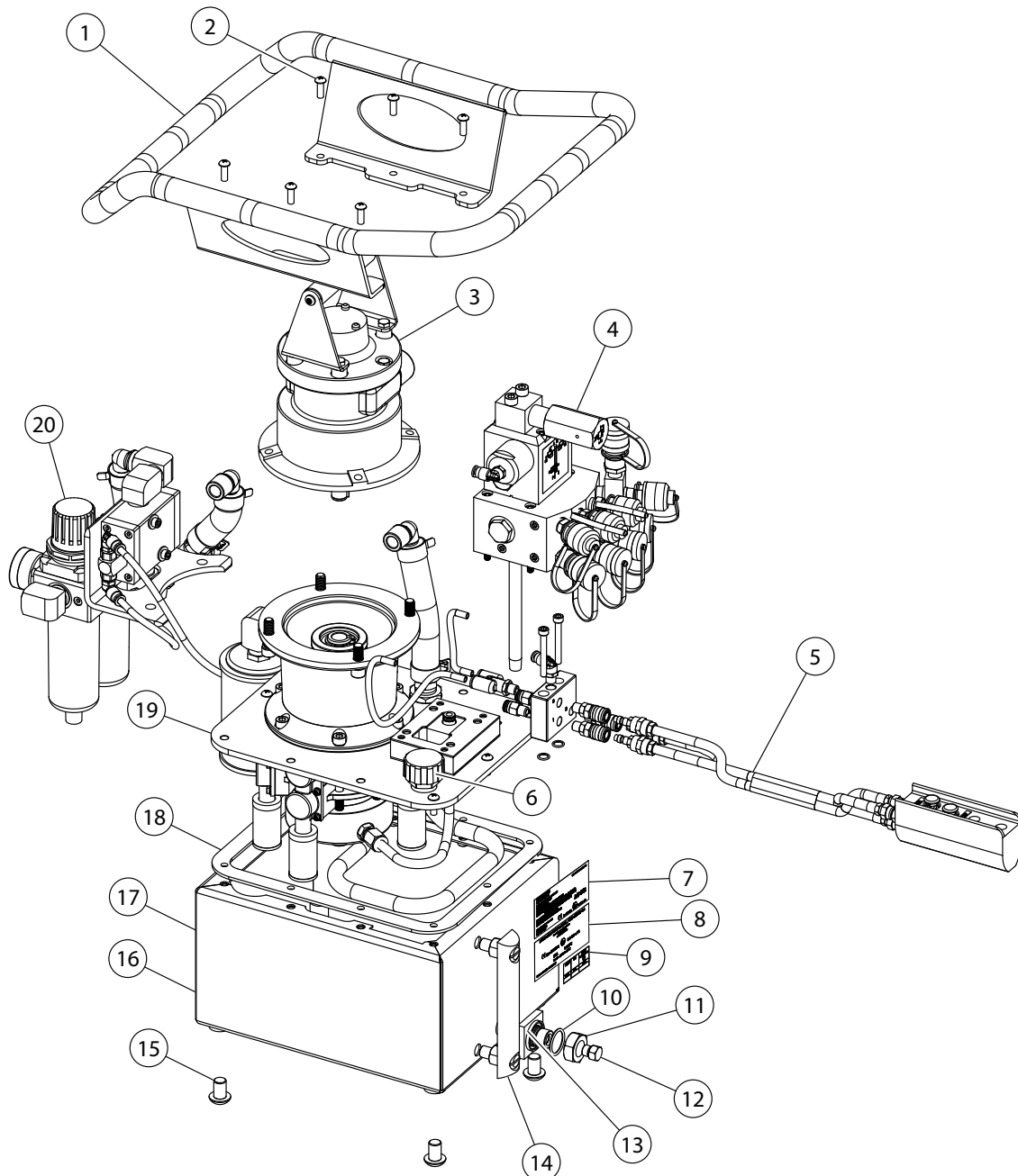


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PA60APF5FP
PA60APF5FMP
PA60APF5FPR
PA60APF5FMPR

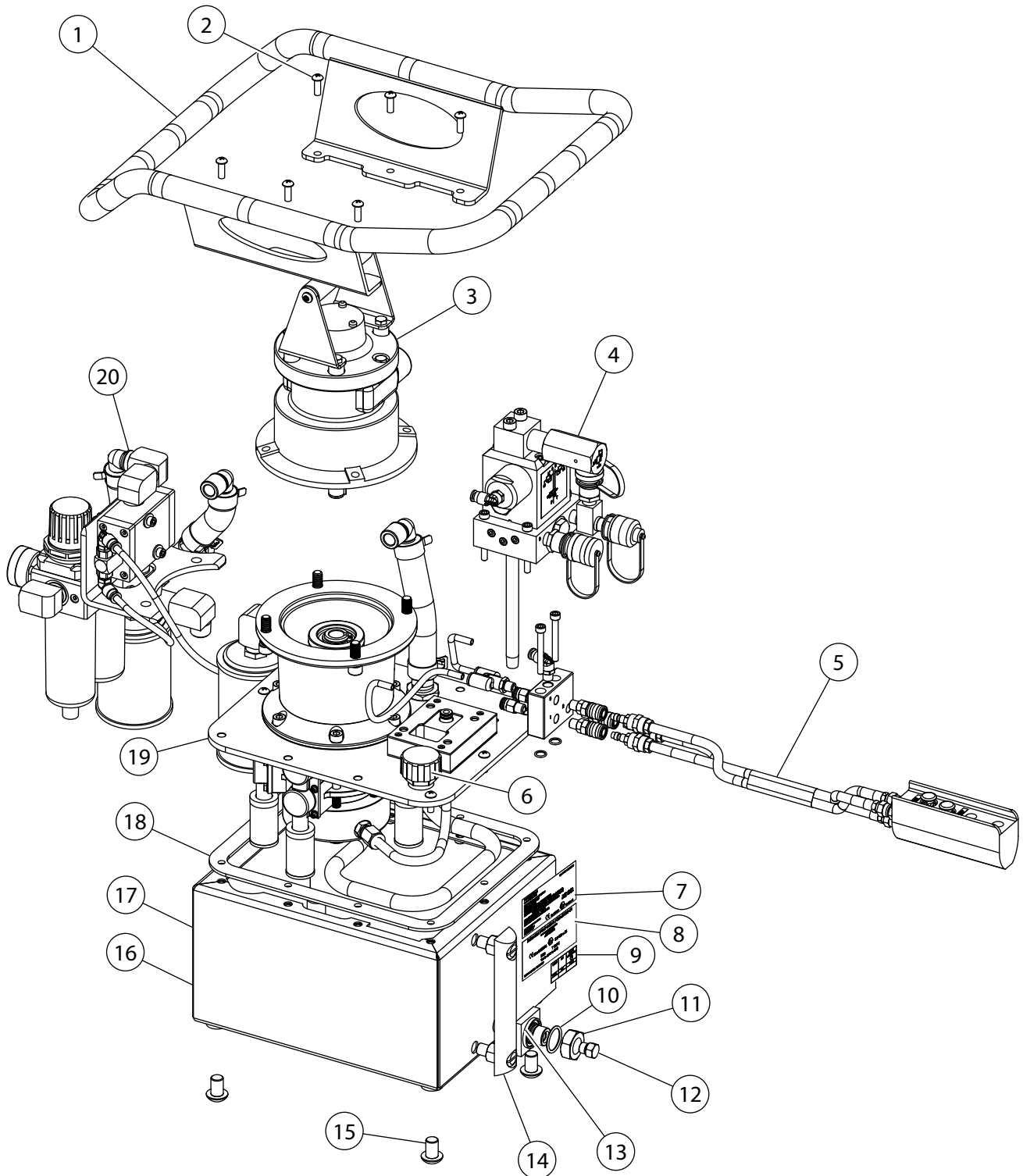
Air ISP Series Air Hydraulic Pump Maximum Capacity: 10,000 PSI



Air Hydraulic Pump PA60APF5FMP

Parts Lists

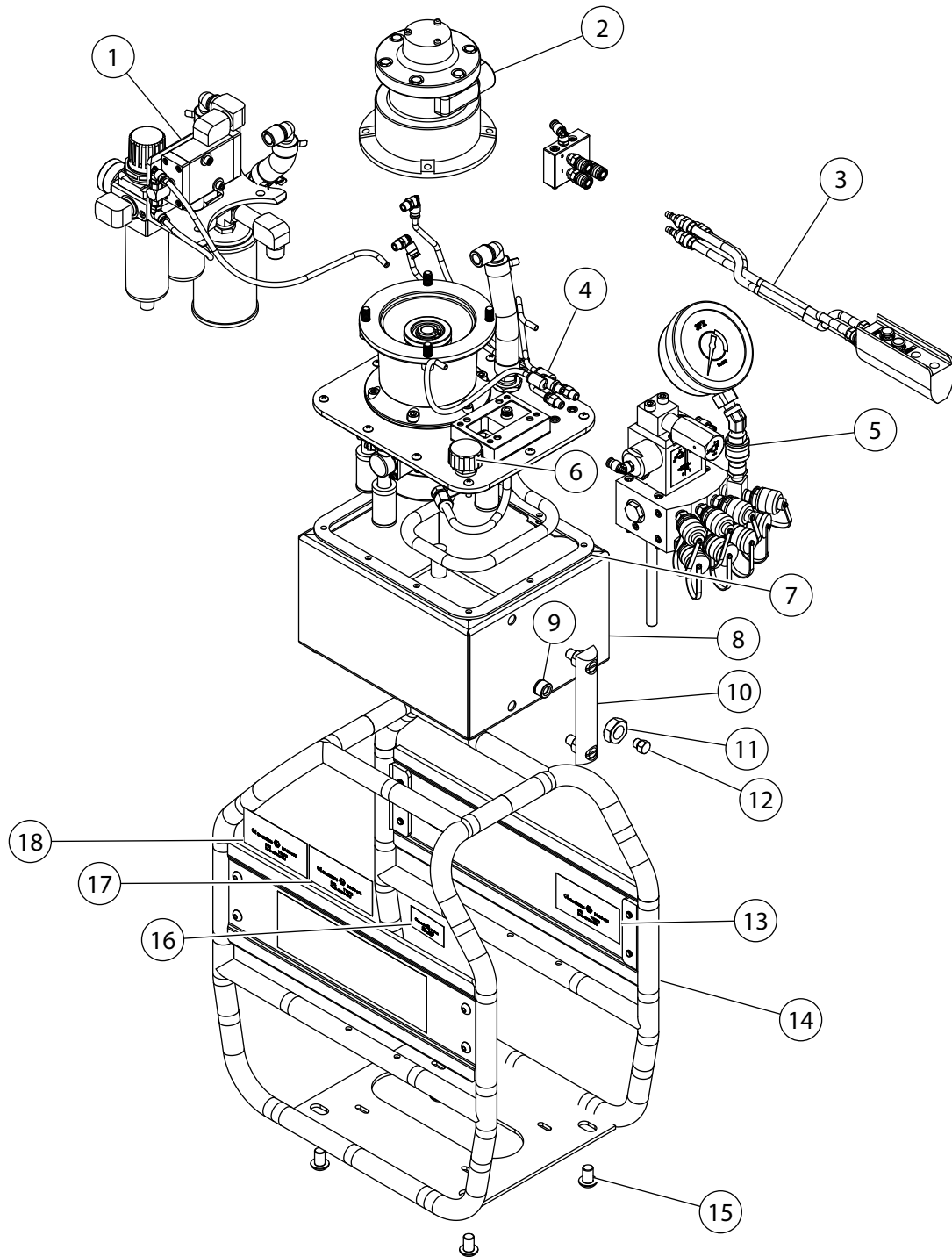
ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FMP FULL ASSEMBLY DESCRIPTION	NOTES
1	2001669GR15	1	GUARD	
2	10177	10	SCREW	torque to 6.8Nm (60 in-lbs)
3		1	AIR MOTOR ASSEMBLY	see Air Motor
4		1	CONTROL VALVE AND MANIFOLD	see Control Valve & Manifold FMP & FMPR
5		1	CONTROL PENDANT ASSEMBLY	see Control Pendant
6	1683-AB	1	BREATHER	
7	1000581	1	ISP AIR CE PERFORMANCE DECAL	
8	1000582	1	ISP AIR ATEX COMPLIANCE DECAL	
9	1000580	1	ISP AIR CE PUMP PERFORMANCE DECAL	
10	14725	1	O-RING	
11	10396	1	NUT	torque to 22.6Nm (200 in-lbs)
12	17147	1	PLUG FITTING	
13	351000	1	DRAIN	
14	350431	1	FLUID LEVEL GAUGE	torque to 5.6Nm (50 in-lbs)
15	2001650	4	SCREW	torque to 13.5Nm (120 in-lbs)
16	65599BK-TXT	1	RESERVOIR	
17	1000377	1	ISP AIR CE COMPLIANCE DECAL	
18	40164	1	GASKET	
19	3000525	1	ISP AIR PUMP COVER PLATE ASSEMBLY	
20		1	F-R-L ASSEMBLY AND MOUNT	see Filter-Regulator-Lubricator & Muffler



Air Hydraulic Pump PA60APF5FP

Parts Lists

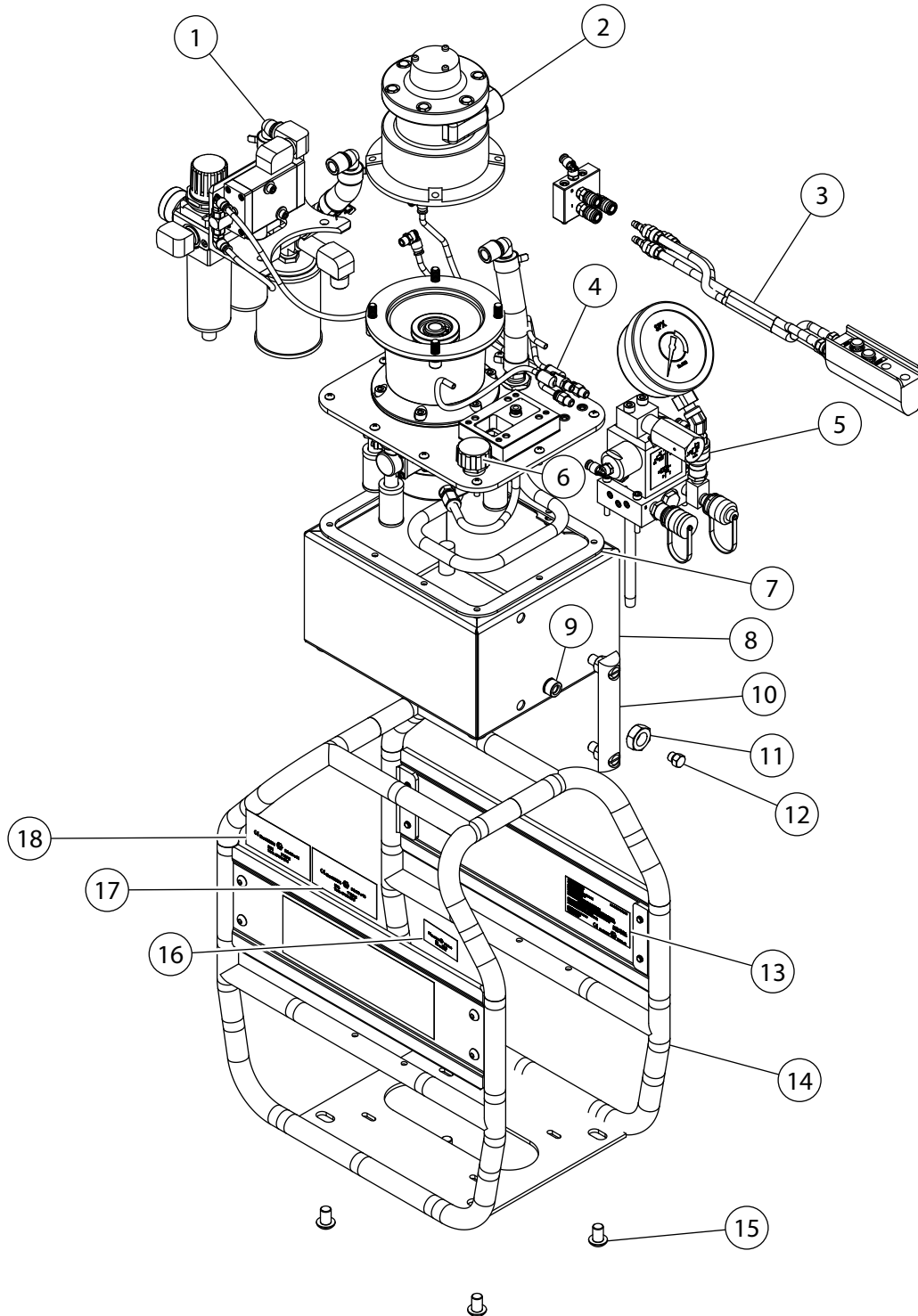
ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FP FULL ASSEMBLY DESCRIPTION	NOTES
1	2001669GR15	1	GUARD	
2	10177	10	SCREW	torque to 6.8Nm (60 in-lbs)
3		1	AIR MOTOR ASSEMBLY	see Air Motor
4		1	CONTROL VALVE AND MANIFOLD	see Control Valve & Manifold FP & FPR
5		1	PENDANT CONTROL ASSEMBLY	see Control Pendant
6	1683-AB	1	BREATHER	
7	1000578	1	ISP AIR CE PERFORMANCE DECAL	
8	1000579	1	ISP AIR ATEX COMPLIANCE DECAL	
9	1000580	1	ISP AIR CE PUMP PERFORMANCE DECAL	
10	14725	1	O-RING	
11	10396	1	NUT	torque to 22.6Nm (200 in-lbs)
12	17147	1	PLUG FITTING	
13	351000	1	DRAIN	
14	350431	1	FLUID LEVEL GAUGE	torque to 5.6Nm (50 in-lbs)
15	2001650	4	SCREW	torque to 13.5Nm (120 in-lbs)
16	65599BK-TXT	1	RESERVOIR	
17	1000377	1	ISP AIR CE COMPLIANCE DECAL	
18	40164	1	GASKET	
19	3000525	1	ISP AIR PUMP COVER PLATE ASSEMBLY	
20		1	F-R-L ASSEMBLY AND MOUNT	see Filter-Regulator- Lubricator & Muffler



Air Hydraulic Pump PA60APF5FMPR

Parts Lists

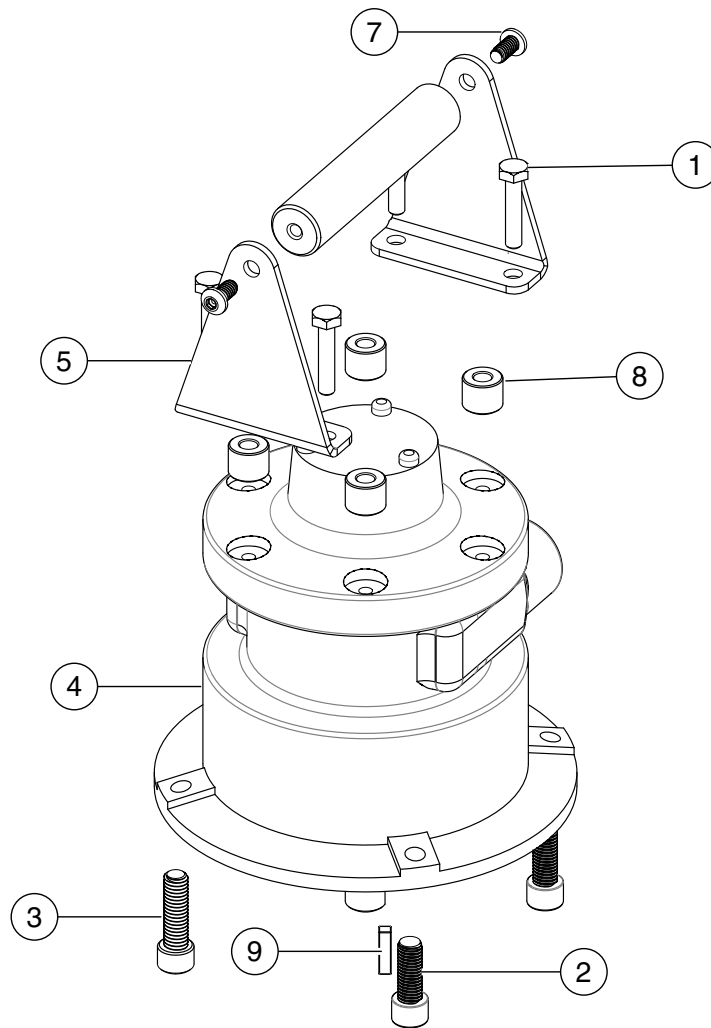
ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FMPR FULL ASSEMBLY DESCRIPTION	NOTES
1		1	F-R-L ASSEMBLY AND MOUNT	see Filter-Regulator-Lubricator & Muffler
2		1	AIR MOTOR ASSEMBLY	see Air Motor
3		1	CONTROL PENDANT ASSEMBLY	see Control Pendant
4	3000525	1	ISP AIR PUMP COVER PLATE ASSEMBLY	
5		1	CONTROL VALVE AND MANIFOLD	see Control Valve & Manifold FP & FPR
6	1683-AB	1	BREATHER	
7	40164	1	GASKET	
8	65599BK-TXT	1	RESERVOIR	
9	351000	1	DRAIN	
10	350431	1	FLUID LEVEL GAUGE	torque to 5.6Nm (50 in-lbs)
11	10396	1	NUT	torque to 222.6Nm (200 in-lbs)
12	17147	1	PLUG FITTING	
13	1000377	1	ISP AIR CE COMPLIANCE DECAL	
14	2001573	1	ISP AIR (GREEN) ROLL CAGE	
15	2001650	4	SCREW	torque to 13.5Nm (120 in-lbs)
16	1000580	1	ISP AIR CE PUMP PERFORMANCE DECAL	
17	1000583	1	ISP AIR ATEX COMPLIANCE DECAL	
18	1000585	1	ISP AIR CE PERFORMANCE DECAL	



Air Hydraulic Pump PA60APF5FPR

Parts Lists

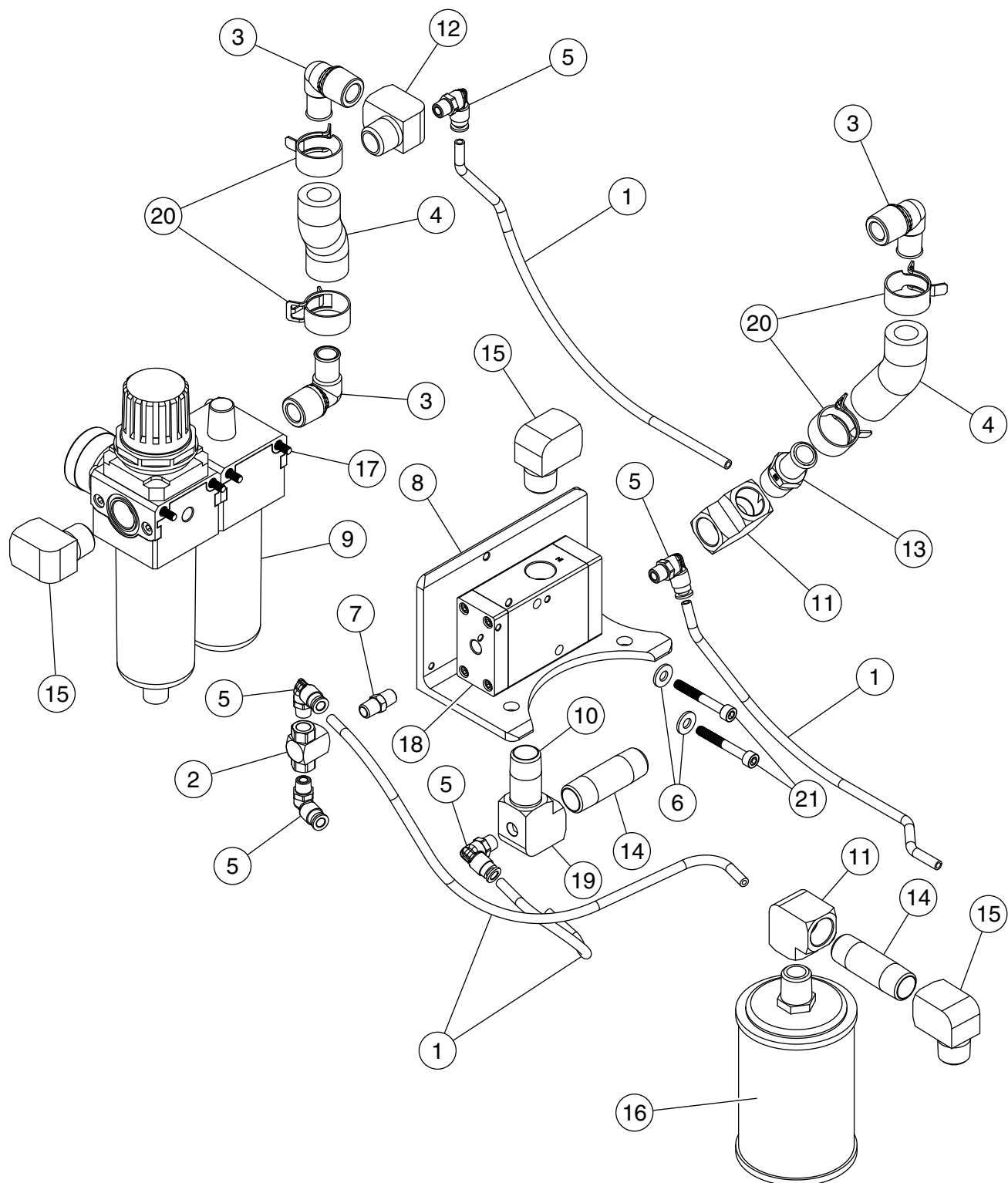
ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FPR FULL ASSEMBLY DESCRIPTION	NOTES
1		1	F-R-L ASSEMBLY AND MOUNT	see Filter-Regulator-Lubricator & Muffler
2		1	AIR MOTOR ASSEMBLY	see Air Motor
3		1	CONTROL PENDANT ASSEMBLY	see Control Pendant
4	3000525	1	ISP AIR PUMP COVER PLATE ASSEMBLY	
5		1	CONTROL VALVE AND MANIFOLD	see Control Valve & Manifold FP & FPR
6	1683-AB	1	BREATHER	
7	40164	1	GASKET	
8	65599BK-TXT	1	RESERVOIR	
9	351000	1	DRAIN	
10	350431	1	FLUID LEVEL GAUGE	torque to 5.6Nm (50 in-lbs)
11	10396	1	NUT	torque to 222.6Nm (200 in-lbs)
12	17147	1	PLUG FITTING	
13	1000377	1	ISP AIR CE COMPLIANCE DECAL	
14	2001573	1	ISP AIR (GREEN) ROLL CAGE	
15	2001650	4	SCREW	torque to 13.5Nm (120 in-lbs)
16	1000580	1	ISP AIR CE PUMP PERFORMANCE DECAL	
17	1000586	1	ISP AIR ATEX COMPLIANCE DECAL	
18	1000584	1	ISP AIR CE PERFORMANCE DECAL	



Air Motor

ITEM NO.	PART NO.	NO. REQ'D	AIR MOTOR DESCRIPTION	NOTES
1*	10018	4	SCREW	torque to 20.3Nm (180 in-lbs)
2	10050	2	SCREW	torque to 20.3Nm (180 in-lbs)
3	10053	2	SCREW	torque to 20.3Nm (180 in-lbs)
4	14717	1	AIR MOTOR	
5*	33808	2	HANDLE BRACKET	
6	251437	2	SCREW	torque to 20.3Nm (180 in-lbs)
7*	2001653	1	HANDLE	
8*	2001662	4	HANDLE BRACKET SPACER	
9	F9-2002-00	1	SQUARE DRIVE KEY	
*(PA60APF5FP AND PA60APF5FMP ONLY)				

Parts Lists

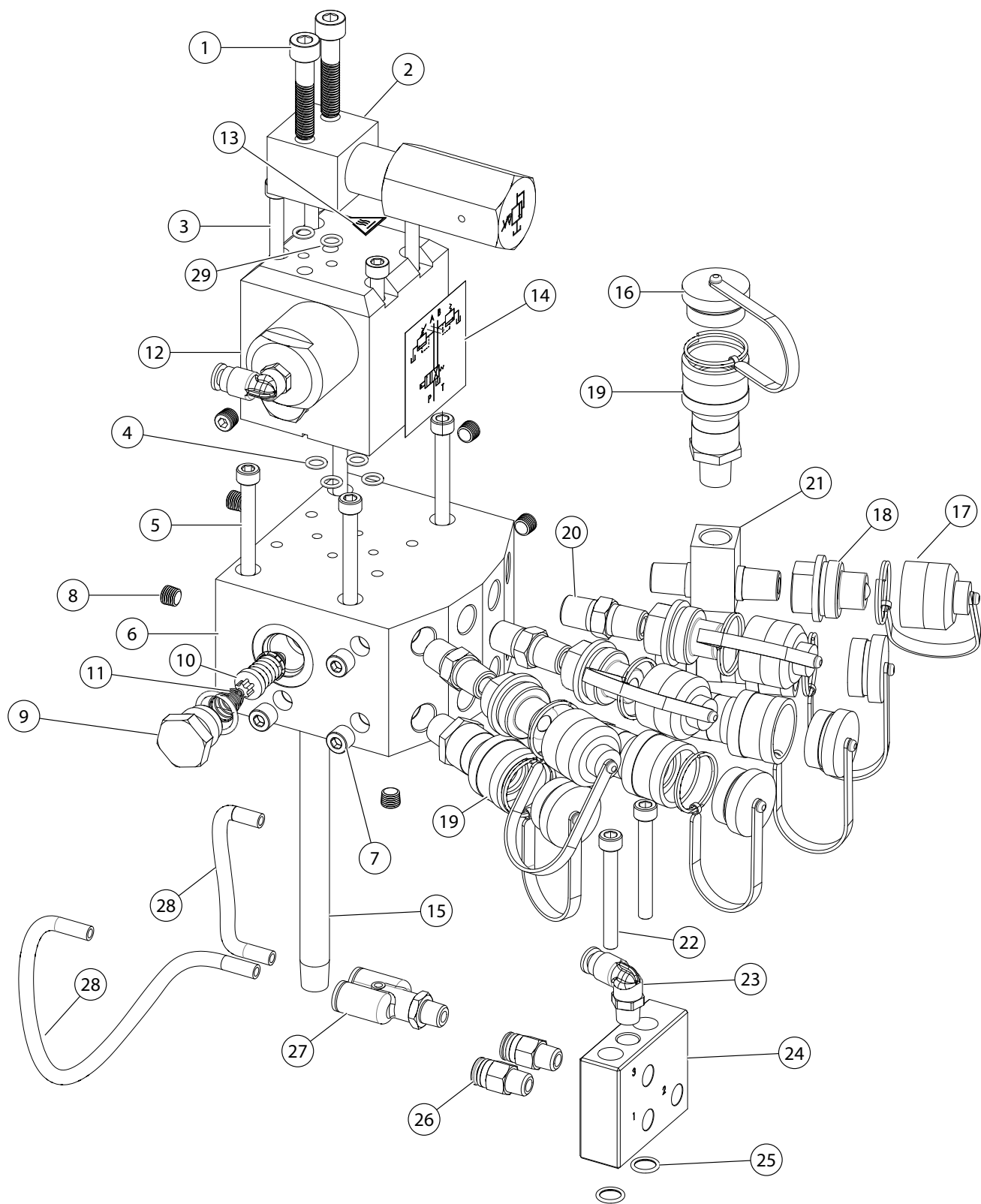


Filter-Regulator-Lubricator & Muffler

Parts Lists

ITEM NO.	PART NO.	NO. REQ'D	F-R-L & MUFFLER DESCRIPTION	NOTES
1	15883	130.1 cm (51.5 in)	POLYETHYLENE TUBING NOTE: Tubing must be cut to exact length to retain CE-ATEX Rating	279.4 mm (11 in), 282.5 mm (11.125 in), 311.1 mm (15.25 in), 258.7 mm (14.125 in)
2	212405	1	1000 PSI CHECK VALVE	
3	212897	3	90 DEGREE ELBOW FITTING	
4	212898	33 cm (13 in)	PRESSURE HOSE	82.5 mm (3.25 in), 85.7 mm (3.375 in)
5	250463	5	90 DEGREE ELBOW FITTING	
6	12719	2	PLAIN WASHER	
7	11421	1	STRAIGHT FITTING, TUBE	
8	2002258	1	ISP AIR VALVE BRACKET	
9	2001580	1	ISP AIR F-R-L ASSEMBLY	
10	2001589	1	STRAIGHT FITTING, LONG	
11	2001591	2	90 DEGREE ELBOW	
12	2001592	1	90 DEGREE ELBOW	
13	2001593	1	STRAIGHT FITTING, BARBED	
14	2001594	2	STRAIGHT FITTING, LONG	
15	2001598	3	90 DEGREE ELBOW	
16	2001604	1	ISP AIR MUFFLER	
17	2001613	4	SCREW	torque to 5.6Nm (50 in-lbs)
18	2002239	1	ISP AIR VALVE	
19	2001667	1	90 DEGREE ELBOW	
20	2231-AA	4	PLUMBING CLAMP HOSE ADJUSTABLE INLET	
21	2635-AA	2	SCREW	torque to 8.5Nm (75 in-lbs)

Parts Lists

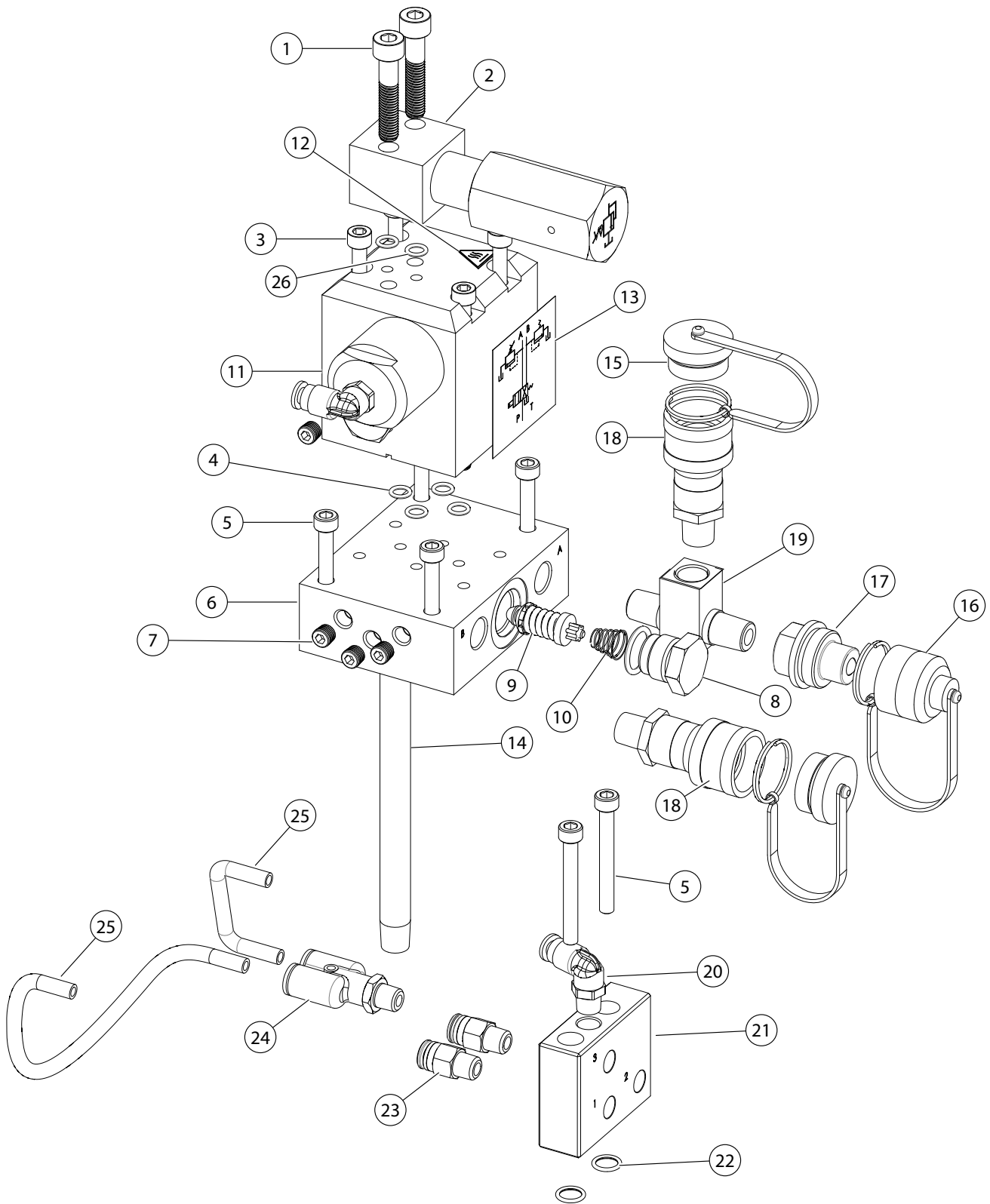


Control Valve & Manifold FMP & FMPR

Parts Lists

ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FMP AND PA60APF5FMPR CONTROL VALVE & MANIFOLD DESCRIPTION	NOTES
1	2001611	2	SCREW	Torque to 33.9Nm (300 in-lbs)
2	3000504	1	RELIEF VALVE ASSEMBLY	
3	2001608	4	SCREW	Torque to 24.8Nm (220 in-lbs)
4	12522	4	O-RING	
5	8073-AA	4	SCREW	Torque to 24.8Nm (220 in-lbs)
6	2001712	1	MULTI-PORT MANIFOLD VALVE	
7	10427	3	PLUG FITTING	
8	15130	6	PLUG FITTING	
9	1600-BA	1	RELIEF CAP ASSEMBLY	
10	RV-11	1	RELIEF ASSEMBLY FIXED 110 BAR	
11	1225-BA	1	SPRING COM	
12	3000529	1	CONTROL VALVE	
13	1000371	1	ISO BURN HAZARD/HOT SURFACE DECAL	
14	2001704	1	2P4W SCHEMATIC VALVE DECAL	
15	200609	1	DRAIN TUBE	
16	252364	5	DUST CAP (Male)	
17	252365	4	DUST CAP (Female)	
18	251411	4	QUICK PLUG COUPLER (Male)	
19	251410	5	QUICK COUPLER (Female)	
20	10672	3	STRAIGHT FITTING	
21	16495	1	TEE FITTING	
22	5165-AA	2	SCREW	Torque to 24.8Nm (220 in-lbs)
23	250463	1	90 DEGREE ELBOW FITTING	
24	2001640	1	PENDANT CONNECTION MANIFOLD	
25	10268	2	O-RING	
26	250464	2	STRAIGHT FITTING, TUBE	
27	2001641	1	Y MALE SWIVEL CONNECTOR	
28	15883	42.2 cm (16.625 in)	POLYETHYLENE TUBING NOTE: Tubing must be cut to exact length to retain CE-ATEX Rating	180.9 mm (7.125 in) 241.3 mm (9.5 in)
29	2000699	2	O-RING 8x2x12 mm NBR90	

Parts Lists

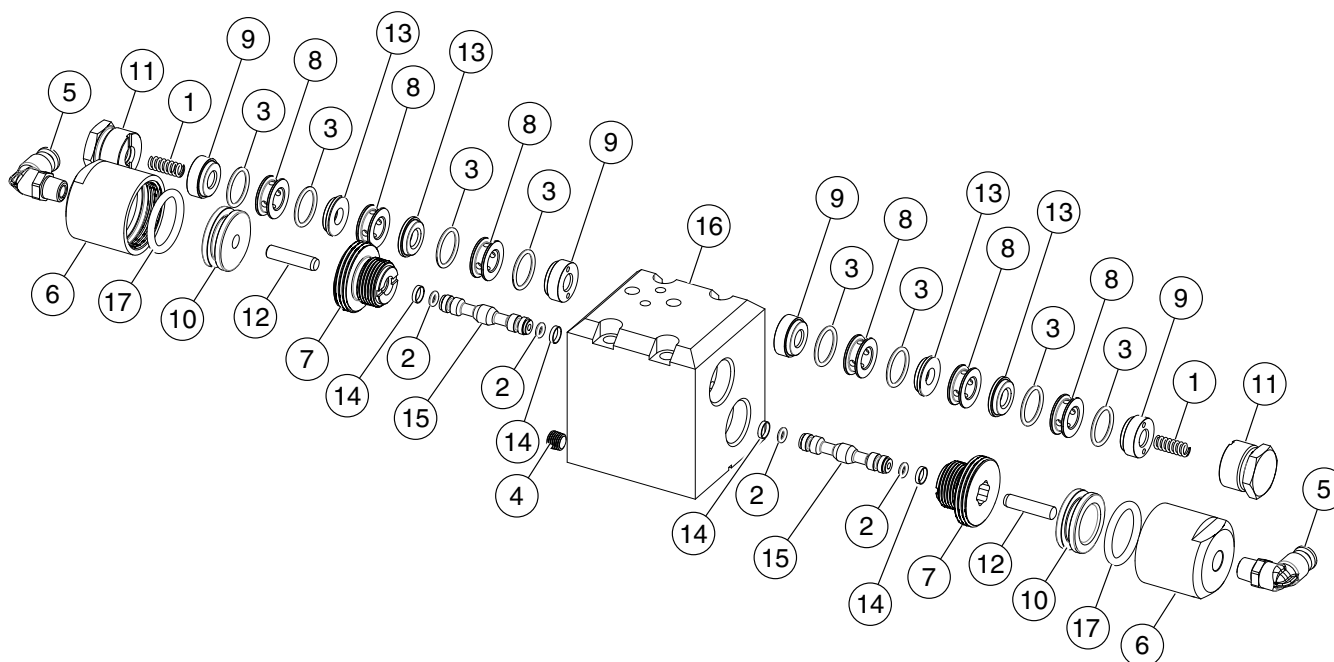


Control Valve & Manifold FP & FPR

Parts Lists

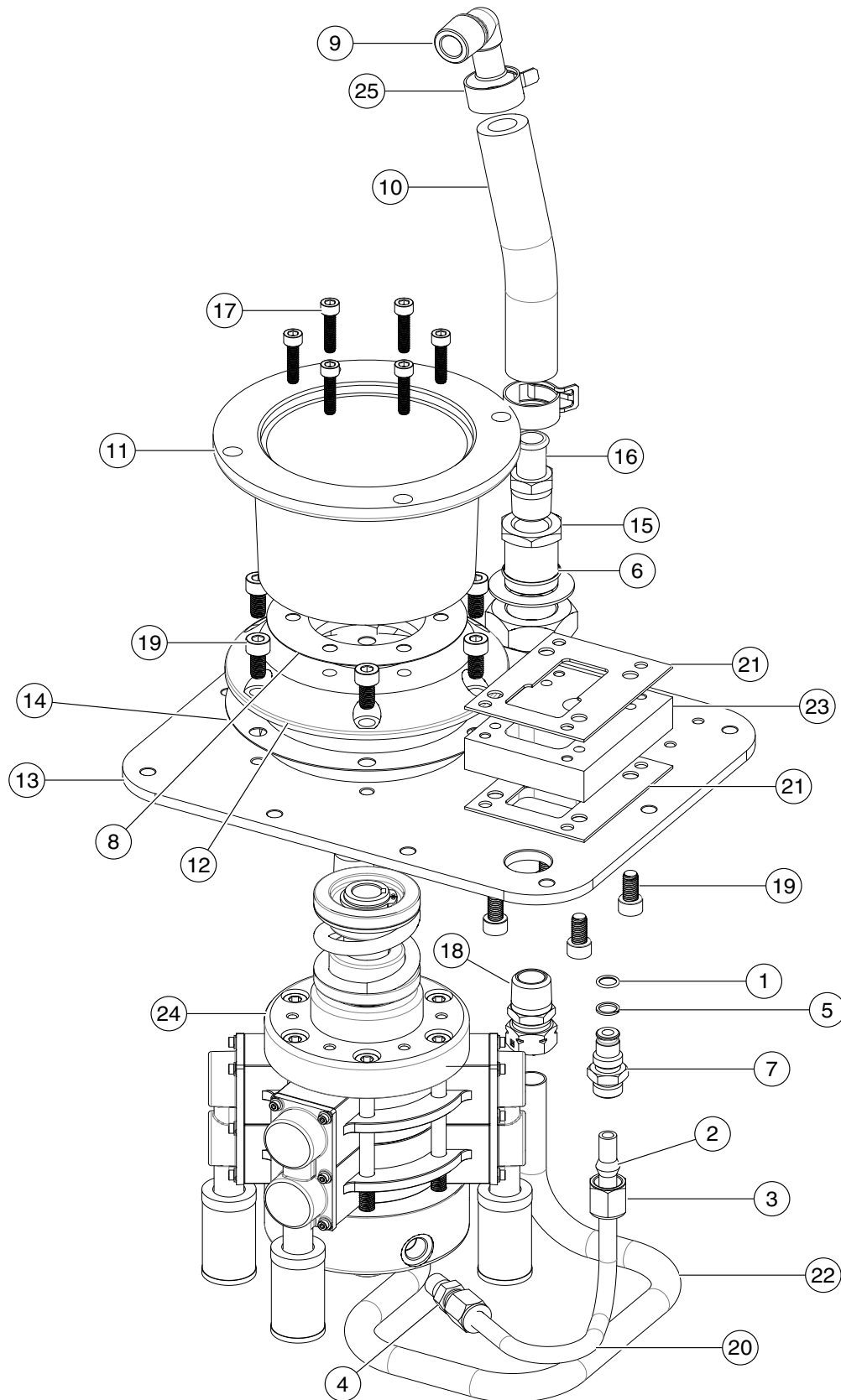
ITEM NO.	PART NO.	NO. REQ'D	PA60APF5FP AND PA60APF5FPR CONTROL VALVE & MANIFOLD DESCRIPTION	NOTES
1	2001611	2	SCREW	Torque to 33.9Nm (300 in-lbs)
2	3000504	1	RELIEF VALVE ASSEMBLY	
3	2001608	4	SCREW	Torque to 24.8Nm (220 in-lbs)
4	12522	6	O-RING	
5	5165-AA	6	SCREW	Torque to 24.8Nm (220 in-lbs)
6	2001661	1	MODULAR VALVE ISP AIR SUBPLATE	
7	15130	3	PLUG FITTING	
8	1600-BA	1	RELIEF CAP ASSEMBLY	
9	RV-11	1	RELIEF ASSEMBLY FIXED 110 BAR	
10	1225-BA	1	SPRING COM	
11	3000529	1	CONTROL VALVE	
12	1000371	1	ISO BURN HAZARD/HOT SURFACE DECAL	
13	2001704	1	2P4W SCHEMATIC VALVE DECAL	
14	200609	1	DRAIN TUBE	
15	252364	2	DUST CAP (Male)	
16	252365	1	DUST CAP (Female)	
17	251411	1	QUICK PLUG COUPLER (Male)	
18	251410	2	QUICK COUPLER (Female)	
19	16495	1	TEE FITTING	
20	250463	1	90 DEGREE ELBOW FITTING	
21	2001640	1	PENDANT CONNECTION MANIFOLD	
22	10268	2	O-RING	
23	250464	2	STRAIGHT FITTING, TUBE	
24	2001641	1	Y MALE SWIVEL CONNECTOR	
25	15883	42.2 cm (16.625 in)	POLYETHYLENE TUBING NOTE: Tubing must be cut to exact length to retain CE-ATEX Rating	180.9 mm (7.125 in), 241.3 mm (9.5 in)
26	2000699	2	O-RING 8x2x12 mm NBR90	

Parts Lists



3000529 Control Valve

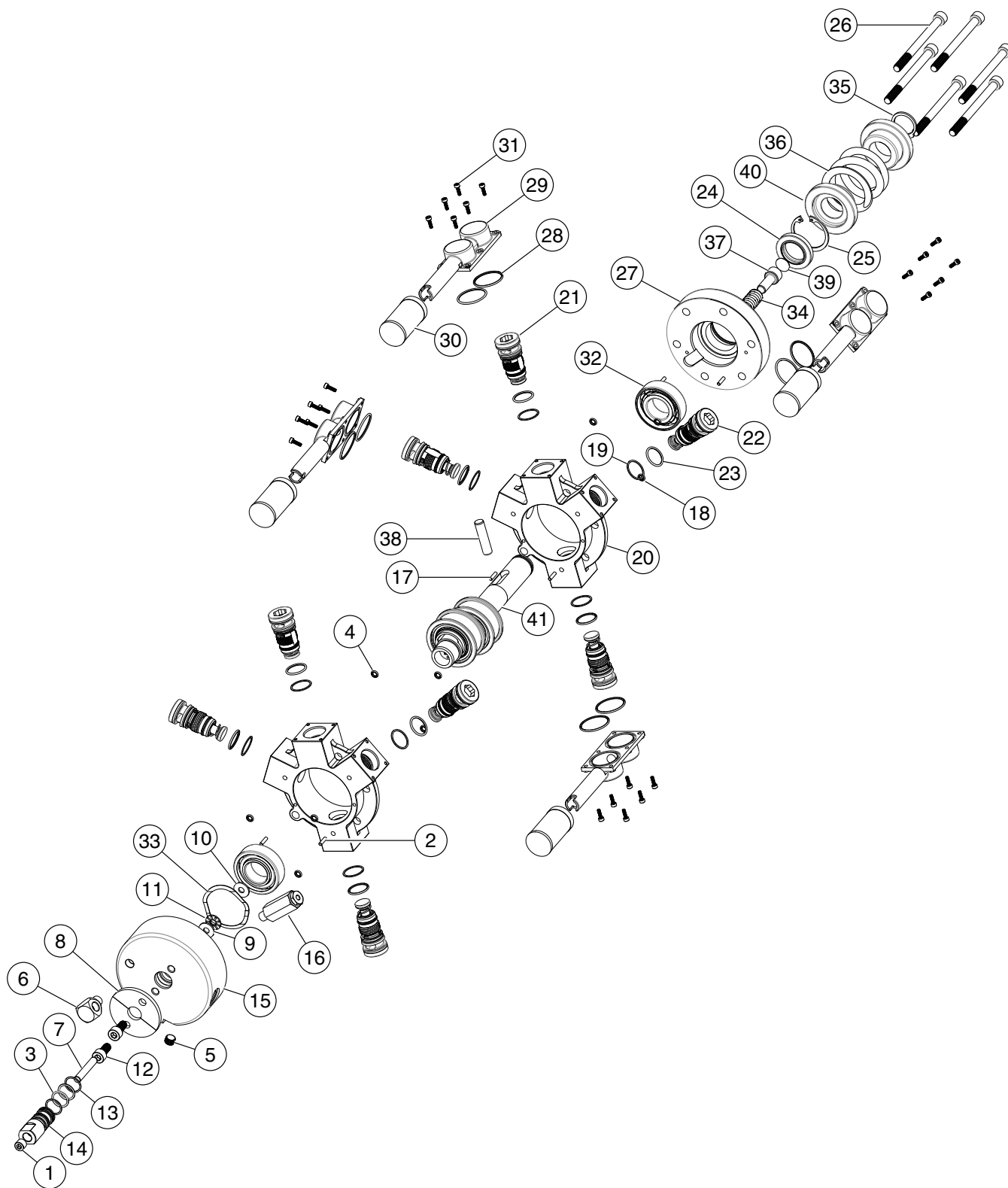
ITEM NO.	PART NO.	NO. REQ'D	CONTROL VALVE DESCRIPTION	NOTES
1	10360	2	SPRING COM	
2	12099	4	O-RING	
3	15011	8	O-RING	
4	15130	1	PLUG FITTING	
5	250463	2	90 DEGREE ELBOW FITTING	
6	2001567	2	PNEUMATIC CYLINDER	
7	2001569	2	PLUG	
8	2001579	6	HYDRAULIC VALVE SPACER	
9	2001581	4	SPOOL GUIDE	
10	2001583	2	PNEUMATIC PISTON	
11	2001586	2	PLUG	
12	2001587	2	DOWEL PIN	
13	2001595	4	SPOOL VALVE SEAT	
14	2001614	4	PISTON SEAL	
15	2001619	2	SPOOL	
16	2001633	1	MODULAR AIR VALVE MANIFOLD	
17	808-004	2	BREATHER O-RING	



Pump and Adapter Assembly

Parts Lists

ITEM NO.	PART NO.	NO. REQ'D	PUMP & ADAPTER ASSEMBLY DESCRIPTION	NOTES
1	10268	1	O-RING	
2	10430	1	TUBE SLEEVE	
3	10431	1	FITTING, NUT	
4	10661	1	STRAIGHT FITTING, TUBE	
5	11863	1	BACKUP WASHER	
6	15175	2	O-RING	
7	20787	1	VALVE CONNECTOR	
8	35266	1	PUMP TO COVER GASKET	
9	212897	1	90 DEGREE ELBOW FITTING	
10	212898	1	PRESSURE HOSE	157.7 mm (6.25 in)
11	2001022	1	MOTOR MOUNT	
12	2001576	1	AIR MOTOR ADAPTOR	
13	2001577	1	AIR RESERVOIR COVER	
14	2001578	1	ADAPTER TO COVERPLATE GASKET	
15	2001590	2	FITTING	
16	2001593	1	STRAIGHT FITTING, BARBED	
17	2001601	6	SCREW	torque to 6.8Nm (60 in-lbs)
18	2001603	2	STRAIGHT FITTING, TUBE	
19	2001606	10	SCREW	torque to 6.8Nm (60 in-lbs)
20	2001618	1	3/8 HIGH PRESSURE TUBE	
21	2001627	2	GASKET	
22	2001631	1	AIR COOLING TUBING	
23	2001636	1	VALVE MOUNTING BLOCK	
24	3000524	1	AIR PUMP ASSEMBLY	
25	2231-AA	2	PLUMBING CLAMP HOSE ADJUSTABLE INLET	



Steel Pump Assembly

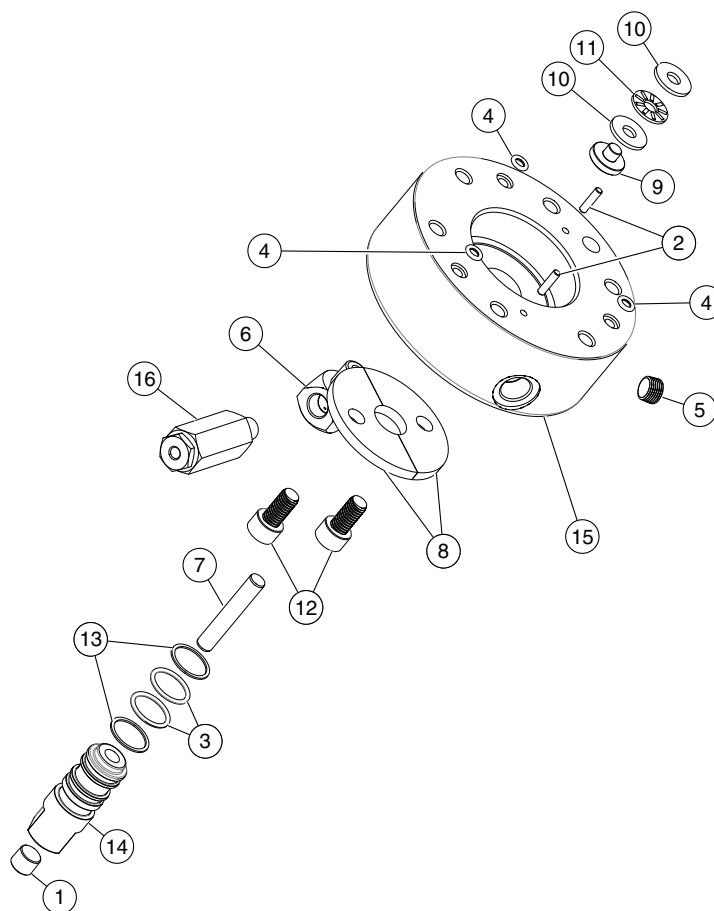
Parts Lists

ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
1	10427	1	PLUG FITTING	See Pump Assembly Section 1
2	10796	2	DOWEL PIN	See Pump Assembly Section 1
3	15011	2	O-RING	See Pump Assembly Section 1
4	15023	3	O-RING	See Pump Assembly Section 1
5	15499	1	HEX SOCKET PLUG (DRYSEAL)	See Pump Assembly Section 1
6	24730	1	90 DEGREE ELBOW FITTING	See Pump Assembly Section 1
7	2000671	1	DOWEL PIN	See Pump Assembly Section 1
8	2000681	2	RETAINING PLATE (CHP)	See Pump Assembly Section 1
9	2001028	1	THRUST BEARING GUIDE	See Pump Assembly Section 1
10	2001029	2	NEEDLE BEARING WASHER	See Pump Assembly Section 1
11	2001030	1	NEEDLE BEARING ELEMENT	See Pump Assembly Section 1
12	2001606	2	SCREW	See Pump Assembly Section 1
13	2001610	2	BACKUP WASHER	See Pump Assembly Section 1
14	2001620	1	PILOT PISTON BODY	See Pump Assembly Section 1
15	2001852	1	ROUND BACK COVER	See Pump Assembly Section 1
16	3000377	1	RELIEF VALVE ASSEMBLY - 748 bar (10,850 psi)	See Pump Assembly Section 1
17	10796	4	DOWEL PIN	See Pump Assembly Section 2
18	15023	6	O-RING	See Pump Assembly Section 2
19	2001398	8	BACKUP WASHER	See Pump Assembly Section 2
20	2001854	2	PUMP BODY	See Pump Assembly Section 2
21	3000526	2	LUBE PISTON CARTRIDGE ASSEMBLY	See Pump Assembly Section 2, torque to 81.3Nm (60 ft-lbs)

Parts Lists

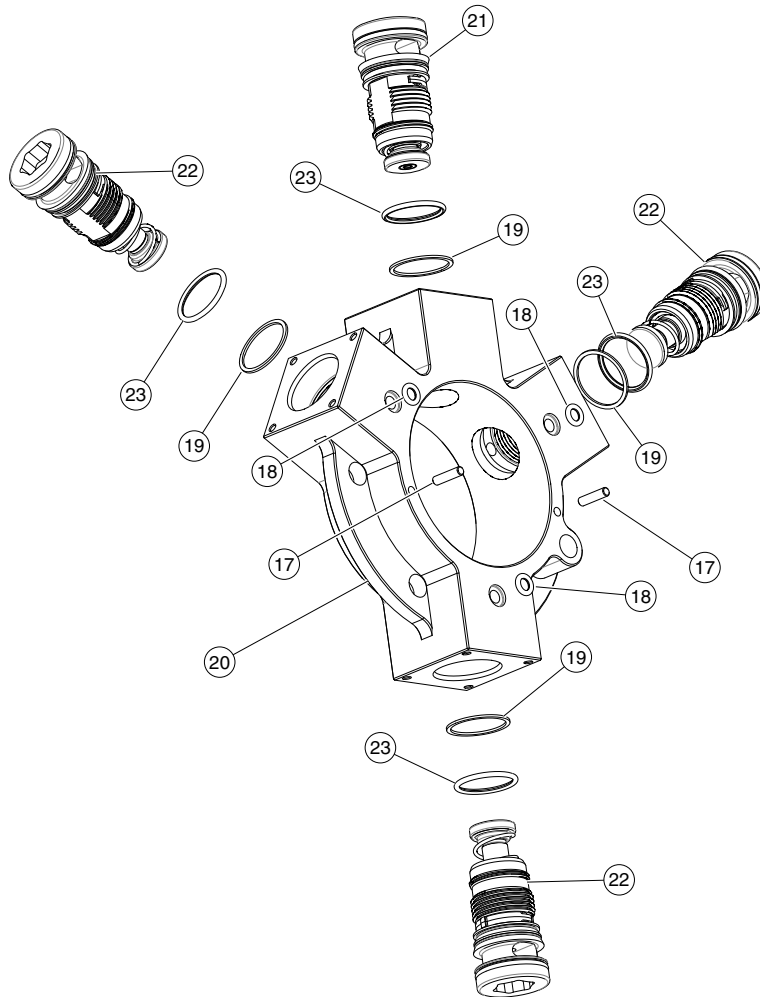
ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
22	3000527	6	PUMP PISTON CARTRIDGE ASSEMBLY	See Pump Assembly Section 2, torque to 81.3Nm (60 ft-lbs)
23	4029-AA	8	O-RING	See Pump Assembly Section 2
24	2000689	1	MOTOR SHAFT SEAL (CHP)	See Pump Assembly Section 3
25	2001087	1	RING	See Pump Assembly Section 3
26	2001600	6	SCREW	See Pump Assembly Section 3
27	2001853	1	ROUND FRONT COVER	See Pump Assembly Section 3
28	15175	8	O-RING	See Pump Assembly Section 4
29	2001596	4	INLET SUCTION FITTING	See Pump Assembly Section 4
30	2001605	4	INLET SUCTION FILTER	See Pump Assembly Section 4
31	2001607	24	SCREW	See Pump Assembly Section 4
32	2000664	2	ANGULAR CONTACT BEARING, 25mm (CHP)	See Pump Assembly Section 5
33	2000683	1	SPRING WAVE WASHER	See Pump Assembly Section 5
34	2000970	1	PUMP SHAFT INNER SPRING	See Pump Assembly Section 5
35	2000971	1	RING	See Pump Assembly Section 5
36	2001010	1	PUMP SHAFT OUTER SPRING	See Pump Assembly Section 5
37	2001011	1	SPRING INTERNAL GUIDE	See Pump Assembly Section 5
38	2001012	1	DOWEL PIN	See Pump Assembly Section 5
39	2001412	1	THICK SHIM	See Pump Assembly Section 5
40	2001460	2	EXTERNAL SPRING GUIDE	See Pump Assembly Section 5
41	3000499	1	AIR SHAFT ASSEMBLY	See Pump Assembly Section 5

Parts Lists



Pump Assembly Section 1

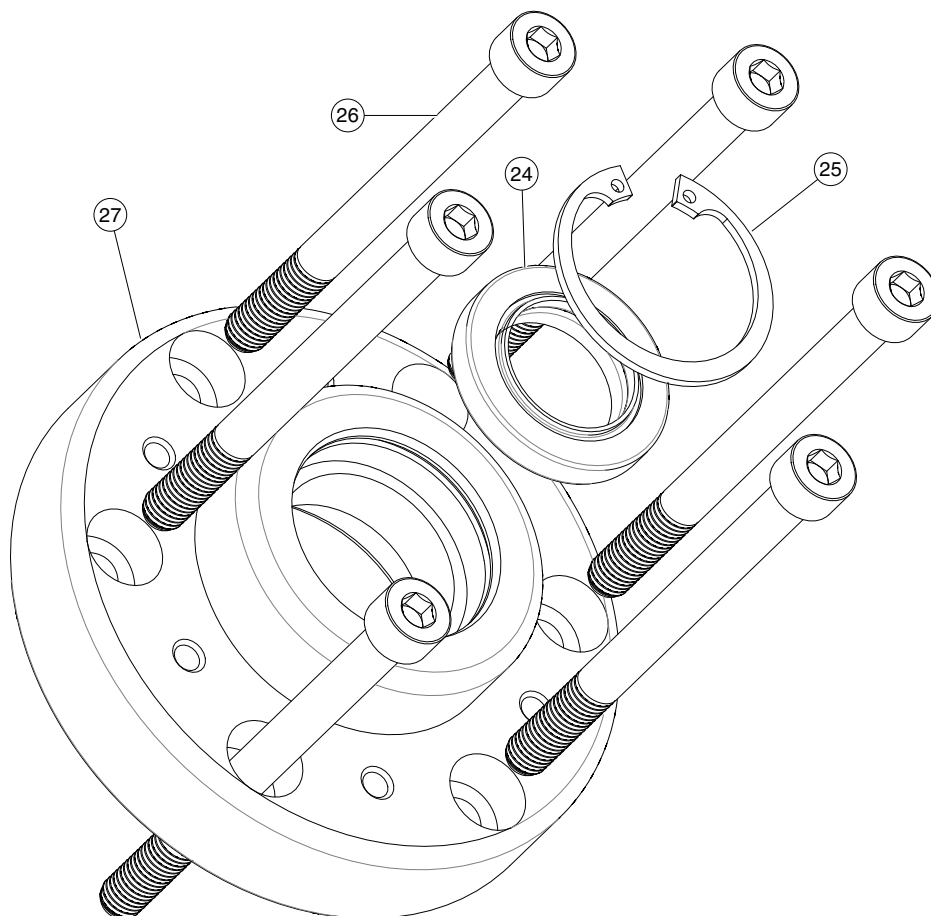
ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
1	10427	1	PLUG FITTING	
2	10796	2	DOWEL PIN	
3	15011	2	O-RING	
4	15023	3	O-RING	
5	15499	1	HEX SOCKET PLUG (DRYSEAL)	
6	24730	1	90 DEGREE ELBOW FITTING	
7	2000671	1	DOWEL PIN	
8	2000681	2	RETAINING PLATE (CHP)	
9	2001028	1	THRUST BEARING GUIDE	
10	2001029	2	NEEDLE BEARING WASHER	
11	2001030	1	NEEDLE BEARING ELEMENT	
12	2001606	2	SCREW	13.5Nm (120 in-lbs)
13	2001610	2	BACKUP WASHER	
14	2001620	1	PILOT PISTON BODY	
15	2001852	1	ROUND BACK COVER	
16	3000377	1	RELIEF VALVE ASSEMBLY - 748 bar (10,850 psi)	



Pump Assembly Section 2

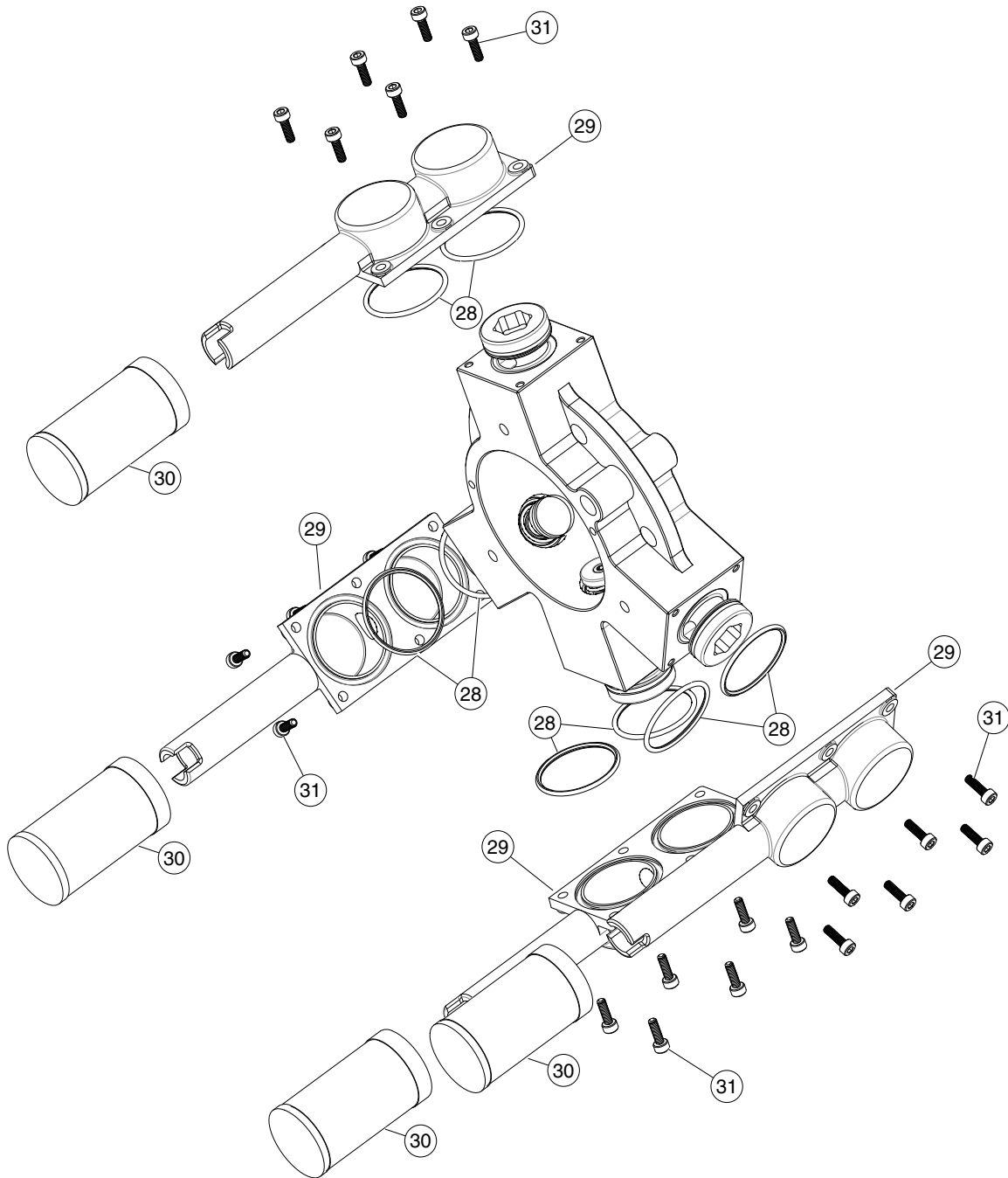
ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
17	10796	4	DOWEL PIN	
18	15023	6	O-RING	
19	2001398	8	BACKUP WASHER	
20	2001854	2	PUMP BODY	
21	3000526	2	LUBE PISTON CARTRIDGE ASSY	torque to 81.3Nm (60 ft-lbs)
22	3000527	6	PUMP PISTON CARTRIDGE ASSY	torque to 81.3Nm (60 ft-lbs)
23	4029-AA	8	O-RING	

Parts Lists



Pump Assembly Section 3

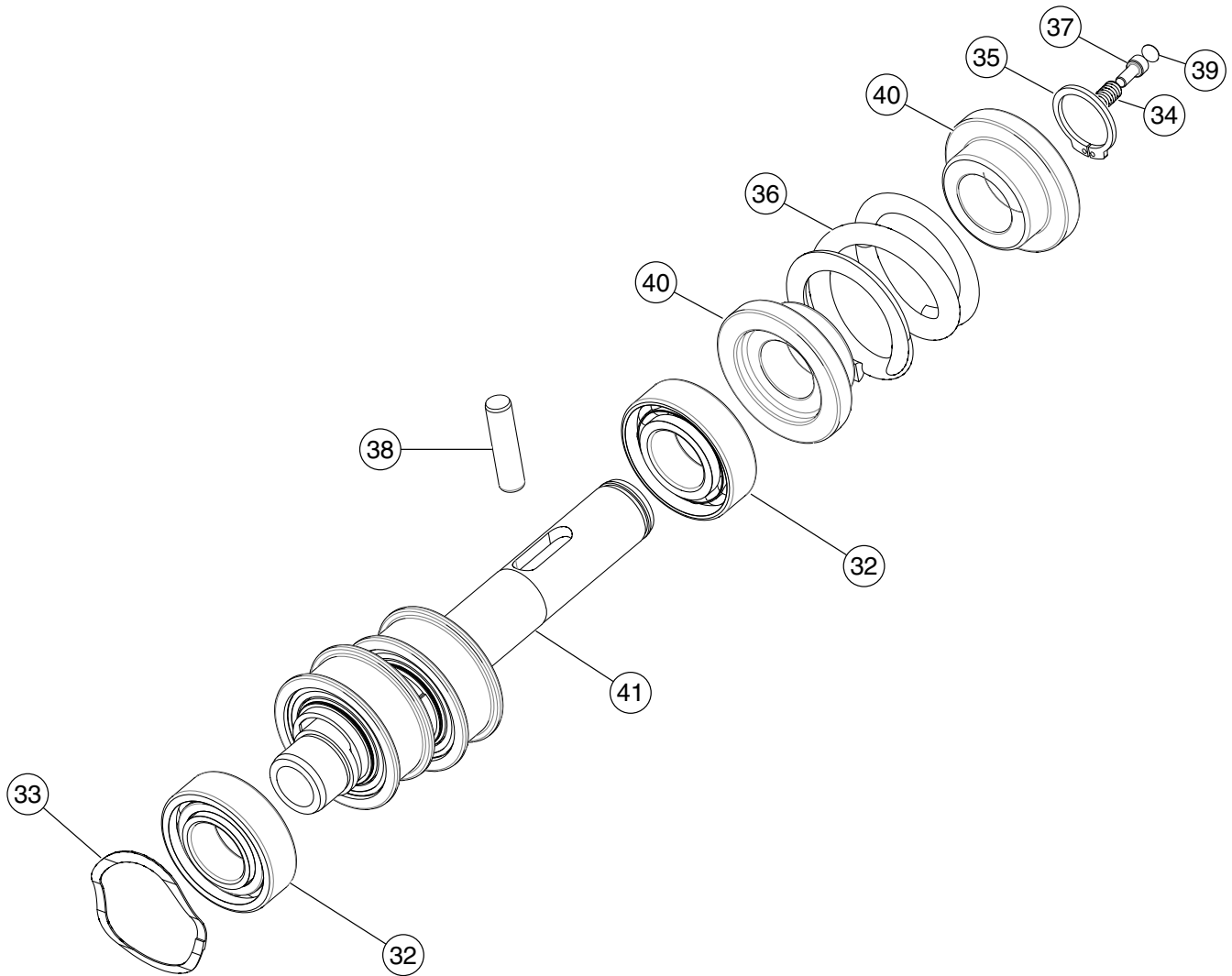
ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
24	2000689	1	MOTOR SHAFT SEAL (CHP)	
25	2001087	1	RING	
26	2001600	6	SCREW	torque to 13.5Nm (120 in-lbs)
27	2001853	1	ROUND FRONT COVER	



Pump Assembly Section 4

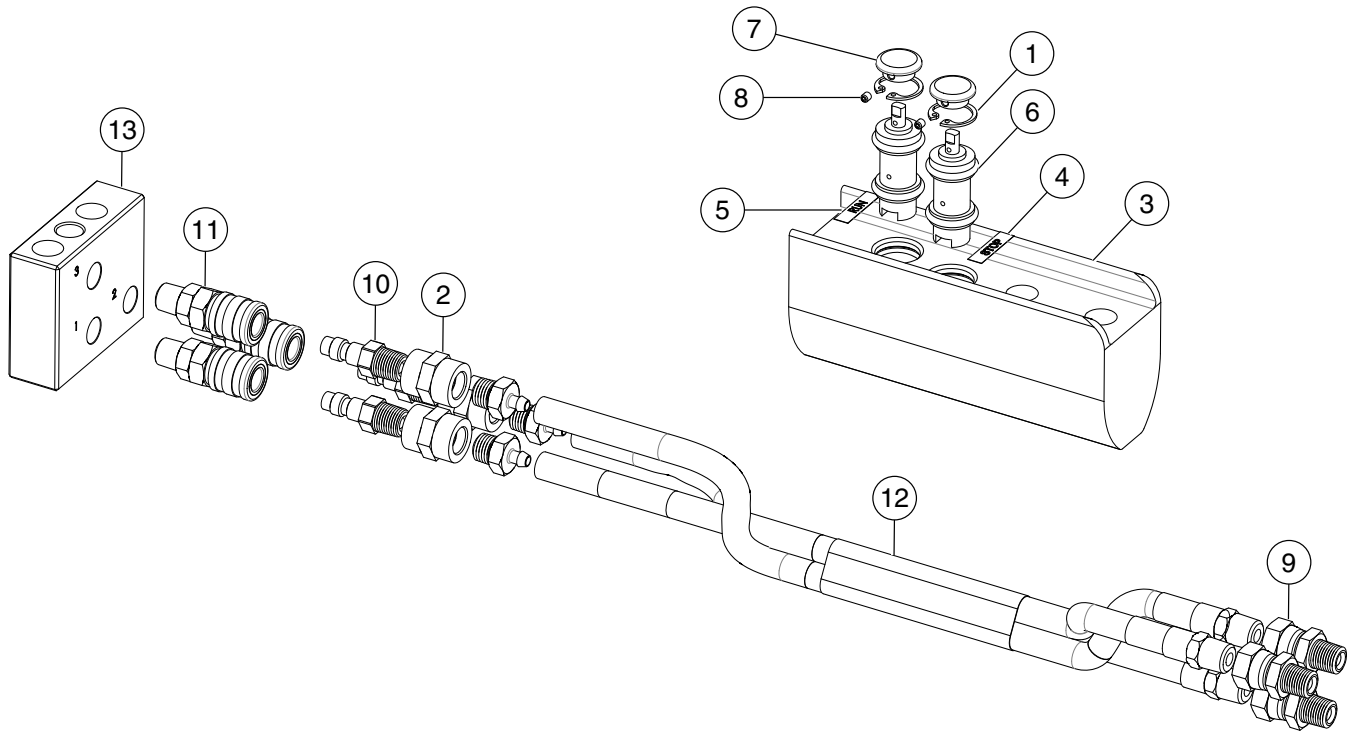
ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
28	15175	8	O-RING	
29	2001596	4	INLET SUCTION FITTING	
30	2001605	4	INLET SUCTION FILTER	
31	2001607	24	SCREW	torque to 0.9Nm (8 in-lbs)

Parts Lists



Pump Assembly Section 5

ITEM NO.	PART NO.	NO. REQ'D	STEEL PUMP ASSEMBLY DESCRIPTION	NOTES
32	2000664	2	ANGULAR CONTACT BEARING, 25mm (CHP)	
33	2000683	1	SPRING WAVE WASHER	
34	2000970	1	PUMP SHAFT INNER SPRING	
35	2000971	1	RING	
36	2001010	1	PUMP SHAFT OUTER SPRING	
37	2001011	1	SPRING INTERNAL GUIDE	
38	2001012	1	DOWEL PIN	
39	2001412	1	THICK SHIM	
40	2001460	2	EXTERNAL SPRING GUIDE	
41	3000499	1	AIR SHAFT ASSEMBLY	

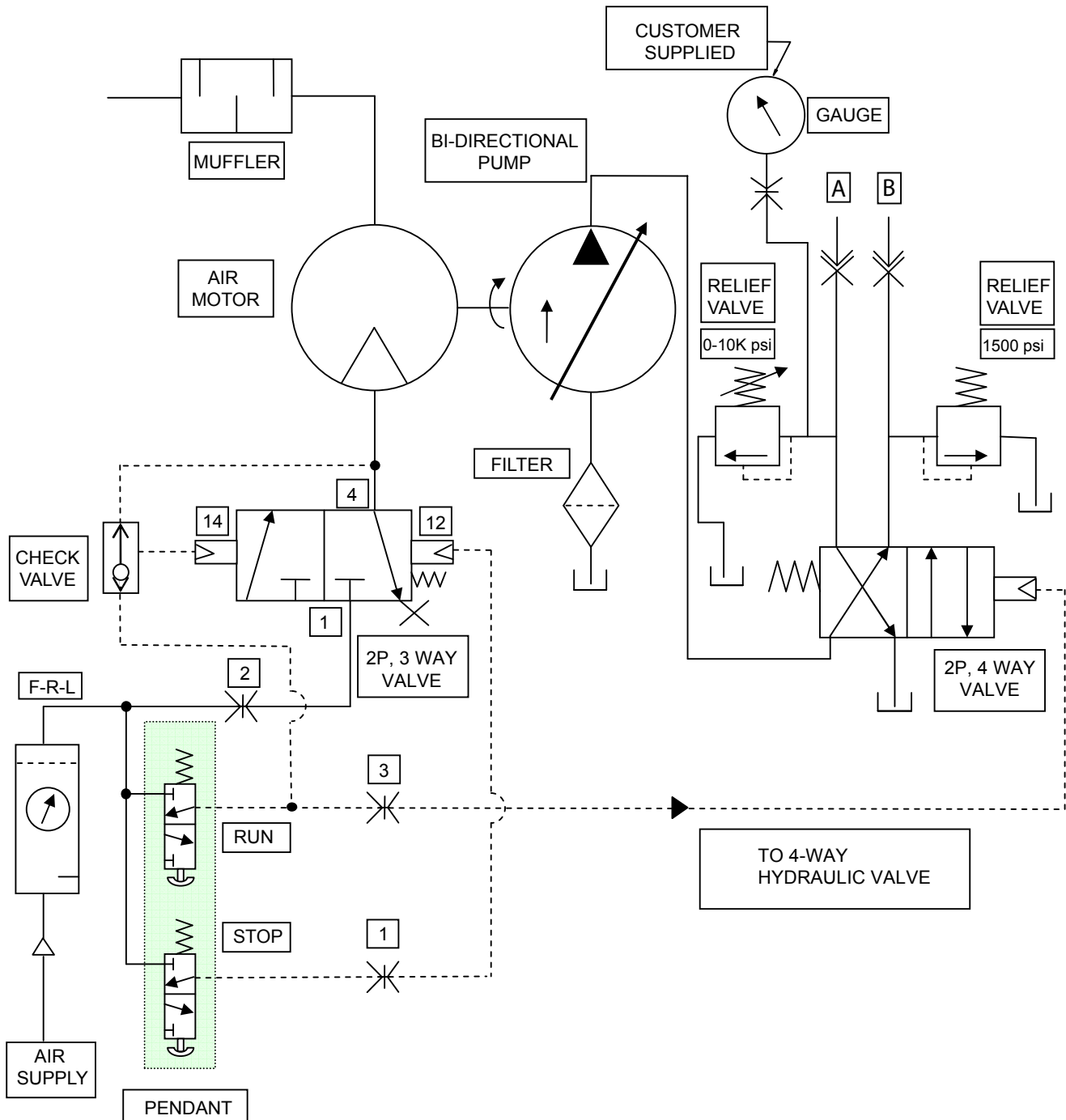


Control Pendant

ITEM NO.	PART NO.	NO. REQ'D	CONTROL PENDANT DESCRIPTION	NOTES
1	11033	2	RING	
2	18841	3	STRAIGHT FITTING	
3	44024	1	VALVE BODY	
4	203769	1	LABEL STOP DECAL	
5	203770	1	LABEL RUN DECAL	
6	206104	2	VALVE 3 WAY CLOSED CARTRIDGE	
7	206105	2	PUSH W/WRENCH BUTTON	
8		2	SET SCREW	included in 206105
9	208218	3	STRAIGHT FITTING	
10	213343	3	PLUG COUPLER (MALE)	
11	213344	3	FEMALE QUICK COUPLER, FOSTER 2202	
12	420096	1	THREE STRAND 25' HOSE	CLEAR =2, SUPPLY YELLOW =3, RUN BLACK =1, STOP
13	2001640	1	PENDANT CONNECTION MANIFOLD	referenced on other pages

Parts Lists

PA60APF5FP and PA60APF5FPR Hydraulic/Pneumatic Schematic



PA60APF5FMP AND PA60APF5FMPR Hydraulic/Pneumatic Schematic

