



Form 16572794

Edition 1

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## Air Drill

7L

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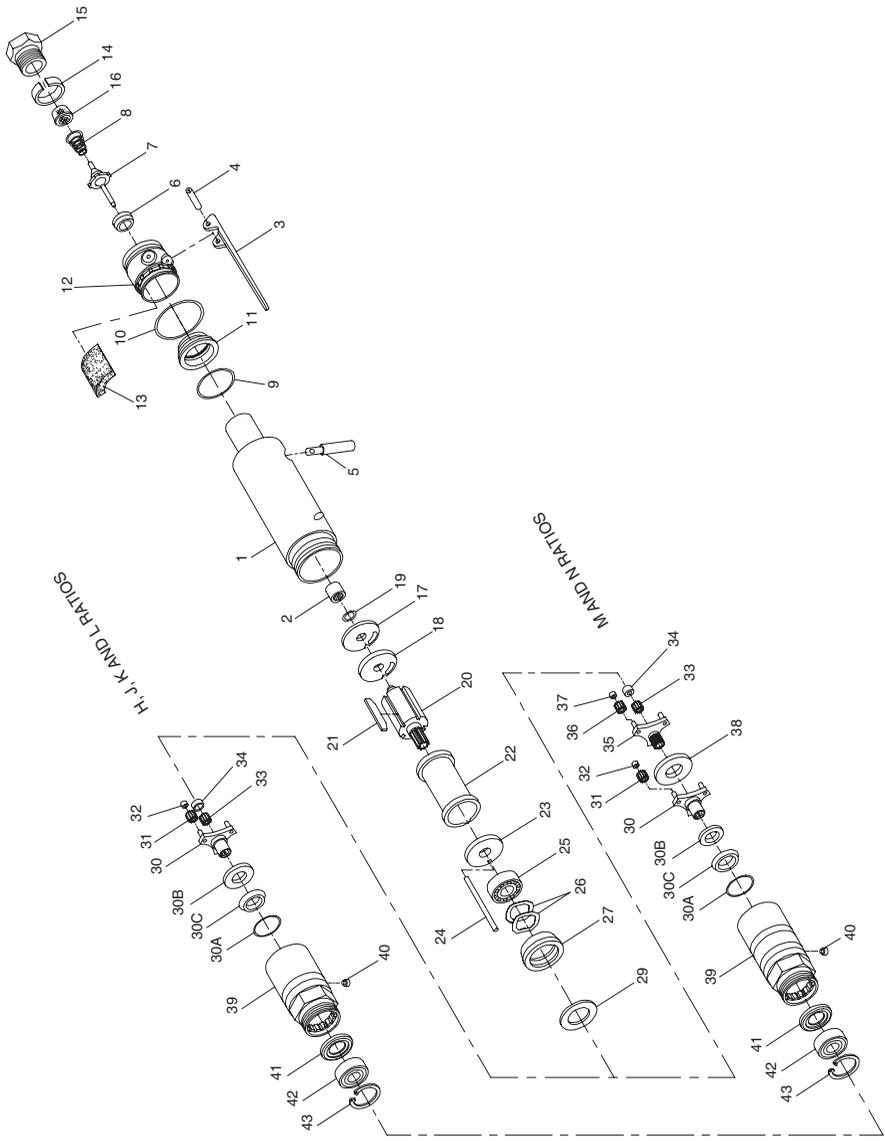
# Parts Information



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7L Air Drill Exploded Diagram



(Dwg. TPA910-2)

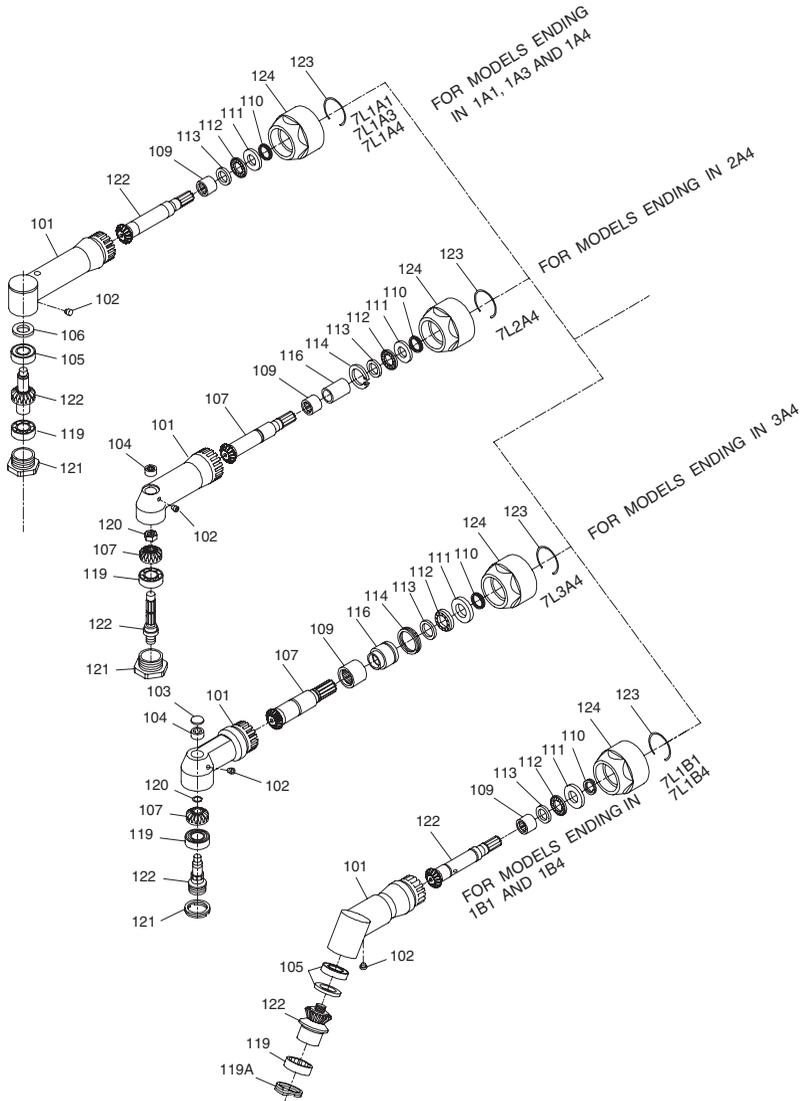
## 7L Air Drill Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	Motor Housing Assembly		30A	Spindle Seal (for K, L, M and N ratios)	182A53-610
	for 7LJ1B1 and 7LK1B1	7L1B-A40	30B	Seal Retaining Washer (for J, K, L, M and N ratios)	7L-303
	for 7LJ1B1-EU and 7LK1B1-EU	7L1B-EU-A40	30C	Seal Support (for J, K, L, M and N ratios)	5RAK-5
	for all others models ending in -EU	7L-EU-A40A	31	Spindle Planet Gear Assembly (3)	
	for all others models	7L-A40A		for H ratio (15 teeth)	7AH-A10
1	Motor Housing			for J and M ratios (18 teeth)	7AJ-A10
	for 7LJ1B1 and 7LK1B1	7L1B-B40		for K and N ratios (21 teeth)	7AK-A10
	for 7LJ1B1-EU and 7LK1B1-EU	7L1B-EU-B40		for L ratio (22 teeth)	7AL-A10
	for all others ending in -EU	7L-EU-B40A	32	Spindle Planet Gear Bearing (1 for each Gear)	
	for all others models	7L-B40A		for H ratio	7AH-500
* 2	Rear Rotor Bearing	7L-24		for J and M ratios	7AJ-500
*	Warning Label			for K, L and N ratios	7AK-500
	for models ending in -EU	EU-99			
	for all others models	WARNING-7-99			
3	Throttle Lever	7L-273	33	Rotor Pinion	
4	Throttle Lever Pin	7L-120		for H, M and N ratios (22 teeth)	7AH-17
5	Throttle Plunger	7L-94A		for J ratio (16 teeth)	7AJ-17
6	Throttle Valve Seat	7AH-303	34	Rotor Pinion Spacer (for H, J, M and N ratios)	7AH-18
* 7	Throttle Valve	7AH-302	35	Gear Head	
8	Throttle Valve Spring	7L-51		for M ratio (16 teeth)	7AM-216
9	Silencer Seal Ring	WWW100A1-43		for N ratio (10 teeth)	7AN-216
10	Exhaust Deflector Seal	7A-379	36	Gear Head Planet Gear Assembly (for M and N ratios (15 teeth) (3)	7AH-A10
11	Exhaust Silencer	7L-310	37	Gear Head Planet Gear Bearing (1 for each Gear)	7AH-500
12	Exhaust Deflector	7L-23	38	Gear Head Spacer (for M or N ratio)	7AN-80
* 13	Muffler Element	7L-311		Gear Case Assembly	
14	Inlet Bushing Spacer	7AH-65		for H, J, K and L ratios	7LH-A37A
15	Inlet Bushing	7L-565		for M and N ratios	7LM-A37A
* 16	Air Strainer Screen	ROA2-61	39	Gear Case	
*	Locking Type Throttle Lever Assembly			for H, J, K and L ratios	7LH-B37A
	for 7LH1A1	7LH1A1-A400		for M and N ratios	7LM-B37A
	for 7LJ1A1	7LJ1A1-A400	40	Grease Fitting	DOF9-879
	for 7LK1A1	7LK1A1-A400	41	Grease Shield	5R-701
* 17	Rear End Plate Gasket	7AH-739	42	Spindle Bearing	R1L-24
18	Rear End Plate		43	Spindle Bearing Retainer	7L-28
	for 7LJ1B1 and 7LK1B1	7RL-12	*	Drill Chuck	
	for all others	7AH-12		0 to 1/4" capacity	R0H-99
* 19	End Plate Retainer	7AH-118		0 to 5/16" capacity	6A-99
20	Rotor			0 to 3/8" capacity	R1M-99
	for H, J, L, M and N ratios	7AH-53		5/64" to 1/2" capacity	R0K-99
	for K ratio	7AK-53	*	Drill Chuck Key	
* 21	Vane Packet (set of 4 Vanes)	7AH-42A-4		for R0H-99	R1H-J253
22	Cylinder	7AH-3A		for 6A-99	R0J-J253
* 23	Front End Plate	7AH-11		for R1M-99	R1M-J253
24	Cylinder Dowel	7AH-98		for R0K-99	R1T-J253
* 25	Front Rotor Bearing	R1-22	*	Bevel Pinion Sprag Key (for 7L1A1, 7L1A3 and 7L1B1 Angle Attachments)	5C1-416
26	Bearing Spring Washer (2)	7AH-278	*	Suspension Bail	7L-365
27	Front Rotor Bearing Housing	7AH-13	*	Grease Gun	R00A2-228
29	Bearing Housing Spacer	7AH-81	*	Spindle Bearing Cap Wrench	8SA32-26
30	Spindle Assembly		*	Tune-up Kit (includes illustrated parts: 2, 6, 7, 8, 9, 10, 13, 16, 17, 19, 21, 25 and 30A)	7L-DRILLS-TK1
	for H ratio	7LH-8	*	Piped-Away Exhaust Kit	7L-K284
	for J ratio	7LJ-A8			
	for K and N ratios	7LK-A8			
	for L ratio	7LL-A8			
	for M ratio	7LM-A8			

\* 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.

# 7L Air Drill Angle Heads Exploded Diagram



(Dwg. TPA911-4)

## 7L Air Drill Angle Heads Parts List

Item	Part Description	For Models ending in 1A1, 1A3 and 1A4	For Models ending in 1B1 and 1B4
	Angle Drill Attachment		
	for models ending in 1A1	7L1A1	---
	for models ending in 1A3	7L1A3	---
	for models ending in 1A4	7L1A4	---
	for models ending in 1B1	---	7L1B1
	for models ending in 1B4	---	7L1B4
101	Angle Housing Assembly	7L1A-B550	7L1B-A550
102	Grease Fitting	D0F9-879	D0F9-879
103	Angle Housing Cap	---	---
• 104	Spindle Upper Bearing	---	---
105	Spindle Upper Bearing	7L1A-603	7L1B-A97
• 106	Upper Bearing Shim Packet (two thicknesses of Shims)	7L1A-P448	---
• 107	Matched Bevel Gear Set (includes Bevel Pinion and Bevel Gear)	---	---
• 109	Bevel Pinion Bearing	7AH-24	7L1B-593
110	Bearing Seat Retainer	W22-6	W22-6
111	Rear Thrust Bearing Seat	7L2A-682	7L2A-682
112	Bevel Pinion Thrust Bearing	3RL2-105	3RL2-105
113	Front Thrust Bearing Seat	7L1A-683	7L1A-683
114	Pinion Bearing Spacer Retainer	---	---
116	Bevel Pinion Bearing Spacer	---	---
• 119	Lower Spindle Bearing	7L1A-593	7L1B-593
119A	Lower Spindle Bearing Retainer	---	7L1B-28
120	Bevel Gear Retainer	---	---
121	Spindle Bearing Cap	7L1A-531	---
• 122	Angle Drill Gear Set (includes Bevel Pinion and Bevel Gear/ Spindle)		
	with 1/4-28 female thread (for models ending in 1A1)	7L1A1-A591	---
	with 1/4-28 female thread (for models ending in 1B1)	---	7L1B1-A591
	with 5/16-24 female thread (for models ending in 1A3)	7L1A3-A591	---
	with 9/32-40 male thread (for models ending in 1A4)	7L1A4-A591	---
	with 9/32-40 female thread (for models ending in 1B4)	---	7L1B4-A591
123	Coupling Nut Retainer	5C1-29	5C1-29
124	Coupling Nut	7L-27	7L-27
*	Bearing Inserting Tool	7L1A-950	7L1B1-955

\* 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.

## 7L Air Drill Angle Heads Parts List

Item	Part Description	For Models ending in 2A4	For Models ending in 3A4
	Angle Drill Attachment	7L2A4	7L3A4
101	Angle Housing Assembly	7L2A-B550	7L3A-B550
102	Grease Fitting	D0F9-879	D0F9-879
103	Angle Housing Cap	---	8SA32-110
* 104	Spindle Upper Bearing	120A4-603	8SA32-603
105	Spindle Upper Bearing	---	---
* 106	Upper Bearing Shim Packet (two thicknesses of Shims)	---	---
* 107	Matched Bevel Gear Set (includes Bevel Pinion and Bevel Gear)	141A12-A552	7L3A-A552
* 109	Bevel Pinion Bearing	H54U-511B	182A53-606
110	Bearing Seat Retainer	1415A12-6	1415A12-6
111	Rear Thrust Bearing Seat	7L2A-682	7L2A-682
112	Bevel Pinion Thrust Bearing	161A32-105	161A32-105
113	Front Thrust Bearing Seat	141A12-683	141A12-683
114	Pinion Bearing Spacer Retainer	RXA21-343	182A53-685
116	Bevel Pinion Bearing Spacer	7L2A-165	182A53-165
* 119	Lower Spindle Bearing	120A4-593	8SA32-593
119A	Lower Spindle Bearing Retainer	---	---
120	Bevel Gear Retainer	120A4-578	8SA32-578
121	Spindle Bearing Cap	7L2A4-531	8SA32-531
* 122	Angle Drill Gear Set (includes Bevel Pinion and Bevel Gear/Spindle)		
#	with 3/8-24 male thread	7L2A4-791	7L3A4-791
	with 9/32-40 female thread	---	---
123	Coupling Nut Retainer	5C1-29	5C1-29
124	Coupling Nut	7L-27	7L-27
*	Bearing Inserting Tool	7L2A-950	7L3A-950

\* 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.

# Does not include Bevel Gear Set. For Bevel Gear Set, order illustration number 107.

## 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:  
 Air Drill Product Safety Information Manual 04580353.  
 Air Drill Product Information Manual 16572174.  
 Air Drill Maintenance Information Manual 16572638.

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



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