



Repair Parts Sheet

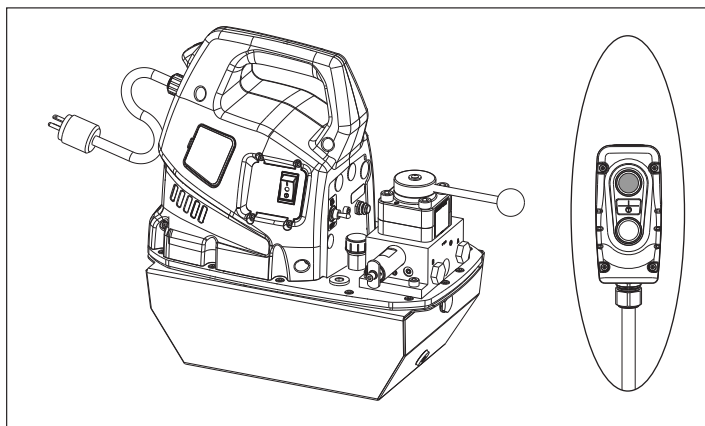
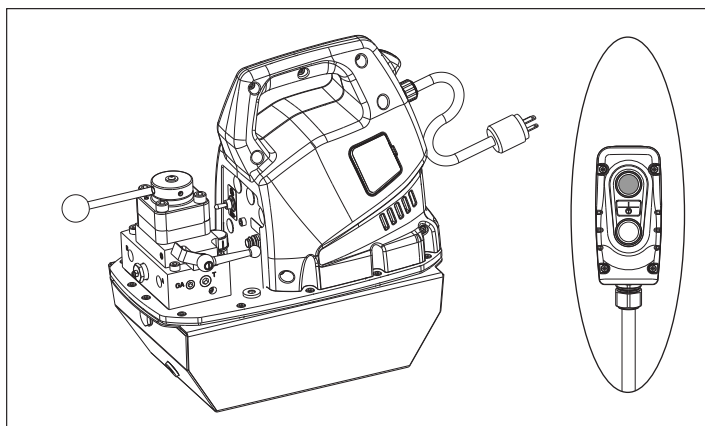
ZU-Series Post Tensioning & Foundation Repair Pumps

Document Number	Document Revision Letter	Document Revision Date	Product Date Code	
L4467	B	08/2022	Model	Beginning With Letter:
			ZU5408PB-P	C
			ZU5708RB-P	B
			ZU5908PB-P	C

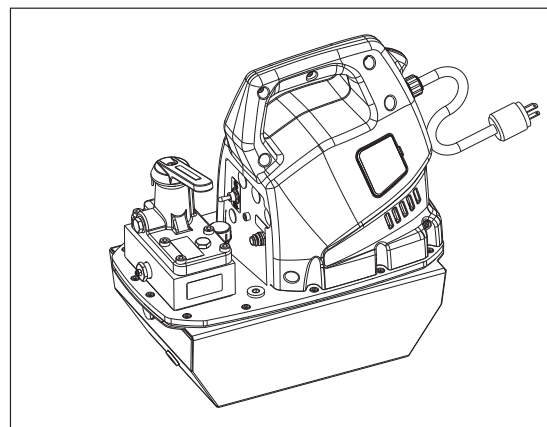
To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

Enerpac recommends that all kit components be installed to ensure optimum performance of the repaired product.

▼ MODEL ZU5408PB-P



▲ MODEL ZU5908PB-P



▲ MODEL ZU5708RB-P

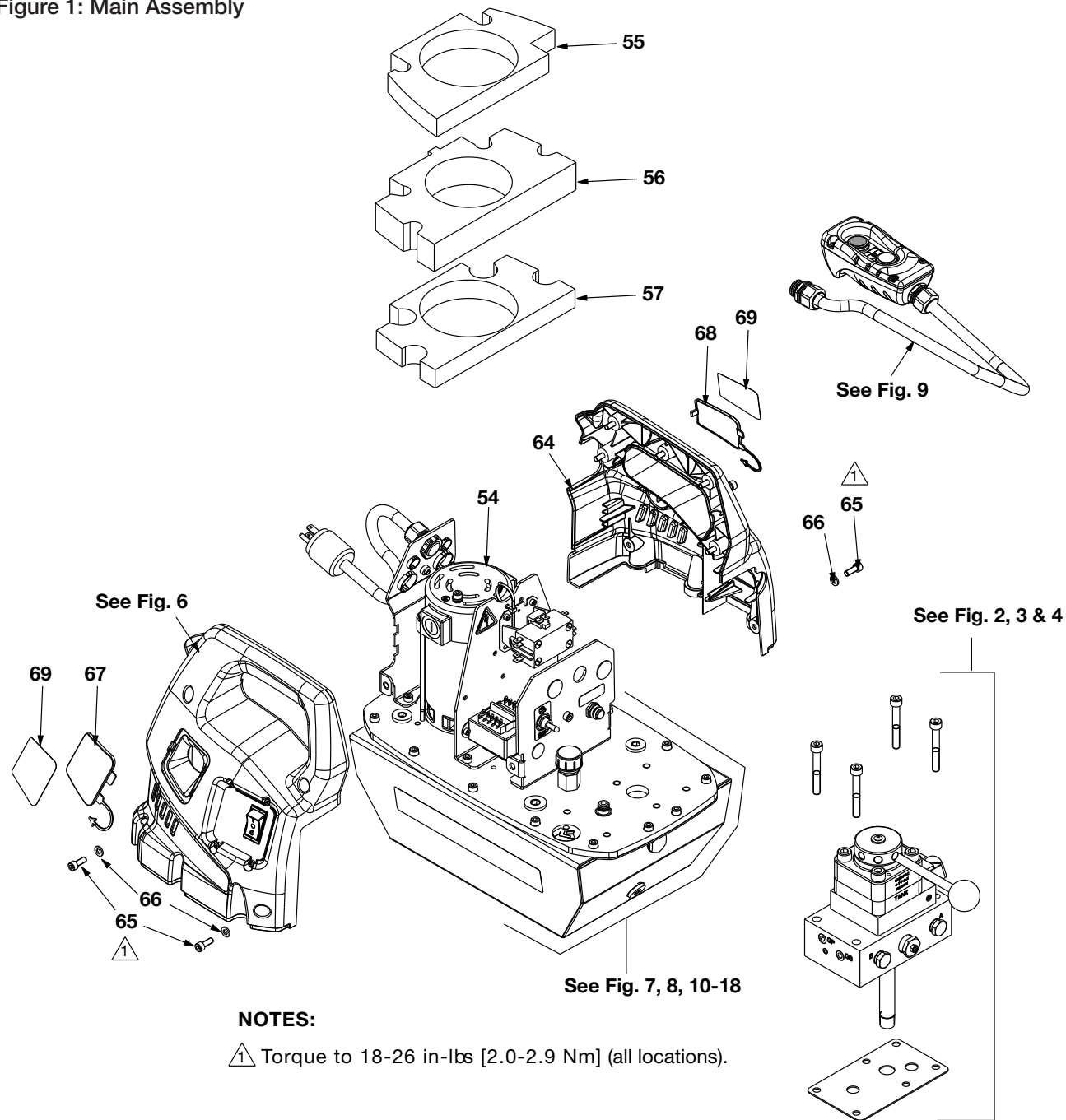
⚠ WARNING Fully relieve hydraulic pressure, disconnect hydraulic hoses and unplug AC power cord from electrical outlet before beginning any inspection, maintenance or repair procedures. Failure to observe these precautions could result in death or serious personal injury. Appropriate shop safety procedures are to be followed during disassembly and reassembly to minimize any possibility of injury.

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 **WARNING** Disconnect power cord from electrical outlet and be sure all hydraulic pressure is completely relieved before performing any maintenance, disassembly or repair procedures. Verify that hydraulic pressure gauge indicates zero (0) psi/bar before disconnecting hydraulic hoses.

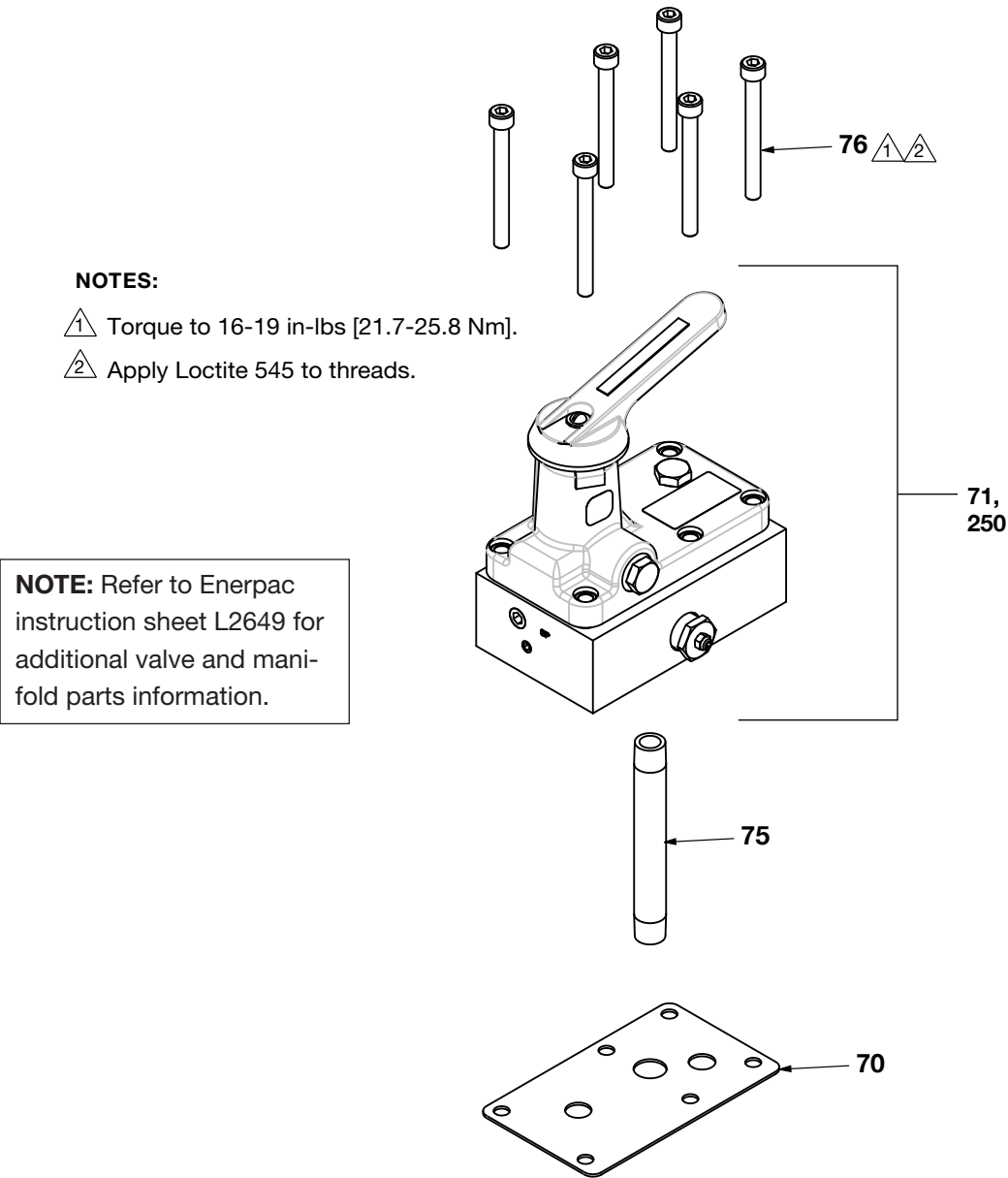
Figure 1: Main Assembly



Repair Parts List for Figure 1

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
54	(See Fig. 5)	1	Motor, Electric 115V	65	CBE619028-1A	9	SHCS, M6 x 16
55	DC9401298	1	Baffle, Lower ZU	66	CAE1060108-1A	9	Flat Washer, M6
56	DC9400298	1	Baffle, Middle ZU	67	DC9414424	1	Brush Cover, Left
57	DC9402298	1	Baffle, Upper ZU	68	DC9413424	1	Brush Cover, Right
64	DC9641424	1	Enclosure, RH	69	DC9598026	1	Decals, LH & RH

Figure 2: Control Valve VM22



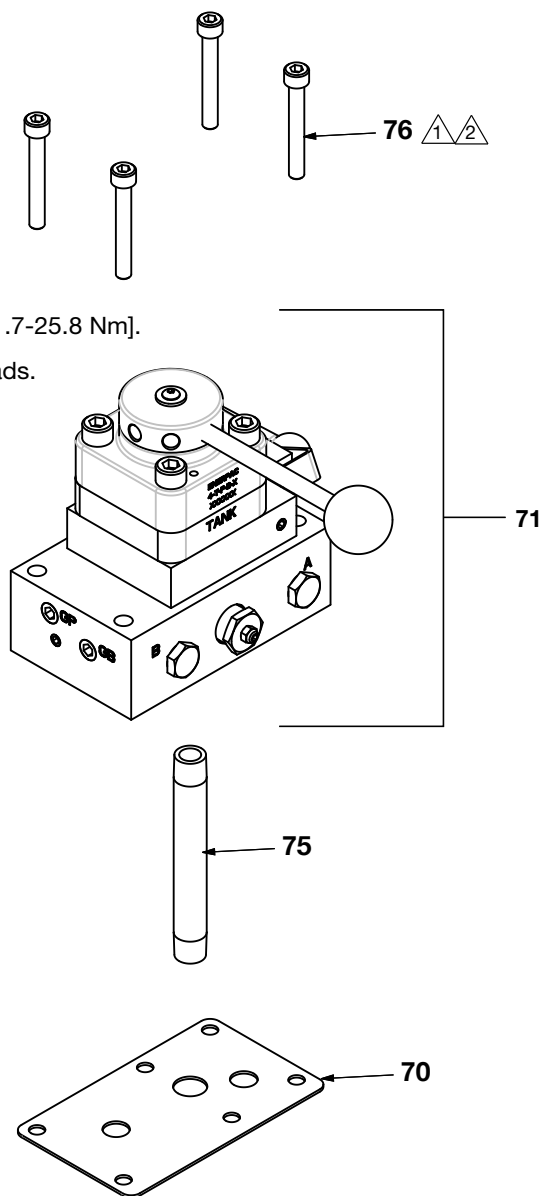
Repair Parts List for Figure 2			
Item	Part Number	Qty.	Description
76	◆ CBE843028-1A	6	Capscrew, SHCS M8
71	◆ (See RPS 2649)	1	Control Valve, VM22
250	◆ (See RPS 2649)	1	Hydraulic Manifold
75	◆ DC2749768	1	Tube, Oil Return, 3/8 NPT
70	◆ DC9356037	1	Gasket
◆ Included in VM22 Replacement Hydraulic Valve and Manifold Assembly.			

Figure 3: Control Valve VM43M-FR

NOTES:

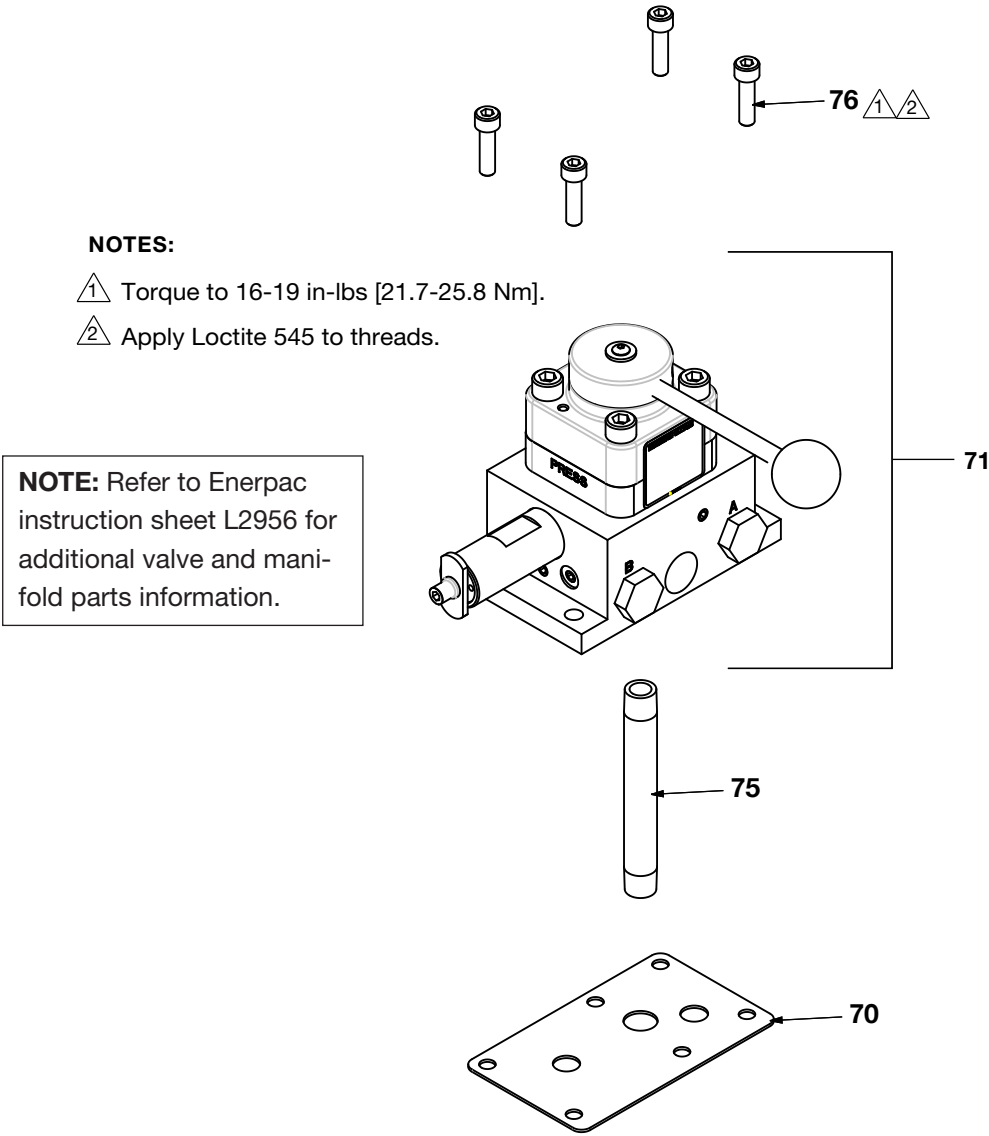
- 1 Torque to 16-19 in-lbs [21.7-25.8 Nm].
- 2 Apply Loctite 545 to threads.

NOTE: Refer to Enerpac instruction sheet L4479 for additional valve and manifold parts information.



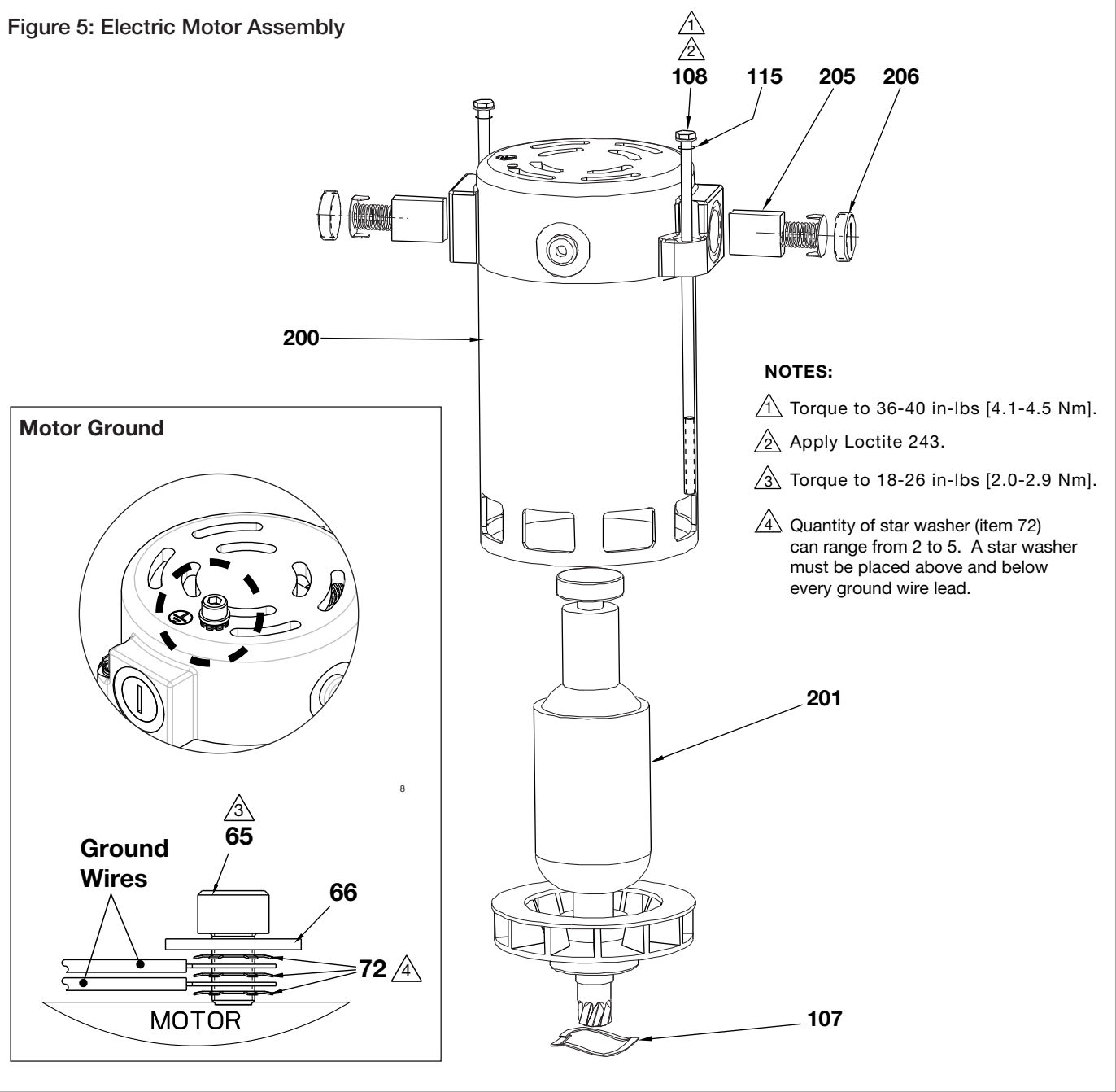
Repair Parts List for Figure 3			
Item	Part Number	Qty.	Description
76	❖ CBE837028-1A	4	Capscrew, SHCS M8
71	❖ (See RPS L4479)	1	Assembly, VM43M-FR Control Valve and Manifold
75	❖ DC2749768	1	Tube, Oil Return, 3/8 NPT
70	❖ DC9356037	1	Gasket
❖ Included in VM43M-FR Replacement Hydraulic Valve and Manifold Assembly.			

Figure 4: Control Valve VM43-LPS



Repair Parts List for Figure 4			
Item	Part Number	Qty.	Description
76	❖ CBE825028-1A	4	Capscrew, SHCS M8
71	❖ (See RPS L2956)	1	Assembly, VM43-LPS Control Valve and Manifold
75	❖ DC2749768	1	Tube, Oil Return, 3/8 NPT
70	❖ DC9356037	1	Gasket
❖ Included in VM43-LPS Replacement Hydraulic Valve and Manifold Assembly.			

Figure 5: Electric Motor Assembly

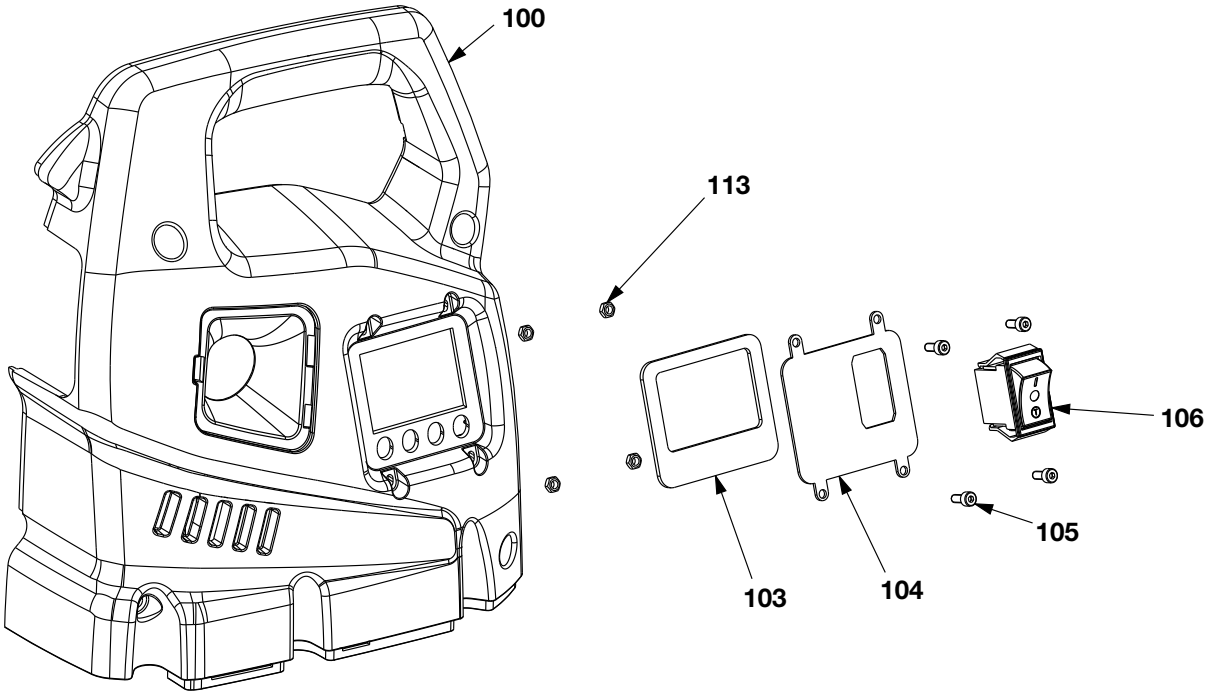


Repair Parts List for Figure 5

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
65	CBE619028-1A	1	SHCS, Hex M6	115	► B1080066	2	Star Washer
66	CAE1060108-1A	1	Washer, Flat No. 10	200	► (Not Available)	1	Housing
72	CCE1060108-6A	3	Star Washer	201	► DC8246736	1	Armature, 115V
85	► E1001181	2	Connector, Female	205	► DC9656259	2	Brush, ZU
107	► DC9661066	1	Spring Washer	206	► DC9655020	2	Brush Cap, ZU
108	► DC9653028	2	Bolt, #10-32 x 6.5"				

► Included in 115V Electric Motor Assembly, DC8244259SR.

Figure 6: Enclosure Assembly, Left-Hand

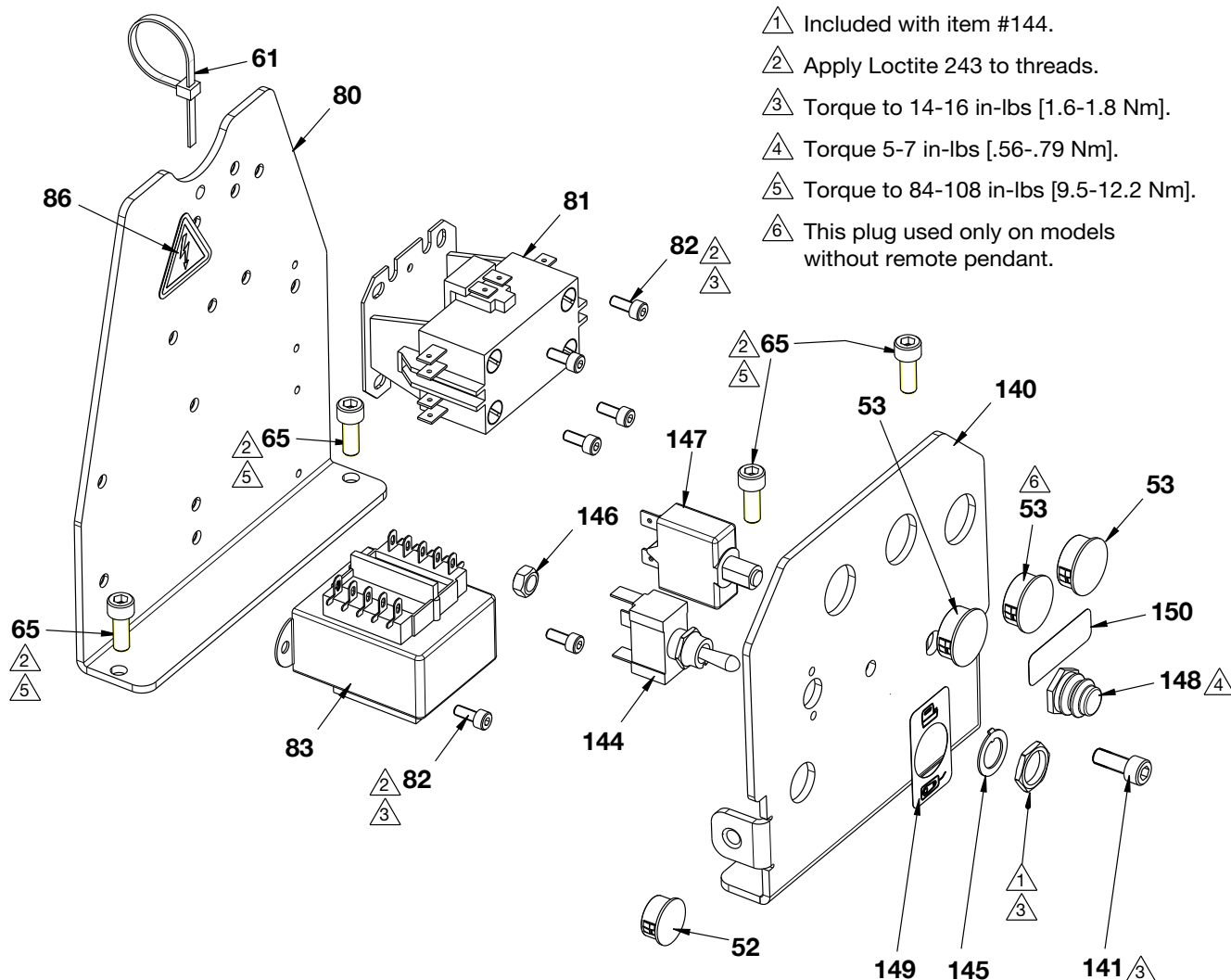


Repair Parts List for Figure 6			
Item	Part Number	Qty.	Description
106	69159	1	Switch, On/Off Jog
113	CBE1040120-1D	4	Nut, Hex M4
105	CBE415028-1A	4	SHCS, Hex M4
104	DD8367101-P01	1	Plate, Switch Mount
103	DD8395037	1	Gasket, Overlay
100	DD8555424	1	Enclosure, Left-Hand

Figure 7: Front and Middle Electrical Bracket Assemblies

NOTES:

- ① Included with item #144.
- ② Apply Loctite 243 to threads.
- ③ Torque to 14-16 in-lbs [1.6-1.8 Nm].
- ④ Torque 5-7 in-lbs [.56-.79 Nm].
- ⑤ Torque to 84-108 in-lbs [9.5-12.2 Nm].
- ⑥ This plug used only on models without remote pendant.

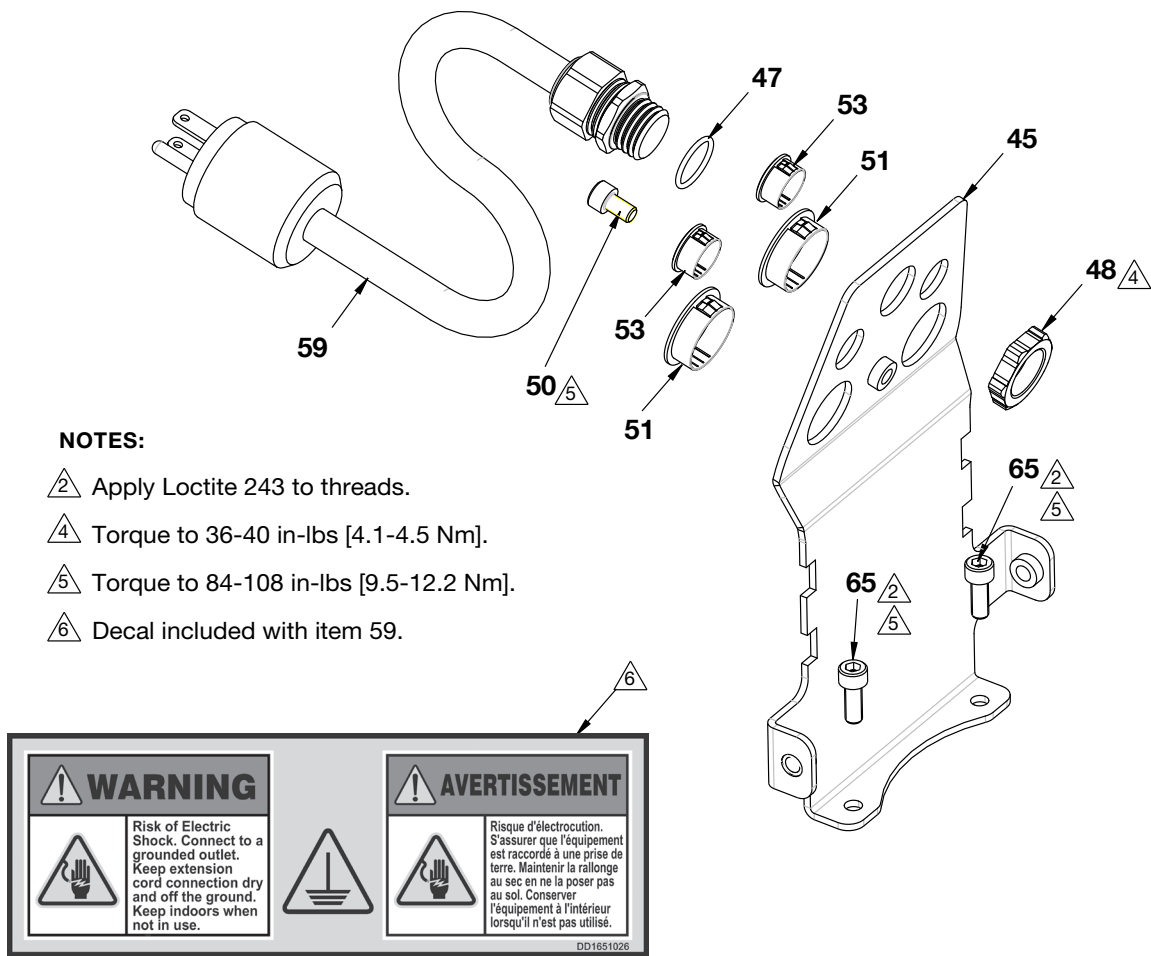


Repair Parts List for Figure 7

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
52	DC9436009	1	Dome Plug, 16 mm	145	DC8230108	1	Ring, Locking
53	DC9437009	3	Dome Plug, 1"	146	CBE1060120-1D	1	Nut, Hex M6 Zinc
61	DC9876647	1	Cable Tie, Black	147	DC8308380	1	C Breaker, 25A. 115V
65	CBE619028-1A	4	SHCS, M6 x 16	148	DC8200380	1	Cap, CB Reset
80	DC8354111	1	Bracket, Middle PT	149	DD8205026	1	Switch Decal
81	DC8193398	1	Contactor	150	DC8237026	1	Decal, CB Reset
82	CBE415028-1A	6	Screw, SHCS M4 x 10	260	✦ DC8317960	1	Cable, Cont to Switch
83	DC8279480SR	1	Transformer	263	✦ DC8314960	2	Cable, Xfmr Output
86	DC9922026	1	Decal, High Voltage	264	✦ DC8316960	1	Cable, Solenoid Sw
140	DC8353111	1	Bracket, Front PT	265	✦ DC8312960	1	Cable, Ovid to Cont
141	CBE625028-1A	1	M6 x 30 Zinc Screw	266	✦ DD8374960	1	Cable, Cont to Switch
144	DD8206372	1	Switch, Pendant/Remote	267	✦ DD8376960	1	Cable, Xfmr Input

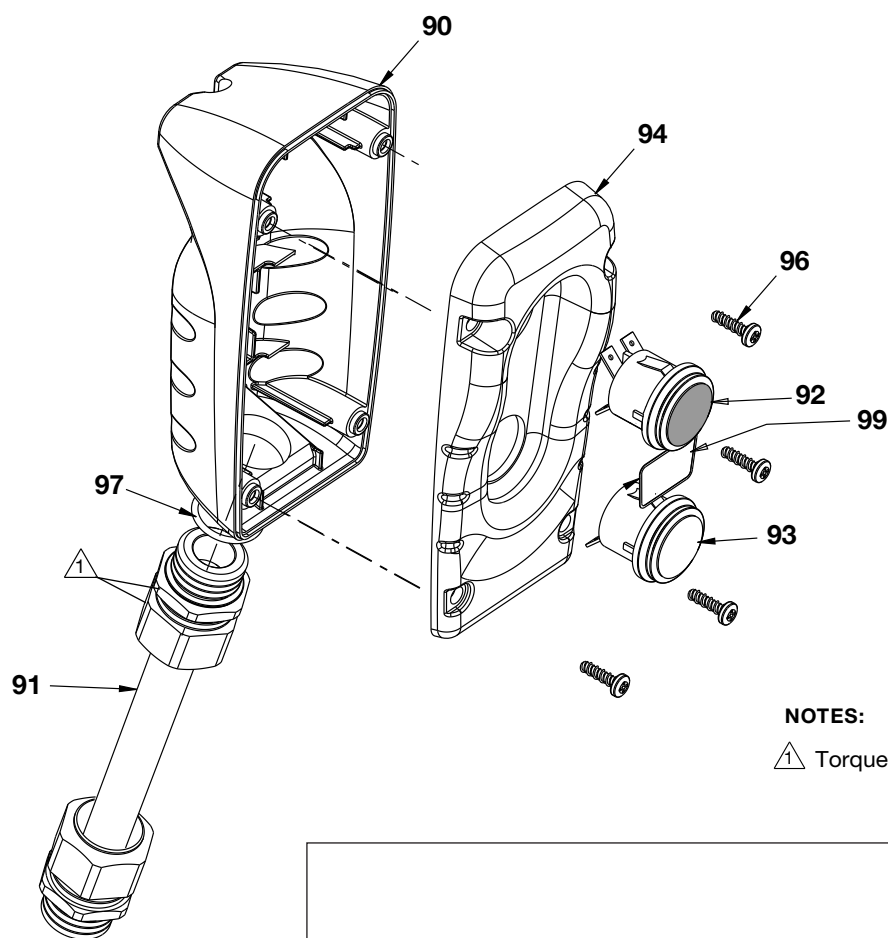
✦ Items 260-267 not shown.

Figure 8: Back Electrical Bracket Assembly



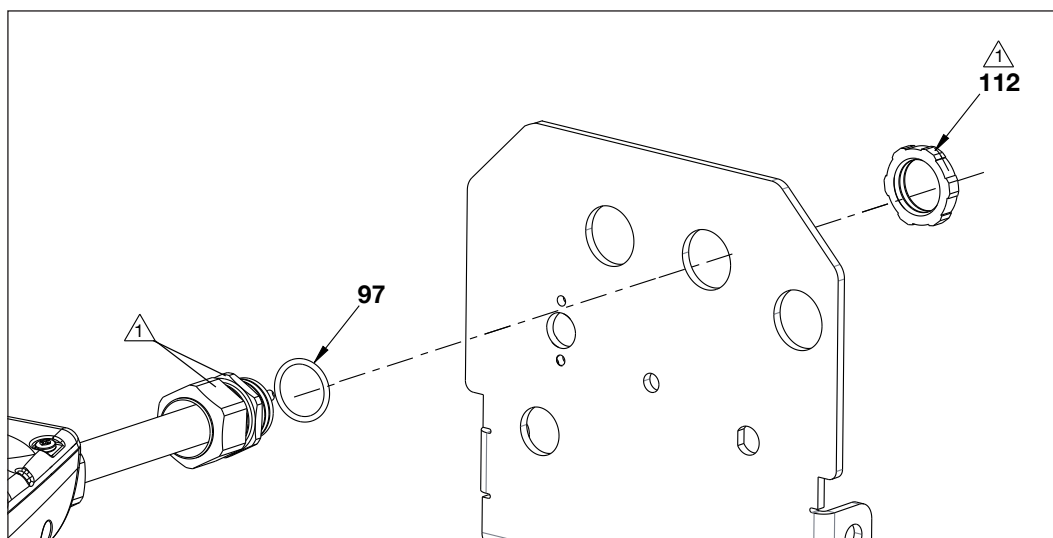
Repair Parts List for Figure 8			
Item	Part Number	Qty.	Description
45	DC9504111	1	Bracket, Back
47	B1223503	1	O-Ring, Round
48	DC9538021	1	Locking Nut, 20 mm
50	CBE615028-1A	1	SHCS, M6
51	DC9435009	2	Dome Plug, 1"
52	DC9436009	2	Dome Plug, 16 mm
59	DD8375960	1	Power Cord, ZU 115V
65	CBE619028-1A	2	SHCS, M6 x 16
---	DD1651026	1	Power Cord Safety Decal (Included with item 59)

Figure 9: Remote Pendant Assembly



NOTES:

1 Torque to 36-40 in-lbs [4.1-4.5 Nm].

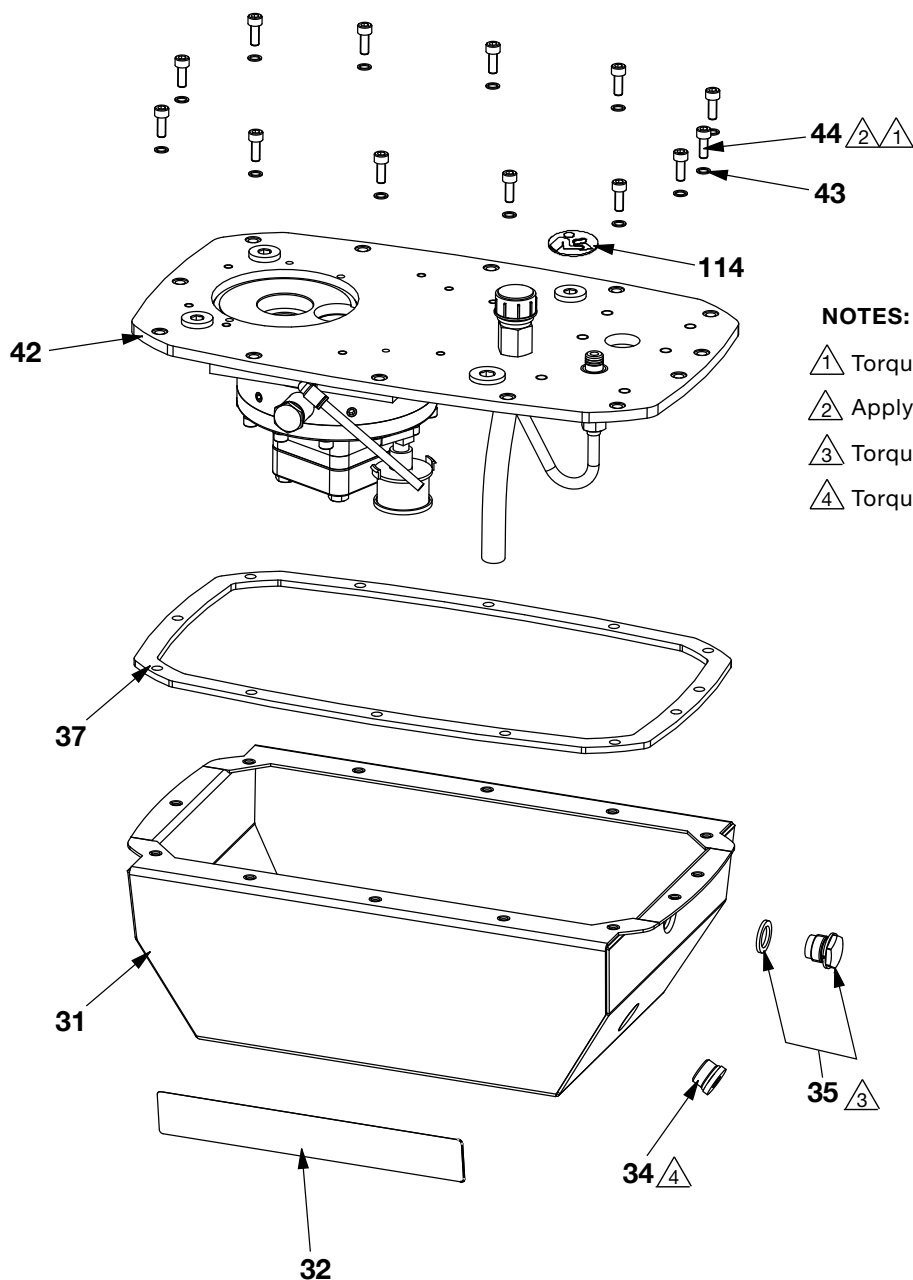


Repair Parts List for Figure 9

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
90	+ DC9425424	1	Lower Pendant	96	+ DC9428008	4	Screw, Hi-Lo #8 x 1/2"
91	+ DD8215960	1	Cable Assy, Pendant	97	+ B1223503	1	O-Ring, Round
92	+ DD8217379	1	Push Button, Black	99	+ DD8219026	1	Decal, Pendant
93	+ DD8216379	1	Push Button, White	112	+ DC9538021	1	Locking Nut, 20 mm
94	+ DD8218424	1	Housing, Upper				

+ Included in Pendant and Cable Assembly, DD8042900SR.

Figure 10: Hydraulic Reservoir Assembly



NOTES:

- ① Torque to 60-75 in-lbs [6.8-8.5 Nm].
- ② Apply Loctite 243.
- ③ Torque to 30-40 in-lbs [3.4-4.5 Nm].
- ④ Torque to 50-60 in-lbs [5.6-6.8 Nm].

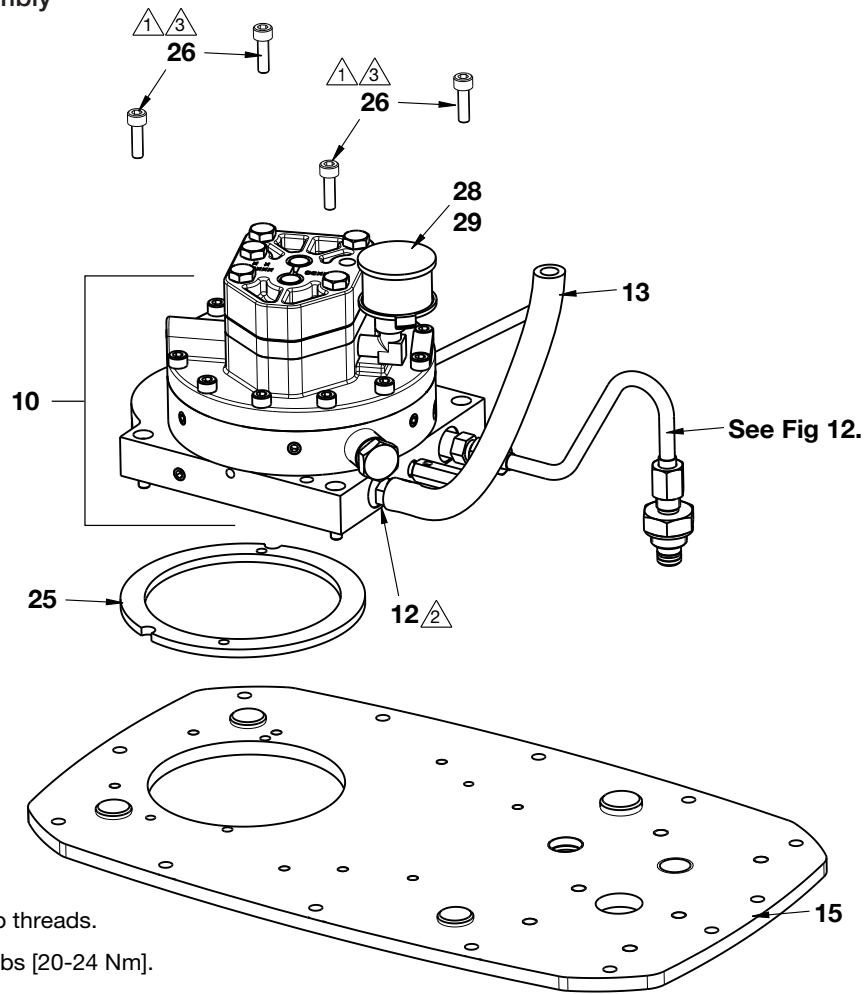
Repair Parts List for Figure 10

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
31	❖ DC8136025	1	Reservoir, 8L Short	42	(See Figure 11)	1	Coverplate Assy
32	❖ DC9596026	2	Decal, Enerpac	43	S3037	13	Gasket
34	❖ DC8249006	1	Threaded Plug w/Mgt	44	CBE619028-1A	13	SHCS, Hex M6
35	❖ DC85900SR	1	Assembly, Sight Glass	114	DC9920026	1	Decal, Read Inst
37	▼❖ DC9551920SR	1	Gasket, Reservoir				

❖ Included in 8L Reservoir Kit, DC8136025SR.

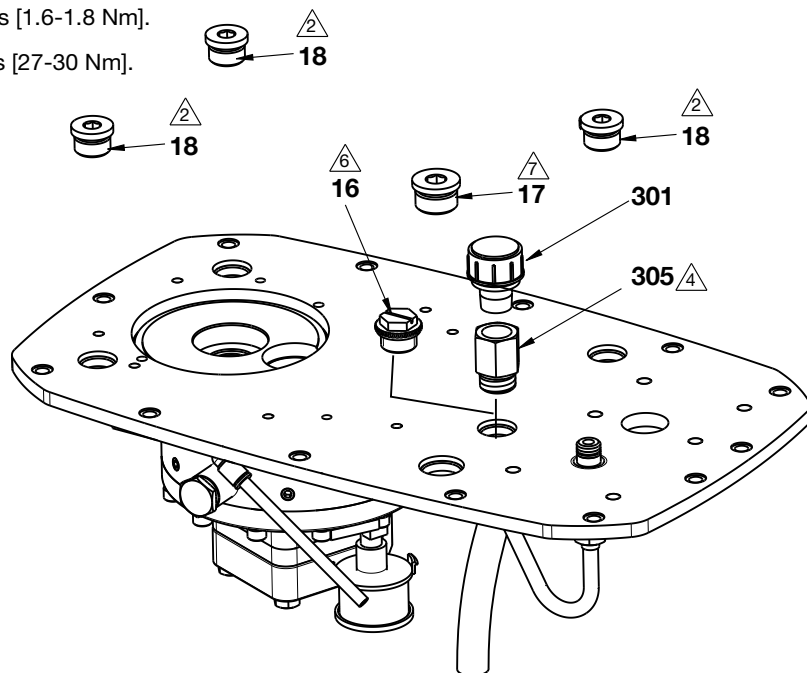
▼ Pump element gasket (see Fig. 11, item 25) is also included with DC9551920SR.

Figure 11: Coverplate Assembly



NOTES:

- ① Apply Loctite 545 to threads.
- ② Torque to 15-18 ft-lbs [20-24 Nm].
- ③ Torque to 72-84 in-lbs. [8.1-9.5 Nm].
- ④ Torque 5-7 in-lbs [.56-.79 Nm].
- ⑤ Torque 30-32 in-lbs [40-43 Nm].
- ⑥ Torque to 14-16 in-lbs [1.6-1.8 Nm].
- ⑦ Torque to 20-22 ft-lbs [27-30 Nm].

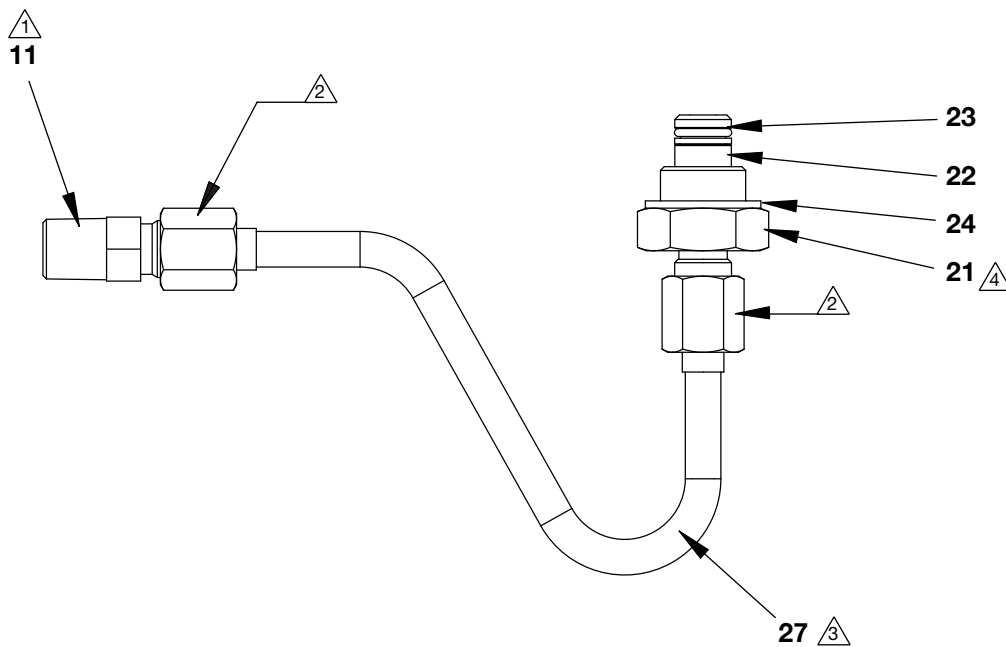


Repair Parts List for Figure 11			
Item	Part Number	Qty.	Description
10	(See Fig. 13-18)	1	Pump Element
12	F100097-16	1	Fitting, Barbed
13	DC9335646	1	Hose, Bypass, 8"
15	DC9407101-P01	1	Coverplate (black)
16	DD6321271	1	Plug, Thread Protector
17	B1007006	1	Plug, 0.875-14 Steel
18	B1006006	3	Plug, 0.750-16, Steel
25	▼❖DC9551920SR	1	Gasket, Pump Element
26	CBE621028-1A	4	SHCS, M6, Steel
28	DC9600268	1	Intake Tube
29	DC9178118	1	Intake Filter
301	DC8250006	1	Breather, 3/8" NPTF
305	F100096-38	1	Adapter
❖ Included in 8L Reservoir Kit, DC8136025SR.			
▼ Pump element gasket (see Fig. 10, item 37) is also included with DC9551920SR.			

Figure 12: Oil Pressure Tube Assembly

NOTES:

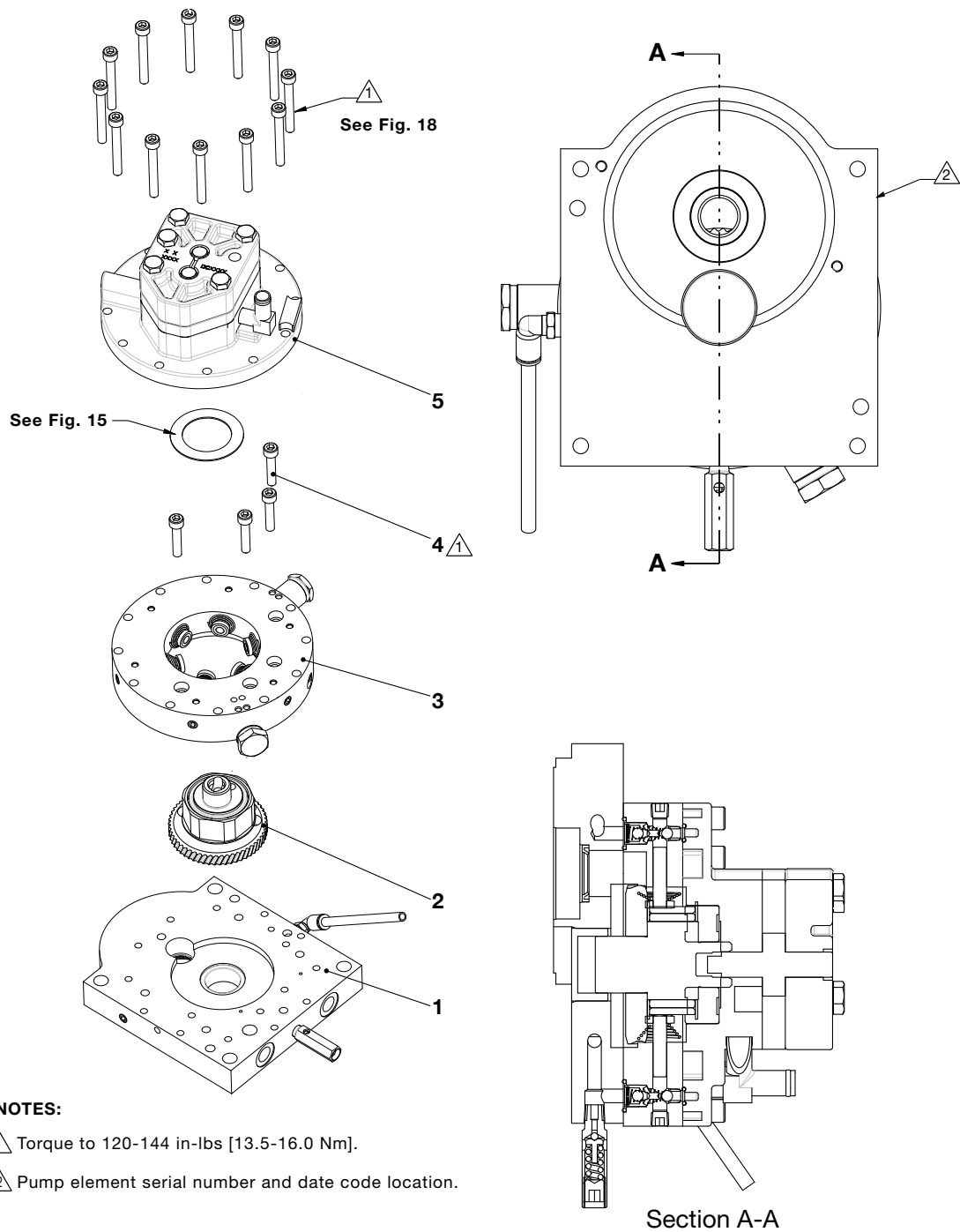
- ⚠1 Torque to 32-39 ft-lbs [43-53 Nm].
- ⚠2 Torque to 20-22 ft-lbs [27-30 Nm] (at both ends).
- ⚠3 Adjust bend on tubing as needed to align item 27.
- ⚠4 Torque to 45-47 ft-lbs [61-64 Nm].



Repair Parts List for Figure 12

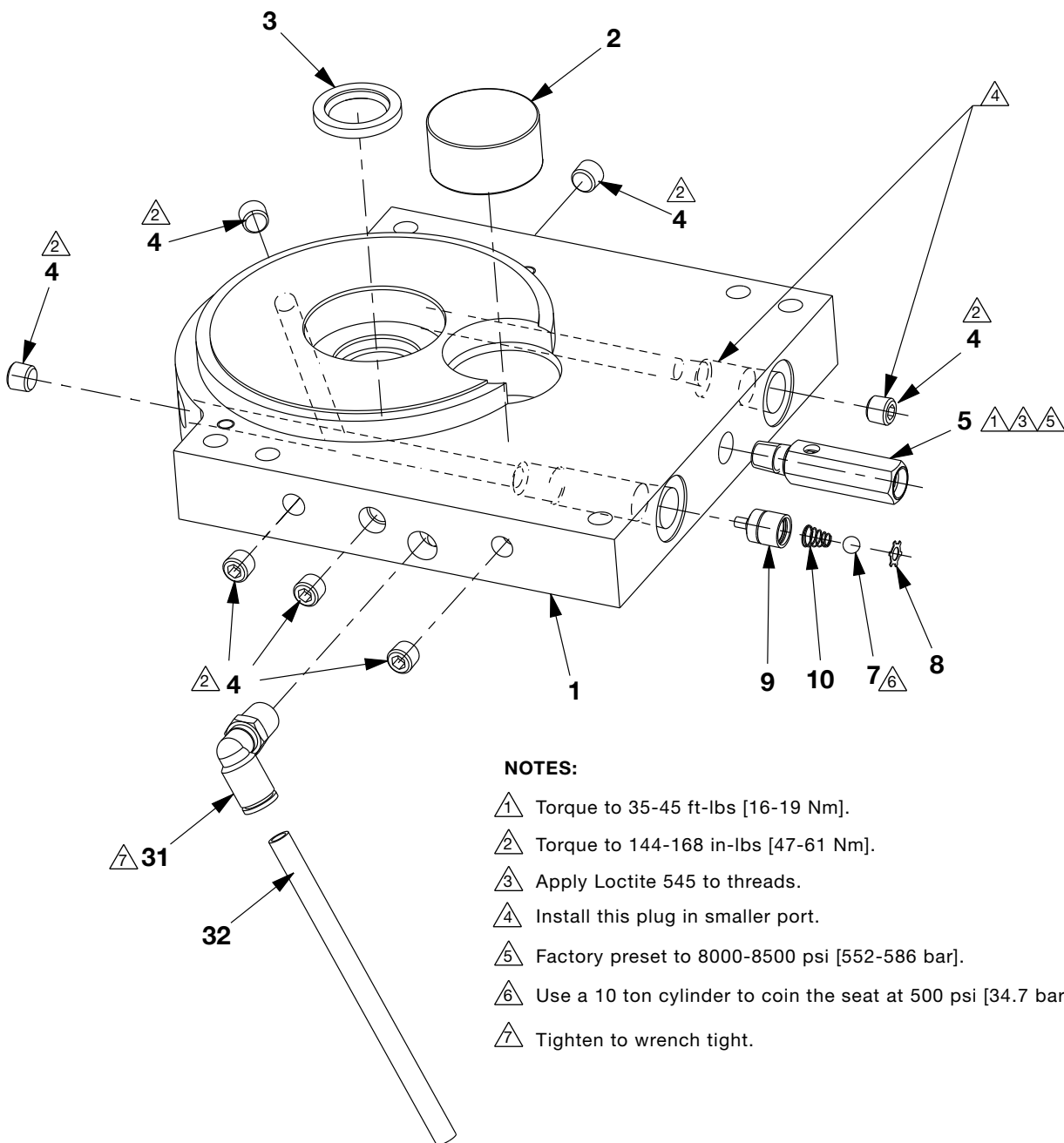
Item	Part Number	Qty.	Description
11	F100094-246	1	Connector, Flare
21	DC9173690	1	Connector, Tube/Fitting
22	B1012566	1	Back-Up 0.375
23	B1012803	1	O-Ring, Round, 0.375
24	DC9271167	1	Gasket, Copper
27	DC9447920	1	Tube Assembly, Steel

Figure 13: Pump Element Assembly



Repair Parts List for Figure 13			
Item	Part Number	Qty.	Description
1	* (See Figure 14)	1	Top Plate Assembly
2	* (See Figure 15)	1	Eccentric Assembly
3	* (See Figures 16-17)	1	Piston Ring Assembly
4	* CCA625028-1A	4	SHCS, Hex, M6
5	* (See Figure 18)	1	Gear Pump Assembly
* Included in Pump Element Replacement Kit, DD8209900SR.			

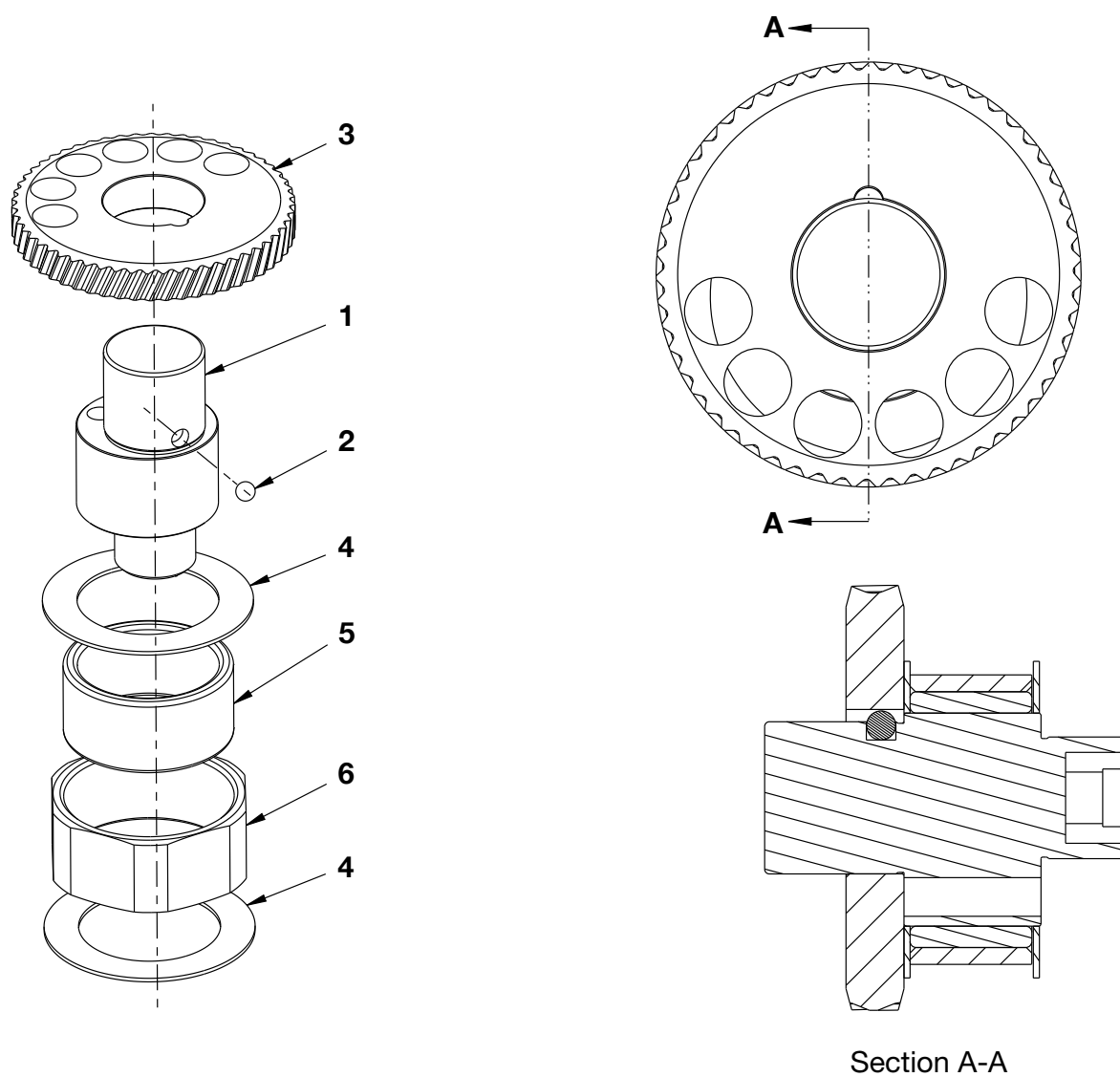
Figure 14: Top Plate Assembly



Repair Parts List for Figure 14

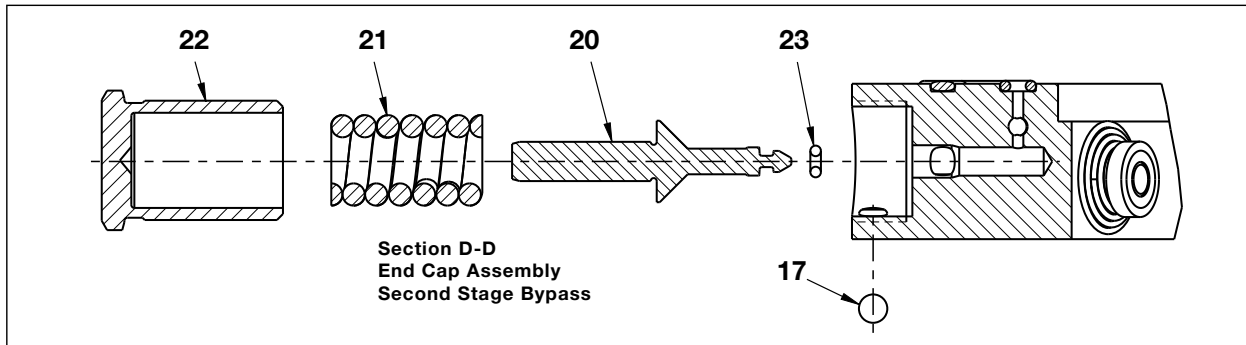
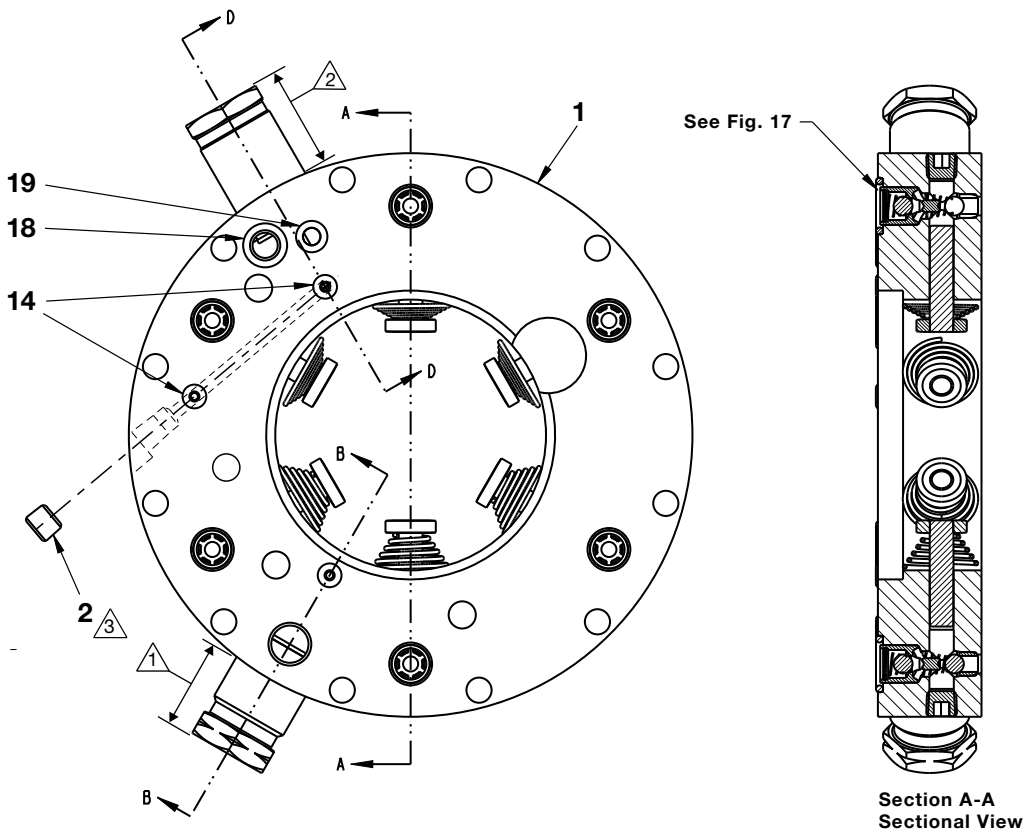
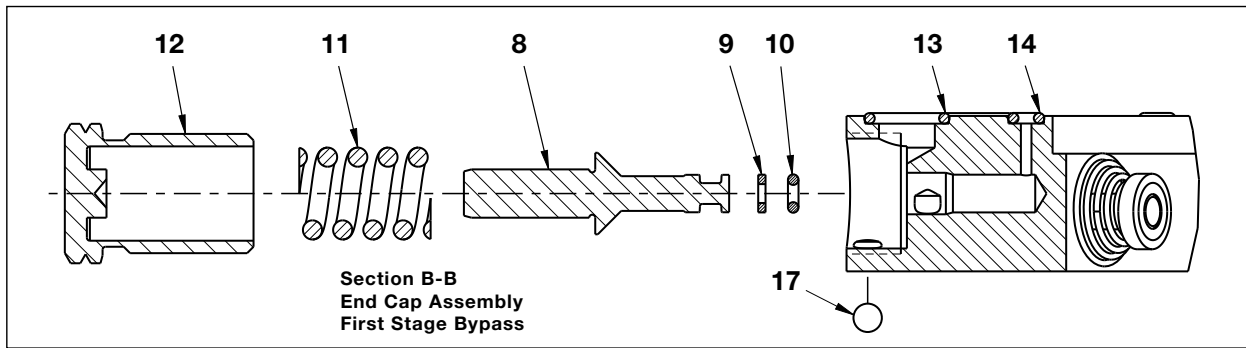
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
2	✕ DC9240155	1	Bearing, Needle	8	✚ ✕ BSS5356D	1	Retaining Ring
3	✕ DC9041776	1	Oil Seal	9	✚ ✕ BSS5357D	1	Seat
4	✕ A1006245	7	Plug, Hex Flush	10	✚ ✕ BSS5809D	1	Spring, Conical
5	✕ DD8211900	1	Safety Relief Valve	31	✚ ✕ F100097-52	1	Fitting, 90 Degree
7	✚ ✕ B1005016	1	Ball, 0.188 Dia. Steel	32	✚ ✕ DD4821268	1	Tubing, 1/4", 4" Long
✕ Included in Top Plate Assembly, DD8210900SR.				✚ Included in ZU5 Check Valve Kit, DD8589900SR.			

Figure 15: Eccentric Assembly



Repair Parts List for Figure 15			
Item	Part Number	Qty.	Description
1	★ DC9239537	1	Eccentric
2	★ B1005016	1	Ball, 0.188 Steel
3	★ DC9241228	1	Gear
4	★ BSS4725D	2	Ring
5	★ DC4107155	1	Needle Bearing
6	★ DC4328350	1	Hex Cam
★ Included in Universal Motor Eccentric Kit, DC9238900SR.			

Figure 16: Piston Ring Assembly



NOTES:

- ① Set end cap height of first stage bypass to 0.95 inch ± 0.01 [24.1 mm ± 0.2].
- ② Set end cap height of second stage bypass to 0.98 inch ± 0.01 [24.9 mm ± 0.2].
- ③ Torque to 144-168 in-lbs [16.3-19 Nm].

Repair Parts List for Figures 16 and 17

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	DD8166101	1	Piston Ring	13	➕● B1013803	7	O-Ring, Large
2	A1006245	7	Plug, Flush Hex 27 Teflon	14	● B1005403	3	O-Ring, Small
3	➕ BSS5358D	6	Piston Seat, Lower	15	DC9244920	6	Piston Assembly
4	➕ B1005016	12	Ball, 0.188 Steel	16	BSS5509D	6	Spring
5	➕ BSS5809D	6	Spring, Conical	17	● DC9293016	4	Ball, Nylon 3/16"
6	➕ BSS5357D	6	Piston Seat, Upper	18	● B1011803	1	O-Ring, Round, 0.313
7	➕ BSS5356D	6	Retaining Ring	19	● B1008803	1	O-Ring, Round, 0.188
8	DC9292051	1	Piston, Bypass	20	DD8164505	1	Bypass Piston, 2nd St.
9	● B1006564	1	Back-up Ring, Split	21	DD5926110	1	Bypass Spring, 2nd St.
10	● B1006803	1	O-Ring, 0.125" OD	22	DC9208020	1	End Cap, Bypass
11	DC394110	1	Spring, Bypass	23	● B1004803	1	O-Ring, Round 0.078
12	DC8373020	1	End Cap, Bypass	24	CCA625028-1A	4	SHCS, M6 x 30

● Included in MPE Seal Kit, DD8588900SR. ➕ Included in Piston Check Kit, DD8589900SR.

NOTE: All items in the above table are included in Piston Ring Service Kit, DD8212900SR.

Figure 17: Piston Ring Check Valve Details

NOTES:

③ Torque to 144-168 in-lbs [16.3-19 Nm].

④ Use a 10 ton cylinder to coin the seat at 500 psi [34.7 bar].

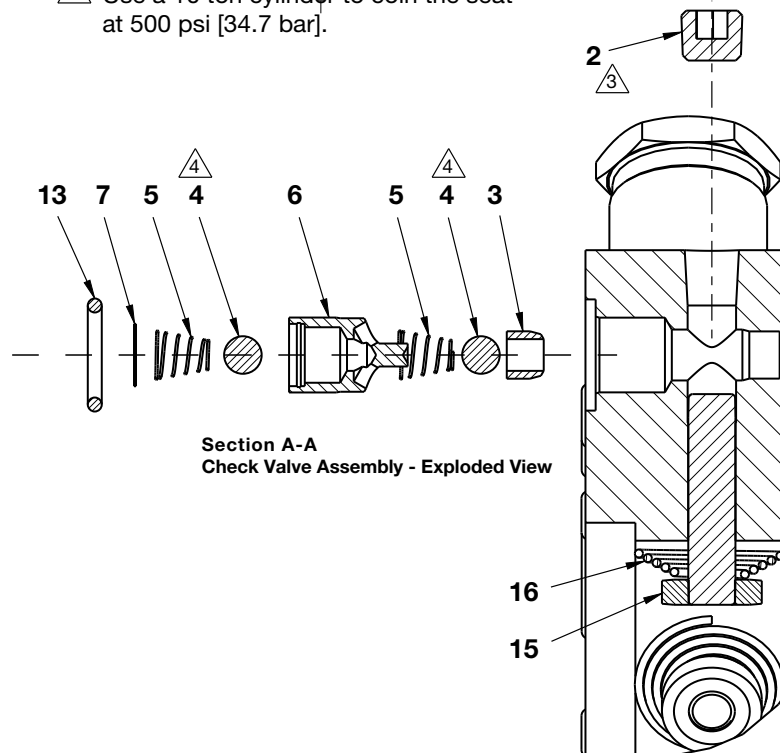
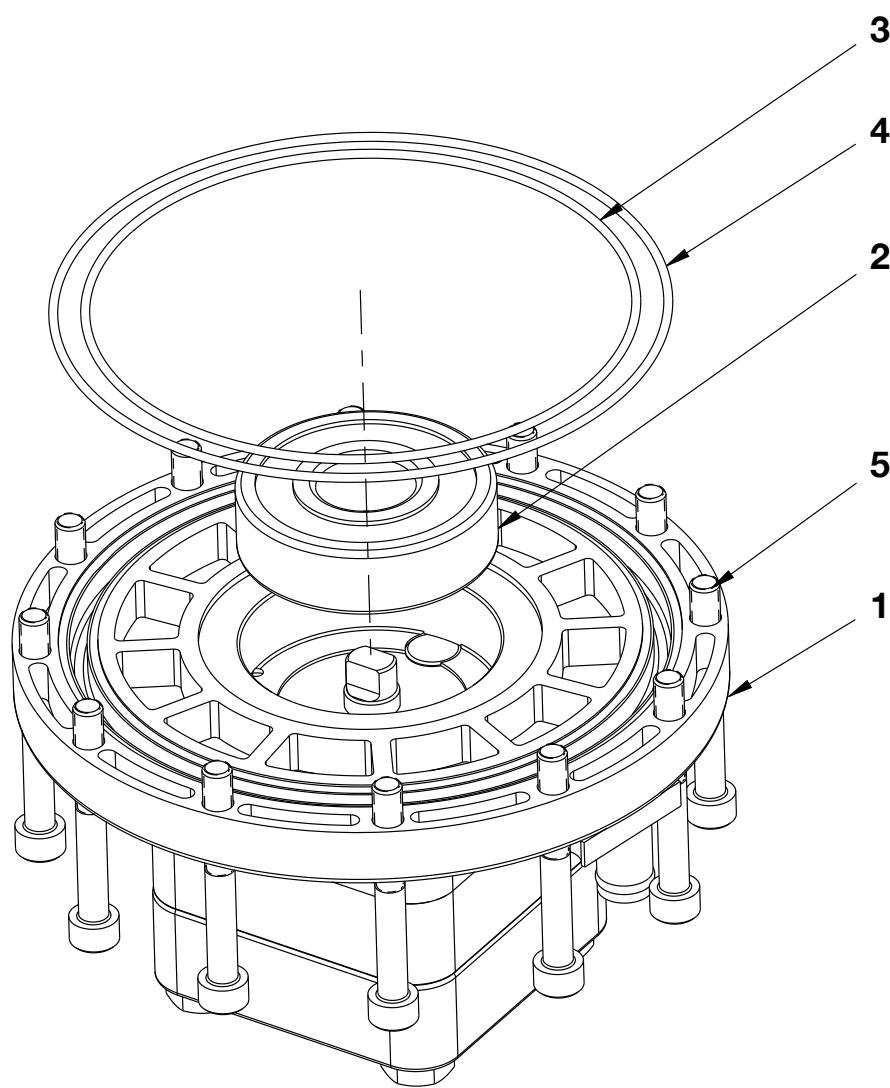
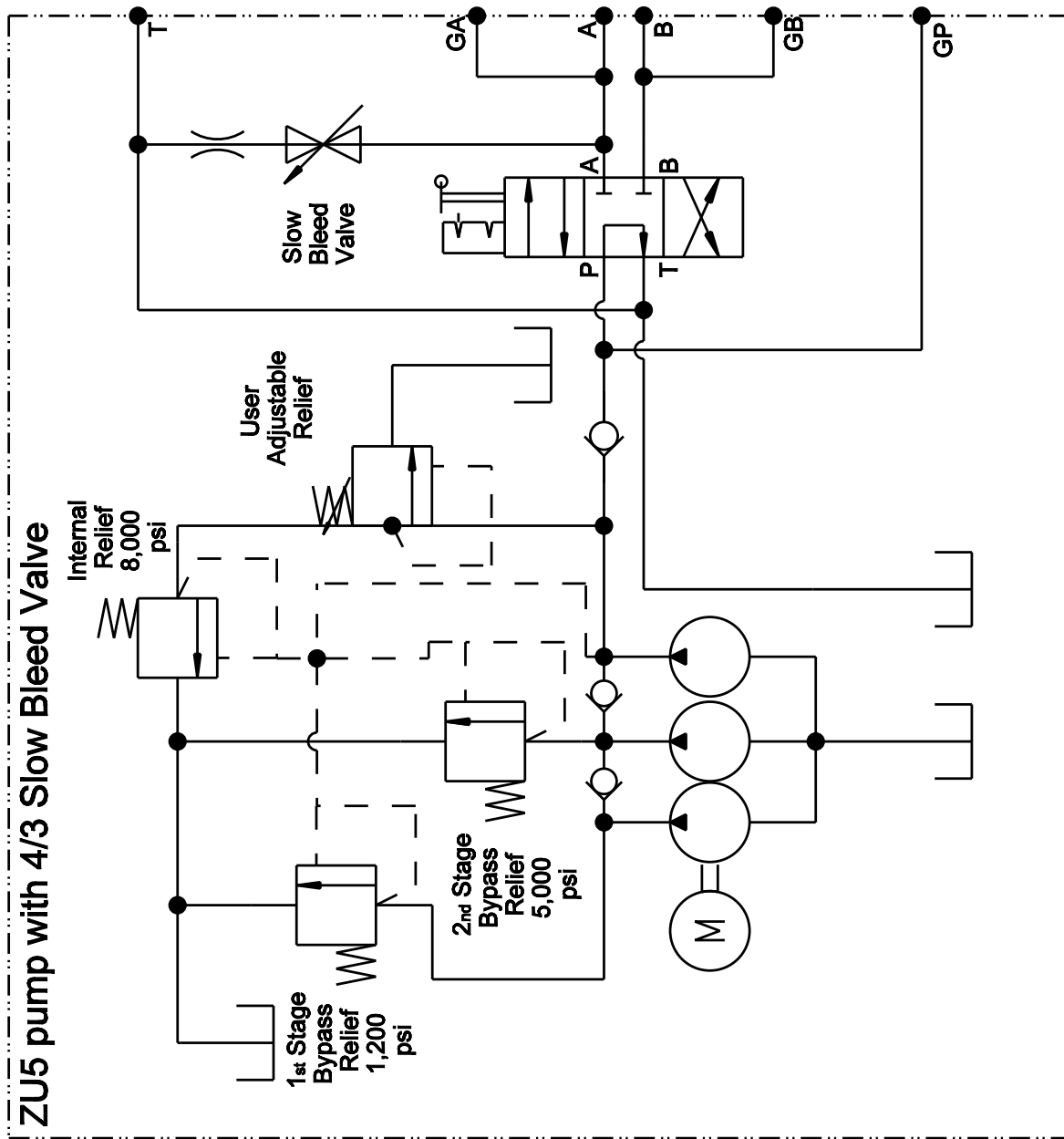


Figure 18: Gear Pump

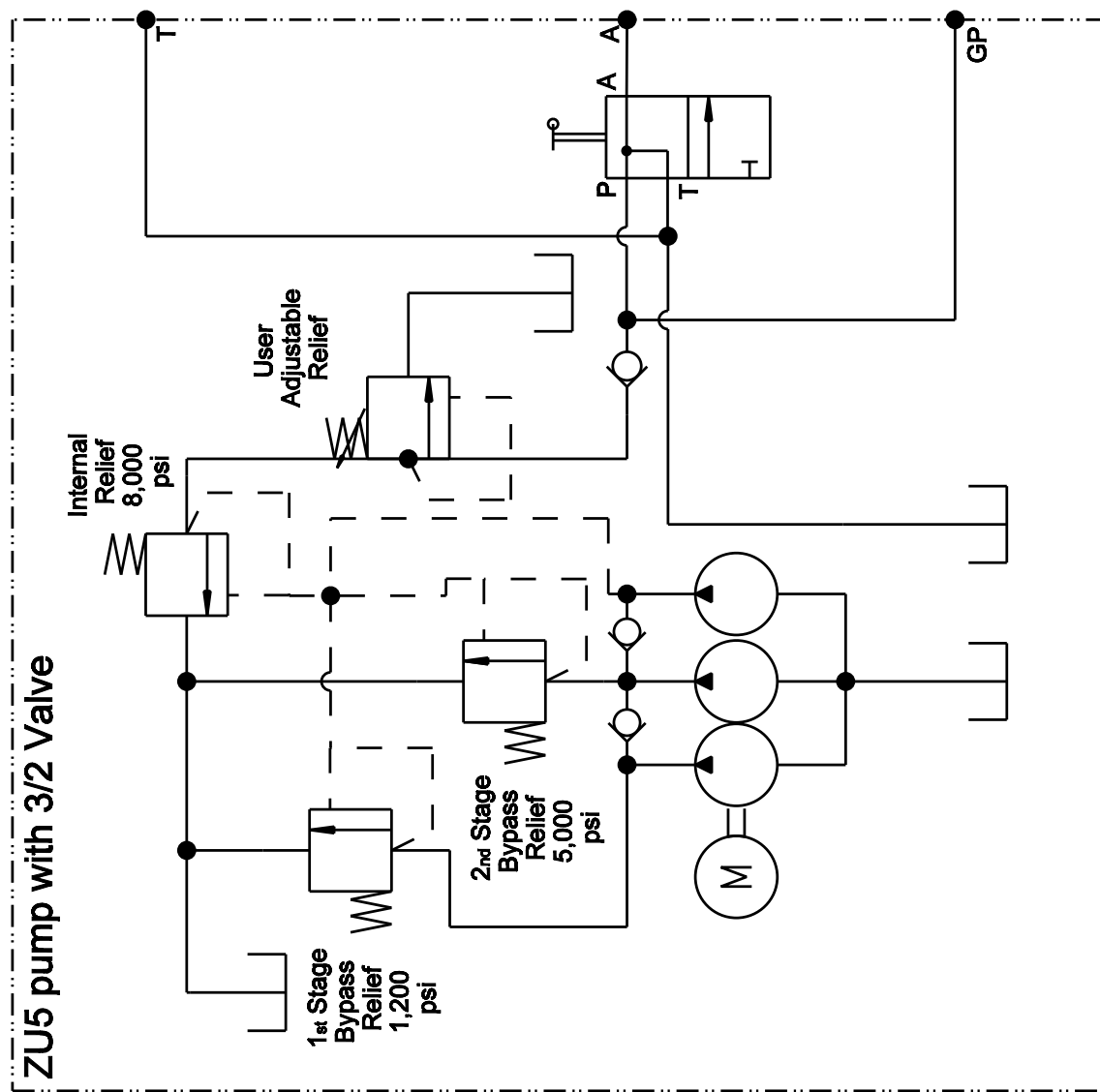


Repair Parts List for Figure 18			
Item	Part Number	Qty.	Description
1	▲ DC9298920	1	Pump, Gear
2	▲ DC9219155	1	Bearing, Ball
3	●▲ B1400503	1	O-Ring, Round (small)
4	●▲ B1402503	1	O-Ring, Round (large)
5	CCA633028-1	12	SHCS, Hex M6 x 50
▲ Included in Gear Pump Service Repair Kit, DD9298920SR.			
● Included in MPE Seal Kit, DD8588900SR.			



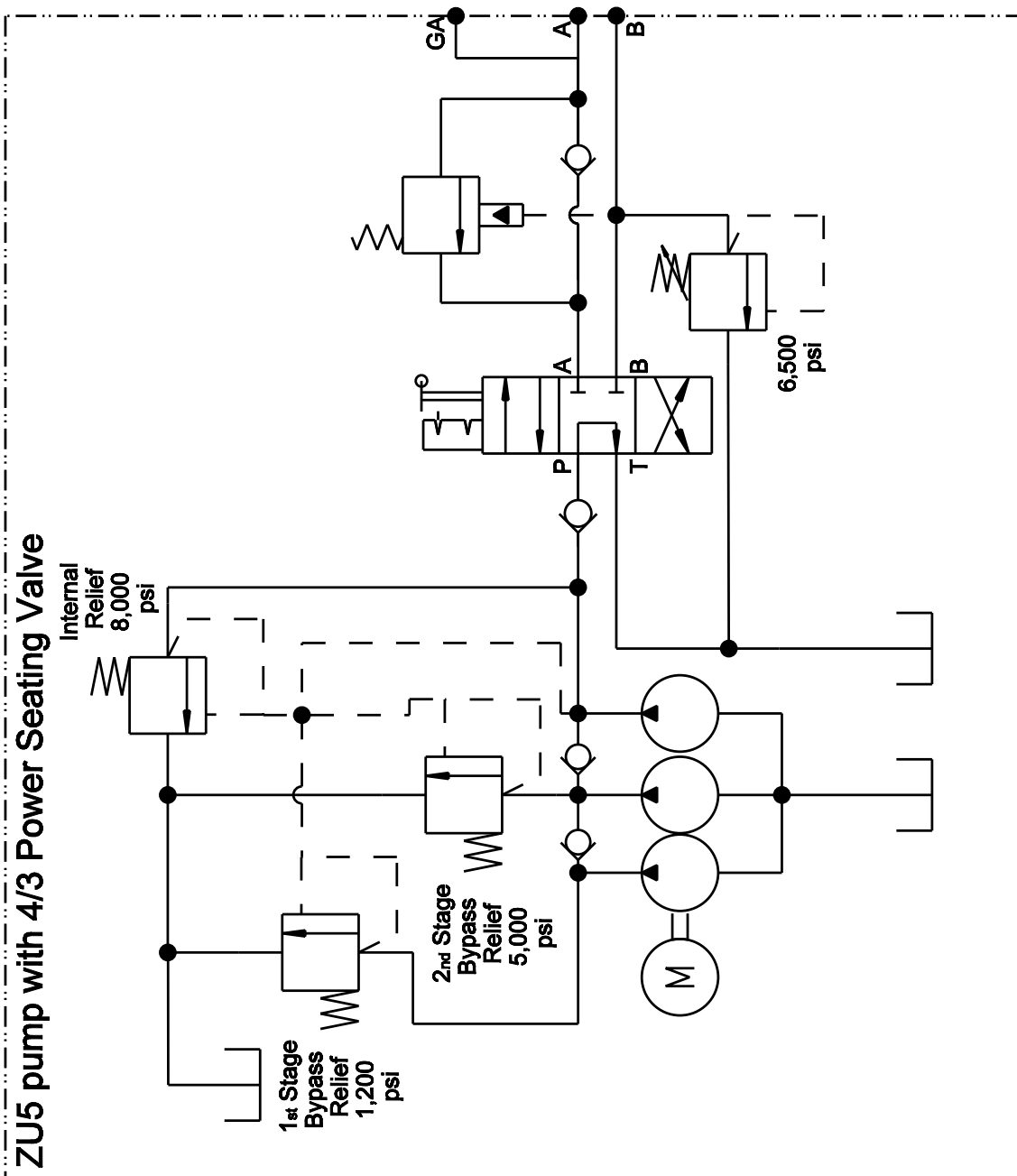
⚠ WARNING Disconnect power cord from electrical outlet before servicing the pump electrical or hydraulic systems.

Figure 19: Hydraulic Schematic - Model ZU5408PB-P



⚠ WARNING Disconnect power cord from electrical outlet before servicing the pump electrical or hydraulic systems.

Figure 20: Hydraulic Schematic - Model ZU5708RB-P



⚠ WARNING Disconnect power cord from electrical outlet before servicing the pump electrical or hydraulic systems.

Figure 21: Hydraulic Schematic - Model ZU5908PB-P



NOTE: Pendant used on models ZU5408PB-P and ZU5408PB-P only.

L4467 (REV. A)

NOTES



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