D	250	Large
3063SF	3/8-16	1.5D	250	Large
4562SF	6-40	1D	1000	Small
4563SF, 4564SF	6-40	1.5D-2D	1000	Large
4602SF	10-32	1D	1000	Large
4603SF, 4604SF	10-32	1.5-2D	500	Large
4042SF, 4043SF, 4044SF	1/4-28	1-2D	500	Large
4052SF, 4053SF, 4054SF	5/16-24	1-2D	250	Large
5252SF, 5253SF, 5254SF	M2.5	1D	1000	Small
5033SF, 5034SF	M3	1.5D	1000	Small
5353SF, 5354SF	M3.5	1.5-2D	1000	Small
5043SF, 5044SF	M4	1.5-2D	1000	Large
5042SF	M4	1D	1000	Small
5052SF	M5	1D	1000	Large
5053SF, 5054SF	M5	1.5-2D	500	Large
5062SF, 5063SF, 5064SF	M6	1-2D	500	Large
5082SF, 5083SF, 5084SF	M8-1.25	1.5-2D	500	Large
5122SF, 5123SF, 5124SF	M12-1.75	1-2D	125	Large

**Note: Strip feed inserts are also available with different finishes and coatings. Super reels are also available increasing the number of inserts available per reel.**

**Note: Prefixes of 0 are required for free running inserts and a prefix of 1 for locking inserts.**

ALCOA Fastening Systems products are available from MARYLAND METRICS P.O. Box 261 Owings Mills, MD 21117 USA  
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