



**16574576**  
Edition 3  
February 2014

# Air Screwdrivers

**5 Series**

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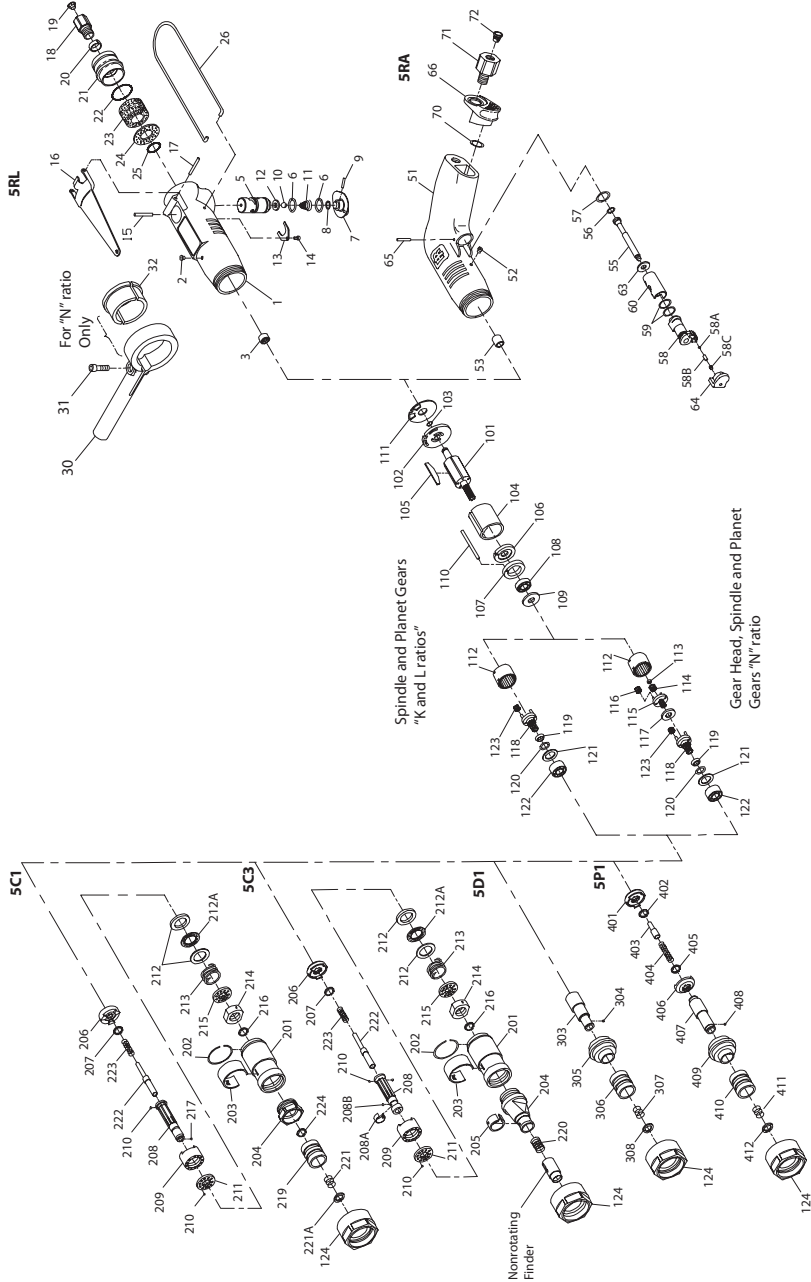
## Parts Information



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**Series 5 Motor Housing Assembly - Exploded View**



(Dwg. TPA807-5)

## Series 5 Motor Housing Assembly - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	Motor Housing Assembly		*	Nameplate	
	L ratio			for 5RLL & 5RLN models	5RA-301
	for 5RLL models ending in C1 or C3	5RLK-A40		ending in C1 or C3	
	for 5RLL models ending in -EU	5RLK-EU-A40		for 5RLL and 5RLN models	5RA-EU-301
	N ratio			ending in EU	
	for 5RLN models ending in C1 or C3	5RLN-A40		for all other models ending	4RA-EU-301
	for 5RLN models ending in -EU	5RLN-EU-A40		in -EU	
	for all other models				4RA-301
1	Motor Housing		*	Nameplate Screw (2)	BN403-302
	L ratio			Piped-Away Exhaust Kit	5L-K184
	for 5RLL models ending in C1 or C3	5RLK-B40		Dead Handle Assembly	728N-A48
	for 5RLL models ending in -EU	5RLK-EU-B40	30	Pinch Bolt	510-638
	N ratio		31	Dead Handle Adapter (2)	5A-49
	for 5RLN models ending in C1 or C3	5RLN-B40			
	for 5RLN models ending in -EU	5RLN-EU-B40	*	Tune-up Kit (includes illustrated parts: 6, 8, 11, 12, 22, 23, 53, 56, 57, 59, 62, 70, 72, 103, 105, 108, 111 and 120)	5RA/5RL-TK1
2	Grease Fitting	D0F9-879			
3	Rear Rotor Bearing	5R-24			
	Throttle Assembly	5RL-A329	*	Vibra-Tite® +	
5	Throttle Valve Body Assembly	5RL-B329		0.6 cc	5R-VT06
6	Valve Seal (2)	85H-167		30.0 cc	5R-VT30
7	Valve Knob	5RL-658	*	Rear Rotor Bearing Puller	5R-A799
8	Valve Knob Seal	R1A-159		Motor Housing Assembly	
9	Valve Knob Retainer	R2N-152		K and L ratios	
10	Throttle Valve	G601-65		for 5RAK and 5RAL models	5RAK-A40
11	Throttle Valve Spring	5RL-51		ending in C1, C3, D1 and P1	
12	Throttle Valve Seat	5L-323		for 5RAK and 5RAL models	5RAK-EU-A40
13	Throttle Assembly Retainer	5RL-667		ending in -EU	
14	Retainer Screw	WWA100-77		N ratio	
15	Throttle Valve Plunger	5RL-302		for 5RAN models	5RAN-A40
16	Throttle Lever	5RL-273		ending in C1, C3, D1 or P1	
17	Throttle Lever Pin	5RL-120		for 5RAN models ending in -EU	5RAN-EU-A40
18	Inlet Bushing Assembly	5RA-A565	51	Motor Housing	
•19	Air Strainer Screen	5RA-61		K and L ratios	
20	Inlet Bushing Spacer	5RA-65		for 5RAK and 5RAL models	5RAK-B40
21	Exhaust Deflector	5RL-23		ending in C1, C3, D1 or P1	
22	Exhaust Deflector Seal	R00A2-103		N ratio	
23	Muffler Element	5RL-311		for 5RAN models ending	5RAN-B40
24	Exhaust Silencer	5RL-310		in C1, C3, D1 or P1	
25	Silencer Seal Ring	R18LF-21		for 5RAN models ending in -EU	5RAN-EU-B40
26	Suspension Bail	5RL-365	52	Grease Fitting	D0F9-879
*	Warning Label		† 53	Rear Rotor Bearing	5R-24
	for 5RLL and 5RLN models	WARNING-7-99		Throttle Assembly	5RA-A302
	ending in C1 or C3			# 55	Throttle Valve
	for 5RLL and 5RLN models	EU-99	† 56	Throttle Valve Face	401-159
	ending in EU		† 57	Throttle Bushing Seat	R18L-14
	for other models ending in -EU	4RA-EU-301	# 58	Reverse Valve Assembly	5RA-A329
	for all other models	4RA-301	58A	Reverse Valve Detent Ball	AV1-255

## Series 5 Motor Housing Assembly - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
58B	Reverse Valve Detent Spring	5RA-664	† 72	Air Strainer Screen	5RA-61
58C	Reverse Valve Detent Adjusting Screw	5RA-665	*	Warning Label	WARNING-7-99
† 59	Reverse Valve Seal Ring (2)	PS3-67		for 5RAK, 5RAL and 5RAN models ending in C1, C3, D1 or P1	
# 60	Reverse Valve Bushing	5RA-330		for 5RAK, 5RAL and 5RAN models ending in -EU	EU-99
# 61	Throttle Bushing	-----			
† 62	Throttle Bushing Seal (2)	-----	*	Hanger	7RA-A366
63	Throttle Valve Seat	5RA-303	*	Name Plate	5RA-301
64	Trigger	5RA-93		for 5RAK, 5RAL and 5RAN models ending in C1, C3, D1 or P1	
65	Throttle Retaining Pin	R100B-120		for 5RAK, 5RAL and 5RAN models ending in -EU	5RA-EU-301
66	Muffler Assembly	5RA-A123A			
† 70	Seal Ring	R18LF-21			
71	Inlet Bushing Assembly	5RA-A565	*	Rear Rotor Bearing Puller	5R-A799

\* Not illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

† Indicates Tune-up Kit part.

# When ordering any of these parts for replacement, also order a new Trigger (64).

## Series 5 Rotor - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
101	Rotor		• 116	Gear Head Planet Gear	
	for K ratio (8 teeth)	5RLK-53		for N ratio, 13 teeth (3)	5RAN-9
	for all others (6 teeth)	5RLL-53	117	Bearing Retainer Washer	
102	Rear End Plate	5RLK-12		for N ratio	5R-80
† • 103	End Plate Retainer	5RLK-118		Spindle Assembly	
104	Cylinder	5RLK-3	for K and L ratios	5RAK-A8	
† • 105	Vane Packet (set of 5 Vanes)	R1401-42-5	for N ratio	5RAN-A8	
106	Front End Plate	5RLK-11	• 118	Spindle	
107	Front Rotor Bearing Housing	5R-13		for K and L ratios	5RAK-8
† • 108	Front Rotor Bearing	WWA100-97		for N ratio	5RAN-8
109	Bearing Retainer Washer	5R-80	• 119	Seal Support	
• 110	Cylinder Dowel	R0A1-98		for K, L or N ratio	5RAK5
† • 111	Rear End Plate Gasket	5RLK-739	† • 120	Seal	182A53-610
• 112	Ring Gear		121	Grease Shield	5R-701
	for K ratio (40 teeth)	5RAK-406A	122	Spindle Bearing	R1-24A
	for L ratio (42 teeth)	5RAL-406A	• 123	Spindle Planet Gear (3)	
for N ratio (42 teeth)	5RAN-406B	for K ratio (15 teeth)		5RAK-10A	
• 113	Rotor Pinion Spacer			for L ratio (17 teeth)	5RAL-10B
	for N ratio	5RAN-18	for N ratio (14 teeth)	5RAN-10A	
• 114	Rotor Pinion		124	Clutch Coupling Nut	5R-27
	for N ratio (15 teeth)	5RAN-17	*	Grease Gun	R00A2-228
• 115	Gear Head Assembly		*	Nose Piece Spanner Wrench	MR-453
	for N ratio	5RAN-A216			

\* Not illustrated.

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† Indicates Tune-up Kit part.

## Series 5 Adjustable Clutch Attachment - Parts List

Item	Part Description	For Models Ending in C1	For Models Ending in C3
	Adjustable Clutch Attachment		
	with Light Clutch Spring	5C1L	5C3L
	with Heavy Clutch Spring	5C1	5C3
201	Clutch Housing Assembly	5C1-A580	5C1-A580
202	Coupling Nut Retainer	5C1-29	5C1-29
203	Adjusting Hole Cover	5C1-415	5C1-415
204	Housing Nose Cap Assembly	-----	5C3-A400
205	Nose Piece	5C1-400	-----
206	Finder Retaining Spring	-----	102A60-628
• 206	Clutch Driver	5C1-581	5C1-581
• 207	Clutch Driver Retainer	12E-6	12E-6
	Bit Holder Assembly		
	with Light Clutch Spring	5C1-AL586	5C3-AL586
	with Heavy Clutch Spring	5C1-AH586	5C3-AH586
208	Bit Holder	5C1-586	5C3-B586
208A	Bit Retaining Spring	-----	102A60-241
• 208B	Bit Retaining Ball	-----	AV1-255
• 209	Front Clutch Jaw	5C1-589A	5C1-589A
• 210	Clutch Ball (24)	RX1-629	RX1-629
• 211	Clutch Ball Spacer	5C1-401A	5C1-401A
• 212	Clutch Spring Seat (2)	5C1-627	5C1-627
212A	Spring Seat Bearing	5C1-105	5C1-105
213	Clutch Spring		
	Heavy (Green)	5C1-H583	5C1-H583
	Light (Black)	5C1-L583	5C1-L583
214	Clutch Adjusting Nut	5C1-582A	5C1-582A
215	Adjusting Nut Lock	5C1-588	5C1-588
• 216	Bit Holder Stop	5C1-729	5C1-729
• 217	Bit Retaining Ball	RX1-629	-----
• 219	Bit Retaining Sleeve	5C1-930-4	-----
220	Finder Spring	-----	102A60-242
• 221	Retaining Sleeve Spring	5C1-931-4	-----
• 221A	Sleeve Spring Retainer	5C1-853	-----
# 222	Disengaging Plunger	5C1-584A	5C1-584A
# 223	Plunger Spring	5C1-626A	5C1-626A
•224	Bit Retaining Sleeve Stop	5C1-729	-----
*	Clutch Adjusting Key	5C1-416	5C1-416
*	Bit Guide	-----	5RA-69

\* Not illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

# Refer to **IMPROVED DISENGAGING PLUNGER AND SPRING**.

## Improved Disengaging Plunger and Spring

The Adjustable Clutch Attachments have been revised to incorporate a new style Disengaging Plunger (222) and Plunger Spring (223). The new style parts in combination can be used to replace the old style. Parts are easily identified by the following descriptions.

Part	Old Style	New Style
Spring	Length– 2" (50 mm) Coils– 20 Diameter of end coils smaller than others	Length– 1–5/16" (33 mm) Coils– 15 Diameter end of coils larger than others
Plunger	Overall Length– 1–3/8" (35 mm)	Overall Length – 2–5/16" (59 mm)

Note that the position of the new style parts is transposed in comparison with the old. When assembling, insert the small diameter section of the Plunger through the bore of the Spring, then insert the Plunger, large end first, into the bore of the Bit Holder (208).

### Series 5 Direct Drive Attachment - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	Direct Drive Attachment	5D1	403	Disengaging Plunger	5P1-584
303	Bit Holder	5D1-786-4	404	Plunger Spring	5P1-626
• 304	Bit Retaining Ball	RX1-629	• 405	Front Jaw Retainer	N44-6
305	Clutch Housing	5P1-580	• 406	Front Jaw (11 tooth spline)	5P1-587
306	Bit Retaining Sleeve	5C1-930-4	407	Bit Holder	5P1-586
• 307	Retaining Sleeve Spring	5C1-931-4	• 408	Bit Retaining Ball	RX1-629
• 308	Sleeve Spring Retainer	5C1-853	409	Clutch Housing	5P1-580
	Positive Jaw Clutch Attachment	5P1	410	Bit Retaining Sleeve	5C1-930-4
• 401	Clutch Driver (10 tooth spline)	5P1-581	• 411	Retaining Sleeve Spring	5C1-931-4
402	Clutch Driver Retainer	12E-6	• 412	Sleeve Spring Retainer	5C1-853

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

### Parts and Maintenance

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Tool repair and maintenance should only be carried out by an authorized Service Center.

Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.

### Related Documentation

For additional information refer to:

Product Safety Information Manual 04585006.

Product Information Manual 16575268, 80167281.

Maintenance Information Manual 16575268.

Manuals can be downloaded from [ingersollrandproducts.com](http://ingersollrandproducts.com)

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**Notes:**

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