



16574584

Edition 4

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# Air Screwdrivers

7R Series

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## Parts Information



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 **Ingersoll Rand**<sup>®</sup>



## 7R Series, Motor Housing Assembly - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number		
	Motor Housing Assembly		† 19	Throttle Valve	7RAK-302		
	for models ending in -EU	7RA-EU-A40	† 20	Throttle Valve Seat	7RAK-303		
	for all other models	7RA-A40	21	Throttle Valve Seat Support	7RAK-304		
1	Motor Housing		† 22	Throttle Valve Spring	7AH-51		
	for models ending in -EU	7RA-EU-B40	23	Muffler Assembly	3RA-A123		
	for all other models	7RA-B40	† 24	Muffler O-Ring	85H-167		
*	Warning Label		† 24A	Muffler Element	7RA-311		
	for models ending in -EU	EU-99	25	Inlet Bushing Spacer	7AH-65		
	for all other models	WARNING-7-99	26	Inlet Bushing Assembly	7AH-A565		
2	Bearing Ejecting Nut	7AH-105A	† 27	Air Strainer Screen	ROA2-61		
† 3	Rear Rotor Bearing	7AH-24	*	Dead Handle (for 7RANP1)	R1A-48		
3A	Trigger Bushing	4RA-91	*	Pinch Bolt (for 7RANP1)	510-638		
4	Reverse Valve	7RA-329	*	Dead Handle Adapter (2 required) (for 7RANP1)	7A-49		
5	Reverse Valve Spring	7RA-515			Nameplate	for models ending in -EU	4RA-EU-301
6	Reverse Valve Cap	7RA-269				for all other models	4RA-301
† 7	Reverse Valve Cap Seal	7RA-358	*	Nameplate Screws (2 required)	BN403-302		
	Actuating Valve Assembly	7RA-A516	*	Horizontal Hanger	7RA-366		
9	Actuating Valve	7RA-B516		Motor Housing Assembly			
† 10	Actuating Valve Face	R2F-167	for models ending in -EU		7RL-EU-AL40		
11	Actuating Valve Bushing Assembly	7RA-A518	for all other models		7RL-AL40		
12	Valve Bushing Seal	ROBRIC-283	51	Motor Housing			
13	Actuating Valve Button	7RA-520		for models ending in -EU		7RL-EU-B40	
14	Actuating Valve Cap Assembly	7RA-A517		for all other models		7RL-B40	
15	Actuating Valve Spring	7RA-519	*	Warning Label			
† 16	Actuating Valve Cap Seal	ROBRIC-283		for models ending in -EU		EU-99	
16A	Actuating Valve Bumper	7RA-664		for all other models		WARNING-7-99	
17	Trigger Assembly	7AH-A93					
18	Trigger Pin	7AH-94					

\* Indicates 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.

## 7R Series, Motor Housing Assembly - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
52	Bearing Ejecting Nut	7AH-105A	115	Seal Support	5RAK-5
† 53	Rear Rotor Bearing	7AH-24	116	Seal Retaining Washer	7L-303
53A	Plunger Bushing	5RLK2C-91	† 117	Seal	182A53-610
54	Throttle Lever	7L-L273	118	Spindle Planet Gear Assembly (3 required)	
55	Throttle Lever Pin	7L-120		for N ratio (21 teeth)	7AK-A10
56	Reverse Valve	7RL-329		for L ratio (22 teeth)	7AL-A10
57	Reverse Valve Spring	55RP-515		for M ratio (18 teeth)	7AJ-A10
58	Reverse Valve Lock Pin	7RL-347	119	Spindle Planet Gear Bearing (1 for each Gear)	
59	Lock Pin Retainer	7RL-56		for L or N ratio	7AK-500
60	Retainer Set Screw	7RL-669	120	Rotor Pinion (for M and N ratios)	7AH-17
† 61	Muffler Element	7L-311	121	Rotor Pinion Spacer (for M and H ratios)	7AH-18
62	Exhaust Deflector	7L-23		122	Gear Head
† 63	Exhaust Deflector Seal	7A-379	for M ratio		7AM-216
64	Exhaust Silencer	7L-310	for N ratio		7AN-216
† 65	Silencer Seal Ring	WWV100A1-43	123	Gear Head Planet Gear Assembly (3 required) (for M and H ratios)	7AH-A10
66	Throttle Valve Seat Support	7RAK-304		124	Planet Gear Bearing (1 for each Gear)
† 67	Throttle Valve Seat	7RAK-303	125		Gear Head Spacer
† 68	Throttle Valve	7RAK-302		Gear Case Assembly	
69	Throttle Valve Plunger	7RL-94		for L ratio	7LH-A37A
† 70	Throttle Valve Spring	7L-51		for M and N ratios	7LM-A37A
† 71	Air Strainer Screen	ROA2-61	127	Gear Case	
72	Inlet Bushing Spacer	7AH-65		for L ratio	7LH-B37A
73	Inlet Bushing	7L-565		for M and N ratios	7LM-B37A
74	Suspension Ball	7L-365			
*	Dead Handle (for 7RLMC1)	R1A-48	128	Grease Fitting	DOF9-879
*	Pinch Bolt (for 7RLMC1)	510-638		129	Grease Shield
*	Dead Handle Adapter (2 required) (for 7RLMC1)	7A-49	130	Spindle Bearing	R1L-24
† 101	Rear End Plate Gasket	7RL-739	131	Spindle Bearing Retainer	7L-28
102	Rear End Plate	7RL-12	*	Grease Gun	R000A2-228
† 103	Rear End Plate Retainer	7AH-118	*	Reverse Valve Cap Wrench	141A12-26
104	Rotor	7RLL-53	*	Tune-up Kit	
† 105	Vane Packet (set of 4)	7RL-42-4		for Models 7RALC1, 7RALD1, 7RAMC1, 7RALP1, 7RAMC3, 7RAMP1, 7RANP1 and 7RALC3 (includes illustrated parts: 3, 7, 10, 16, 19, 20, 22, 24, 24A, 27, 101, 105, 109 and 117)	7RA-S/D-TK1
106	Cylinder	7RL-3		for Models 7RLLC1, 7RLLC3 and 7RLMC1 (includes illustrated parts: 53, 61, 63, 65, 67, 68, 70, 101, 103, 105, 109 and 117)	7RL-S/D-A/T-TK1
107	Front End Plate	7AH-11			
108	Cylinder Dowel	7AH-98			
† 109	Front Rotor Bearing	R1-22			
110	Bearing Spring Washer (2 required)	7AH-278			
111	Front Rotor Bearing Housing	7AH-13			
113	Bearing Housing Spacer	7AH-81			
114	Spindle Assembly				
	for N ratio	7LK-A8			
	for L ratio	7LL-A8			
	for M ratio	7LM-A8			

\* Indicates not illustrated.

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† Indicates tune-up kit part.



## 7 Series, Clutches - Parts List

Item	Part Description	7C1	7C3
	Cushion Clutch Attachment (assembled with Medium Clutch Spring)	7C1	7C3
201	Clutch Housing Assembly	7C1-A580A	7C3-A580A
202	Housing Bushing	7P1-781	7C3-781
203	Finder Retaining Spring	---	102A60-628
204	Adjusting Hole Cover	7C-415A	7C-415A
	Clutch Driver Assembly (assembled with Medium Clutch Spring)	7C-A581A	7C-A581A
• 205	Clutch Driver	7C-581A	7C-581A
• 206	Front Clutch Jaw	7C-589A	7C-589A
• 207	Jaw Bearing Ball (12 required)	2U-696	2U-696
• 208	Clutch Ball Spacer	7C-401A	7C-401A
• 209	Clutch Release Ball (9 required)	4U-31	4U-31
• 210	Clutch Ball Seat	7C-627	7C-627
211	Clutch Spring		
	Light (black)	7C-L583A	7C-L583A
	Medium (yellow)	7C-583A	7C-583A
	Heavy (green)	7C-H583A	7C-H583A
212	Spring Seat Stop	7C-704B	7C-704B
213	Clutch Spring Seat	7C-623	7C-623
214	Spring Seat Bearing	R02W-696	R02W-696
215	Adjusting Nut Lock	7C-588A	7C-588A
216	Clutch Adjusting Nut	7C-582A	7C-582A
• 217	Plunger Spring	4C-626	4C-626
• 218	Disengaging Plunger	7P1-584	7P1-584
219	Bit Holder	7C1-586A	---
• 220	Retaining Sleeve Spring	5C1-931-4	---
• 221	Bit Retaining Sleeve	5C1-930-4	---
221A	Sleeve Spring Retainer (Blue)	5C1-853	---
222	Bit Retaining Ball	RX1-629	---
223	Bit Holder Assembly	---	7C3-A586
224	Bit Retaining Spring	---	102A60-241
225	Bit Retaining Ball	---	AV1-255
226	Finder Spring	---	102A60-242
*	Bit Holder Guide	---	102A60-630
*	Clutch Adjusting Key	5C1-416	5C1-416

\* Indicates not illustrated.

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## 7 Series, Clutches - Parts List

Item	Part Description	7D1
	Direct Drive Attachment	7D1
301	Housing Assembly	7P1-A580
302	Housing Bushing	7P1-781
303	Spacer	7D1-211
304	Spacer Retainer	7AH-118
• 305	Bit Holder	7D1-586
• 306	Bit Retaining Ball	RX1-629
• 307	Retaining Sleeve Spring	5C1-931-4
• 307A	Sleeve Spring Retainer (Blue)	5C1-853
308	Bit Retaining Sleeve	5C1-930-4

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## 7 Series, Clutches - Parts List

Item	Part Description	7P1	7P3
	Positive Drive Attachment	7P1	7P3
401	Clutch Housing Assembly	7P1-A580A	7P3-A580A
402	Housing Bushing	7P1-781	7C3-781
403	Finder Retaining Spring	---	102A60-628
404	Bit Holder	7P1-586	---
405	Bit Holder Assembly	---	7P3-A586
406	Bit Retaining Spring	---	102A60-241
407	Bit Retaining Ball	---	AV1-255
• 408	Clutch Jaw (2 required)	PX3-587	PX3-587
409	Clutch Jaw Retaining Ring	R2-285	R2-285
• 410	Clutch Driver	7P-581	7P-581
411	Clutch Driver Spacer	7P1-211	7P1-211
412	Disengaging Plunger	7P1-584	7P1-584
413	Plunger Spring	RX2-626	RX2-626
• 414	Clutch Driver Spacer Retainer	7AH-118	7AH-118
• 415	Bit Retaining Ball	RX1-629	---
• 416	Bit Retaining Sleeve	5C1-930-4	---
• 416A	Sleeve Spring Retainer (Blue)	5C1-853	---
• 417	Retaining Sleeve Spring	5C1-931-4	---
*	Finder Spring	---	102A60-242
*	Bit Holder Guide	---	102A60-630

\* Indicates not illustrated.

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## Parts and Maintenance

When tool life has expired, it is recommended that the tool be disassembled, degreased and parts separated by material for proper recycling.

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

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

For additional information, refer to:

Product Safety Information Manual 04585006

Product Information Manuals 80167299, 80167349

Product Maintenance Information Manual 16575276

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