

To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

Enerpac recommends that all kit components be installed to insure optimum performance of the repaired unit.

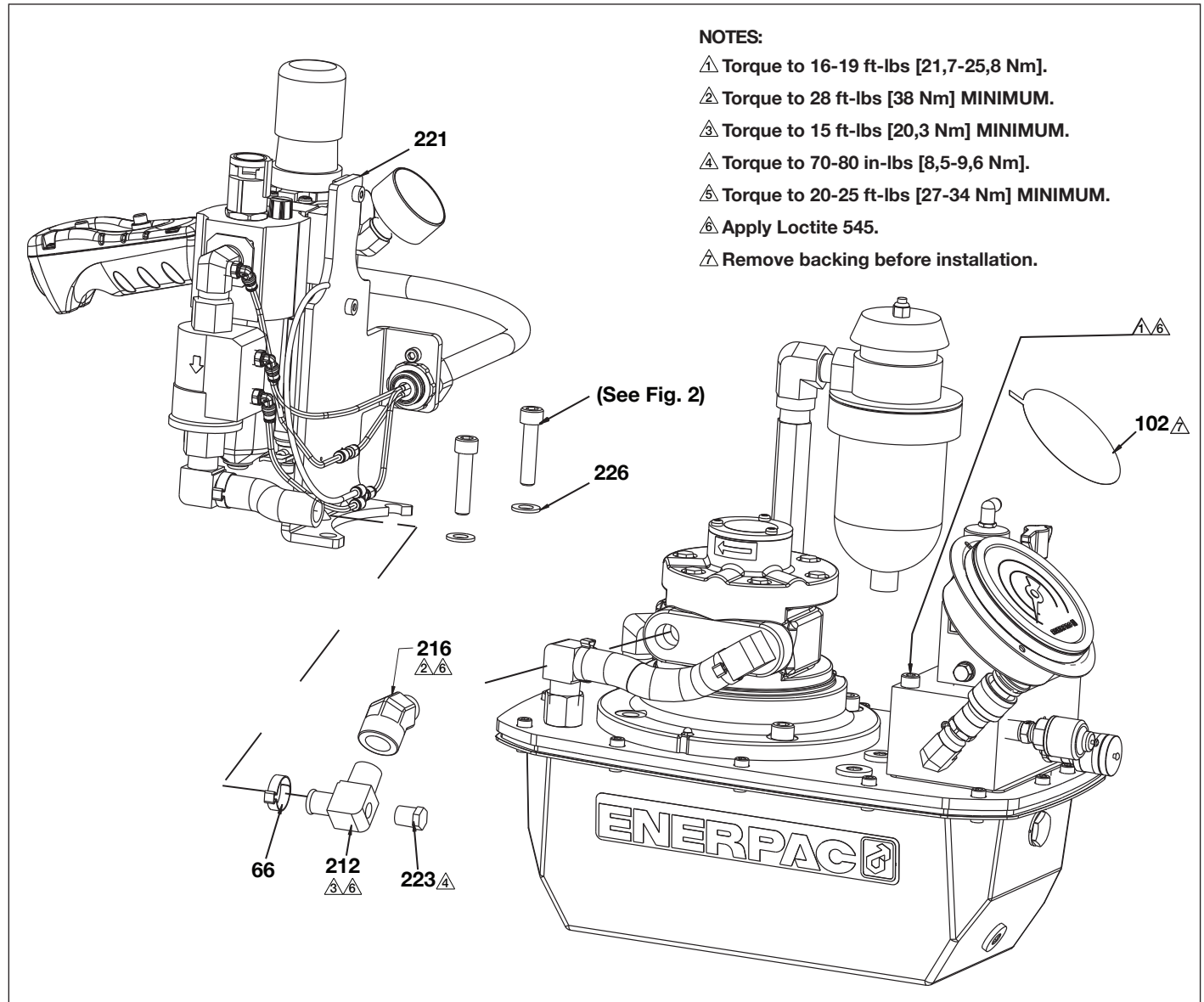
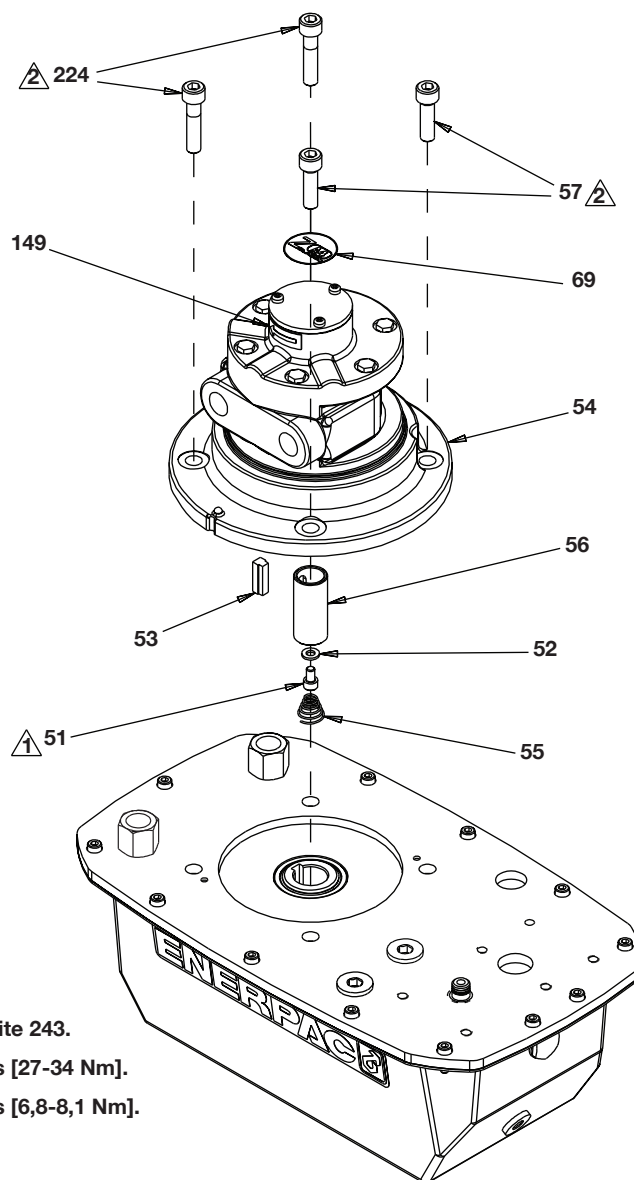


Figure 1, Mounting Arrangement, Air Logic Assembly (Rollbar not shown - See Fig. 3)

Repair Parts List for Figure 1

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
66	DC8038299	2	Hose Clamp 5/8"	221	(see Fig. 6)	1	Air Logic Assembly
102	DD1393026	1	Decal, Pressure Relief	223	A8069006	1	Pipe Plug
212	DC8108038	1	Elbow, Adaptor 90 Deg.	226	CAE1100108-1A	2	Washer, 10mm
216	DA1235095	1	Elbow, Street 45 Deg.				



NOTES:

- ① Apply Loctite 243.
- ② 20-25 ft-lbs [27-34 Nm].
- ③ 60-72 ft-lbs [6,8-8,1 Nm].

Figure 2, Air Motor Assembly

Repair Parts List for Figure 2

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
51	CBE615028-1A	1	M6 x 1 x 10 SHCS	56	DA4918038	1	Sleeve
52	CAE1060108-1A	1	6mm Washer	57	CBE1027028-1A	2	M10 x 35 SHCS
53	DC8091251	1	Stepped Key 8mm/6mm	69	DC8099026	1	Decal, ZA Class
54	DC8030900SR	1	Air Motor Kit (includes items 51, 52, 53, 55, 56 and 57)	149	CJ193026	1	Rotation Decal
55	BSS5509D	1	Spring	224	CBE1031028-1A	2	M10 x 45 SHCS

NOTES:

- 1 Apply Loctite 243 to threads.
- 2 Torque capscrews in a crossing pattern to ensure even sealing of gaskets.

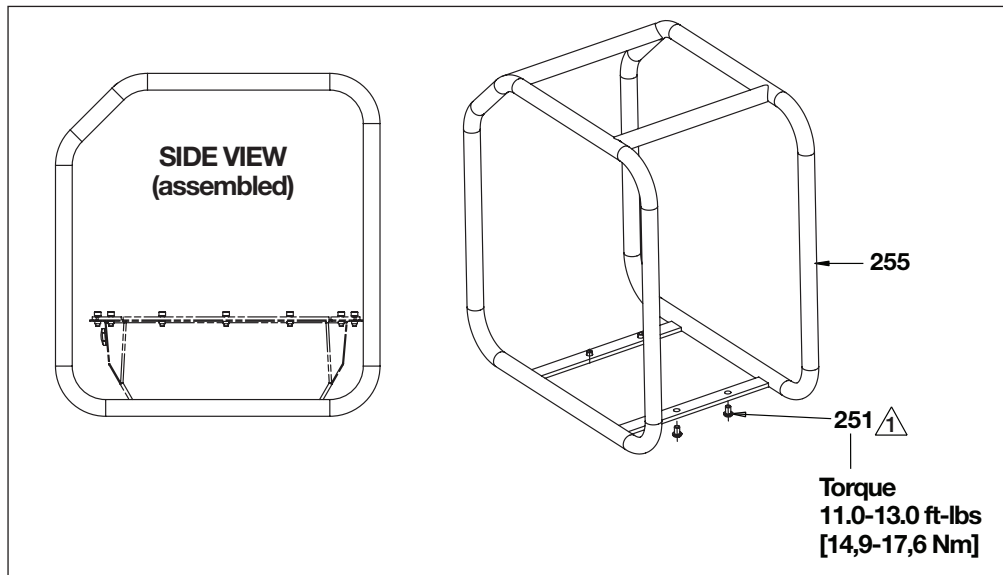
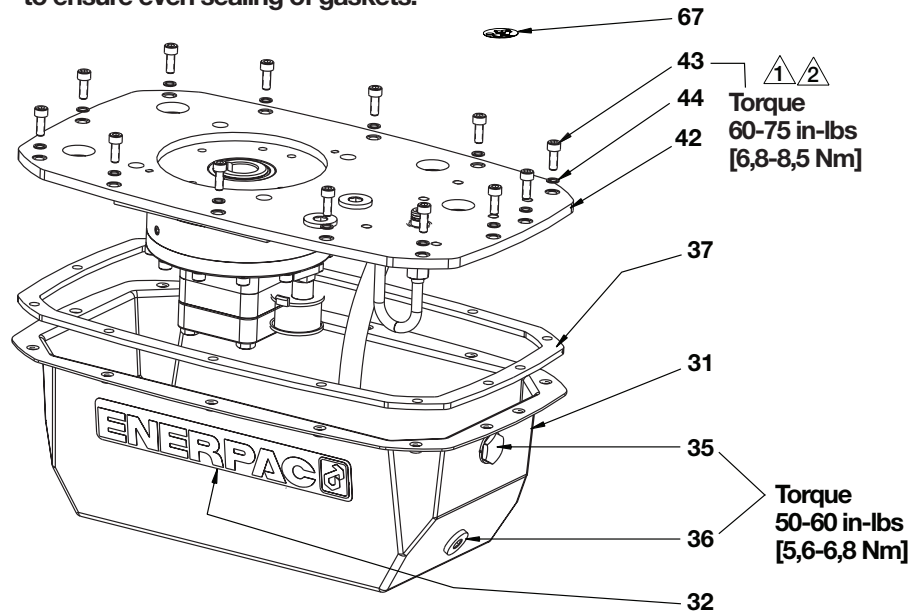


Figure 3, Reservoir and Rollbar Assemblies

Repair Parts List for Figure 3

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
31	DC8136025SR	1	Reservoir, 8L (includes items 32, 35, 36 and 37)	42	(see Fig. 4)	1	Assembly, Pump Basic
32	★ DC9596026	2	Decal, Enerpac	43	CBE619028-1A	13	Screw, SHCS M6 x 16
35	DC85900SR	1	Sight Glass, 4L and 8L	44	★ S3037	13	Gasket, Copper
36	DC8249006	1	Plug, Magnetic, SAE #8	67	DC9920026	1	Decal, Read Instructions
37	★ DC9551920	1	Reservoir & MPE Gasket	251	CBE817028-1E	4	Screw, BHCS M8 x 12
				255	DC8040920	1	Rollbar Assembly, ZA4

★ Items included in Seal Kit ZE3K.

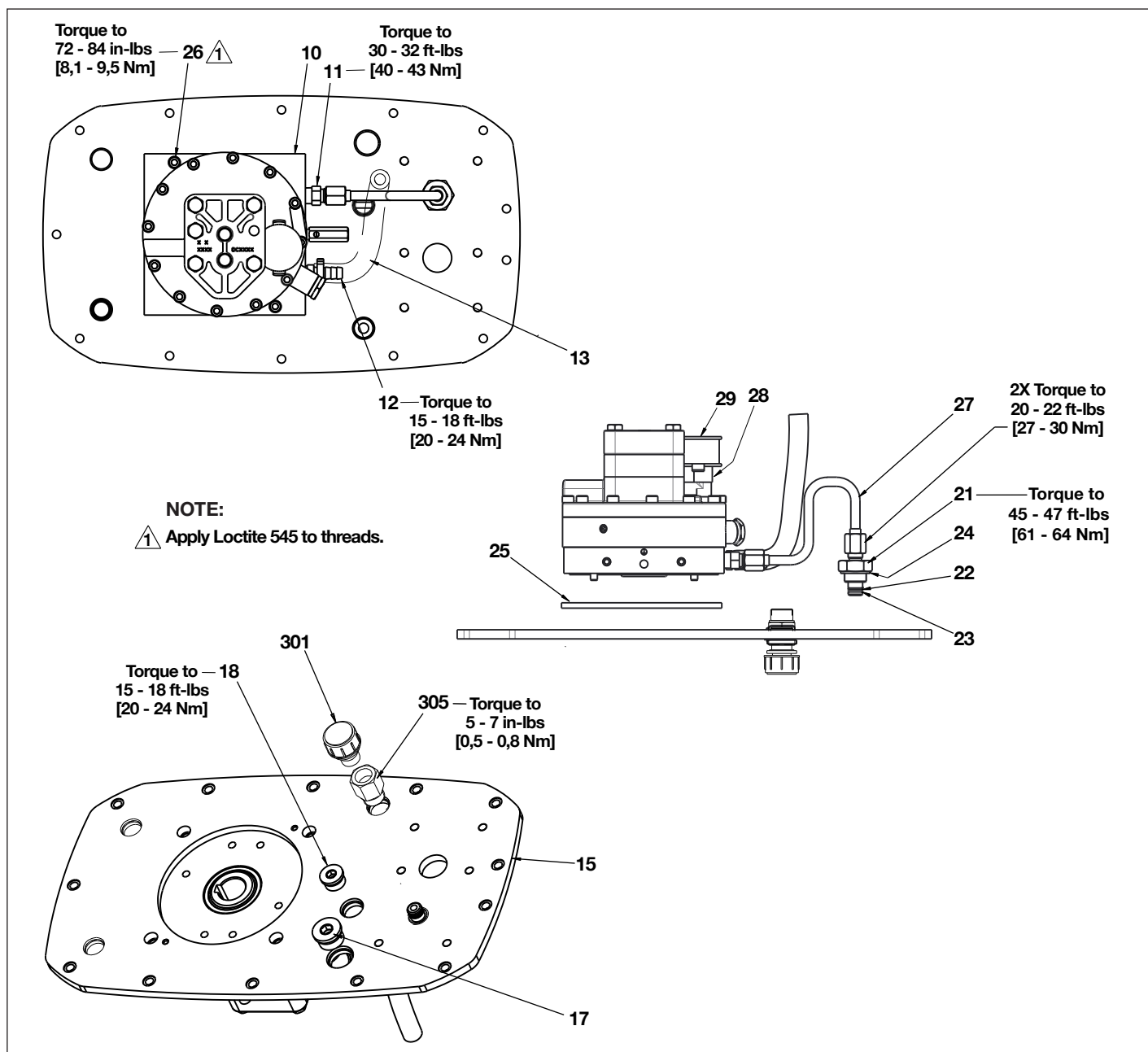
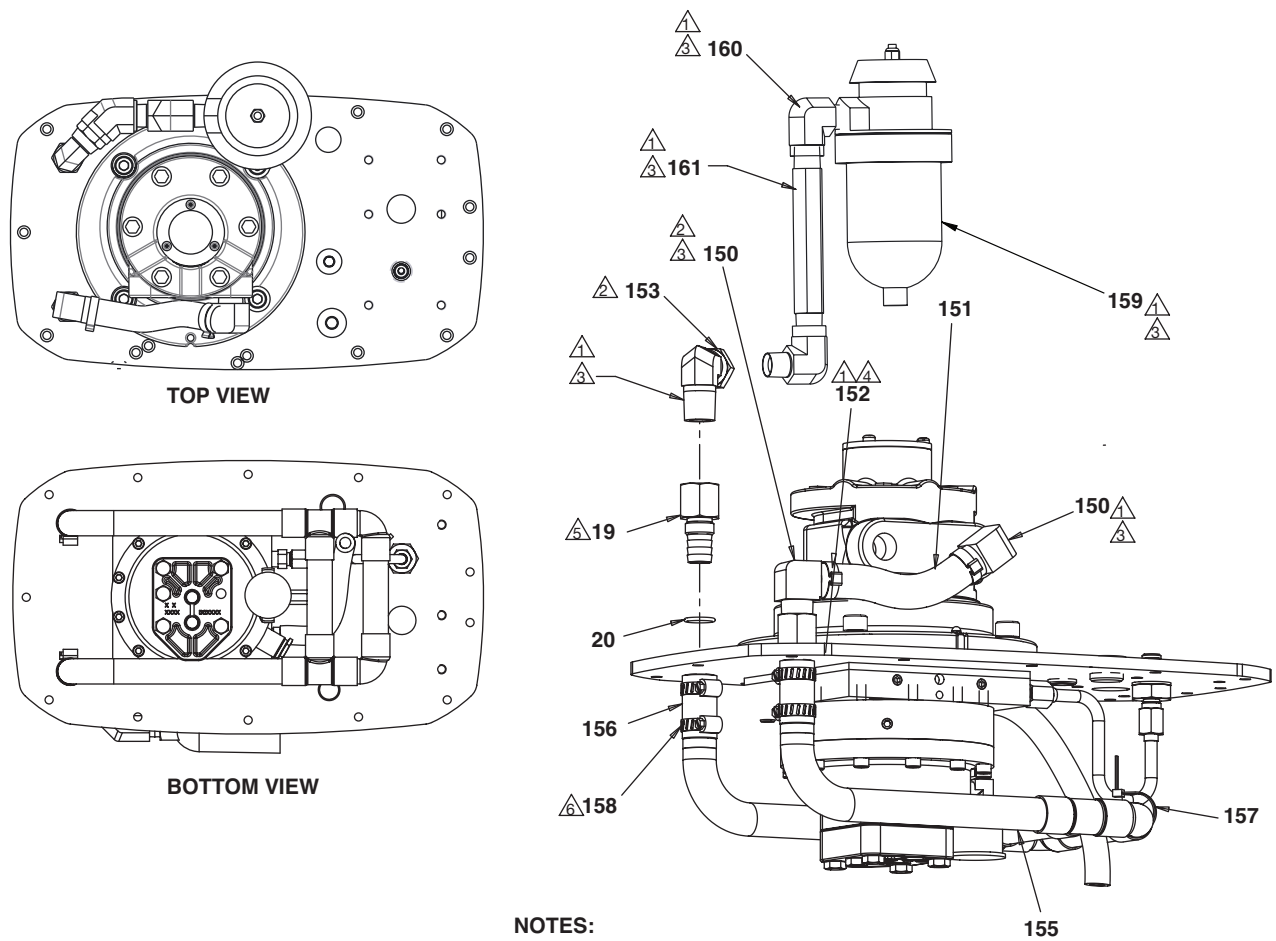


Figure 4, Basic Assembly

Repair Parts List for Figure 4							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
10	* DC9708900	1	Pump Element Assy.	23	★ B1012203	1	O-Ring
11	F100094-246	1	Fitting 5-4 FTX-S	24	★ DC9271167	1	Copper Gasket
12	F100097-16	1	Fitting, Standard Pump	25	★ DC9551920	1	RES and MPE Gasket
13	DC9335646	1	Hose, Bypass 8"	26	CBE621028-1A	2	SHCS, M6 X 20
15	DC9451101	1	Cover Plate, ZE	27	DC9663920	1	Tube Assy, Steel, ZE
17	B1007006	1	Plug SAE #10	28	DC9600268	1	Intake Tube, 1.6" 4L & 8L
18	A1009245	1	Plug, 3/8" Flush	29	DC9178118	1	Intake Filter
21	DC9173690	1	Connector Fitting	301	DC8250006	1	Breather Assembly
22	★ B1012564	1	Back-up	305	F100096-38	1	Adapter Fitting

★ Items included in Seal Kit ZE3K. * Refer to Enerpac repair parts sheet L4048 for additional parts information.



NOTES:

- △ Torque 28-32 ft-lbs [38-43 Nm].
- △ Torque 15 ft-lbs [20 Nm] Minimum.
- △ Loctite 545.
- △ Teflon Tape.
- △ 45-47 ft-lbs [61-64 Nm].
- △ 40-45 ft-lbs [4,5-5,1 Nm].

Figure 5, Heat Exchanger

Repair Parts List for Figure 5							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
19	DC8035038	2	Adapter	156	DC8043646	2	Hose 5/8 ID
20	B1908503	2	O-Ring BUNA-N	157	DC9989647	1	Cable Tie 12.5"
150	DC8036038	2	Elbow 5/8 Barbed to 1/2" NPT	158	CB40299	4	Hose Clamp
151	DC8046646	1	Hose 5/8 ID 4.9"	159	DC8123116	1	Muffler, Wilkerson
152	DC8038299	2	Hose Clamp 5/8"	160	DA1235095	2	Street Elbow 1/2" NPT
153	DC8126095	1	Elbow 1/2" NPT	161	DC8120268	1	Fitting 1/2" NPT x 6.0"
155	DC8039471	1	Heat Exchanger Coil				

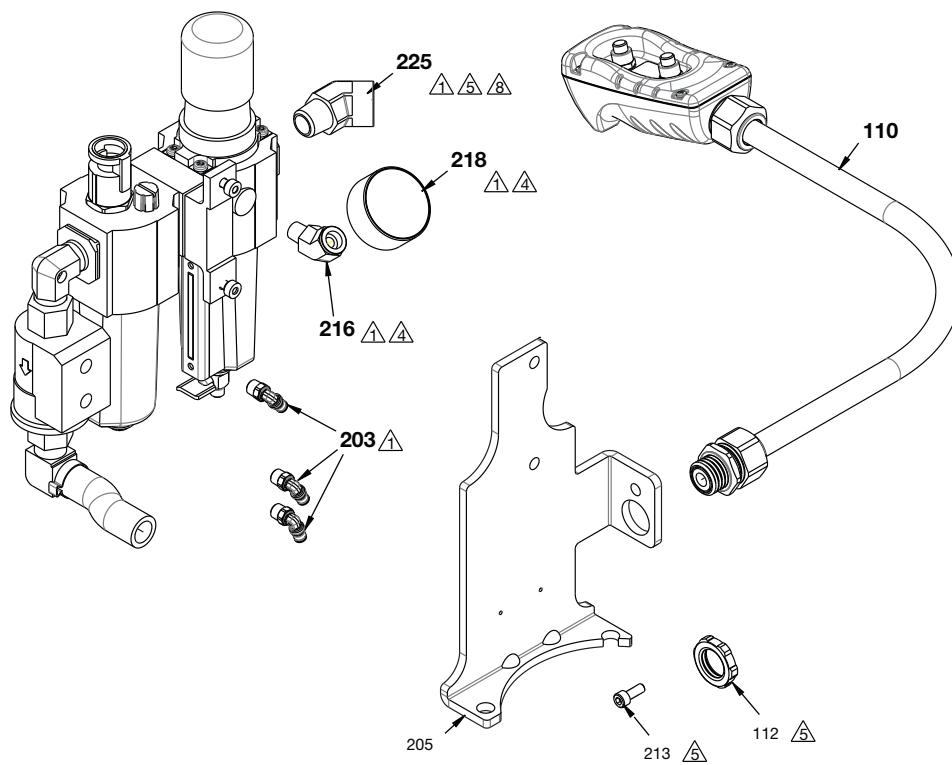
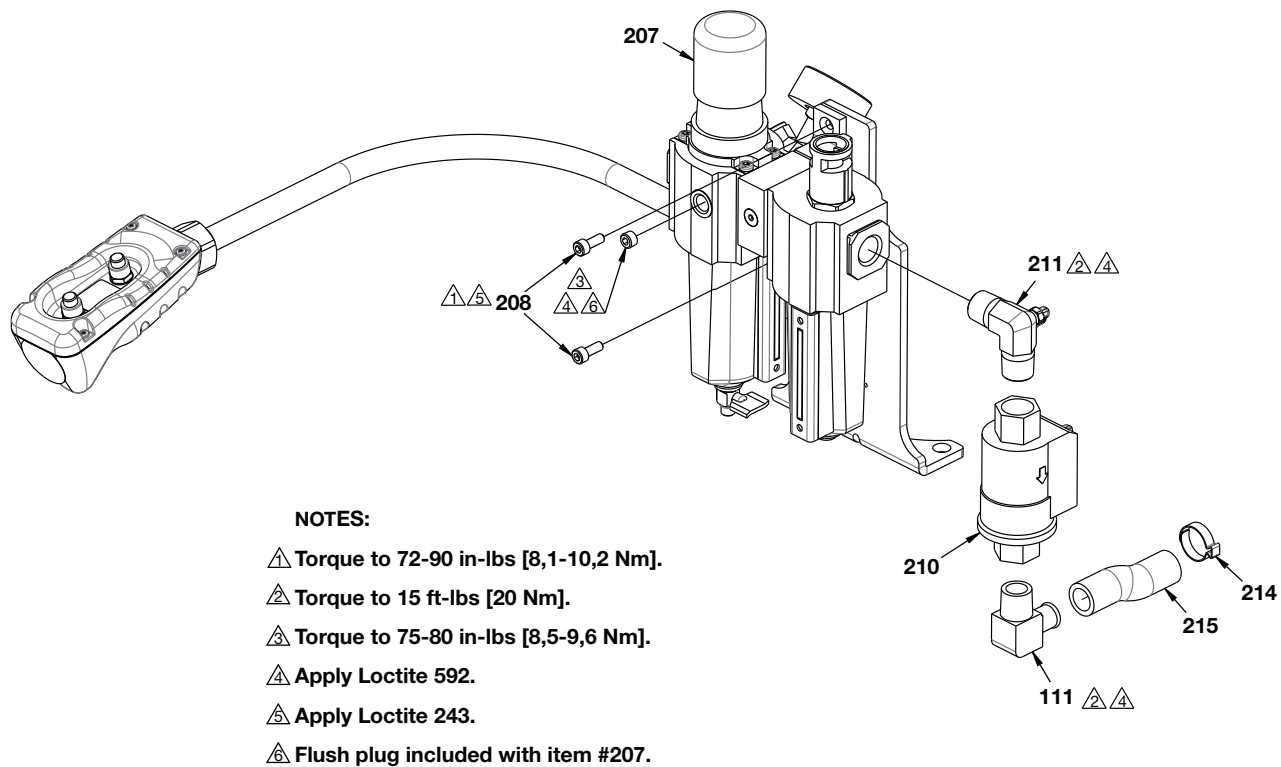


Figure 6A, Air Logic Assembly

Repair Parts List for Figures 6A and 6B

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
110	(see Fig. 8)	1	Assembly, Air Pendant	211	DC8086095	1	Elbow
111	DC8036038	1	Elbow, 5/8" Barbed	213	CBE621028-1A	1	SHCS, M6 X 20
112	DC9683021	1	Locking Nut 25mm	214	DC8038299	1	Hose Clamp 5/8"
203	DC8170097	3	Elbow 1/8 x 5/32"	215	DD1357646	1	Hose 5/8" ID x 2.9"
204	E112041097	1	Coupling, Air	216	F100095	1	Street Elbow, 45 Degree
205	DC8042111	1	Bracket	217	DD1398268	1	Tubing 5/32 x 8" Green
207	DC8033118	1	Filter, Regulator Lubricator	218	DC8101223	1	Gauge 0-160 PSI
208	CBE619028-1A	2	M6-1 x 16 SHCS	219	DC3574097	1	Y Fitting
209	DD1396268	1	Tubing 5/32 x 20.5" Black	220	DC8095268	1	Tubing 5/32 x 7.3" Black
210	DD1355660	1	Air Control Valve	225	DA1235095	1	Street Elbow, 45 Degree

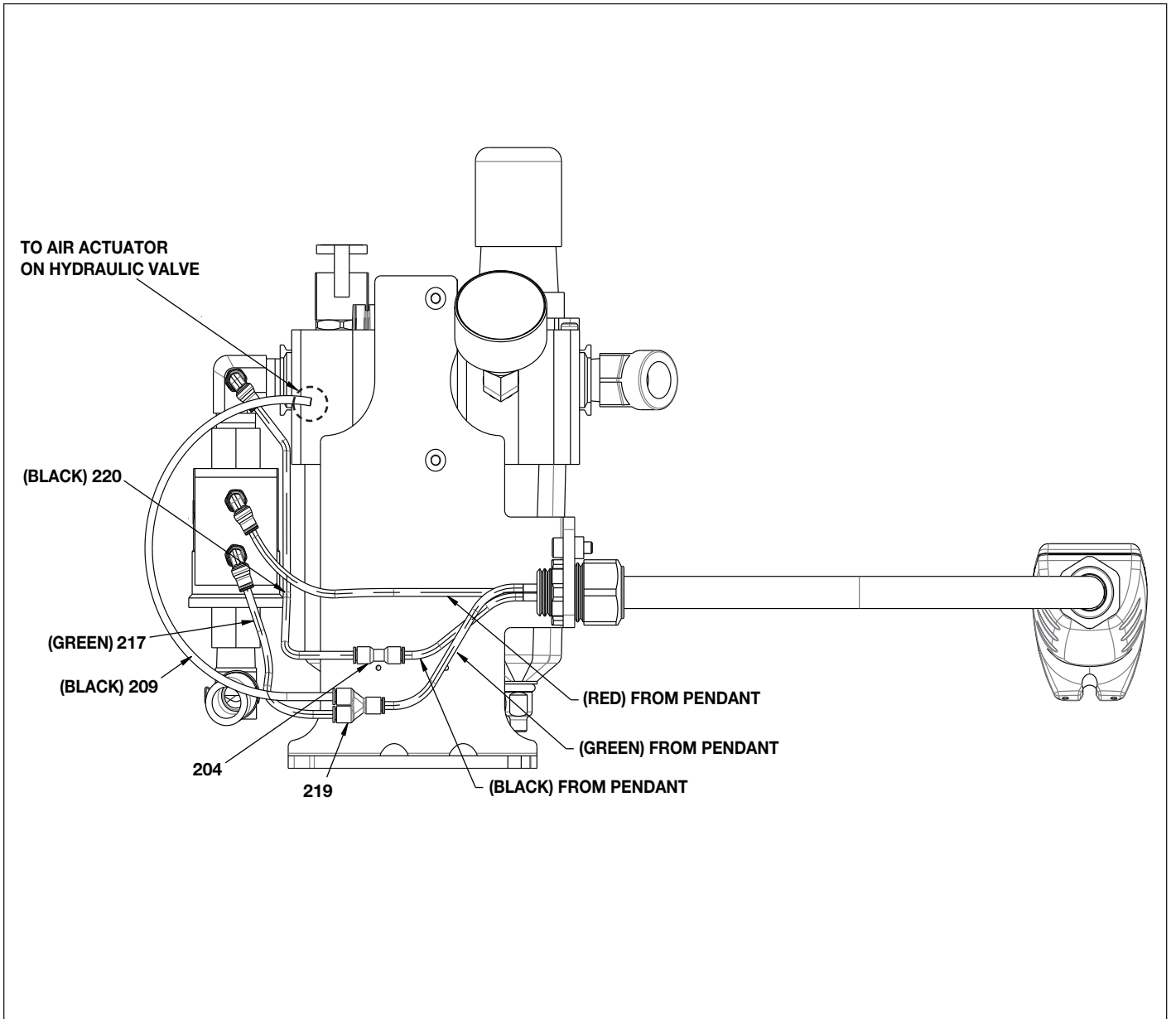
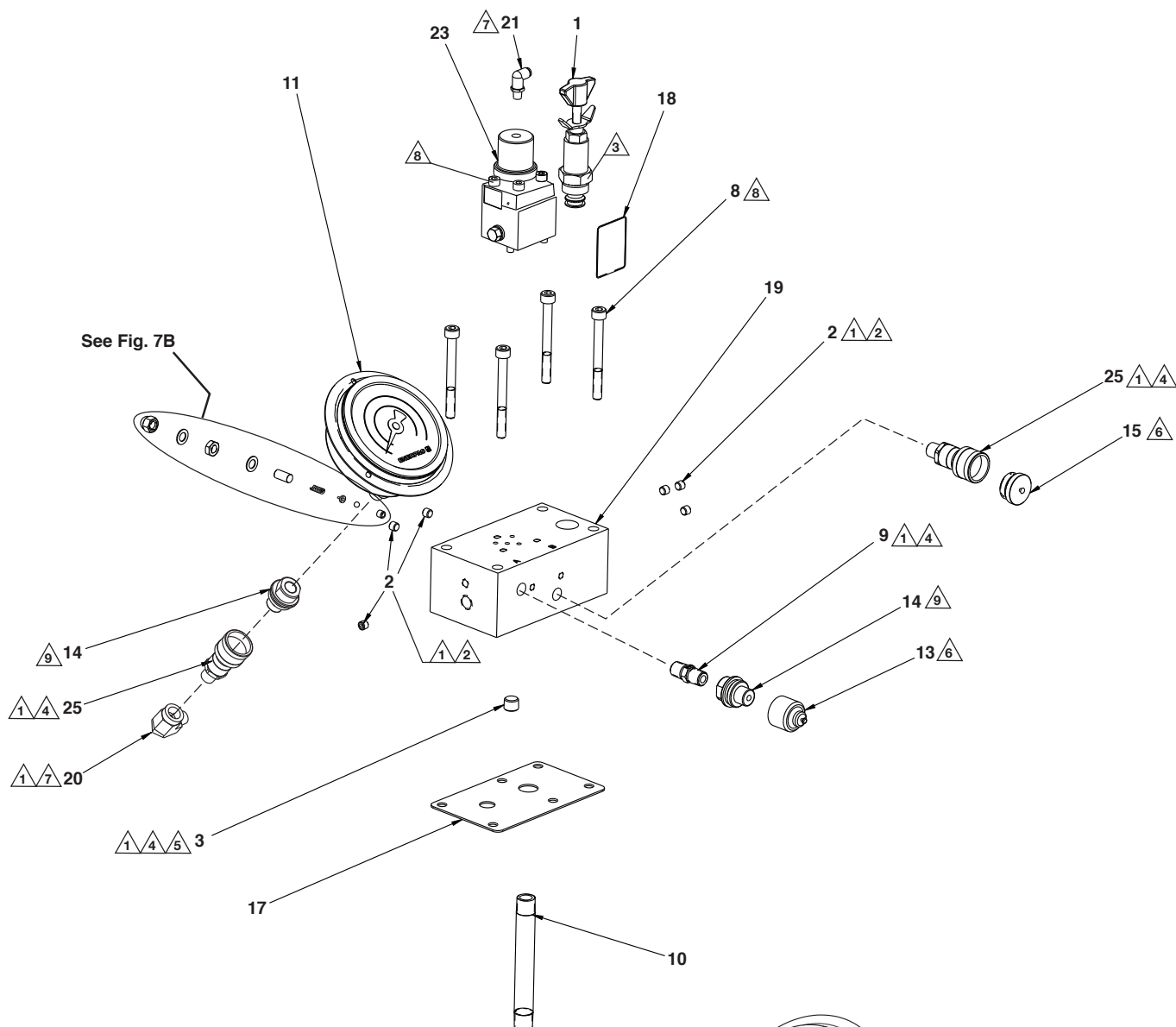


Figure 6B, Air Logic Assembly



Notes:

- ① Apply Teflon tape to NPTF Threads.
- ② Torque to 10-12 ft-lbs [13,5-16,2 Nm].
- ③ Torque to 18-22 ft-lbs [24,4-29,8 Nm].
- ④ Torque to 32-39 ft-lbs [43,3-52,8 Nm].
- ⑤ Must be flush.
- ⑥ Attach chains (not shown) before final assembly.
- ⑦ Torque to 32 ft-lbs [43,3 Nm] minimum. Orient as shown.
- ⑧ Torque to 60-70 in-lbs [6,7-7,9 Nm].
- ⑨ Torque to 23-28 in-lbs [31,2-37,9 Nm].

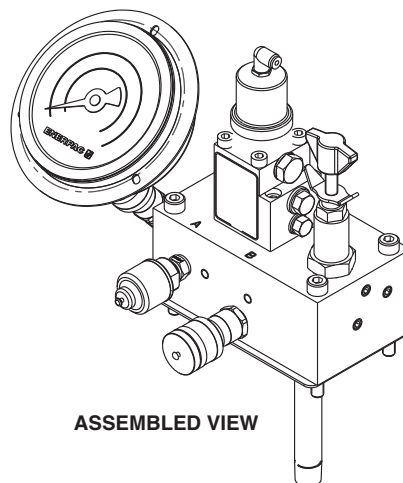
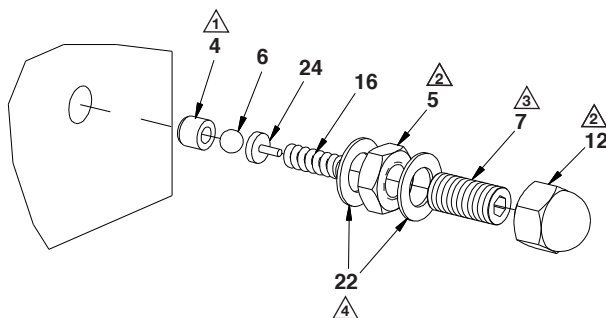


Figure 7A, Control Valve Assembly

Repair Parts List for Figures 7A and 7B			
Item	Part Number	Qty.	Description
1	45423	1	Cartridge, Relief Valve
2	A1006245	6	Flush Plug, 1/16" With Sealant
3	A1008245	1	Flush Plug, 1/4" With Sealant
4	A8015290	1	Seat
5	B1004214	1	Jam Nut, Hex
6	B1005016	1	Ball, 3/16" Diameter
7	BF3110027F	1	Set screw, 0.31-24 UNF x 0.62"
8	CBE843028-1A	4	SHCS, M8 x 80 Zinc
9	CJ647096	1	Nipple, 0.250 NPTF
10	DC2749768	1	Return Pipe, 3/8" NPT x 5"
11	DC3760900	1	Assembly, Pressure Gauge
12	DC5625055	1	Acorn Nut, 0.312-24 UNF
13	DC6187234	1	Dust Cap
14	DC6188020	2	Coupler, Male
15	DC6629020	1	Dust Cap
16	DC6632110	1	Spring
17	DC9356037	1	Gasket
18	DD1423026	1	Decal
19	DD4297038	1	Manifold
20	F100095-7	1	Elbow, Street
21	F100097-000	1	Elbow, 90 Degree Male
22	G909167	2	Gasket
23	PZ4-1	1	Directional Control Valve, Air-Operated
24	K1013	1	Guide
25	U962148134-2	2	Coupler, Female



Notes:

- ① Item 4 is pressed into manifold and not available as a replacement part.
- ② Torque to 60-72 in-lbs [6.8-8.1 Nm].
- ③ Hold item 7 to keep it from turning while torquing item 5.
- ④ Set B-Port Pressure to 2600 psi, +/-100 psi [180 bar, +/-7 bar].

Figure 7B, Relief Pressure Valve (B-Port - Retract)

TROUBLESHOOTING:

Only qualified hydraulic technicians should service the pump or system components. A system failure may or may not be the result of a pump malfunction. To determine the cause of the problem, the complete system must be included in any diagnostic procedure.

TROUBLESHOOTING GUIDE		
PROBLEM	POSSIBLE CAUSE	REPAIR ACTION
Pump will not start.	No air to pump.	Make sure air is not shut off to pump. Check air line for blockage.
	Low air pressure.	Check air pressure setting at air pressure regulator.
	Low air SCFM.	Make sure air compressor has enough SCFM to operate pump.
	Air valve not working.	Replace air valve.
	Air motor not working.	Replace air motor.
Pump fails to build pressure.	External leak in system.	Repair any external components that are leaking.
	Internal leak in pump.	See RPS L4048 for basic pump assembly.
	Internal leak in control valve.	Repair control valve.
	Internal leak in system component.	Repair system component.
Pump builds less than full pressure.	Relief valve set too low.	Adjust relief valve.
	External leak in system.	Repair leak.
	Internal leak in pump.	Back pressure test, locate and repair leak (see RPS L4048).
	Internal leak in control valve.	Repair control valve.
	Internal leak in system component.	Repair system component.
Pump builds full pressure, but wrench does not operate.	Torque exceeds wrench maximum capacity at full pressure.	Use larger torque wrench.
	Flow to torque wrench blocked.	Check hoses and system components.
	Torque wrench worn or damaged.	Inspect and repair wrench.

NOTES:

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