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Air Screwdrivers

QP1P, QP1S and QP1T Series

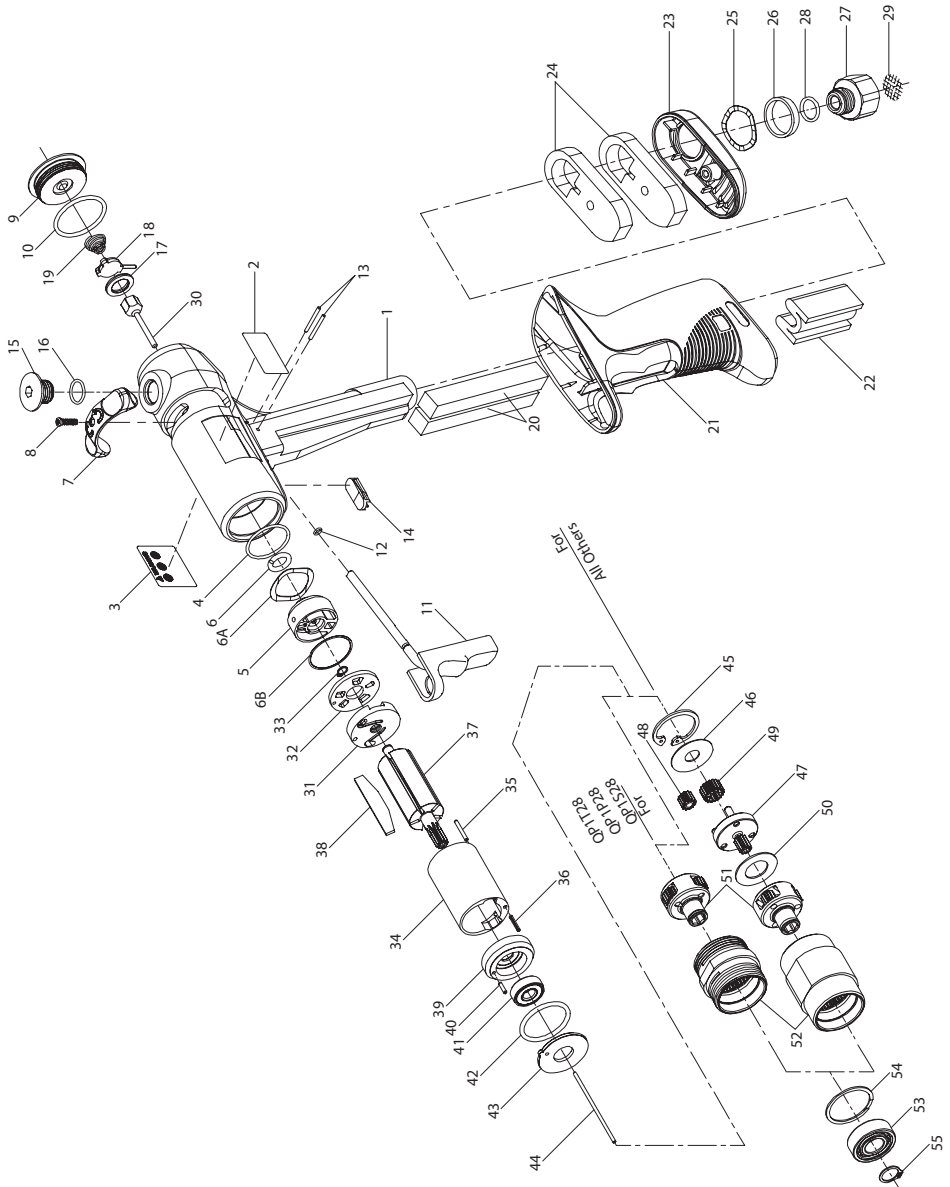
Parts Information



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 **Ingersoll Rand**[®]

QP1P, QP1S and QP1T Motor and Gearing - Exploded View



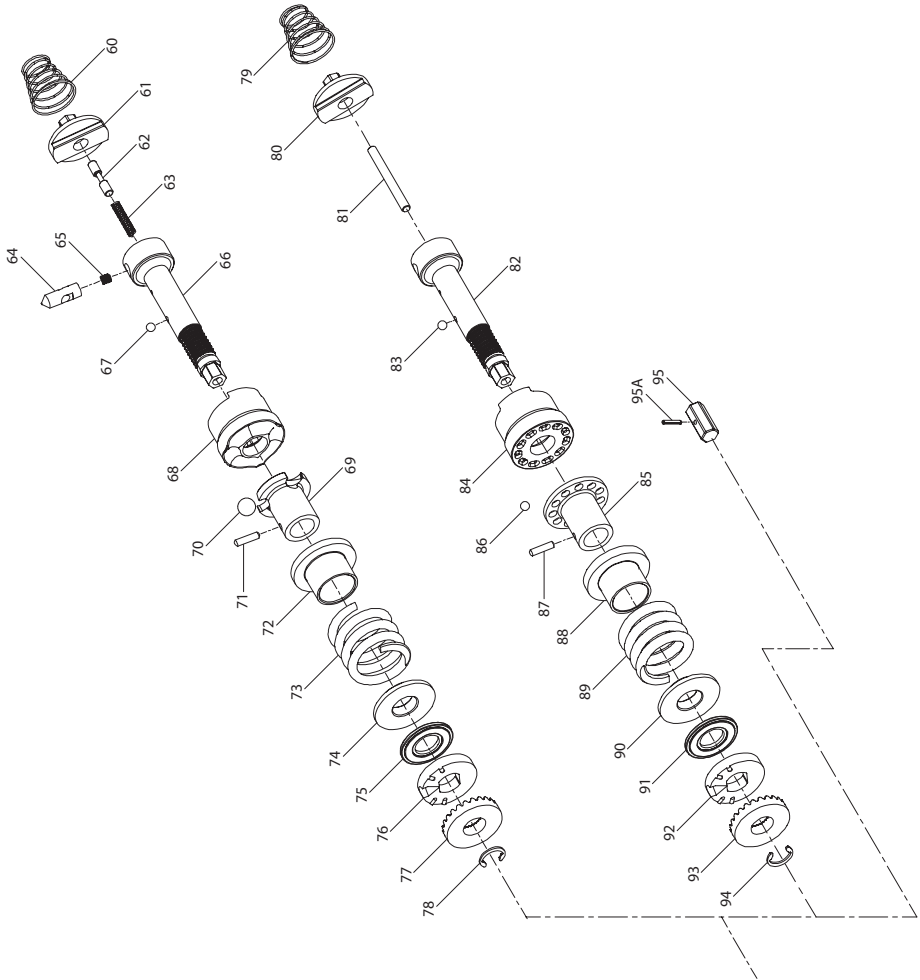
(Dwg. TPA1769-2)

QP1P, QP1S and QP1T Motor and Gearing - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
1	Motor Housing Assembly		31	Rear End Plate Assembly (includes rear rotor bearing)	TRH-A12-1
	for Push-to-Start with bottom inlet except 250 rpm models	TRP-A40-P-B	32	Rear End Plate Face Plate	TRH-12-2
	for 250 rpm Push-to-Start models with bottom inlet	TRP-A40-2P-B	33	Rear End Plate Assembly Retainer	8SL-305
	for Push-to-Start with top inlet except 250 rpm Models	TRP-A40-P	34	Cylinder Assembly	TRH-A3
	for 250 rpm Push-to-Start models with top inlet	TRP-A40-2P	35	Cylinder Rear Alignment Pin	TRH-98
	for non-Push-to-Start models with bottom inlet except 250 rpm models	TRP-A40-B	36	Cylinder Front Alignment Pin	TRH-98-1
	for 250 rpm non-Push-to-Start models with bottom inlet	TRP-A40-2B	37	Rotor	
	for non-Push-to-Start models with top inlet except 250 rpm models	TRP-A40		for models with an Automatic Shutoff Valve	TRH-53
	for 250 rpm non-Push-to-Start models with top inlet	TRP-A40-2	for models without an Automatic Shutoff Valve	RD-53	
	2	Nameplate	TRH-301	38	Vane Packet (set of 5 Vanes)
3	Warning Label	TRH-99	39	Front End Plate Assembly	TRH-A11
4	Housing O-Ring	TRH-104	40	End Plate Alignment Pin	TRH-98-2
5	Reverse Valve Assembly		41	Front Rotor Bearing	TRH-24
	for models with an Automatic Shutoff Valve	TRH-A329	42	Motor Seal	TRH-211
	for models without an Automatic Shutoff Valve	TRH-A3291	43	Motor Clamp Washer	TRH-207
6	Reverse Valve Seal	R1A-159	44	Push Rod (for models with an Automatic Shutoff Valve)	TRH-425
6A	Wave Washer	TRP-761-2	45	Gear Retainer (for all models except 2800 rpm models)	TRH-28
6B	O-Ring	M002-159	46	Gear Head Spacer (for all models except 2800 rpm models)	TRH-81
7	Reverse Lever	TRP-273	47	Planet Gear Head Assembly (includes gear shafts)	
8	Reverse Lever Screw	TRH-330		for 250, 500 and 1000 rpm models	TRH-A2169-16
9	Rear Housing Cap Assembly	TRP-A202		for 1500 rpm all models and 2000 rpm cushion clutch models	TRH-A2169-12
10	Rear Housing Cap Seal	TRP-158		for 2000 rpm shutoff and direct drive models	TRH-A2169-10
11	Trigger Assembly	TRP-A93		48	Planet Gear (3 for each Gear Head)
12	Trigger Shaft O-Ring	TRP-112		for 250, 500 and 1000 rpm models	TRH-10-16
13	Trigger Retaining Pin (2 for Push-to-Start models; 1 for all others)	400-25-87-4		for 1500 rpm all models and 2000 rpm cushion clutch models	TRH-10-12
14	Memory Chip Holder Assembly (for models with memory chip only; includes memory chip)	TRP-A528		for 2000 rpm shut off and direct drive models	TRH-10-10
15	Inlet Plug Assembly (for models with top inlet only)	TRP-A565	49	Gear Head Pinion	
16	Inlet Plug Seal	TRP-103		for 1500 rpm all models and 2000 rpm cushion clutch models	TRH-17-18
17	Throttle Valve Seat	TRP-303		for 2000 rpm shutoff and direct drive models	TRH-17-21
18	Throttle Valve	TRP-A302	50	Planet Gear Head Spacer for all models except 2800 rpm models	TRH-82
19	Throttle Valve Spring	TRP-51	51	Spindle Assembly (includes all spindle gearing)	
20	Housing Muffler Element (2)	TRP-311-2		for 250, 500 and 2800 rpm models	TRH-A8-16
21	Housing Grip			for 1500 rpm models	TRH-A8-12
	large size (standard)	TRP-40-2		for 1000 and 2000 rpm models	TRH-A8-10
	small size	TRP-40-1	52	Gear Case	
22	Grip Muffler Element	3RA-310		for 2800 rpm models	TRH-37-S
23	Grip End Cap	TRP-40-B	for all other models	TRH-37	
24	End Cap Muffler Element (2)	TRP-311-1	53	Spindle Bearing	TRH-510
25	Wave Washer	TRP-761	54	Spindle Bearing seat	TRH-208
26	Inlet Bushing Bezel	TRP-123	55	Spindle Bearing Retainer	4E-6
27	Inlet Bushing Assembly		*	Tune-Up Kit (Includes the following items: 4, 6, 10, 12, 13, 17, 18, 19, 20, 22, 24, 25, 26, 28, 29, 33, 38, 40, 41 and 42)	Q2-PFAST-TK1
	for 1/4-18 NPT thread	TRP-A465			
for 1/4-19 BSPT thread	TRP-A465-B				
28	Inlet Bushing Seal	TRP-103			
29	Inlet Bushing Screen	TRH-61			
30	Automatic Shutoff Valve				
	for all trigger permit models and push-to-start models	TRH-A435			
	for all trigger start models with automatic shutoff clutches	TRP-A435			

* Not Illustrated.

QP1P, QP1S and QP1T Clutches - Exploded View



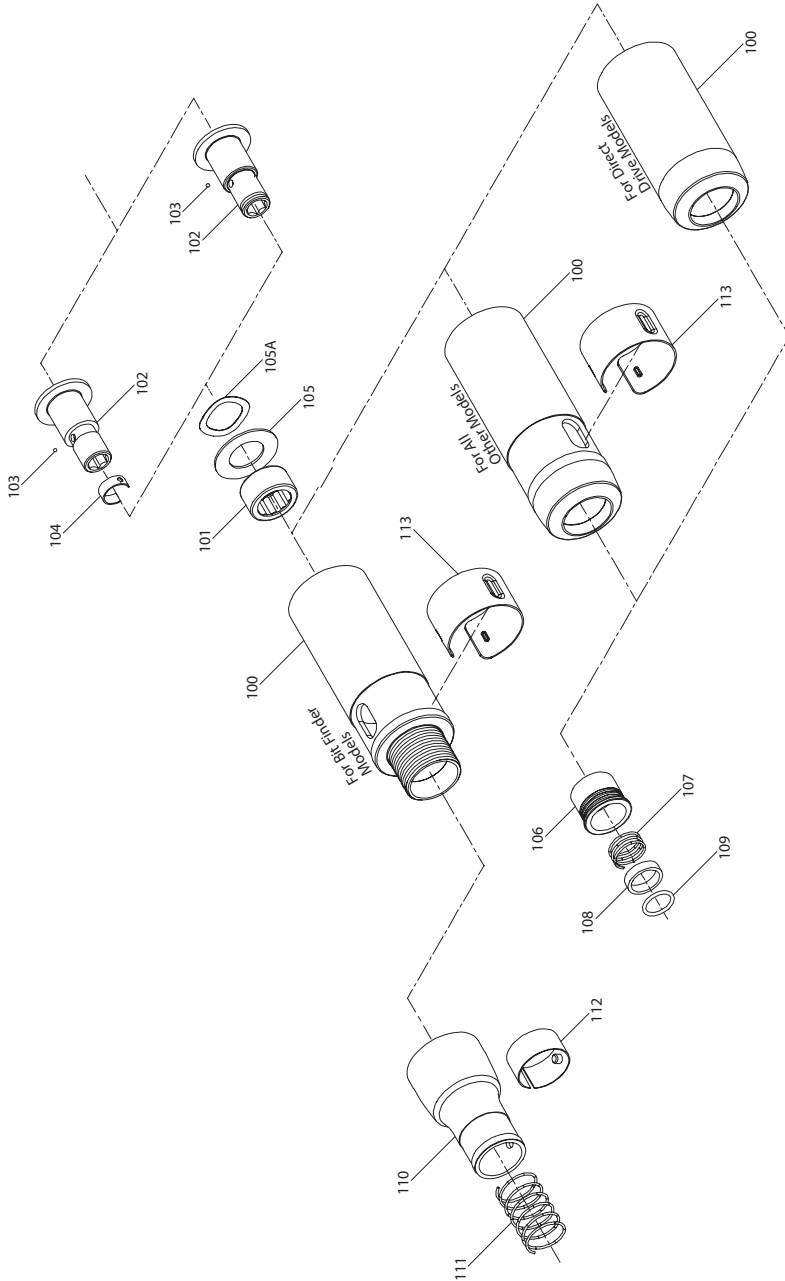
(Dwg. TPA1770-1)

QP1P, QP1S and QP1T Clutches - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
	Automatic Shutoff Clutch Assembly		79	Clutch Return Spring	TRH-405
	with heavy clutch spring	TRH-AH579	80	Clutch Input Driver	TRH-103
	with medium clutch spring	TRH-AM579	81	Clutch Pushrod	TRH-236-C
	with light clutch spring	TRH-AL579	82	Clutch Shaft	TRH-502
60	Clutch Return Spring	TRH-405	83	Clutch Ball (1/8" diameter) (12)	AV1-255
61	Clutch Input Driver	TRH-103	84	Cam Jaw	
62	Automatic Shutoff Plunger	TRH-408		for 1500, 2000 and 2800 rpm cushion clutch models	TRH-722-C
63	Automatic Shutoff Plunger Return Spring	TRH-420		for all other rpm cushion clutch models	TRH-721-C
64	Automatic Shutoff Pin	TRH-704			
65	Automatic Shutoff Pin Spring	TRH-407			
66	Clutch Shaft	TRH-502	85	Clutch Cam Ball Driver	TRH-581-C
67	Clutch Ball (1/8" diameter) (12)	AV1-255	86	Clutch Cam Ball (1/8" diameter) (11)	AV1-255
68	Cam Jaw	TRH-721	87	Clutch Cam Ball Driver Retaining Pin	TRH-188
69	Clutch Cam Ball Driver	TRH-581	88	Cam Ball Seat	TRH-627-C
70	Clutch Cam Ball (1/4" diameter) (3)	4U-722	89	Clutch Spring	
71	Clutch Driver Retaining Pin	TRH-188		heavy (green)	TRH-H583
72	Cam Ball Seat	TRH-627		medium (red)	TRH-M583
73	Clutch Spring			light (orange)	TRH-XL583
	heavy (green)	TRH-H583		90	Spring Seat
	medium (red)	TRH-M583	91	Thrust Bearing	161A32-105
	light (orange)	TRH-XL583	92	Clutch Adjusting Nut Washer	TRH-582
74	Spring Seat	TRH-623	93	Clutch Adjusting Nut	TRH-588
75	Thrust Bearing	161A32-105	94	Clutch Adjusting Nut Stop	353-701
76	Clutch Adjusting Nut Washer	TRH-582	95	Clutch Shaft (for direct drive models only)	TRH-786-S
77	Clutch Adjusting Nut	TRH-588	95A	Shaft Stop Pin (for direct drive models only)	TRH-98-3
78	Clutch Adjusting Nut Stop	353-701	*	Cushion Clutch Tune-Up Kit (Includes the following items: 79, 81, 83, 87, 90, 91 and 94)	Q2-CC-TK1
*	Automatic Shutoff Tune-Up Kit (Includes the following items: 44, 60, 63, 65, 67, 70, 71, 74, 75 and 78)	Q2-AS0-TK1			
	Cushion Clutch Assembly				
	with heavy clutch spring	TRH-AH579-C			
	with medium clutch spring	TRH-AM579-C			
	with light clutch spring	TRH-AL579-C			

* Not Illustrated.

QP1P, QP1S and QP1T Bit Drivers - Exploded View



(Dwg. TPA1777-1)

QP1P, QP1S and QP1T Bit Drivers - Parts List

Item	Part Description	Part Number	Item	Part Description	Part Number
100	Bit Holder Assembly		101	Clutch Housing Bearing	TRH-105
	with 1/4" Quick Release Bit Holder (for Push-to-Start Models and Models with Trigger Permit)	TRP-A580-PQ4	102	Bit Holder	
				for 1/4" Quick Release Bit Holder	TRH-586-H4
				for 1/4" Bit Finder Bit Holder	TRH-583-Q4
				for 5 mm Double End Quick Release Bit Holder	RH-586-5MD
	with 1/4" Quick Release Bit Holder (for Trigger Start Models with Cushion or Shutoff Clutch)	TRP-A580-NQ4		for 1/4" Double End Quick Release Bit Holder	TRH-586-Q4D
	with 1/4" Quick Release Bit Holder (for Direct Drive Models)	TRP-A580-SS-NQ4	103	Bit Retaining Ball	
	with 1/4" Bit Finder Bit Holder (for Push-to-Start Models and Models with Trigger Permit)	TRP-A580-PQ4F		for metric Bit Holders	TRH-629-3M
				for all others Bit Holders	R000B-263
	with 1/4" Bit Finder Bit Holder (for Trigger Start Models with Cushion or Shutoff Clutch)	TRP-A580-NQ4F	104	Bit Retaining Spring (for Bit Finder Bit Holders)	TRH-241
	with 5 mm Double End Quick Release Bit Holder (for Push-to-Start Models and Models with Trigger Permit)	TRP-A580-PQ5MD	105A	Shutoff Spacer (for all Models with Trigger Start only)	TRH-591
	with 5 mm Double End Quick Release Bit Holder (for Trigger Start Models with Cushion or Shutoff Clutch)	TRP-A580-NQ5MD	106	Wave Washer (for all Models with Trigger Start only)	TRH-592
	with 5 mm Double End Quick Release Bit Holder (for Direct Drive Models)	TRP-A580-SSNQ5MD	107	Bit Retaining Sleeve (for Quick Release Bit Holders)	TRH-930
with 1/4" Double End Quick Release Bit Holder (for Push-to-Start Models and Models with Trigger Permit)	TRP-A580-PQ4D	108	Retaining Sleeve Spring (for Quick Release Bit Holders)	TRH-931	
with 1/4" Double End Quick Release Bit Holder (for Trigger Start Models with Cushion or Shutoff Clutch)	TRP-A580-NQ4D	109	Spring Seat (for Quick Release Bit Holders)	TRH-244	
with 1/4" Double End Quick Release Bit Holder (for Direct Drive Models)	RP-A580-SS-NQ4D	110	Retaining Ring (for Quick Release Bit Holders)	TRH-118	
100	Clutch Housing		111	Non-Rotating Bit Finder (for Bit Finder Bit Holders)	TRH-873
	for Models with Bit Finder Bit Holders	TRP-580-F	112	Spring (for Bit Finder Bit Holders)	02A60-242
	for Direct Drive Models without Bit Finder Bit Holders	TRP-580-SS	113	Finder Retaining Spring (for Bit Finder Bit Holders)	102A60-628
	for all other Models	TRP-580	*	Clutch Adjusting Hole Cover	TAP-415
			*	Clutch Housing Spanner Wrench	TRH-478
			Hanger	TRP-A365	

* Not Illustrated.

Clutch Spring Selection Chart

Tool	Free Speed (rpm)	Torque Range (Soft Draw)		
		Light Clutch Spring (Orange)	Medium Clutch Spring (Red)	Heavy Clutch Spring (Green)
All Series QP Pistol Grip Screwdrivers	2800	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	---	---
	2000	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	7.9 to 22.1 in.-lbs. (0.89 to 2.50 Nm)	---
	1500	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	7.9 to 27.3 in.-lbs. (0.89 to 3.08 Nm)	---
	1000	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	7.9 to 27.3 in.-lbs. (0.89 to 3.08 Nm)	13.3 to 40.0 in.-lbs. (1.50 to 4.52 Nm)
	500	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	7.9 to 28.3 in.-lbs. (0.89 to 3.20 Nm)	13.3 to 47.8 in.-lbs. (1.50 to 5.40 Nm)
	250	1.7 to 9.7 in.-lbs. (0.19 to 1.1 Nm)	7.9 to 28.3 in.-lbs. (0.89 to 3.20 Nm)	13.3 to 47.8 in.-lbs. (1.50 to 5.40 Nm)

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 Screwdriver Product Safety Information Manual 04585006.

Air Screwdriver Product Information Manual 80165939.

Air Screwdriver Maintenance Information Manual 16575219.

Manuals can be downloaded from ingersollrandproducts.com.

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