



**45612710**  
Edition 2  
May 2014

## **Air Drill**

**6L Series**

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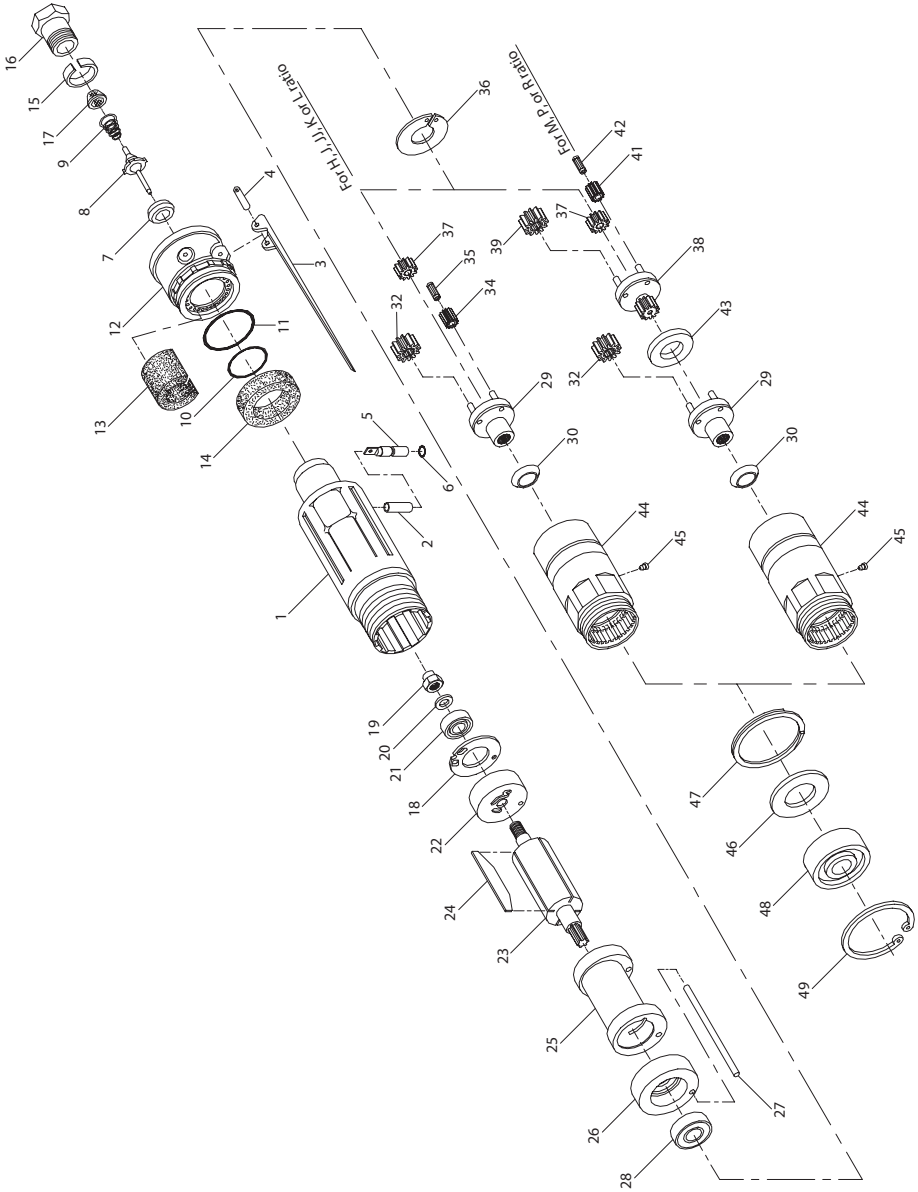
# **Parts Information**



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 **Ingersoll Rand**<sup>®</sup>

# Air Drill 6L Series Motor and Gearing Exploded Diagram



(Dwg. TPA1138-1)

## Air Drill 6L Series Motor and Gearing Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	Motor Housing Assembly		32	Spindle Planet Gear Assembly (3)	
	for models ending in -EU	6LH-EU-A40	†	for K ratio (20 teeth)	6WTK-A10
	for all other models	6LH-A40	†	for L ratio (20 teeth)	6WTL-A10
1	Motor Housing			for J or M ratio (16 teeth)	6WTN-A10
	for models ending in -EU	6WS-EU-B40		for JJ, P, R or S ratio (18 teeth)	6WTP-A10
	for all other models	6WS-B40	34	Spindle Planet Gear (for H ratio) (3)	6WTM-10
2	Throttle Plunger Bushing	7L-91	35	Planet Gear Bearing (for H ratio) (3)	6WTM-500
*	Warning Label	WARNING-7-99	36	Gear Retainer	6L-81
3	Throttle Lever	7L-273	37	Rotor Pinion	
4	Throttle Lever Pin	7L-120		for H,M or S ratio	6WTM-17
5	Throttle Plunger Assembly	5LK2C-A94		for J or P ratio	6WTN-17
‡ 6	Throttle Plunger Seal	6LL-259	38	Gear Head	
‡ 7	Throttle Valve Seat	7AH-303		for M ratio (marked M)	6LM-216
‡ 8	Throttle Valve	7AH-302		for P ratio (marked P)	6LP-216
‡ 9	Throttle Valve Spring	7L-51		for R ratio (marked R)	6LR-216A
‡10	Silencer Seal Ring	WWV100A1-43		for S ratio (marked S)	6AS-216
‡11	Exhaust Deflector Seal	R00A2-103	39	Gear Head Planet Gear Assembly (3)	
12	Rear Muffler	6WS-A23		for P ratio (16 teeth)	6WTN-A10
‡13	Muffler Element	3RA-310		for R ratio (20 teeth)	6WTK-A10
‡14	Exhaust Silencer (2 for Model 6LR3; 1 for all other models)	4RL-311		for S ratio (20 teeth)	6WTL-A10
15	Inlet Bushing Spacer	7AH-65		41	Gear Head Planet Gear (for M ratio) (3)
16	Inlet Bushing	7L-565	42	Planet Gear Bearing (for M ratio) (3)	6WTM-500
‡17	Air Strainer Screen	R0A2-61	43	Gear Head Spacer (for M, P, R or S ratio)	6LM-80
*	Warning Label			Gear Case Assembly	
	for models ending in -EU	EU-99		for H, J, JJ, K or L ratio	6LL-A37
	for all other models	WARNING-7-99	44	for M, P, R or S ratio	6LM-A37
‡18	Rear End Plate Gasket	6WRT-739		Gear Case	
‡19	Rear Rotor Bearing Retaining Nut	6WT-118		for M, J, JJ, K or L ratio	6LL-B37
‡20	Bearing Thrust Washer	6WT-117		for M, P, R or S ratio	6LM-B37
21	Rear Rotor Bearing	DG20-22	45	Grease Fitting	D0F9-879
‡22	Rear End Plate	6AH-12	46	Grease Shield	5R-701
23	Rotor		47	Grease Shield Retainer	6LL-343
	for H, J, M or P ratio (9 teeth)	6AH-53	48	Spindle Bearing	R1L-24
	for JJ ratio (12 teeth)	6AJ-53	49	Spindle Bearing Retainer	7L-28
	for K or R ratio (9 teeth)	6AK-53	*	Drill Chuck (includes Chuck Key)	
	for L or S ratio (6 teeth)	6AL-53		for K ratio (0 to 1/4" [0 to 6 mm] capacity)	R00A-99
‡24	Vane Packet (set of 4 Vanes)	6WT-42-4		for L, M, P or S ratio (0 to 3/8" [0 to 10 mm] capacity)	6A-99
25	Cylinder	6AH-3		for R ratio (0 to 1/2" [0 to 13 mm] capacity)	R0K-99
26	Front End Plate	6WT-11	*	Chuck Key	
27	Cylinder Dowel	6WT-98		for R00A-99	R00A-1253
‡28	Front Rotor Bearing	R00H-97		for 6A-99	R0J-1253
29	Spindle Assembly			for R0K-99	R1T-1253
	for H ratio	6LH-A8	*	Horizontal Hanger	6WS-366
	for J ratio	6LJ-A8	*	Vertical Hanger	7L-365
	for JJ ratio	6LJJ-A8	*	Grease Gun	R000A2-228
	for P, R or S ratio	6LP-A8	*	Piped-Away Exhaust Kit	7L-K284
	for K ratio	6LK-A8	*	Tune-up Kit (includes illustrated items 6, 7, 8, 9, 10, 11, 13, 14 [2], 17, 18, 19, 20, 21, 24 and 28)	6-DRILLS-TKI
	for L ratio	6LL-A8			
for M ratio	6LN-A8				
30	Seal Support	5RAK-5	*	Pressing Fixture	7L1A-950

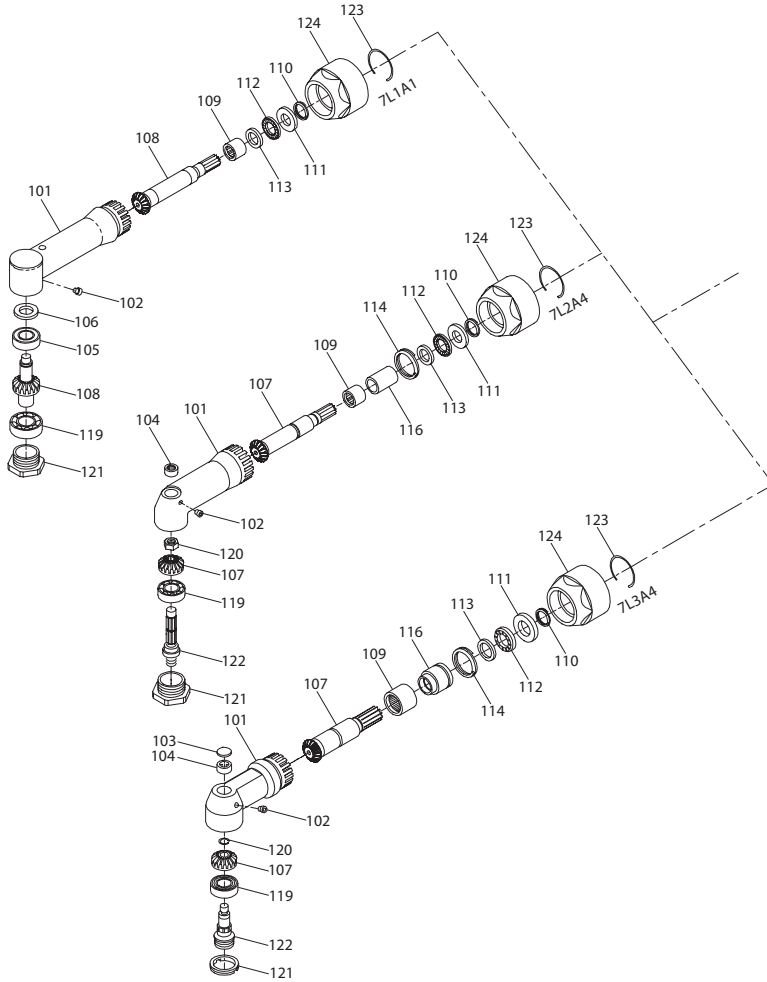
\* Not Illustrated.

• 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 12345678 bullet (•) for every four tools in service.

‡ Indicates Tune-up Kit part.

† The gears used in both the No. 6WTL-A10 and No. 6WTK-A10 Planet Gear Assemblies have 20 teeth. The Gear (Part No. 6WTK-A10) can be distinguished by the annular groove through the middle of the tooth.

# Air Drill 6L Series Angle Attachments Exploded Diagram



(Dwg. TPB791)

## Air Drill 6L Series Angle Attachments Parts List

Item	Part Description	Part Number		
		7L1A1	7L2A4	7L3A4
	Angle Drill Attachment	7L1A1	7L2A4	7L3A4
101	Angle Housing Assembly	7L1A-B550	7L2A-B550	7L3A-B550
102	Grease Fitting	D0F9-879	D0F9-879	D0F9-879
103	Angle Housing Cap	---	---	8SA32-110
• 104	Spindle Upper Bearing	---	120A4-603	85A32-603
105	Spindle Upper Bearing	7L1A-603	---	---
• 106	Upper Bearing Shim Packet (two thicknesses of Shims)	7L1A-P448	---	---
• 107	Matched Bevel Gear Set	---	141A12-A552	7L3A-A552
• 108	Spindle Assembly (1/4"-28 female thread)	7L1A1-A591	---	---
• 109	Bevel Pinion Bearing	7AH-24	H54U-511B	182A53-606
110	Bearing Seat Retainer	W22-6	1415A12-6	1415A12-6
111	Rear Thrust Bearing Seat	7L2A-682	7L2A-682	7L2A-682
112	Bevel Pinion Thrust Bearing	3RL2-105	161A32-105	161A32-105
113	Front Thrust Bearing Seat	7L1A-683	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	7L1A-593	120A4-593	8SA32-593
120	Bevel Gear Retainer	---	120A4-578	85A32-578
121	Spindle Bearing Cap	7L1A-531	7L2A4-531	85A32-531
122	Spindle (3/8"-24 male thread)	---	7L2A4-791	7L3A4-791
123	Coupling Nut Retainer	5C1-29	5C1-29	5C1-29
124	Coupling Nut	7L-27	7L-27	7L-27
*	Bearing Inserting Tool	7L1A-950	7L2A-950	7L3A-950
*	Lower Bearing Cap Wrench	---	---	85A32-26

\* 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.

### 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 04580353.

Product Information Manual 03534666.

Product Maintenance Information Manual 45612736.

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

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**Notes:**

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