

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.

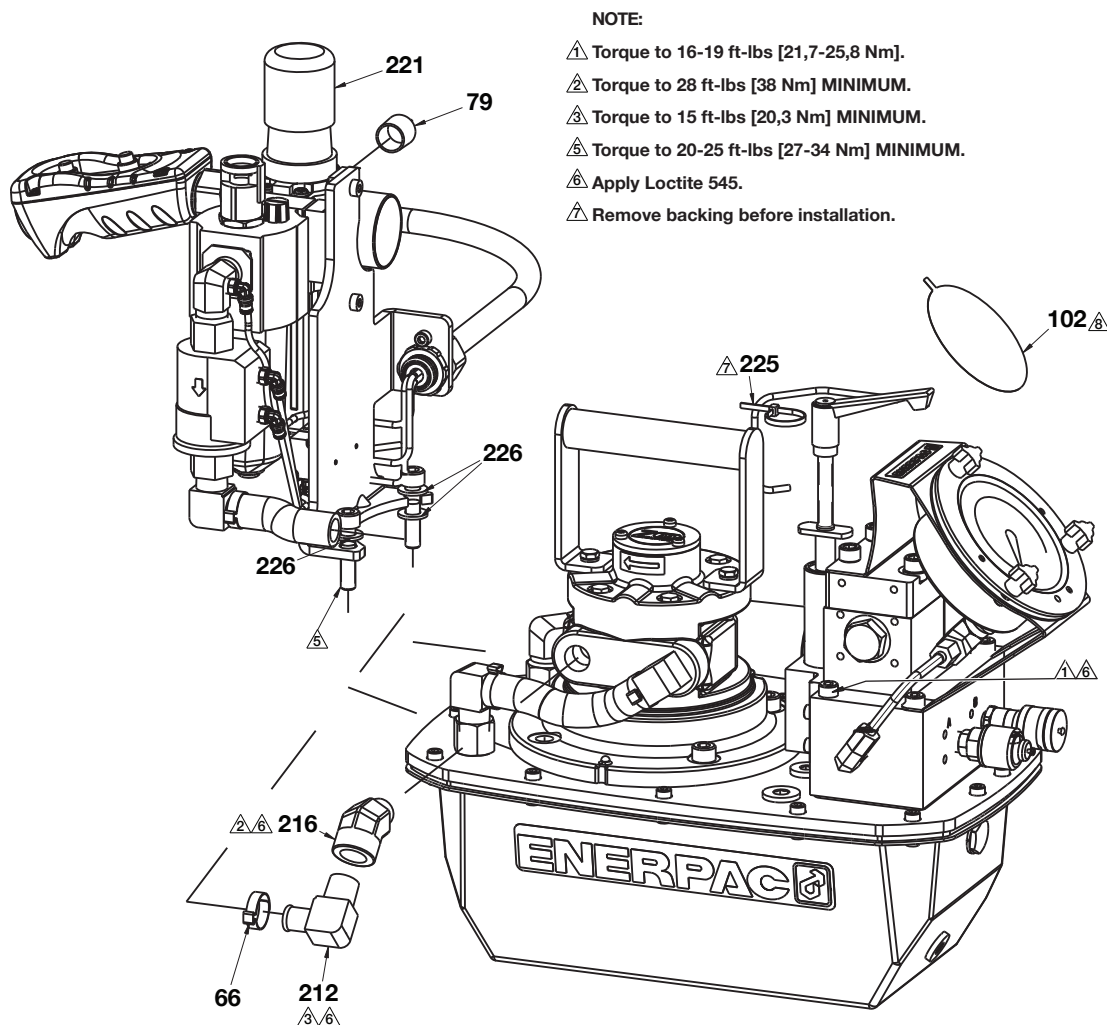


Figure 1, Mounting Arrangement, Air Logic Assembly

Repair Parts List for Figure 1

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
66	DC8038299	2	Hose Clamp 5/8"	216	DA1235095	1	Elbow, Street 45 Deg.
79	B1053271	1	Shipping Plug	221	(see Fig. 6)	1	Air Logic Assembly
102	DD1393026	1	Decal, Pressure Relief	225	DC9876647	1	Cable Tie, Black 6"
212	DC8036038	1	Elbow, 5/8" Barb to 1/2 NPT	226	CAE1100108-1A	3	Washer, 10mm

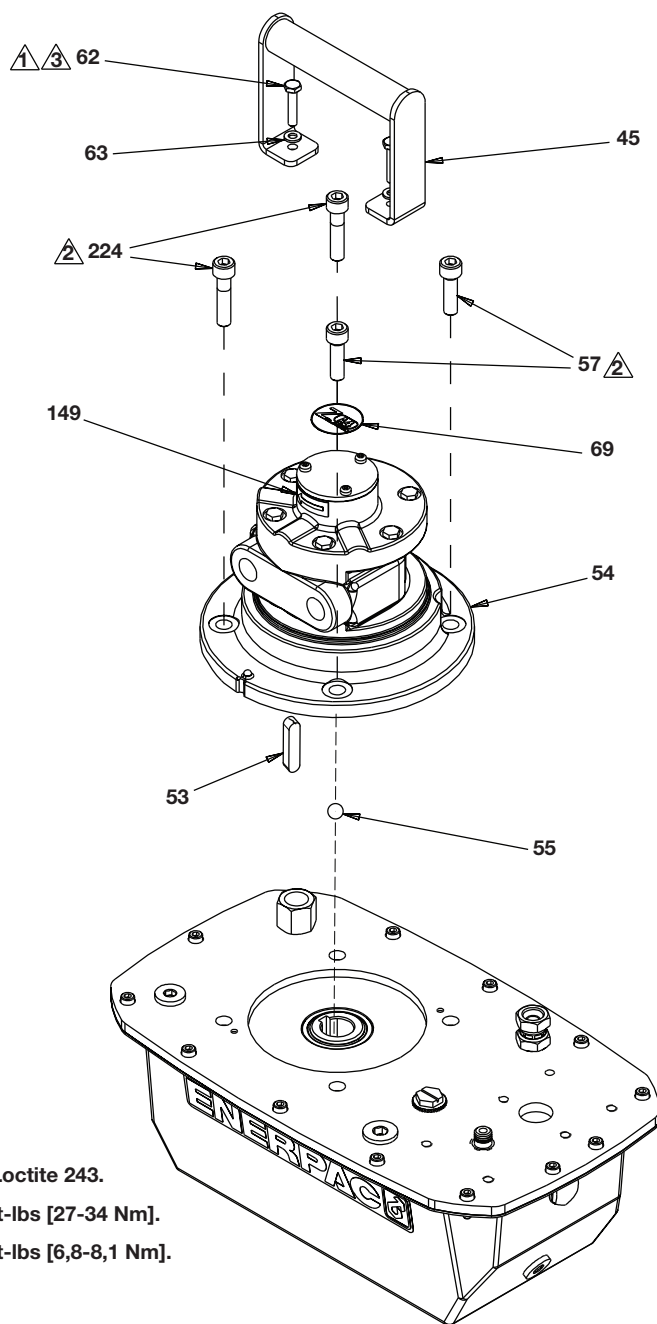


Figure 2, Air Motor Assembly

Repair Parts List for Figure 2

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
45	DC8056070	1	Handle, ZA4.	62	B1461046X	1	.25-28 x 1.25" Hex Head
53	DD4308251	1	Motor Key, Hardened	63	CAE1060108-1A	1	6mm Washer
54	DC8030900SR	1	Air Motor Kit (includes items 53, 55 and 57)	69	DC8099026	1	Decal ZA Class
55	44968	1	Rubber Ball, 3/8" 70 Duro	149	CJ193026	1	Rotation Decal
57	CBE1027028-1A	2	M10 x 35 SHCS	224	CBE1031028-1A	2	M10 x 45 SHCS

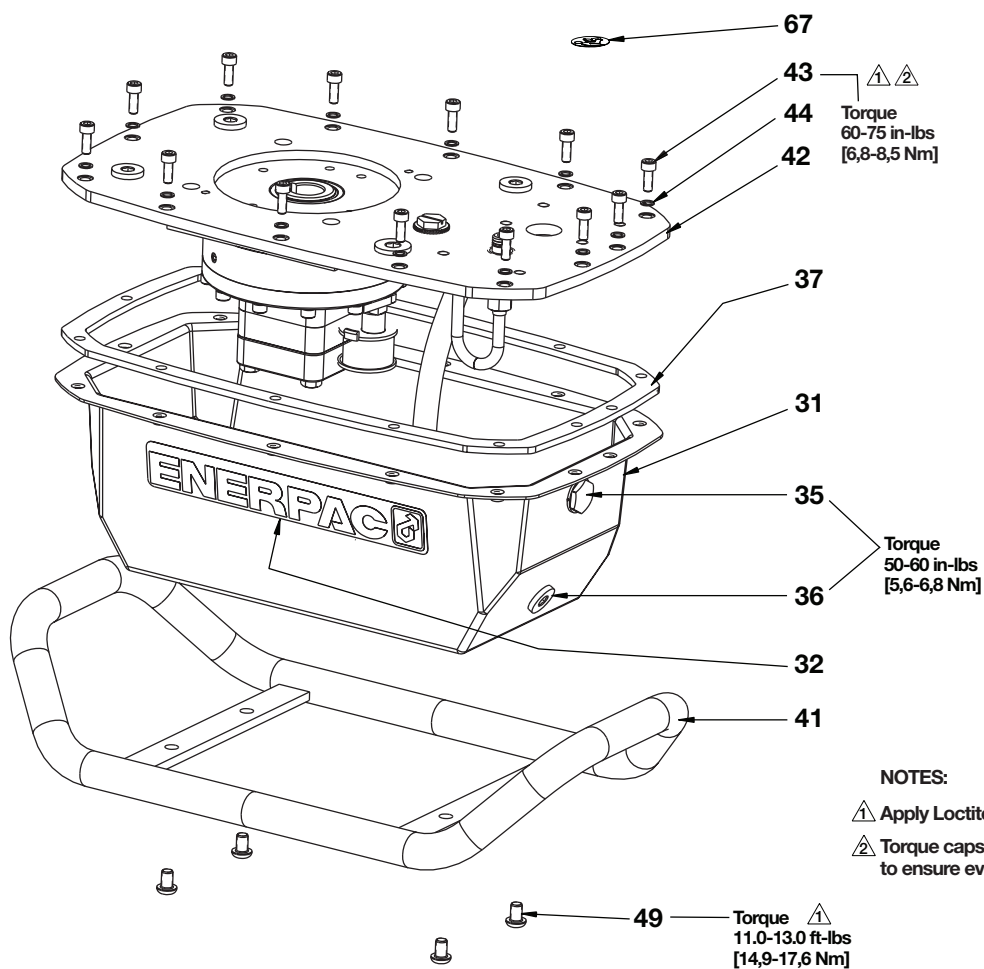


Figure 3, Reservoir Assembly

Repair Parts List for Figure 3

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
31	DC9379025SR	1	Reservoir, 4L (includes items 32, 35, 36 and 37)	37	★ DC9551920	1	Reservoir & MPE Gasket
	DC8136025SR	1	Reservoir, 8L (includes items 32, 35, 36 and 37)	41	DC9590920	1	Skid Bar
32	★ DC9596026	2	Decal, Enerpac	42	(see Fig. 4)	1	Assembly, Pump Basic
35	DC85900SR	1	Sight Glass, 4L and 8L	43	★ S3037	13	Gasket, Copper
36	DC8249006	1	Plug, Magnetic, SAE #8	44	CBE619028-1A	13	Screw, SHCS M6 x 16
				49	CBE817028-1E	4	Screw, BHCS M8 x 12
				67	DC9920026	1	Decal, Read Instructions
★ Items included in Seal Kit ZE3K.							

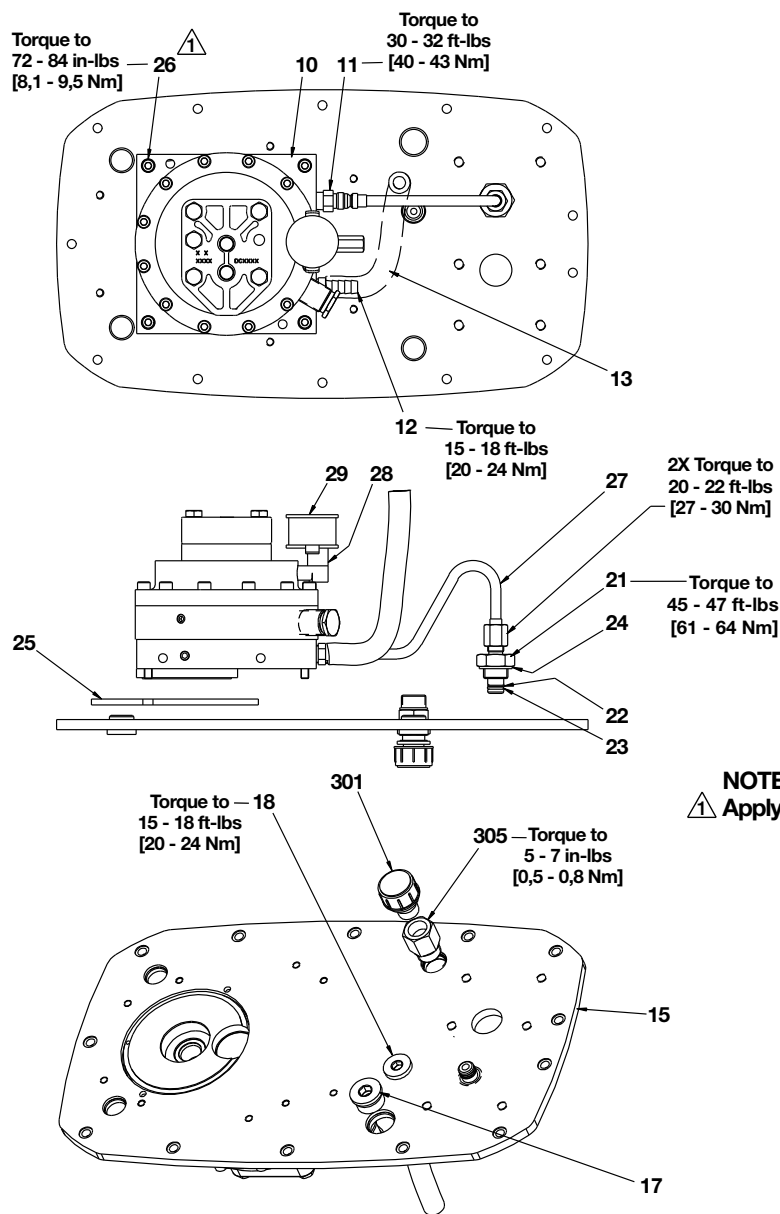


Figure 4, Basic Assembly

Repair Parts List for Figure 4							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
10	(see RPS L2596)	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.

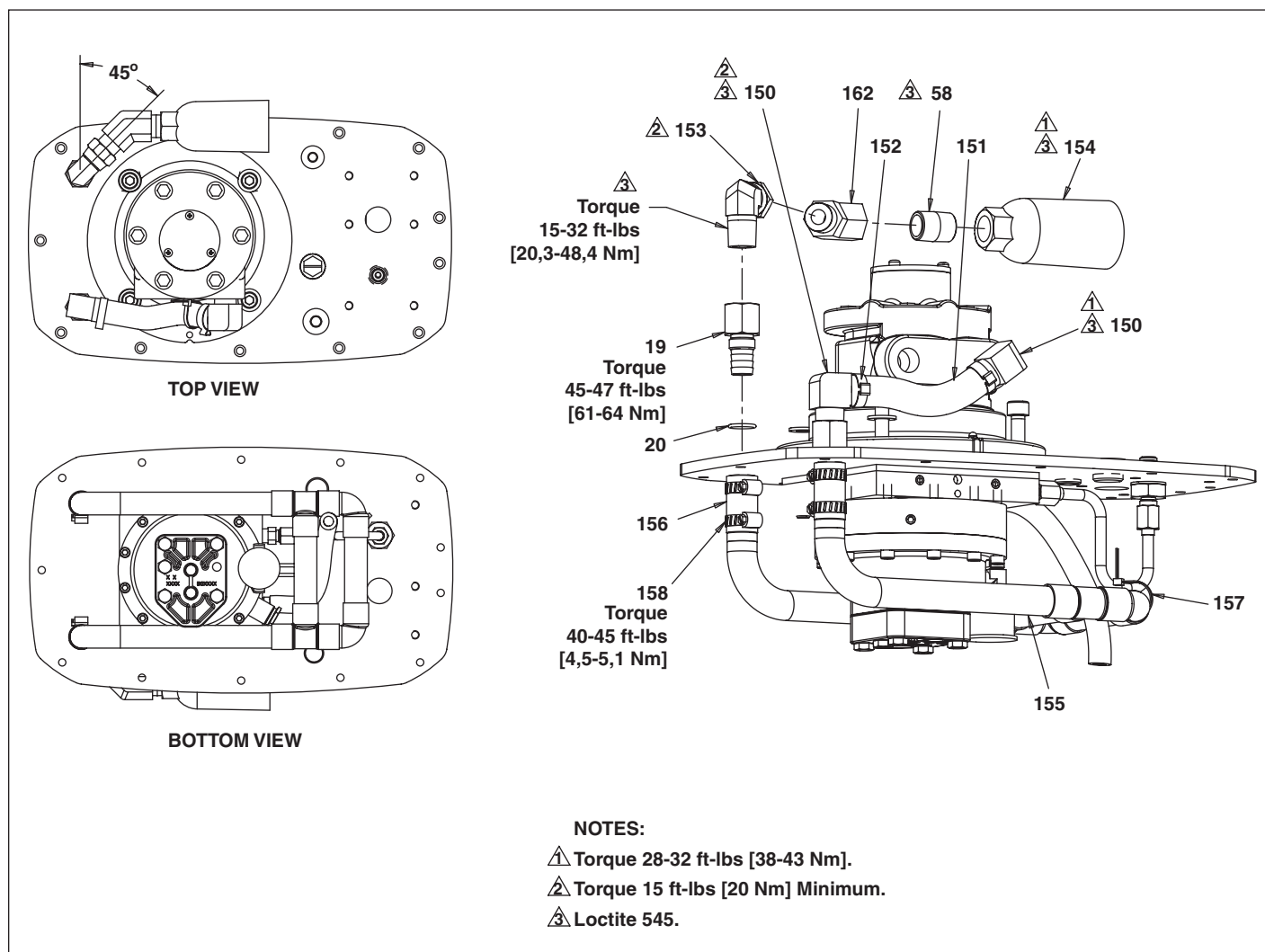


Figure 5, Heat Exchanger

Repair Parts List for Figure 5							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
19	DC8035038	2	Adapter	154	DC8032116	1	Muffler, Parker
20	B1908503	2	O-Ring BUNA-N	155	DC8039471	1	Heat Exchanger Coil
58	DC8097095	1	1/2" NPT Short Pipe	156	DC8043646	2	Hose 5/8 ID
150	DC8036038	2	Elbow 5/8 Barbed to 1/2" NPT	157	DC9989647	1	Cable Tie 12.5"
151	DC8046646	1	Hose 5/8 ID 4.9"	158	CB40299	4	Hose Clamp
152	DC8038299	2	Hose Clamp 5/8"	162	DA1235095	1	Fitting 1/2" NPT
153	DC8126095	1	Elbow 1/2" NPT				

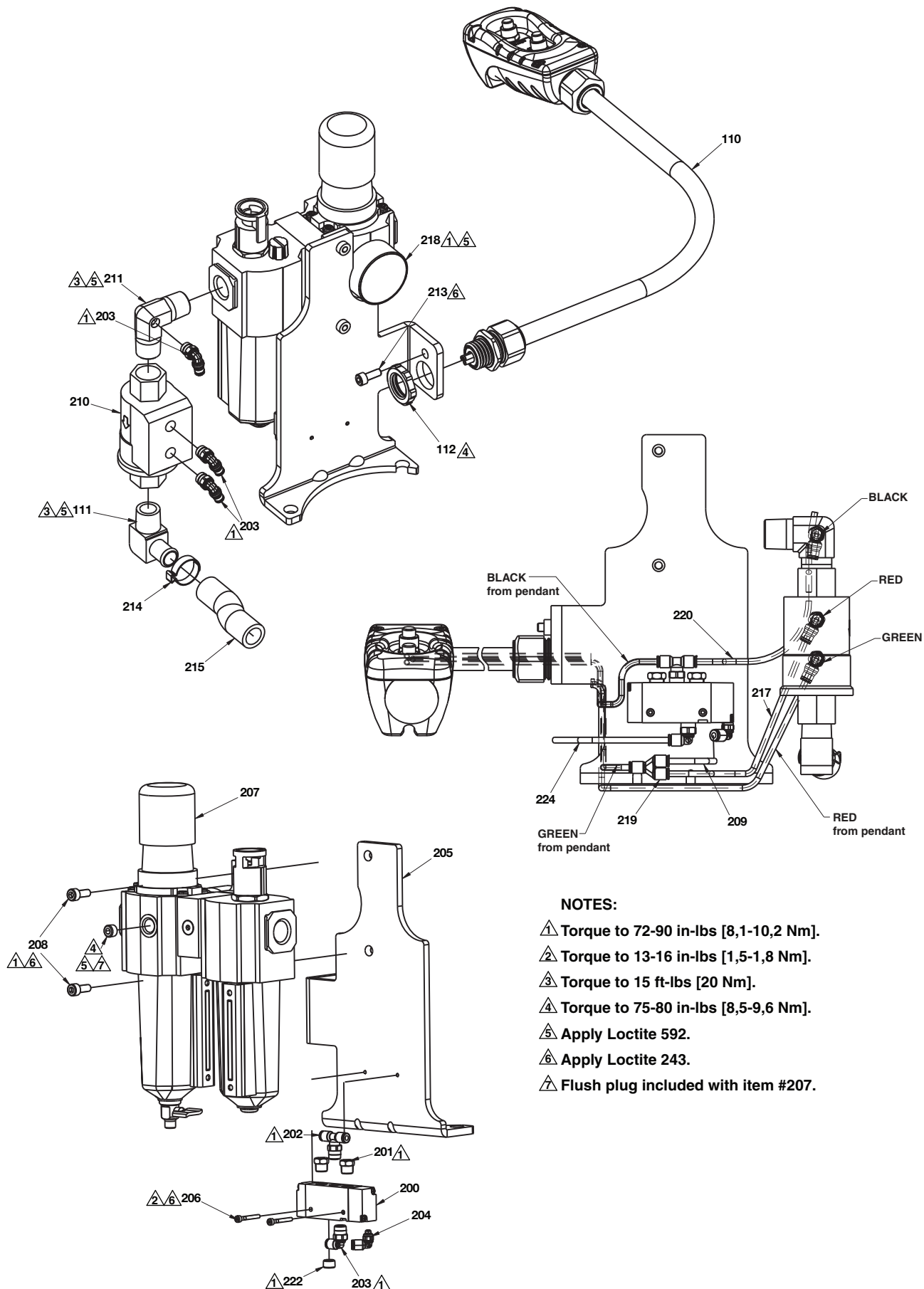
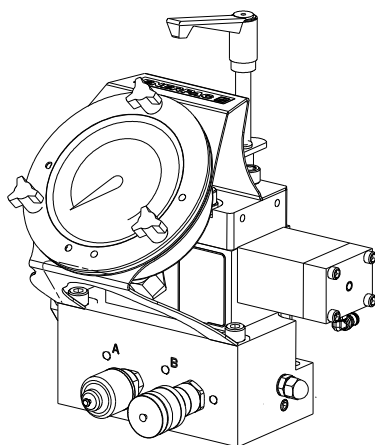


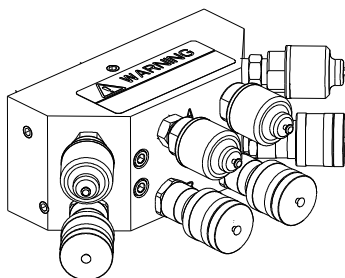
Figure 6, Air Logic Assembly

Repair Parts List for Figure 6							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
110	(see Fig. 8)	1	Assembly, Air Pendant	209	DC8124268	1	Tubing 5/32 x 4/5" Green
111	DC8036038	1	Elbow, 5/8" Barbed	210	DD1355660	1	Air Control Valve
112	DC9683021	1	Locking Nut 25mm	211	DC8086095	1	Elbow
200	DC8064660	1	Air Directional Valve	213	CBE621028-1A	1	SHCS, M6 X 20
201	DC352118	2	Vent Pug 1/8" NPT	214	DC8038299	1	Hose Clamp 5/8"
202	DC8171097	1	Plug SAE #10	215	DD1357646	1	Hose 5/8" ID x 2.9"
203	DC8170097	4	Elbow 1/8 x 5/32"	217	DD1398268	1	Tubing 5/32 x 8" Green
204	DC8169097	1	Elbow #10 x 5/32"	218	DC8101223	1	Gauge 0-160 PSI
205	DC8042111	1	Bracket	219	DC3574097	1	Y Fitting
206	CBE323028-1A	2	M3 x .5 x 25mm SHCS	220	DC8095268	1	Tubing 5/32 x 7.3" Black
207	DC8033118	1	Filter	222	A1007245	1	1/2 NPT Flush Plug
208	CBE619028-1A	2	M6-1 x 16 SHCS				

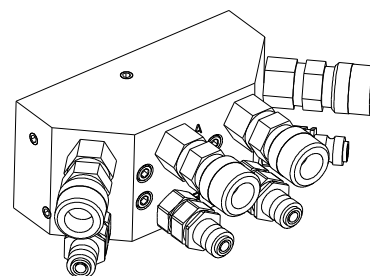
Valve Type	Model Number	Assembly Number	Configuration	See Valve Repair Parts Sheet
Valves with single air actuator. Date Code "B" and later.	VA42Q	DD1375900	10,000 PSI [700 bar] no manifold	L2908
	VA42QM	DD1426900	10,000 PSI [700 bar] with manifold	L2908
	VA42E	DD1427900	11,600 PSI [800 bar] no manifold	L2908
	VA42EM	DD1428900	11,600 PSI [800 bar] with manifold	L2908
Note: Refer to valve repair parts sheet for valve replacement parts and additional information.				



**VA42Q and VA42E
Control Valve
(single air actuator)**



**Multiport Manifold
Used on VA42QM only.**



**Multiport Manifold
Used on VE42EM only.**

Figure 7, Control Valve Assembly and Manifolds (typical - appearance may vary)

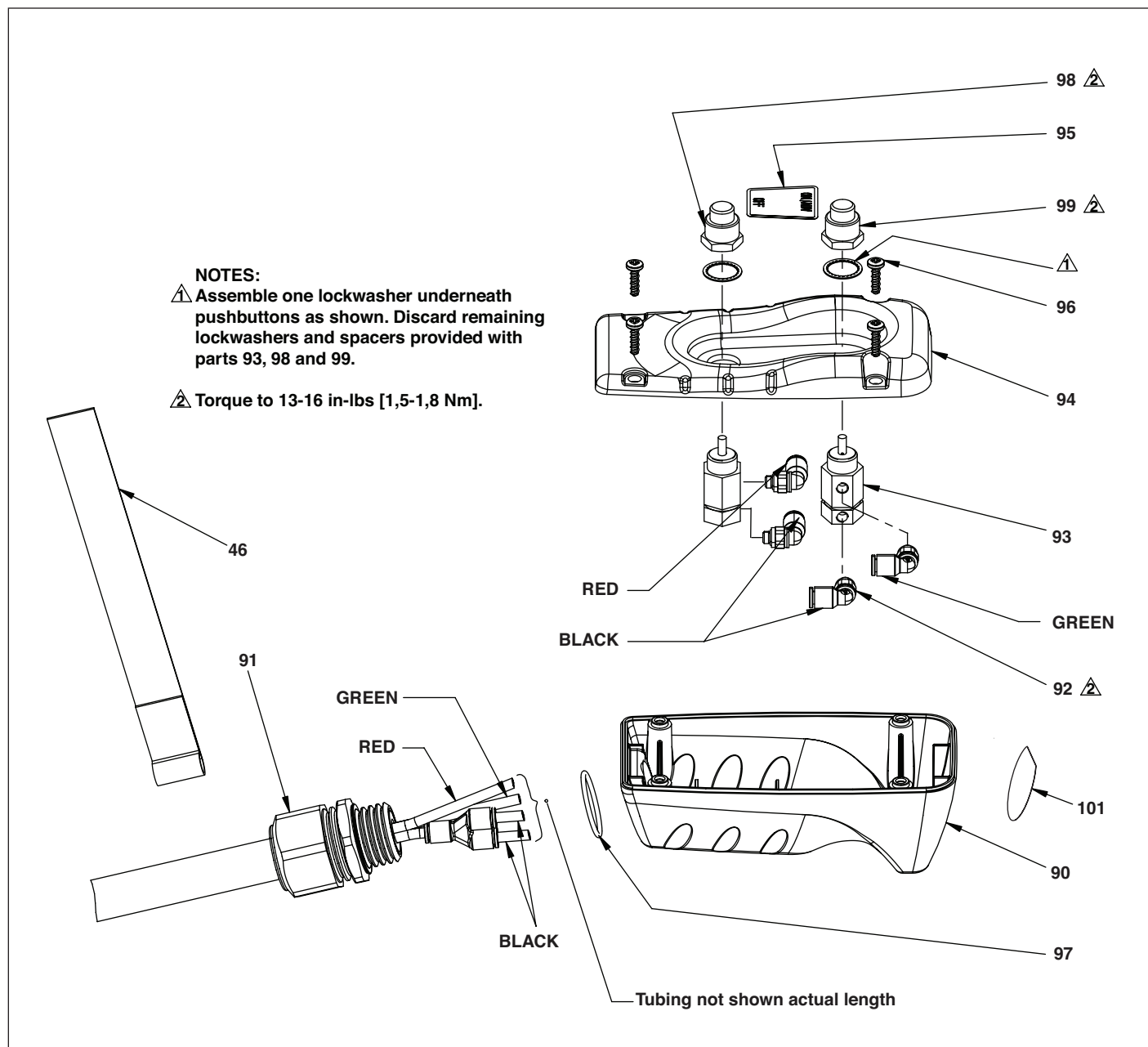


Figure 8, Pendant Assembly

Repair Parts List for Figure 8							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
46	* DA7570217	1	Cord Strap.	95	* DC8127026	1	Pendant Decal
90	* DC9991424	1	Lower Pendant Housing	96	* DC9428008	4	Screw #8 x 1/2
91	* DD1400646	1	Air Tube	97	* B1227503	1	O-Ring
92	* DC8060097	4	Elbow #10 x 5/32	98	* DC3578379	1	Push Button Red
93	* DC8059379	2	Push Button Valve	99	* DC3577379	1	Push Button Green
94	* DC8122424	1	Upper Pendant Housing	101	* DD1394026	1	Decal, Pressure Relief
* Items included in DC9948900SR Pendant and Cable Assembly.							

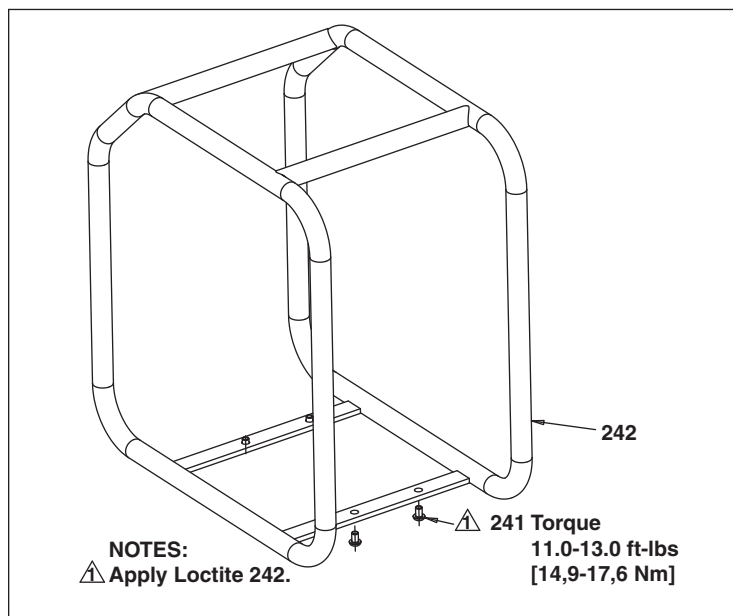


Figure 9, Rollbar Assembly ZRC-04

Repair Parts List for Figure 9			
Item	Part Number	Qty.	Description
241	CBE817028-1E	4	BHCS M8x12
242	DC8040920	1	Roll Bar Assembly
These parts are included in Roll Bar Kit ZRC-04.			

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 L2596 for basic pump assembly.
	Internal leak in valve.	See RPS L2908 for 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 L2596).
	Internal leak in valve.	See RPS L2908 for control valve.
	Internal leak in system component.	Repair system component.
Pump builds full pressure, but wrench does not operate.	Torque exceeds wrench max. 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.

