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Air Angle Wrenches

8RS, 8S and 8T Series

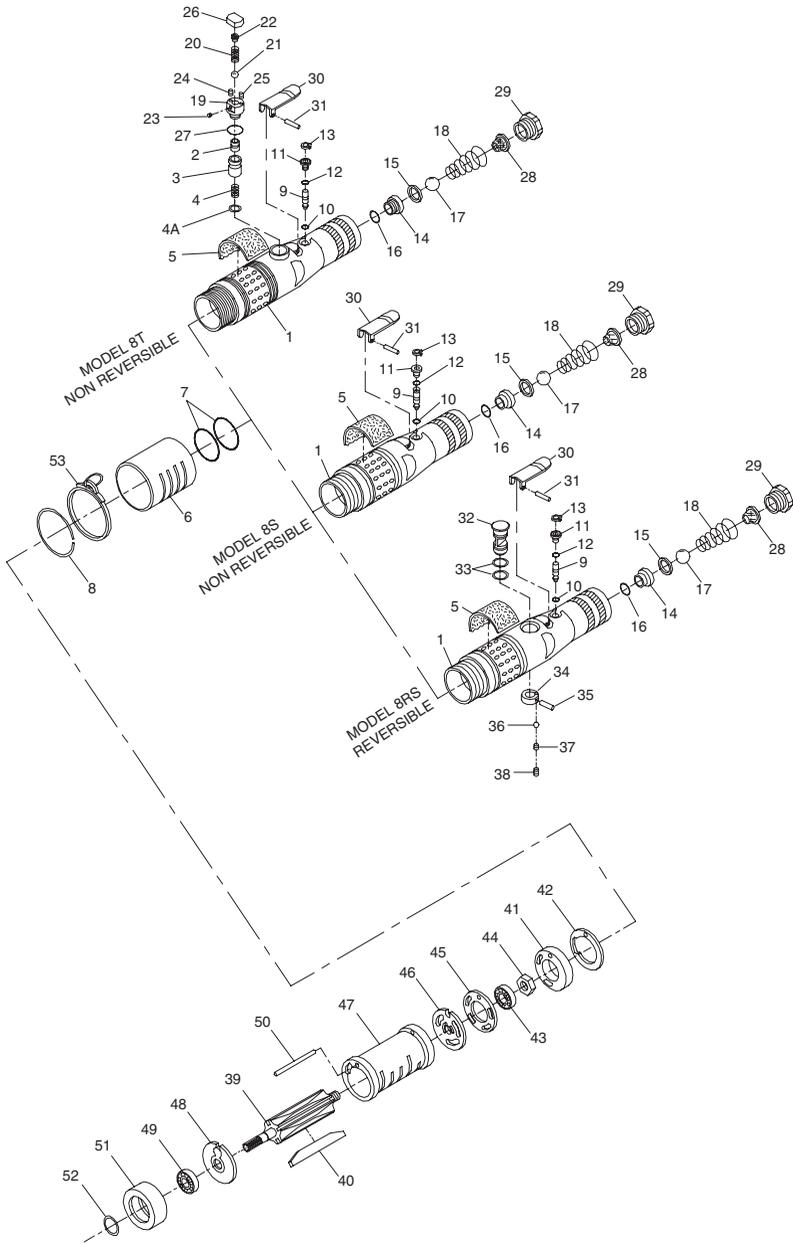
Parts Information



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8RS, 8S and 8T Angle Wrench Exploded Diagram



(Dwg. TPC592)

8RS, 8S and 8T Angle Wrench Parts List

Item	Part Description	Part Number	Part Number
		8RS, 8S	8T
1	Motor Housing Assembly		
	Nonreversible		
	for 8S or 8T models ending in 32 or 53	8SL-A40	8TL-A40
*	for 8T models ending in EU	---	8TL-EU-A40
	Reversible		
	for 8R models ending in 32 or 53	8RSL-A40	---
	for 8R models ending in -EU	8RSL-EU-A40	---
*	Warning Label		
	for models ending in -EU	EU-99	EU-99
	for all other models	WARNING-2-99	WARNING-2-99
2	Shutoff Valve	---	8TL-172
3	Shutoff Valve Body	---	8TL-170
4	Shutoff Valve Spring	---	8TL-171
4A	Shutoff Valve Stop	---	8TL-176
† •	Exhaust Silencer	8SL-311	8SL-311
•	Exhaust Deflector	8SL-23	8SL-23
	for models ending in -EU	8SL-EU-23	8SL-EU-23
	for all other models	8SL-23	8SL-23
† •	Exhaust Deflector Seal (2)	AF160-291Z	AF160-291Z
8	Deflector Retaining Ring	8SL-203	8SL-203
9	Throttle Valve Plunger Assembly	8SL-A302	8SL-A302
† •	Throttle Plunger Seal	8SL-259	8SL-259
11	Throttle Plunger Bushing Assembly	8SL-A503	8SL-A503
† •	Throttle Plunger Bushing Seal	405-159	405-159
13	Throttle Valve Plunger Stop	8SL-305	8SL-305
14	Throttle Valve Seat Assembly	8SL-A303	8SL-A303
•	Valve Seat Face	8SL-159	8SL-159
† •	Valve Seat Seal	AF120-290	AF120-290
17	Throttle Valve Ball	K6U-941	K6U-941
†	Throttle Valve Spring	8SL-262	8SL-262
19	Regulator Body Assembly	---	8TL-A173
20	Regulator Spring	---	8TL-180
21	Regulator Ball	---	2U-722
22	Regulator Adjusting Screw	---	8TL-174
23	Lock Screw	---	8TL-179
24	Bleed Adjusting Screw	---	8TL-175
25	Sensor Port Plug	---	5081T-266
26	Regulator Body Cap	---	8TL-181
†	Regulator Body Seal	---	C321-606
†	Air Strainer	834-61	834-61
29	Inlet Bushing	88V60-38	88V60-38
30	Throttle Lever	8SL-273	8SL-273
† •	Throttle Lever Retaining Pin	MR-100	MR-100
32	Reverse Valve Assembly	8RSL-A329	---
33	Reverse Valve Seal (2)	85H-167	---
34	Reverse Valve Knob	8RSL-163	---
35	Reverse Valve Knob Pin	R100B-120	---
36	Detent Ball	8RSL-31	---
37	Detent Spring	5RA-664	---
38	Detent Adjusting Screw	8RSL-662	---
39	Rotor		
	with L ratio gearing	8SL-53	8SL-53
	with M, N, P or Q ratio gearing	8SM-53	8SM-53
† •	Vane Packet (set of 5 Vanes)	8SL-42-5	8SL-42-5
41	Rear Rotor Bearing Support		

* Not illustrated.

† Indicates Tune-up Kit part.

• 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.

8RS, 8S and 8T Angle Wrench Parts List

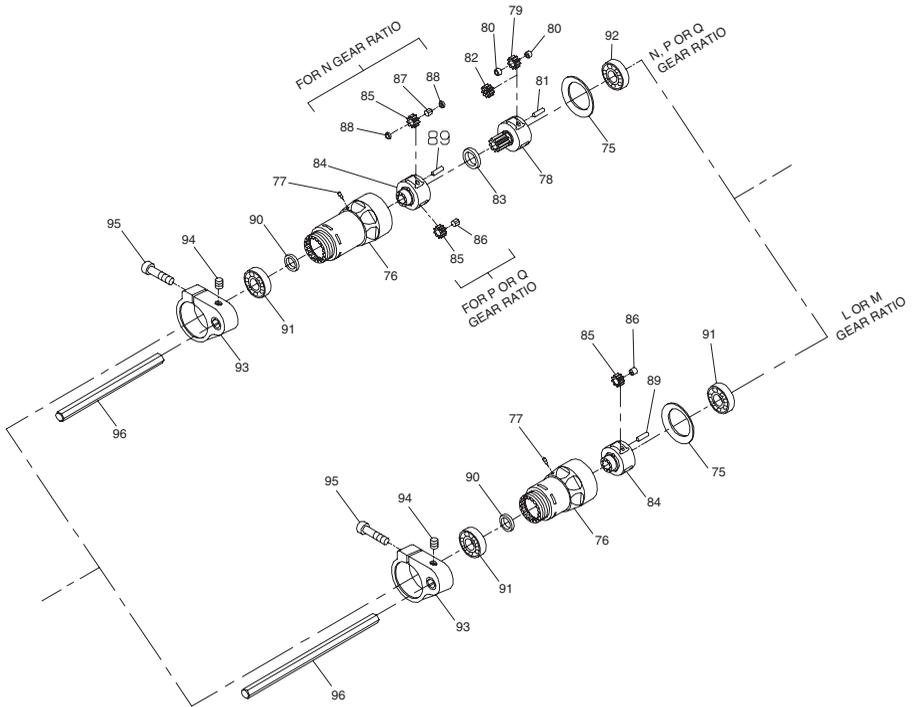
Item	Part Description	Part Number	Part Number
		8RS, 8S	8T
	for nonreversible models	8SL-25	8SL-25
	for reversible models	8RSL-25	---
† • 42	Rear Bearing Support Gasket		
	for nonreversible models	8SL-283	8SL-283
	for reversible models	8RSL-283	---
• 43	Rear Rotor Bearing	AG210-24Z	AG210-24Z
• 44	Rotor Bearing Retaining Nut	8SL-118	8SL-118
† 45	Rear End Plate Gasket	8SL-739	8SL-739
46	Rear End Plate	8SL-12	8SL-12
47	Cylinder		
	for nonreversible models	8SL-3	8SL-3
	for reversible models	8RSL-3	---
48	Front End Plate	8SL-11	8SL-11
49	Front Rotor Bearing	WFS182-24	WFS182-24
50	Cylinder Dowel		
	for nonreversible models	8SL-98	8SL-98
	for reversible models	8RSL-98	---
51	Front Rotor Bearing Support Assembly	8SL-A26	8SL-A26
52	Front Rotor Bearing Retainer	AFH120A-362	AFH120A-362
53	Horizontal Hanger	8SL-366	8SL-366
*	Shutoff Valve Label	---	6WT-999
*	Tune-up Kit (includes illustrated parts 5, 7 [2], 10, 12, 16, 18, 27, 28, 31, 40, 42, and 45)	---	8T-TK1

* Not illustrated.

† Indicates Tune-up Kit part.

• 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.

8RS, 8S and 8T Gear Case Assembly Exploded Diagram

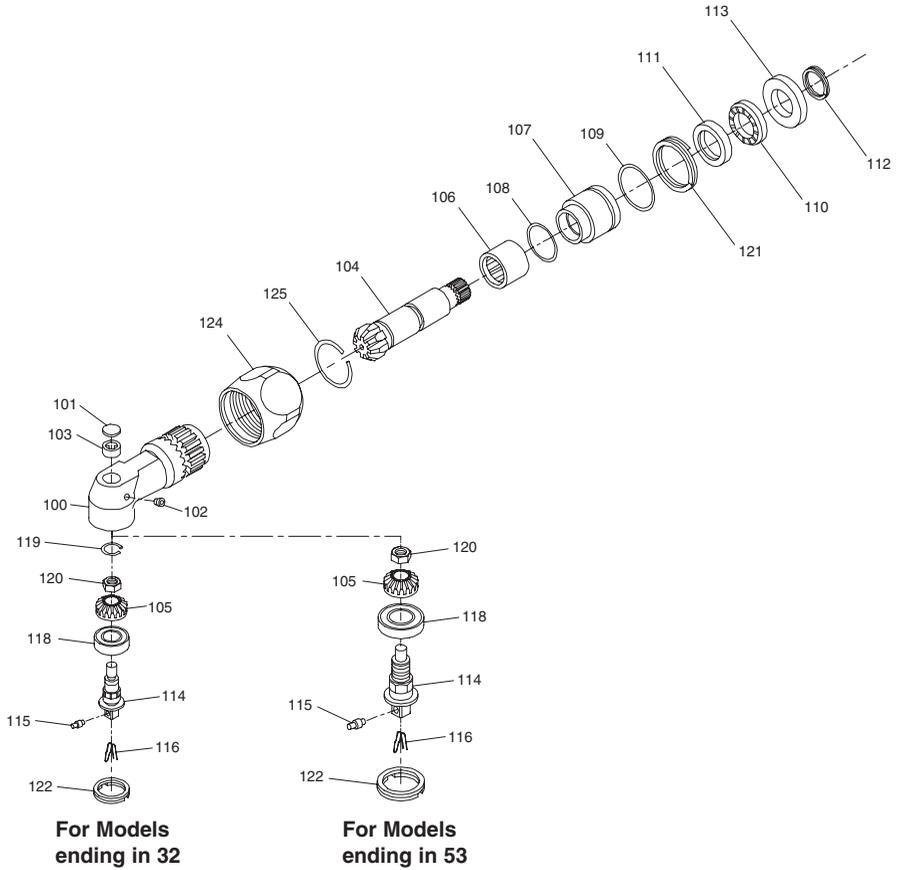


(Dwg. TPC593)

8RS, 8S and 8T Gear Case Assembly Parts List

Item	Part Description	Part Number				
		L Ratio	M Ratio	N Ratio	P Ratio	Q Ratio
75	Motor Clamp Washer	8SL-207	8SL-207	8SL-207	8SL-207	8SL-207
76	Gear Case Assembly	8SL-A37	8SL-A37	8SN-A37	8SN-A37	8SN-A37
77	Grease Fitting	D0F9-879	D0F9-879	D0F9-879	D0F9-879	D0F9-879
	Gear Head Assembly	---	---	8SN-A216A	8SP-A216A	8SQ-A216A
78	Gear Head	---	---	8SN-216A	8SP-216A	8SQ-216A
79	Planet Gear Assembly (3)					
	for N ratio gearing (16 teeth, color-coded yellow)	---	---	8SN-A9	---	---
	for P ratio gearing (15 teeth, color-coded red)	---	---	---	8SP-A9	---
	for Q ratio gearing (17 teeth, color-coded green)	---	---	---	---	8SQ-A9
80	Planet Gear Bearing (2 for each Planet Gear)	---	---	8SL-500	8SL-500	8SL-500
81	Planet Gear Shaft (3)	---	---	8SN-190	8SN-190	8SN-190
82	Rotor Pinion	---	---	8SN-17	8SP-17	8SPQ-17
83	Gear Head Spacer	---	---	8SN-80	8SN-80	8SN-80
84	Spindle Assembly	8SL-A108A	8SM-A108A	8SN-A108A	8SP-A108A	8SP-A108A
	Spindle	8SL-108A	8SM-108A	8SN-108A	8SP-108A	8SP-108A
85	Spindle Planet Gear Assembly (3)					
	for L ratio gearing (20 teeth, color-coded black)	8SL-A10	---	---	---	---
	for M ratio gearing (21 teeth, color-coded white)	---	8SM-A10	---	---	---
	for N ratio gearing (15 teeth, not color-coded)	---	---	8SN-A10	---	---
	for P or Q ratio gearing (18 teeth, color-coded red)	---	---	---	8SP-A10	8SP-A10
86	Planet Gear Bearing	WFS182-654	WFS182-654	---	WFS182-654	WFS182-654
87	Bearing Roller (15 for each Planet Gear)	---	---	8SN-654	---	---
88	Roller Retainer (2 for each Planet Gear)	---	---	8SN-655	---	---
89	Planet Gear Shaft (3)	8SL-191	8SL-191	8SN-190	8SL-191	8SL-191
90	Spindle Spacer	WFS182-111	WFS182-111	WFS182-111	WFS182-111	WFS182-111
91	Spindle Bearing (2 for L and M ratios; 1 for N, P and Q ratios)	R1602-510	R1602-510	R1602-510	R1602-510	R1602-510
92	Gear Head Bearing	---	---	R1602-510	R1602-510	R1602-510
93	Reaction Bar					
	Holder Assembly	8SL-A60	8SL-A60	8SL-A60	8SL-A60	8SL-A60
94	Bar Lock Screw	9SL-50	9SL-50	9SL-50	9SL-50	9SL-50
95	Adapter Bolt	9SL-49	9SL-49	9SL-49	9SL-49	9SL-49
96	Torque Reaction Bar	9SL-48	9SL-48	9SL-48	9SL-48	9SL-48

8RS, 8S and 8T Angle Attachment Exploded Diagram



(Dwg. TPD1385-1)

8RS, 8S and 8T Angle Attachment Parts List

Item	Part Description	Part Number	Part Number
		For Models ending in 32	For Models ending in 53
	Angle Attachment	8SA32	8SA53
100	Angle Housing Assembly	8SA32-A550	8SA53-A600
101	Angle Housing Cap	8SA32-110	182A53-110
102	Grease Fitting	D0F9-879	D0F9-879
* 103	Upper Spindle Bearing	8SA32-603	182A53-603
*	Matched Gear Set	8SA32-A552	182A53-A602
104	Bevel Pinion (not sold separately)	---	---
105	Bevel Gear (not sold separately)	---	---
*	Bevel Pinion Bearing	182A53-606	182A53-606
107	Bevel Pinion Bearing Spacer	182A53-A165	182A53-A165
108	Front Seal	R18LF-21	R18LF-21
109	Rear Seal	C321-606	C321-606
110	Bevel Pinion Thrust Bearing	R1610-105	R1610-105
111	Bevel Pinion Thrust Washer	182A53-554	182A53-554
112	Bevel Pinion Snap Ring	182A53-689	182A53-689
113	Bevel Pinion Retainer	182A53-589	182A53-589
†	Socket Adapter Spindle Assembly		
+	3/8" Square Drive Flush Spindle	8SA32-P507-3/8	---
+	1/2" Square Drive Flush Spindle	---	182A53-P507-1/2
+	3/8" Square Drive Recessed Spindle	8SA32-P607-3/8	---
+	1/2" Square Drive Recessed Spindle	---	182A53-A607-1/2
115	Socket Retainer	5020-716	804-716
116	Socket Retainer Spring	401-718	5UHD-718
†	* Flush Socket Spindle		
	1/2" Hexagon	8SA34-807	182A54-807
	13 mm Hexagon	8SA34-807M	182A13MF-807
	9/16" Hexagon	---	182A55-807
	15 mm Hexagon	---	8SA55-807M
	5/8" Hexagon	---	182A56-807
	17 mm Hexagon	---	8SA56-807M
* 118	Lower Spindle Bearing	8SA32-593	182A53-593
†	119 Bevel Gear Retainer	8SA32-578	---
†	120 Bevel Gear Lock Nut	---	182A53-578
121	Bevel Spacer Retainer	182A53-685	182A53-685
122	Spindle Bearing Cap	8SA32-531	182A53-531
*	Spindle Bearing Cap Wrench	8SA32-26	WFS182-26
124	Attachment Coupling Nut	8SA32-27	8SA32-27
125	Coupling Nut Retainer	182A53-29	182A53-29

* 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.

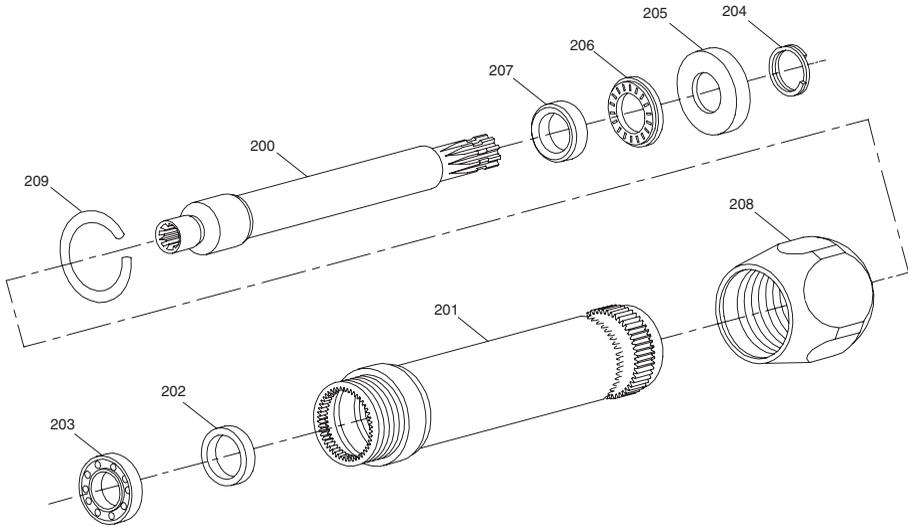
† When ordering a Socket Adapter Spindle (114) or Flush Socket Spindle, also order a Bevel Gear Retainer (119) or Bevel Gear Lock Nut (120).

+ When using Spindle No. 8SA32-P507-3/8, 182A53-P507-1/2, the rear face of the socket will be flush with the face of the Angle Housing.

When using Spindle No. 8SA32-P607-3/8, any socket not exceeding 15/16" diameter will fit up into the Angle Housing, thus reducing the overall height by 1/4".

When using Spindle No. 182A53-A607-1/2, any socket not exceeding 1-11/32" diameter will fit up into the Angle Housing, thus reducing the overall height by 1/4".

8RS, 8S and 8T Angle Housing Extension Assembly Exploded Diagram



(Dwg. TPC420)

8RS, 8S and 8T Angle Housing Extension Assembly Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	6" Angle Housing Extension Assembly	8SL-A327-6	205	Extension Arbor Retainer	182A53-589
200	Extension Arbor	8SL-327-6	206	Extension Arbor Thrust Bearing	R1610-105
201	Arbor Housing	8SL-43-6	207	Extension Arbor Thrust Washer	182A53-554
202	Arbor Spacer	WFS182-111	208	Coupling Nut	8SA32-27
203	Arbor Bearing	R1602-510	209	Coupling Nut Retainer	182A53-29
204	Extension Arbor Snap Ring	182A53-689			

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 Angle Wrench Product Safety Information Manual 04585006.
 Air Angle Wrench Product Information Manuals 80167505, 80167513.
 Air Angle Wrench Maintenance Information Manual 16575144.

Manuals can be downloaded from www.irtools.com

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