

# ENERPAC



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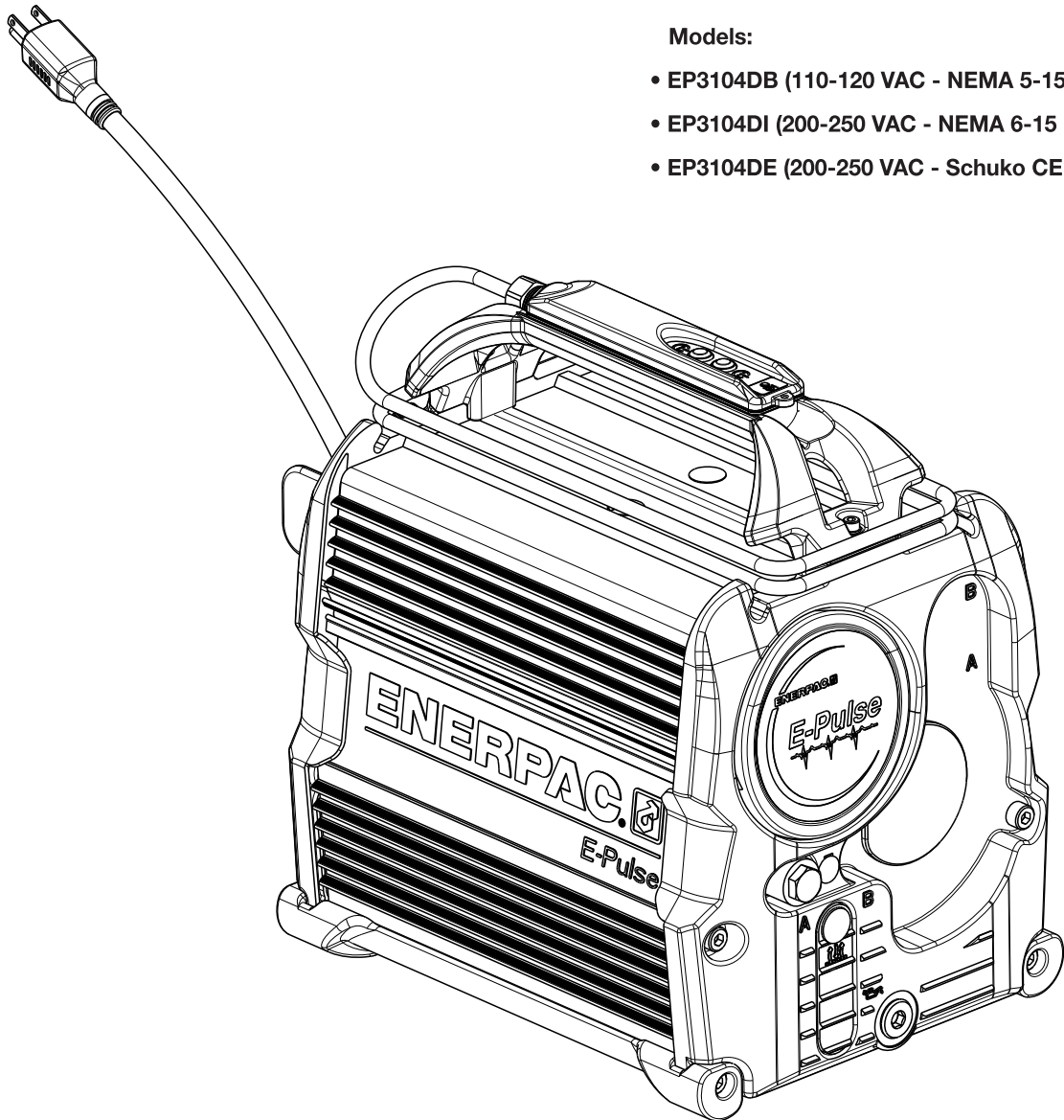
## Repair Parts Sheet

E-Series  
Electric Dump Pump

Document Number	Document Revision	Document Revision Date	Product Date Code Beginning With
L4354	A	04/2019	A

**To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.**

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



Models:

- EP3104DB (110-120 VAC - NEMA 5-15 plug)
- EP3104DI (200-250 VAC - NEMA 6-15 plug)
- EP3104DE (200-250 VAC - Schuko CEE 7/7 plug)

**⚠ 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.

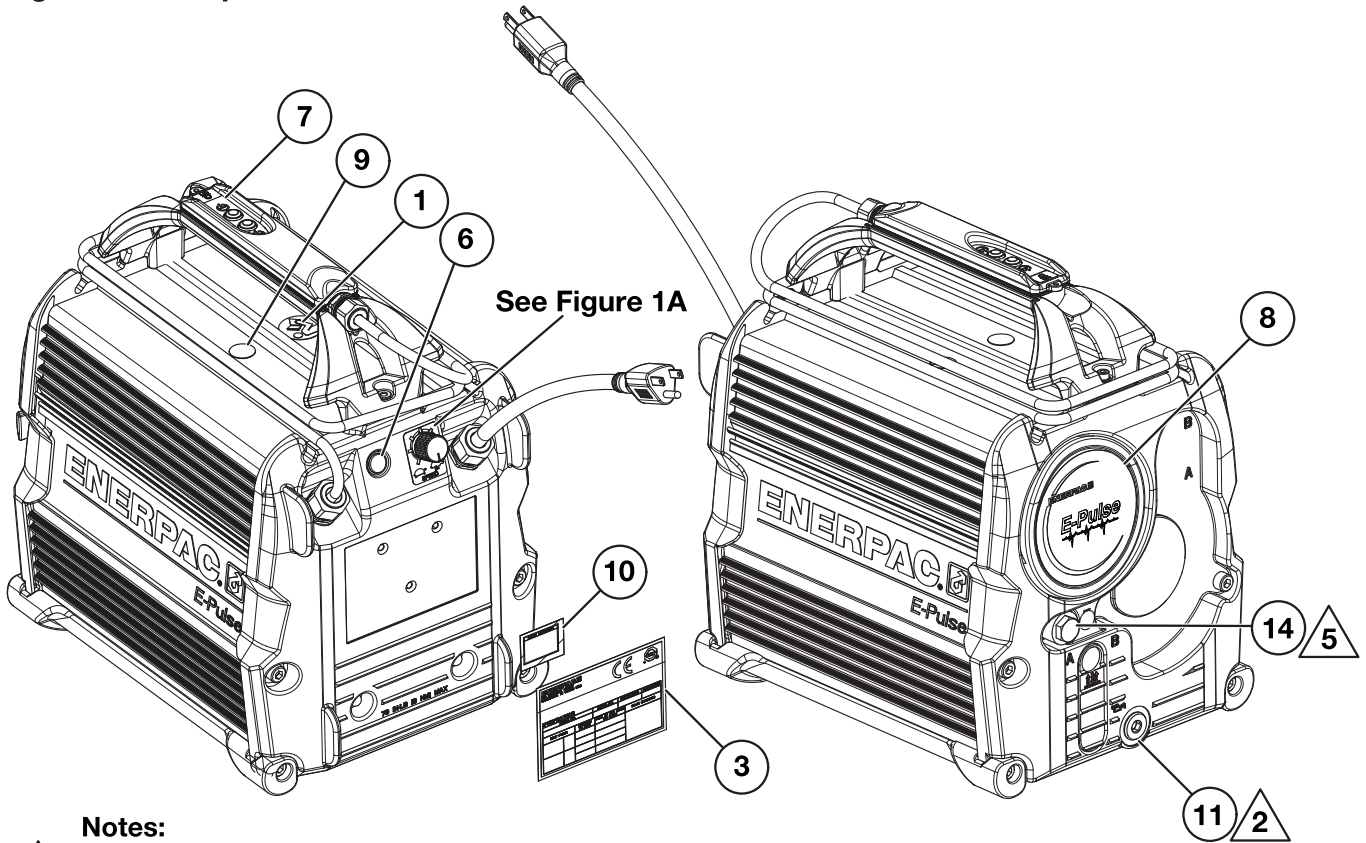
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**Notes:**

- Parts lists indicate the total quantity of each part used in a figure.
- The quantity of a part supplied in a repair kit or service assembly may be less than the total quantity shown in the parts list.
- Information contained in this document is subject to change without notice due to design variables, product improvements and other factors. Copyright © 2019 Enerpac. All rights reserved.

**Figure 1 - Pump Exterior**



**Notes:**

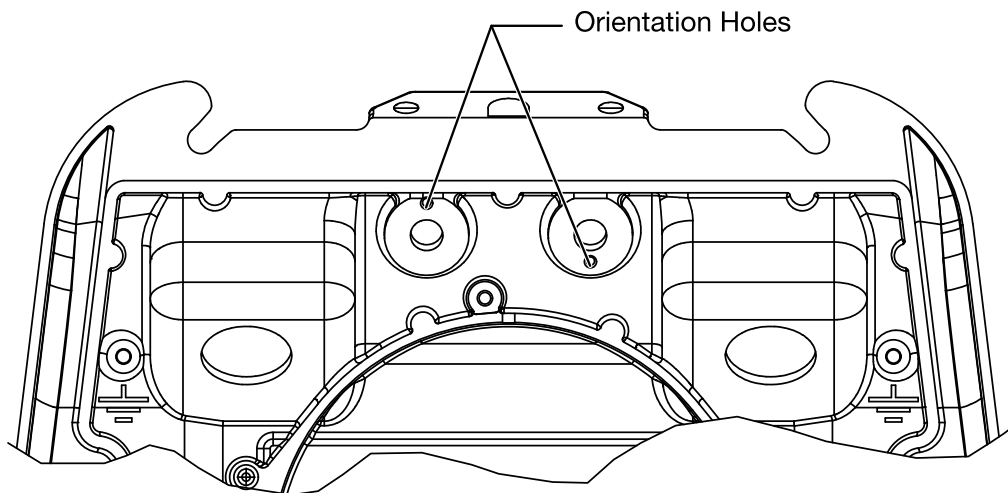
△<sub>2</sub> Torque to 13-16 ft-lbs [18-22 Nm].

△<sub>5</sub> Torque to 10-12 ft-lbs [14-16 Nm].

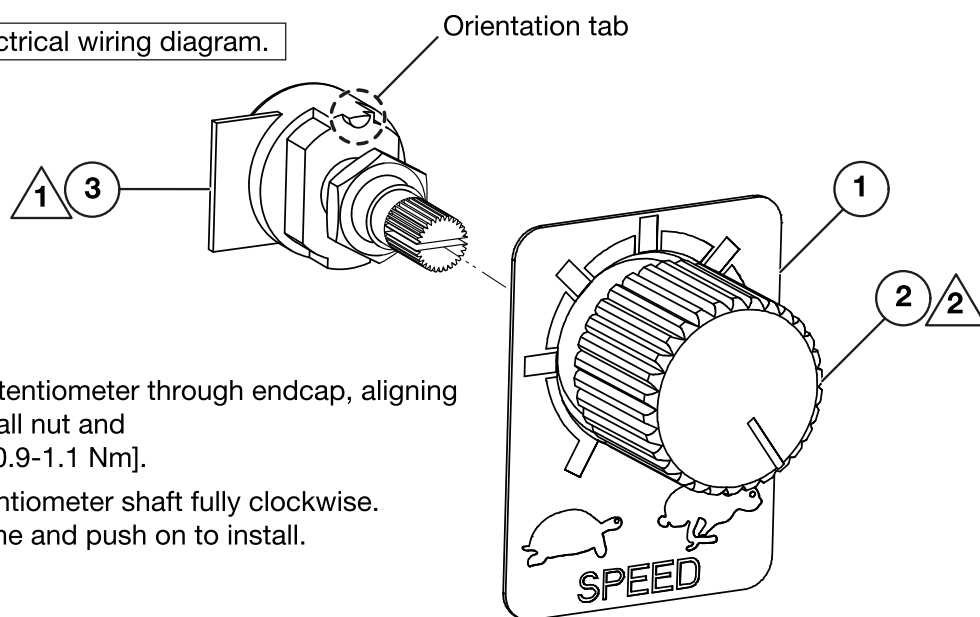
Repair Parts List for Figure 1			
Item	Part Number	Qty.	Description
1	* DC7887026	1	CE Safety Label Read Instructions
3	DD6799026	1	Decal, Product Specification
6	DD7248009	1	Plug, Dome, 7.5 Dia
7	DD7349026	1	Decal, Pendant, Momentary/Continuous
8	DD7355026	1	Decal, Gauge Cap
9	DD7417026	1	Decal, Unplug Cord
10	DD7444026	1	Decal, Valve Schematic, 3/2M
11	DD7557006	1	Plug, SAE #8, Zero-Leak
14	R515245-2	1	Plug

\* - Included in Pump Cover Kit DD6792098SR.

**Figure 1A - Speed Control Potentiometer and Cable Kit: DD7060960K**



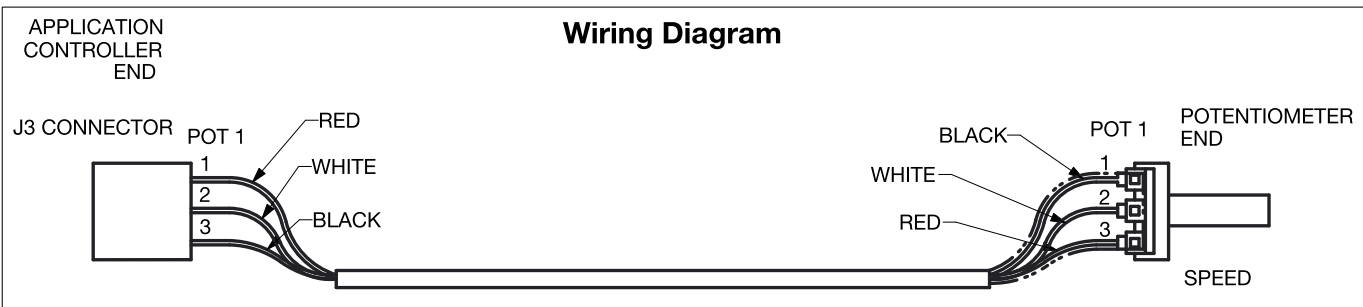
See Figure 13 for main electrical wiring diagram.



**Notes:**

- 1 Remove nut. Insert potentiometer through endcap, aligning orientation tab. Reinstall nut and torque to 8-10 in-lbs [0.9-1.1 Nm].
- 2 Apply decal, turn potentiometer shaft fully clockwise. Align knob with max line and push on to install.

**Wiring Diagram**

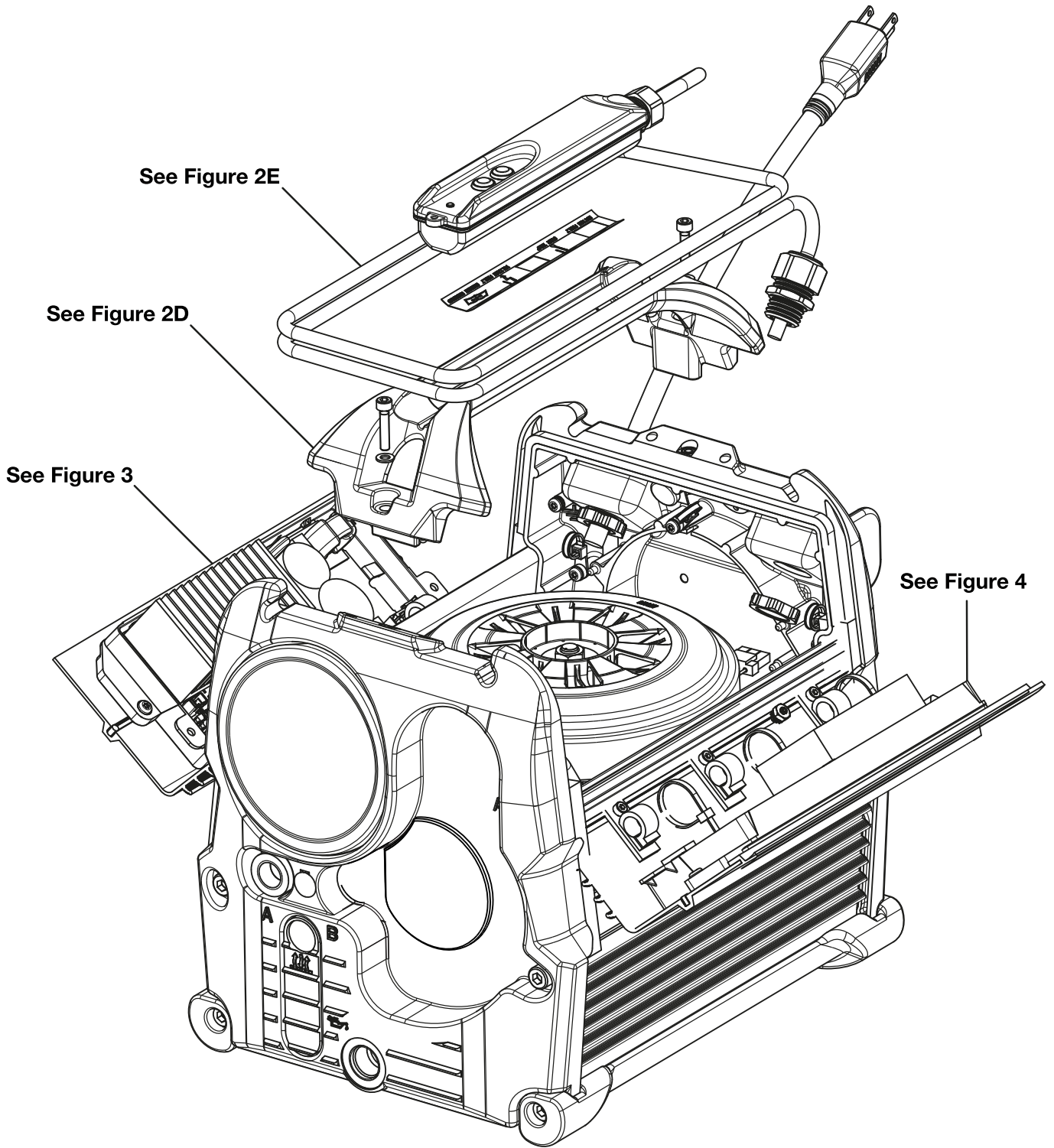


**Repair Parts List for Figure 1A**

Item	Part Number	Qty.	Description
1	DD6798026	1	Decal, Potentiometer, Speed Control
2	DD7029020	1	Knob Potentiometer
3	DD7060960	1	Cable Assembly

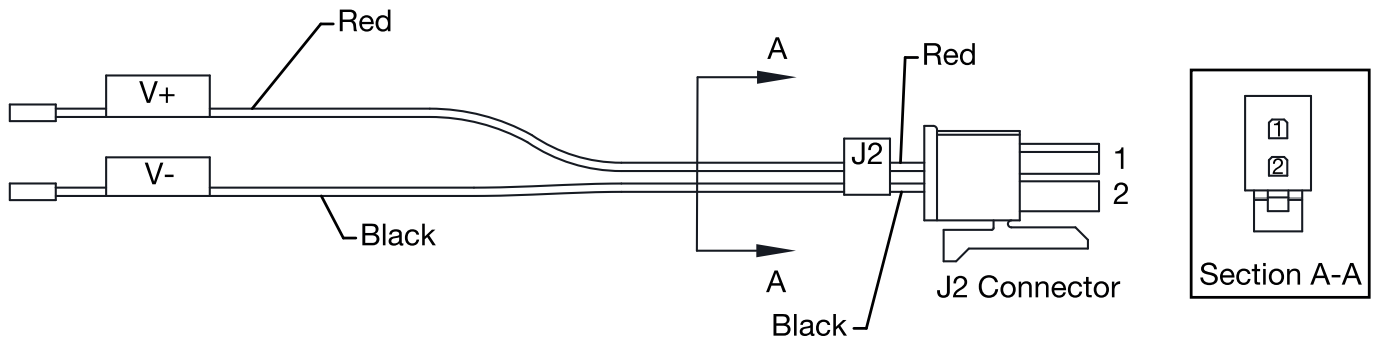
**Note:** Speed Control Potentiometer and Cable Kit DD7060960K includes all items listed in the table above.

**Figure 2 - Miscellaneous Assemblies**

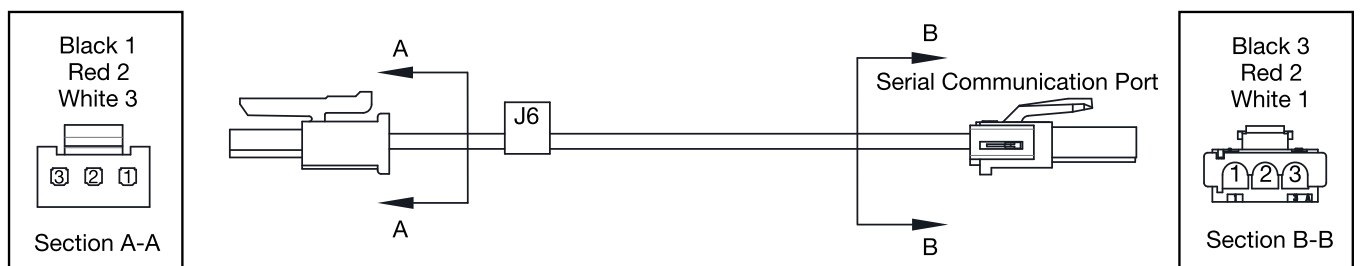


Refer to Figures 2A through 2C  
for electrical cable assemblies.

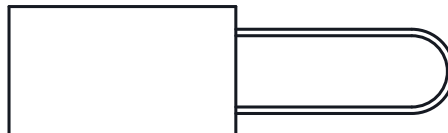
**Figure 2A - DC Power Cable Assembly: DD7061960**



**Figure 2B - Serial Communications Cable Assembly: DD7064960**



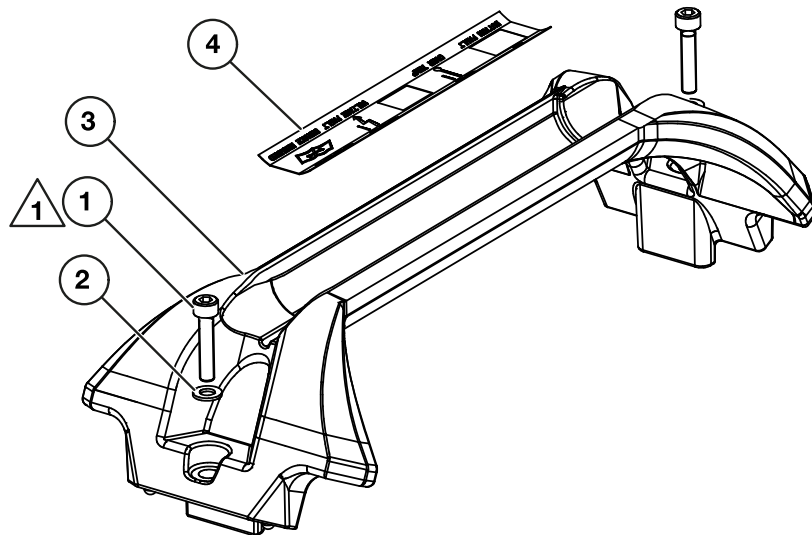
**Figure 2C - Jumper Connection: DD7125960**




**Repair Parts List for Figure 2A, 2B and 2C**

Item	Part Number	Qty.	Description
---	See Figure 2A	1	Cable Assembly, DC Power Supply
---	See Figure 2B	1	Cable Assembly, Serial Communications
---	See Figure 2C	1	Cable, Jumper, J8 and J9 Connection
---	DC9876647	3	Black Cable Tie 6" ( <i>not shown</i> )

**Figure 2D - Pump Handle Kit: DD5789800SR**



**Note:**

 Torque to 42-47 in-lbs [4.7-5.3 Nm].

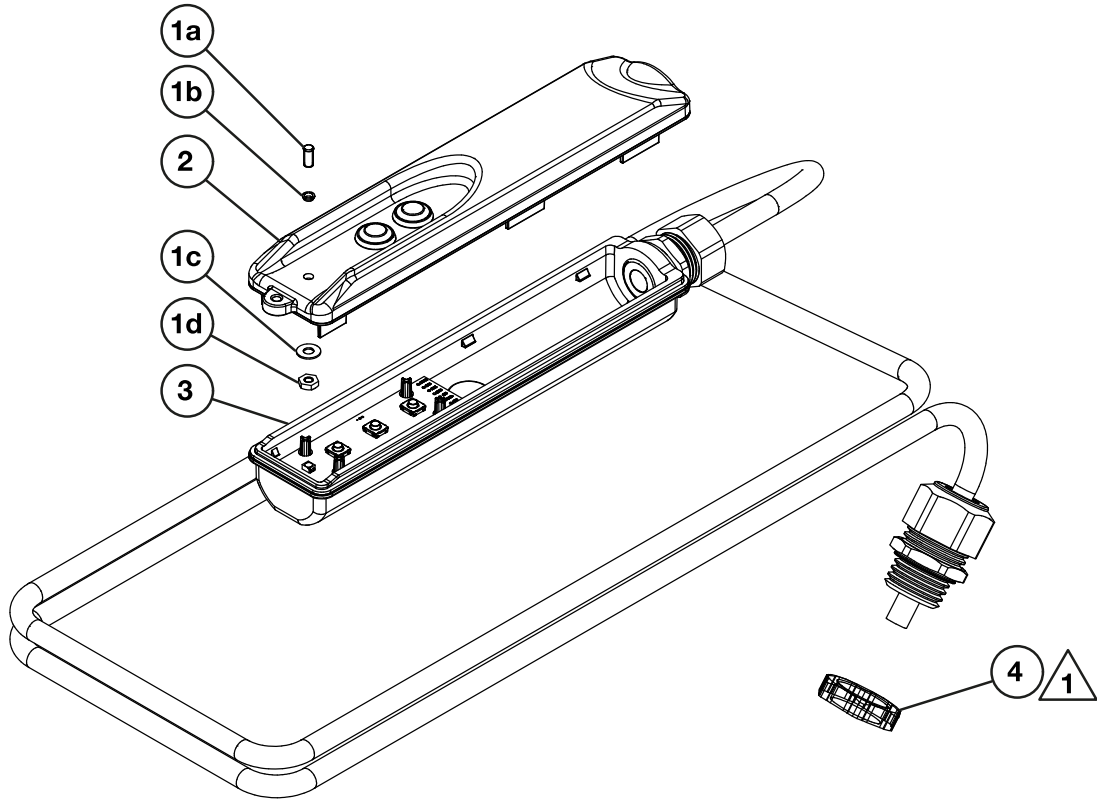
**Repair Parts List for Figure 2D**

Item	Part Number	Qty.	Description
1	CAE1050108-1A	2	Flat Washer DIN125A M5
2	CCE523028-1A	2	Screw-SHCS, Hex, M5 x 0.8 x 25, 12.9, Zinc
3	DD6789800	1	Casting Handle Pump
4	DD7167026	1	Decal, Troubleshooting

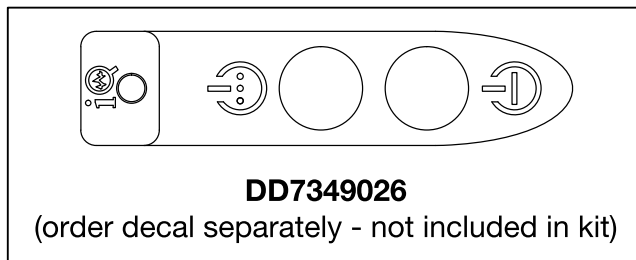
**Note:** Pump Handle Kit DD5789800SR includes all items listed in the table above.




Figure 2E - 2 Button, Pendant Assembly: DD5278900SR1



See Figure 13 for main electrical wiring diagram.



**Note:**

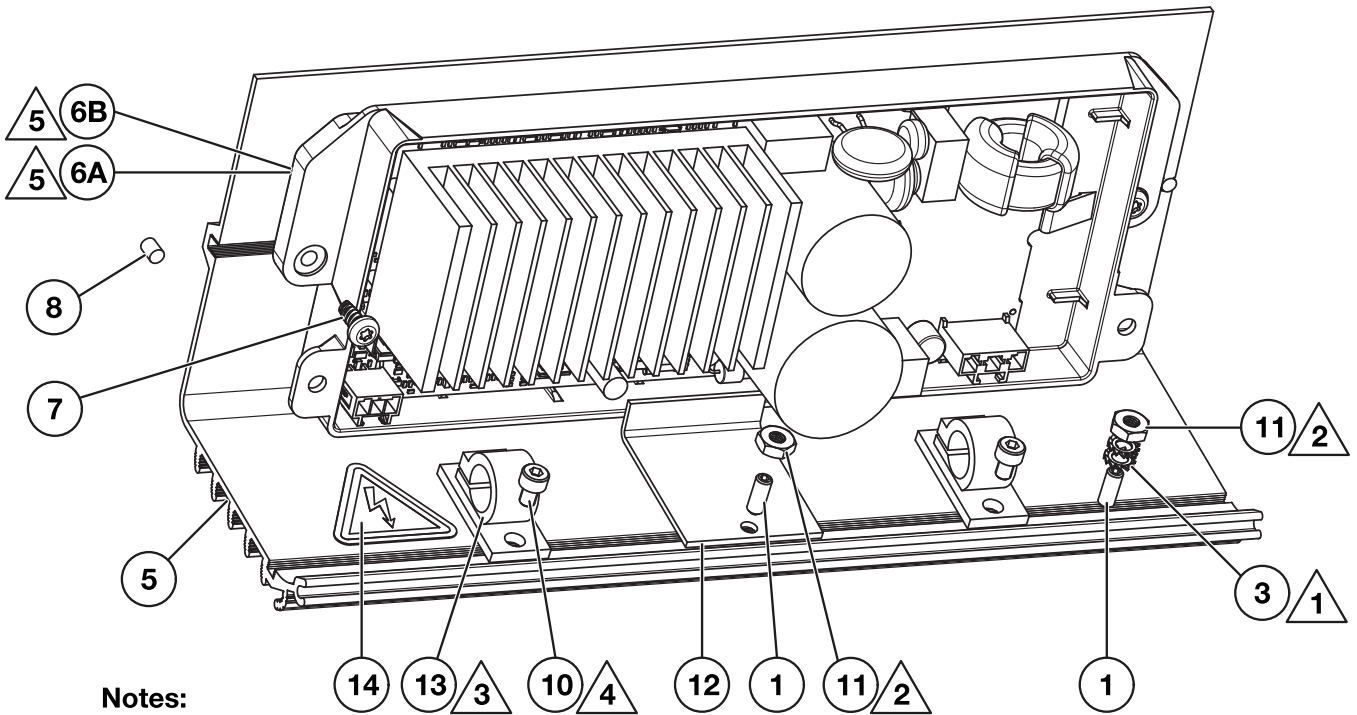
 Torque to finger tight plus an additional 1/4 turn.

Repair Parts List for Figure 2E			
Item	Part Number	Qty.	Description
1a	DD7094380	1	Light Pipe
1b			Seal
1c			Washer
1d			Nut
2	DD7280424	1	Cover
3	DD7294960	1	Bottom
4	DC9538021	1	Locking Nut 20mm

**Note:** 2 Button, Pendant Assembly DD5278900SR1 includes all items listed in the table above.



**Figure 3 - Motor Controller Cover Assembly**



**Notes:**

- ▲ 1 Install ground cable with ring terminal between star washers.
- ▲ 2 Torque to 8-10 in-lbs [0.9-1.1 Nm].
- ▲ 3 Remove adhesive backing before installation.
- ▲ 4 Torque to 6-7 in-lbs [0.7-0.8 Nm].
- ▲ 5 See parts list (items 6A & 6B) for voltage options.

- Attach all wires including ground wire!
- Remove lip seal from old cover and attach to new cover if applicable (only one side has a lip seal).
- See wiring diagram Figure 13 for wire connections.
- See pump cover removal/installation instructions Figure 14.

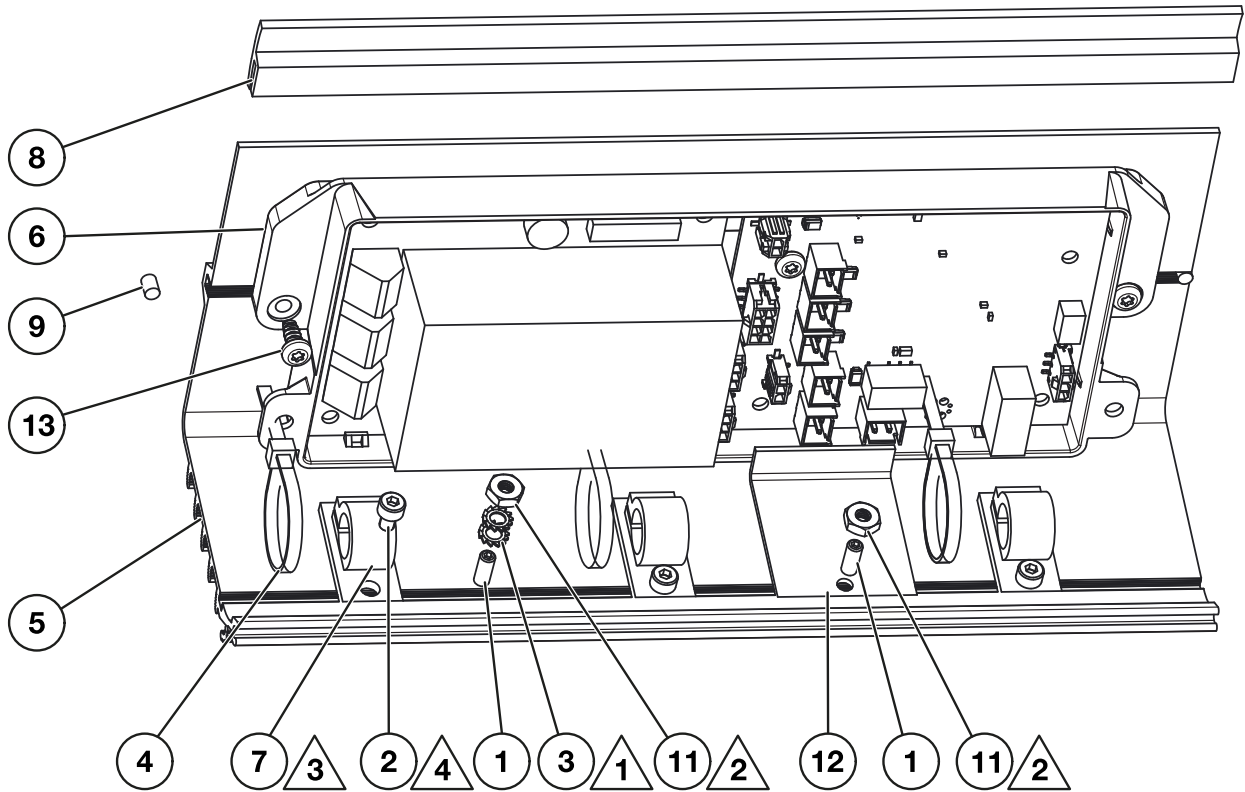
**Repair Parts List for Figure 3**

Item	Part Number	Qty.	Description
1	BF1607027AX	2	Set Screw, #8-36 x 0.438, Cup Point, Zinc
3	CCE1040108-7A	2	Lock Washer, External Tooth For M4
5	* DD6792098-P03	1	Pump Cover
6A	DD6987827K	1	Motor Controller Kit, 120V (Model EP3104DB)
6B	DD7318827K	1	Motor Controller Kit, 230V, 240V (Models EP3104DI and EP3104DE)
7	▲ DD7513001	2	Screw, Thread Forming, M4.55 x 10 Long
8	* DD7462037	2	Gasket, 4.0mm Dia x 5.50mm L Cord Stock
---	* See Figure 1	1	CE Safety Label Read Instructions
10	* CBE411028-1A	3	Screw-SHCS, Hex, M4 x 0.7 x 6, 8.8, Zinc
11	DD7516122	2	Nut-Hex Full, #8-36, GRD 2, Zinc
12	DD7609111	1	Bracket, Motor Controller Restraint
13	* DD7326217	3	Cable Tie, Screw Mount
14	* DC9922026	1	Decal High Voltage

▲ - Each motor controller kit (items 6A and 6B) includes two thread forming screws (item 7).

\* - Included in Pump Cover Kit DD6792098SR.

**Figure 4 - Power/App Assembly**



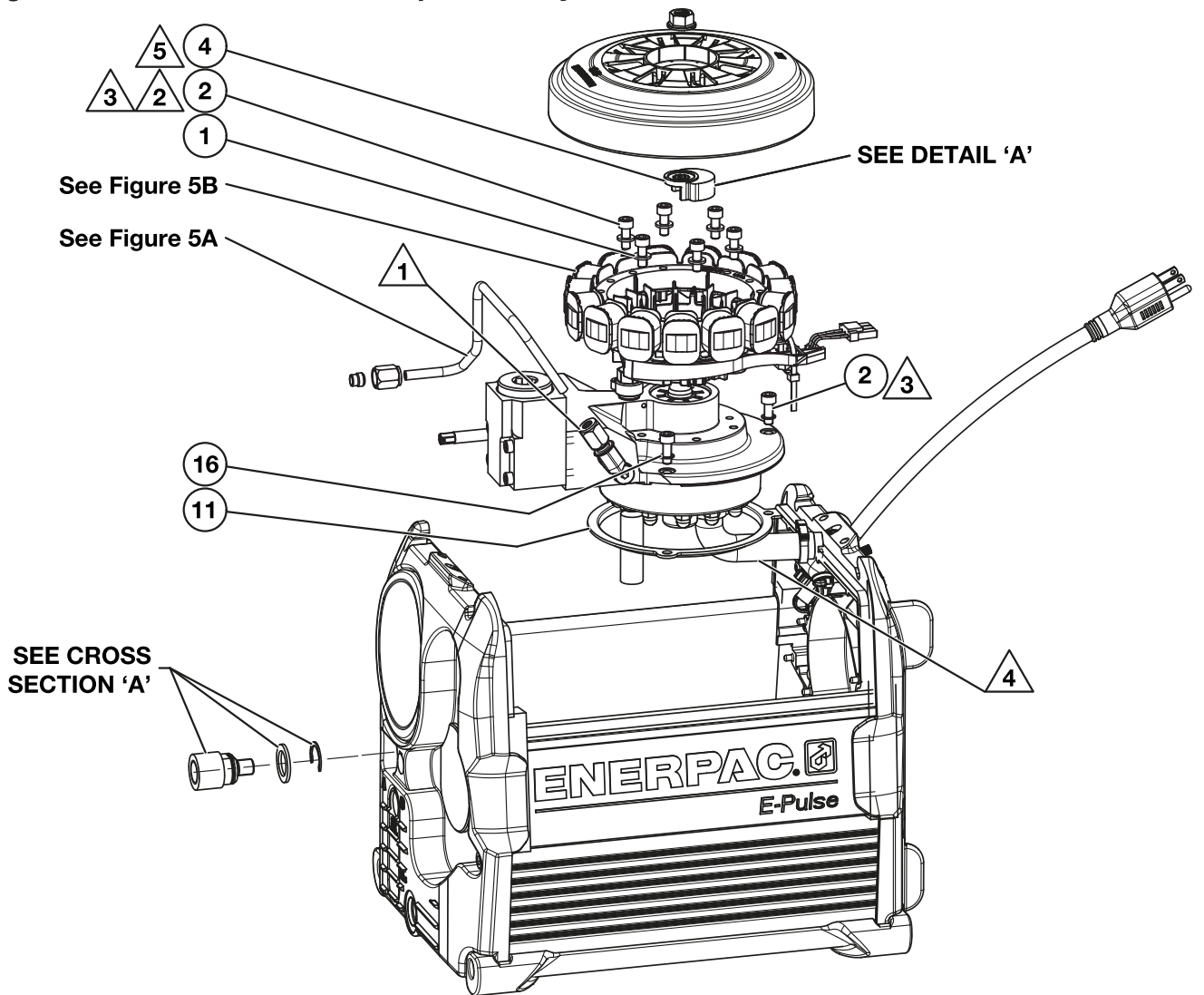
**Notes:**

- △1 Install ground cable with ring terminal between star washers.
- △2 Torque to 8-10 in-lbs [0.9-1.1 Nm].
- △3 Remove adhesive backing before installation.
- △4 Torque to 6-7 in-lbs [0.7-0.8 Nm].

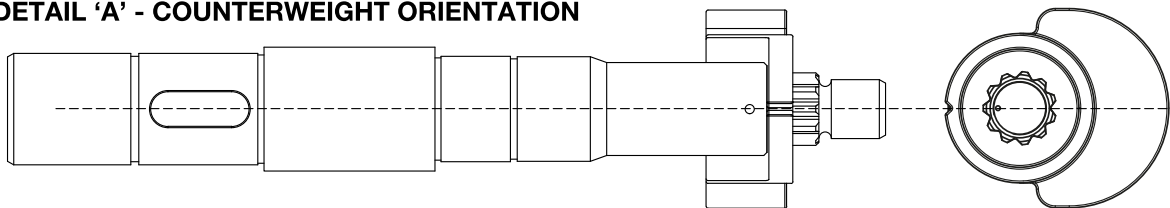
Repair Parts List for Figure 4			
Item	Part Number	Qty.	Description
1	BF1607027AX	1	Set Screw, #8-36 x 0.438, Cup Point, Zinc
2	* CBE411028-1A	3	Screw-SHCS, Hex, M4 x 0.7 x 6, 8.8, Zinc
3	CCE1040108-7A	2	Lock Washer, External Tooth For M4
4	DC9876647	3	Black Cable Tie 6"
5	* DD6792098-P03	1	Cover, Machined, 1 Gal, Yellow
6	DD7298900	1	Power App Board Assembly
7	* DD7326217	3	Cable Tie, Screw Mount
8	DD7448037	1	Lip Seal, E-Pulse
9	* DD7462037	2	Gasket, 4.0mm Dia x 5.50mm L Cord Stock
11	DD7516122	1	Nut-Hex Full, #8-36, GRD 2, Zinc
12	DD7609111	1	Bracket, Motor Controller Restraint
13	DD7513001	2	Screw, Thread Forming, M4.55 x 10 Long
---	* See Figure 1	1	Decal, Unplug Cord ( <i>not shown</i> )

\* - Included in Pump Cover Kit DD6792098SR.

**Figure 5 - Motor Stator and Pump Assembly**



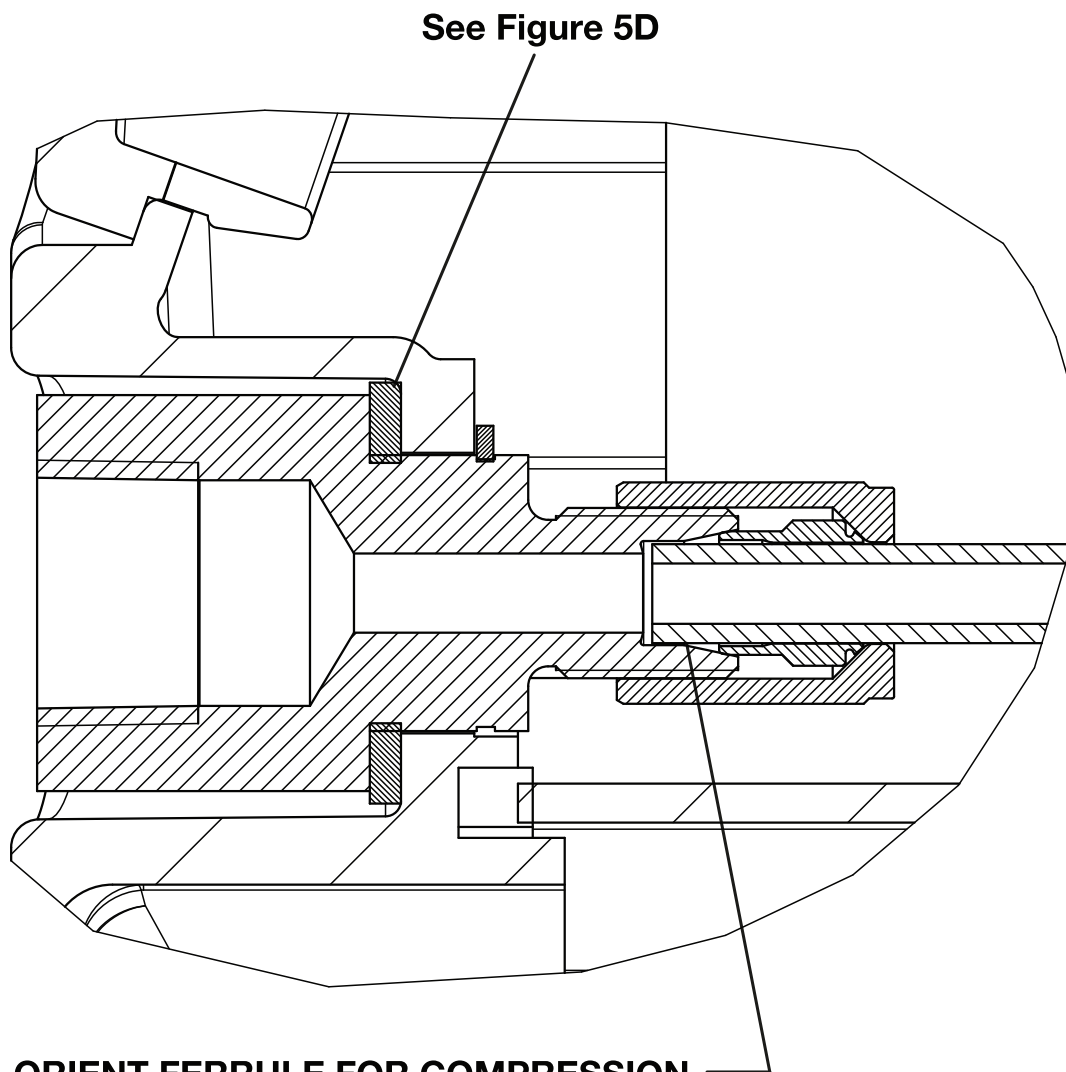
**DETAIL 'A' - COUNTERWEIGHT ORIENTATION**



**Notes:**

- 1 Insert tubes and torque to 150-160 in-lbs [203-217 Nm].  
(At manifold end prior to installing pump into reservoir)
- 2 Apply Loctite 243.
- 3 Torque to 42-47 in-lbs [4.7-5.3 Nm].
- 4 Bend tube vertical while installing pump into reservoir.
- 5 Align mark on counterweight with mark on shaft. (See detail A)
- 6 Torque to 100-120 in-lbs [11-14 Nm].

**CROSS SECTION 'A' (Figure 5)**



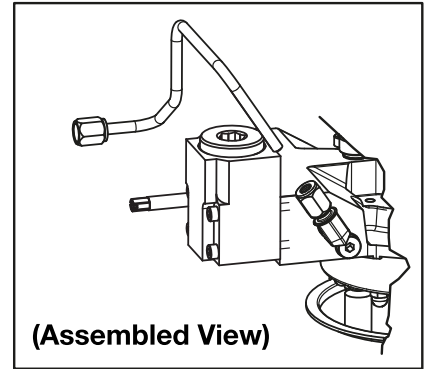
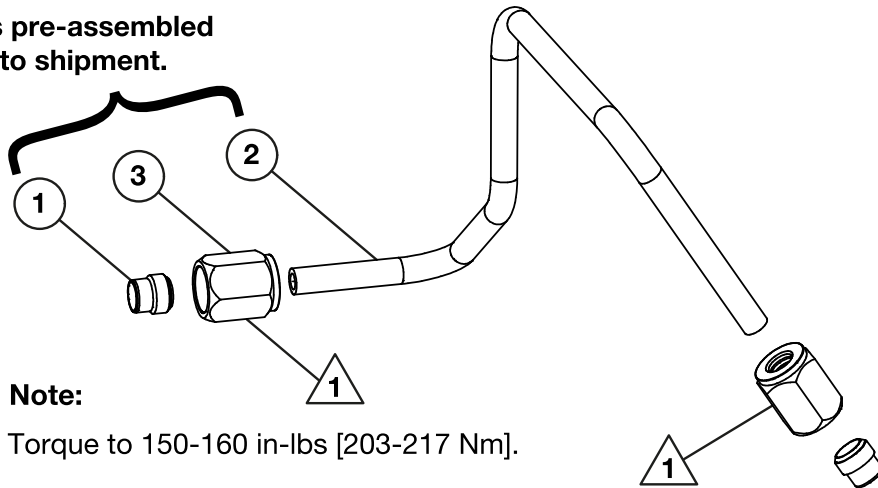
**ORIENT FERRULE FOR COMPRESSION  
FITTING WITH SMALL OD TOWARD  
TUBE END**

**Repair Parts List for Figure 5**

Item	Part Number	Qty.	Description
1	CAE1060108-1A	6	Washer-Flat, M6, 6.4 ID x 12 OD x 1.6, Din 125A, Zinc
2	CBE619028-1A	9	Screw-SHCS, Hex, M6 x 1 x 16, 8.8, Zinc
4	DD6763101	1	Plate, Counterweight
11	DD7319037	1	Gasket, Manifold
16	S3037	3	Gasket

**Figure 5A - Flareless Tube Kit - A Port: DD7038268SR**

Items pre-assembled prior to shipment.



**(Assembled View)**

**Note:**

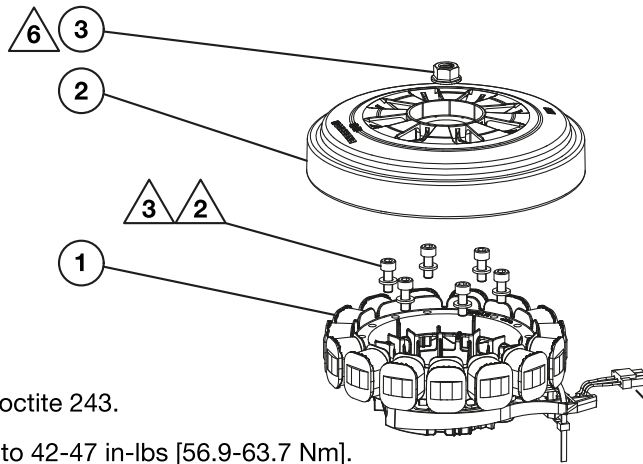
1 Torque to 150-160 in-lbs [203-217 Nm].

**Repair Parts List for Figure 5A**

Item	Part Number	Qty.	Description
1	CU421096	1	Ferrule, Ferulok, 0.25 Tube
2	DD7038268	1	Tube, Flareless, A Port
3	F100093-21	1	Nut, Ferulok, 7/16-20 THD, 0.25

**Note:** Flareless Tube Kit - A Port DD7038268SR includes all items listed in the table above.

**Figure 5B - Motor Replacement Kit: DD6770259K**



**Notes:**

- 2 Apply Loctite 243.
- 3 Torque to 42-47 in-lbs [56.9-63.7 Nm].
- 6 Torque to 100-120 in-lbs [11-14 Nm].

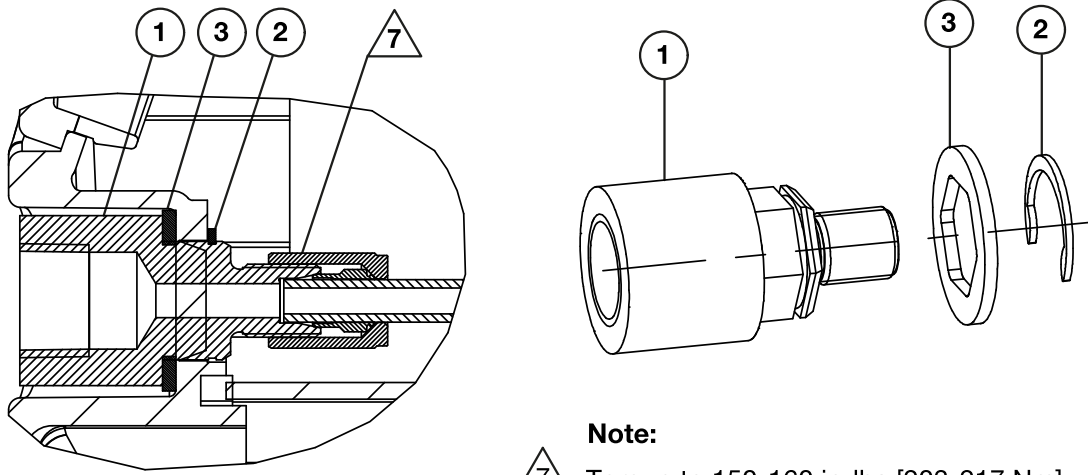
See Figure 13 for electrical wiring connections.

**Repair Parts List for Figure 5B**

Item	Part Number	Qty.	Description
1	DD6770259	1	Motor Stator Assembly
2	DD6771257	1	Motor Rotor
3	DD7003021	1	Nut, Flange M10 x 1.25, with Counterbore

**Note:** Motor Replacement Kit DD6770259K includes all items listed in the table above.

**Figure 5D - Bulkhead Fitting Kit: DD7105093K**



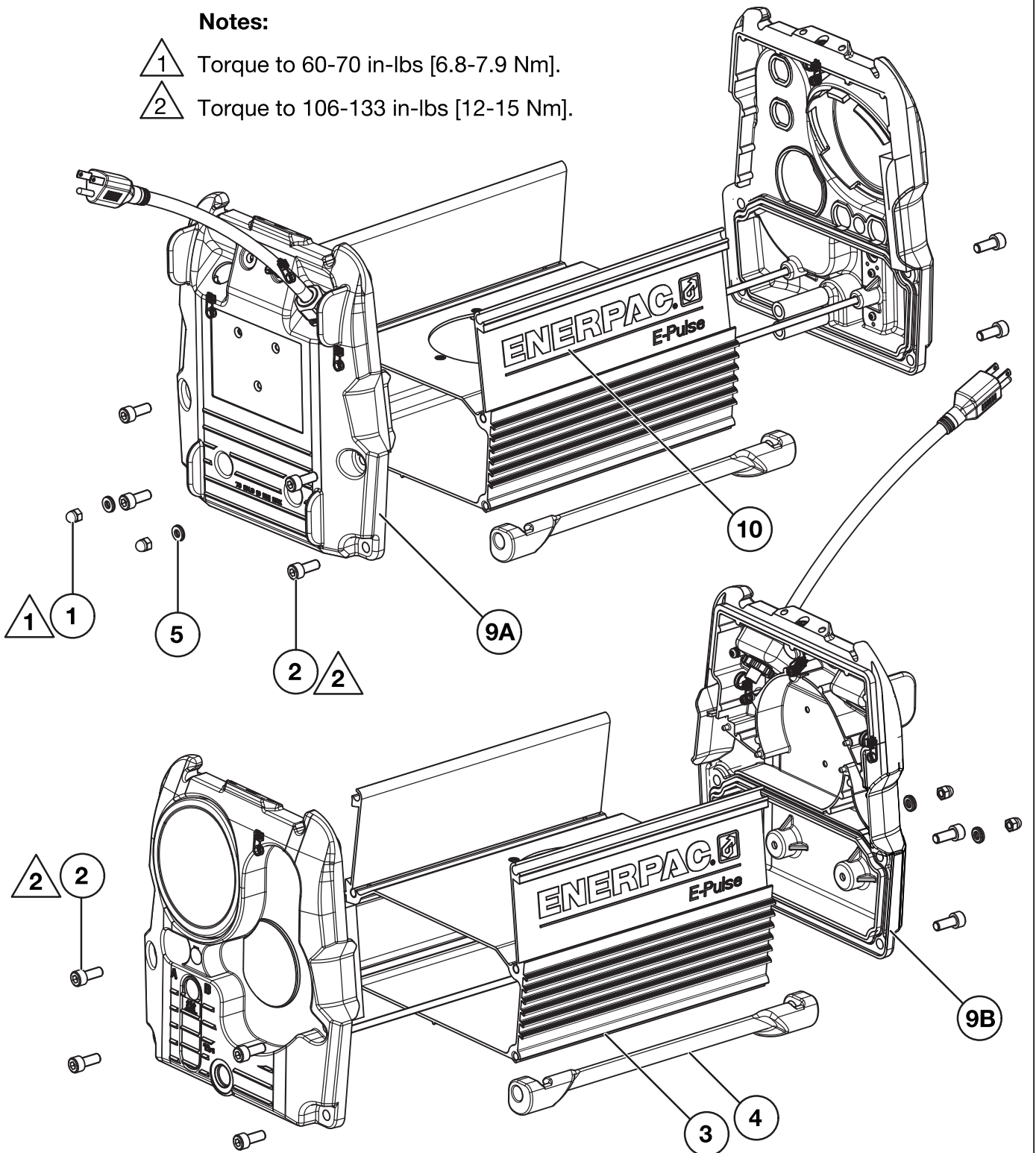
Repair Parts List for Figure 5D			
Item	Part Number	Qty.	Description
1	DD7105093	1	Bulkhead Fitting, 3/8" NPT x 0.25 Flareless
2	DD7106044	1	Retaining Ring, External, 13/16" Shaft
3	DD7447037	1	Gasket, Bulkhead, E-Pulse

**Note:** Bulkhead Fitting Kit DD7105093K includes all items listed in the table above.

Figure 6 - Reservoir and End Cap Assembly

Notes:

- ① Torque to 60-70 in-lbs [6.8-7.9 Nm].
- ② Torque to 106-133 in-lbs [12-15 Nm].



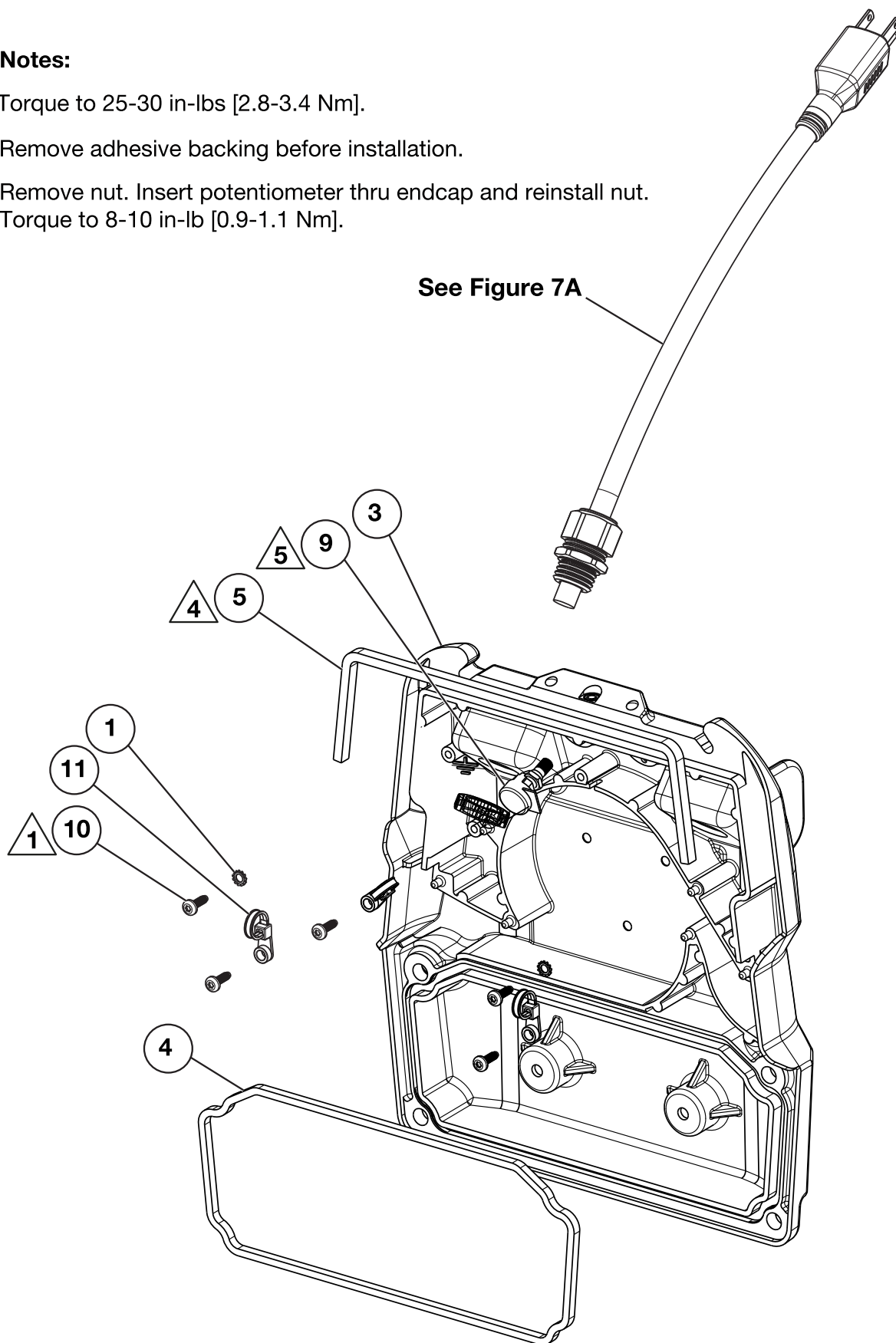


<b>Repair Parts List for Figure 6</b>			
<b>Item</b>	<b>Part Number</b>	<b>Qty.</b>	<b>Description</b>
1	CAE1060055-1A	2	Acorn Nut M6
2	CBE821028-1A	8	Screw-SHCS, Hex, M8 x 1.25 x 20, 8.8, Zinc
3	DD6788025-P03	1	Reservoir, Machined, 1 Gal, Yellow
4	DD6795870	2	Foot, Rubber
5	DD7164108	2	Washer, Rubber Sealing, M6
9A	See Figure 8	1	Endcap Assembly, Front
9B	See Figure 7	1	Endcap Assembly, Rear
10	DD7290026	2	Decal, Enerpac Logo, Die-cut
---	S3037	3	Gasket (See Figure 5, item 20)

## Figure 7 - Rear End Cap Assembly

### Notes:

- 1 Torque to 25-30 in-lbs [2.8-3.4 Nm].
- 4 Remove adhesive backing before installation.
- 5 Remove nut. Insert potentiometer thru endcap and reinstall nut. Torque to 8-10 in-lb [0.9-1.1 Nm].

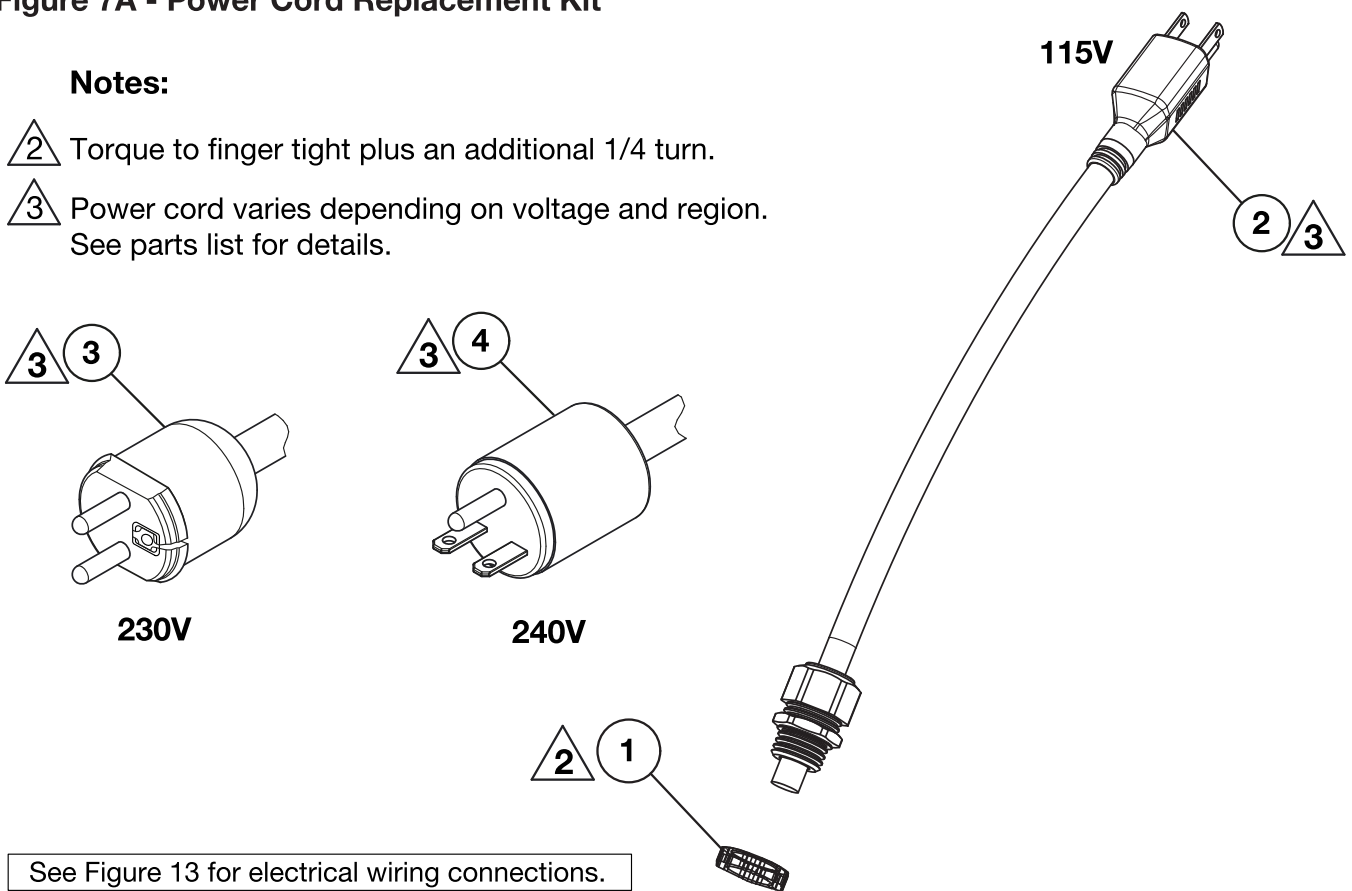


Repair Parts List for Figure 7			
Item	Part Number	Qty.	Description
1	CCE1040108-7A	2	Lock Washer, External Tooth For M4
3	DD6786020	1	End Cap, Rear, Machined, Black
4	DD7017037	1	Gasket, Endcap
5	DD7030037	1	Gasket Tape, 3/16" THK x 1/4" W x 12.25" L
9	DD7060960	1	Cable Assembly, Potentiometer
10	DD7328001	5	Screw, Thread Forming, M4 x 12 Long
11	DD7331217	3	Cable Tie, Screw Mount
12	DD7439960	1	Cable Assembly, Power, Motor Controller
13	DD7463118	2	Filter, 20 x 10 x 100

### Figure 7A - Power Cord Replacement Kit

#### Notes:

- ② Torque to finger tight plus an additional 1/4 turn.
- ③ Power cord varies depending on voltage and region. See parts list for details.

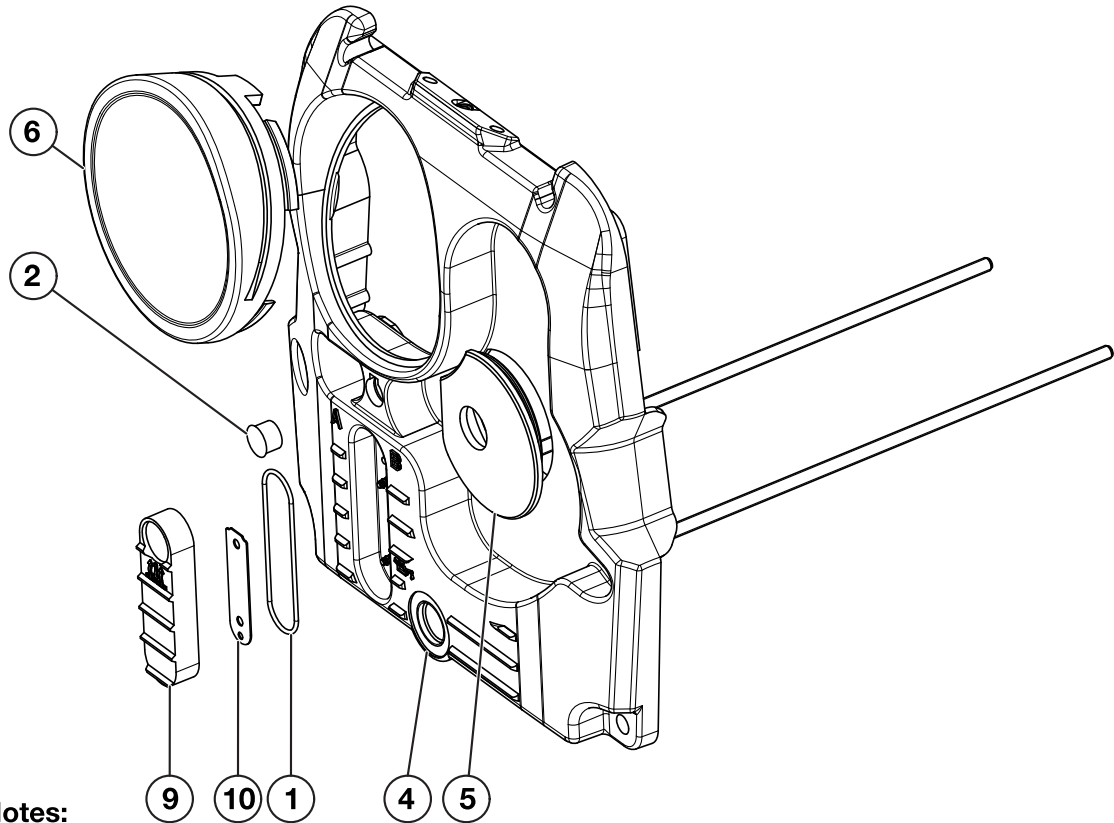


### Repair Parts List for Figure 7A

Item	Part Number	Qty.	Description
1	DC9538021	1	Locking Nut 20mm
2	DD7044960SR	1	Power Cord, 115 VAC, 50/60 Hz, NEMA 5-15 (Model EP3104DB)
3	DD7045960SR	1	Power Cord, 208/230 VAC, 50/60 Hz, NEMA 6-15 (Model EP3104DI)
4	DD7046960SR	1	Power Cord, 208/240 VAC, 50/60 Hz, CEE 7/7 EHUK (Model EP3104DE)

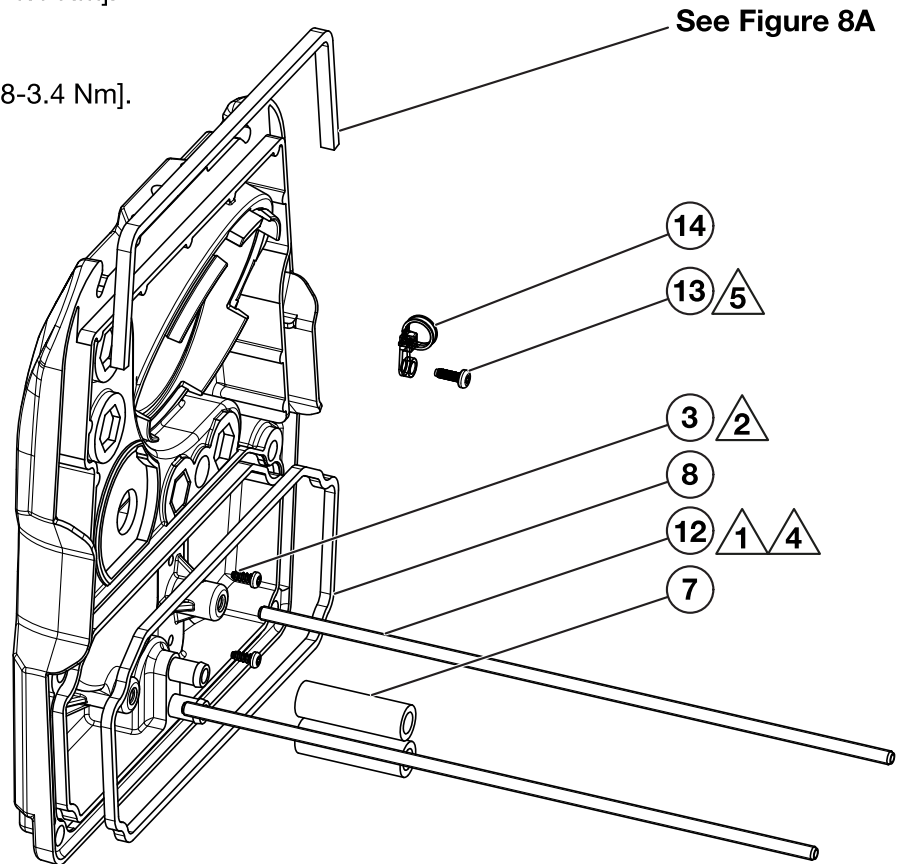
**Note:** Item 1 NOT included in power cord kits. Order separately.

**Figure 8 - Front End Cap Assembly**



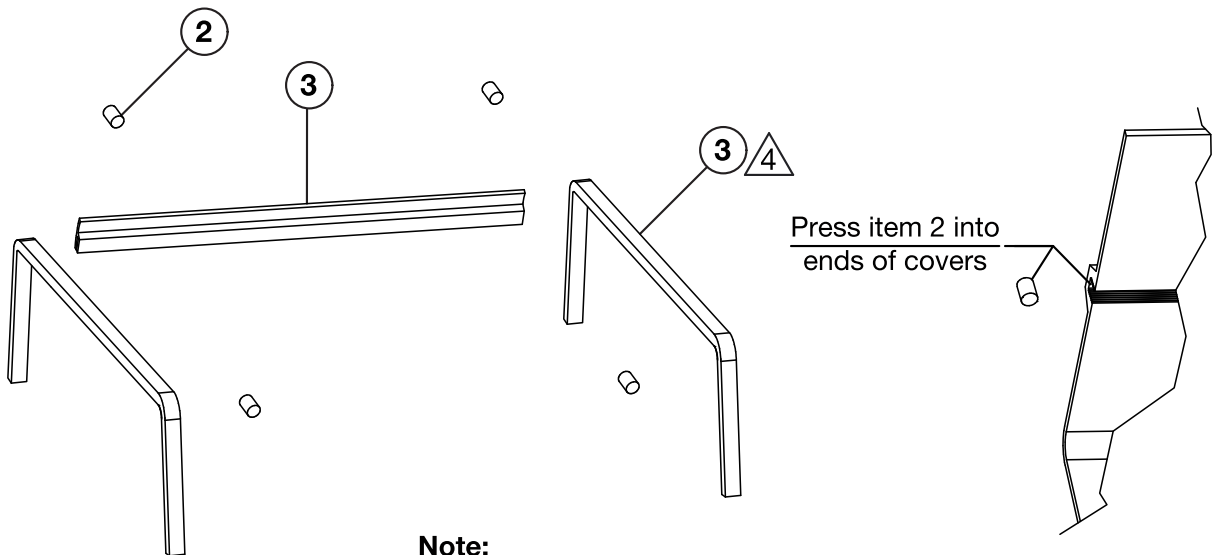
**Notes:**

- 1 Apply loctite 2760.
- 2 Torque to 8-10 in-lbs [0.9-1.1 Nm].
- 4 Install to full depth.
- 5 Torque to 25-30 in-lbs [2.8-3.4 Nm].



Repair Parts List for Figure 8			
Item	Part Number	Qty.	Description
1	B1240503	1	O-Ring, 2-1/8 ID, 0.070 W
2	DC8228009	1	Dome Plug 1/2"
3	DD3883028	2	Screw M4 x 10 Thread FRM, TRX
4	DD6784020	1	End Cap, Front, Machined, Black
5	DD6990808	1	Grommet, Valve, Rubber, 4/3m
6	DD6997020	1	Cap, Gauge
7	DD7002646	2	Hose, Rubber, 9.52 x 15.88 x 50L
8	DD7017037	1	Gasket, Endcap
9	DD7021223	1	Sight Gauge
10	DD7022225	1	Insert, Sight Gage
12	DD7107305	2	Threaded Rod, M6q x 1.0 x 300 Long
13	DD7328001	1	Screw, Thread Forming, M4 x 12 Long
14	DD7331217	1	Cable Tie, Screw Mount

**Figure 8A - Water Ingress Seal Kit: EPWISK1**



**Note:**  
 ⚠️ Remove adhesive backing before installation.

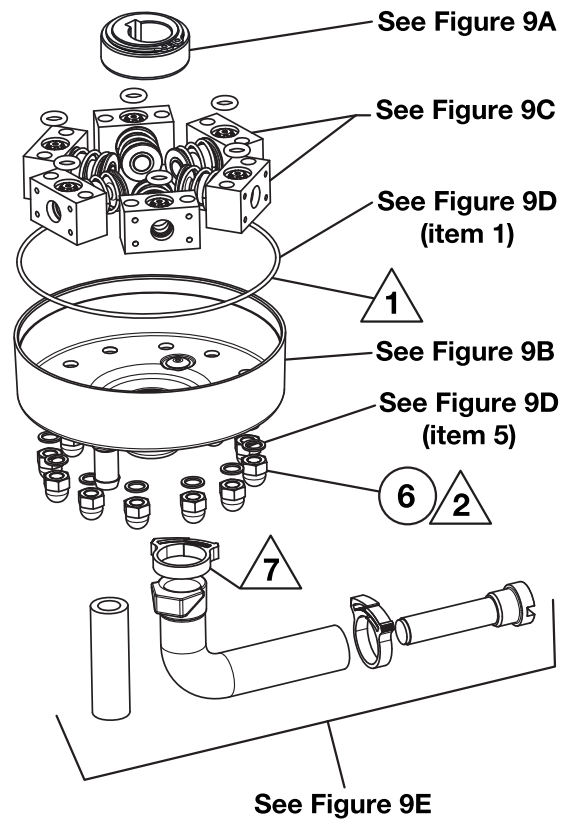
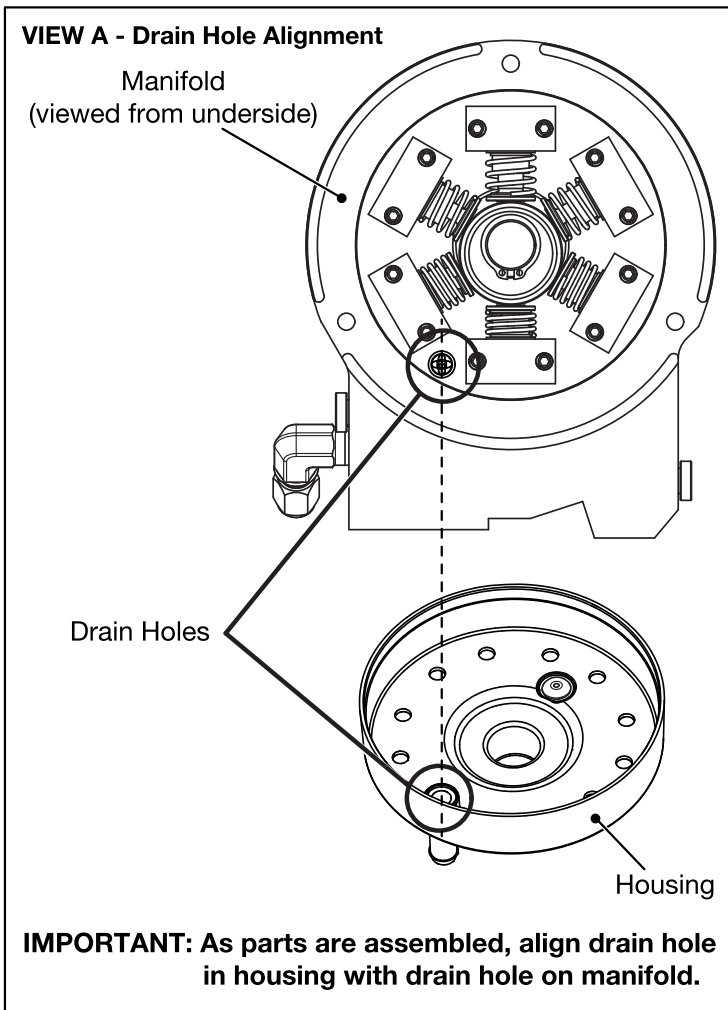
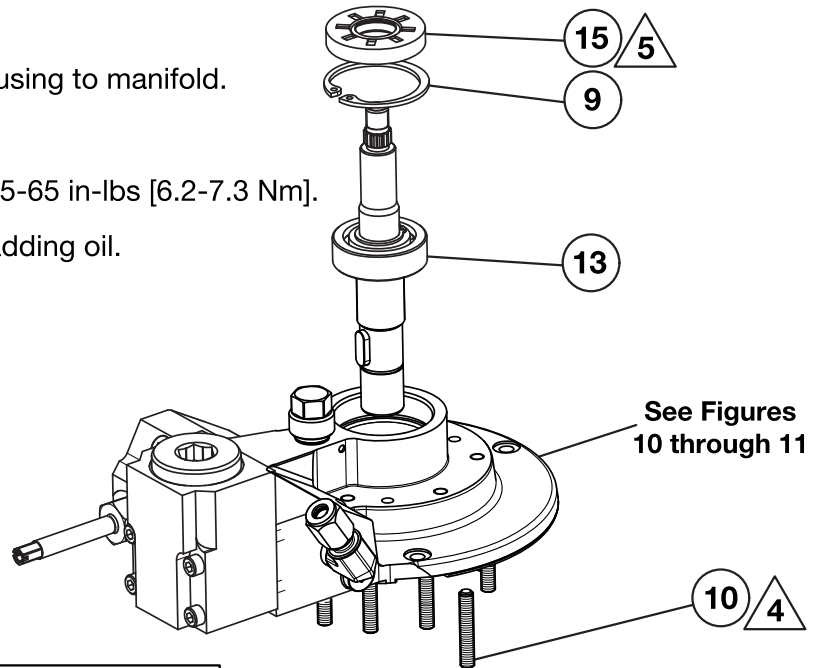
Repair Parts List for Figure 8A			
Item	Part Number	Qty.	Description
1	DD7448037	1	Lip Seal, E-Pulse
2	DD7462037	4	Gasket, 4.0mm Dia x 5.50mm L Cord Stock
3	DD7030037	1	Gasket Tape, 3/16" THK x 1/4" W x 12.25" L

**Note:** Water Ingress Seal Kit EPWISK1 includes all items listed in the table above.

## Figure 9 - Housing Assembly

### Notes:

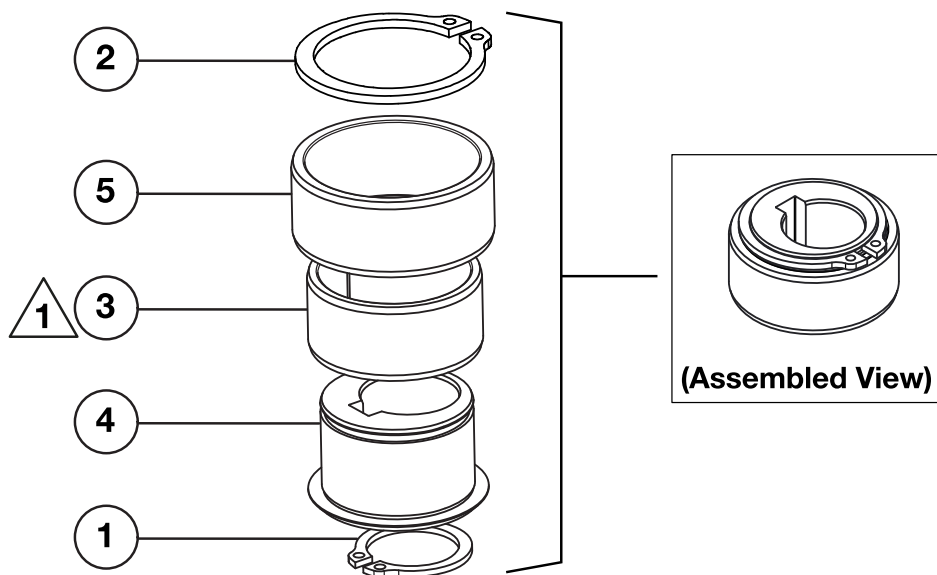
- 1 Apply grease to aid assembly of housing to manifold.
- 2 Torque to 7-9 ft-lbs [9.4-12.2 Nm].
- 4 Apply Loctite 2760, and torque to 55-65 in-lbs [6.2-7.3 Nm].
- 5 Install flush with top surface, after adding oil.
- 7 Orient as shown.




Repair Parts List for Figure 9			
Item	Part Number	Qty.	Description
6	CAE1060055-1A	12	Acorn Nut M6
9	CCA1042044-1C	1	Wiper Ring
10	CCA627028-5A	12	Screw-Set, Flat, HS, M6 x 1 x 35, 45H, Plain
13	DD7004900	1	Shaft, Sub Assembly
15	DD7008476	1	Seal, Rotary 17 x 42 x 7

**Figure 9A - Eccentric Kit: DD72575375SR**

**Eccentric is shipped pre-assembled. Parts shown disassembled for reference purposes only.**



**Note:**

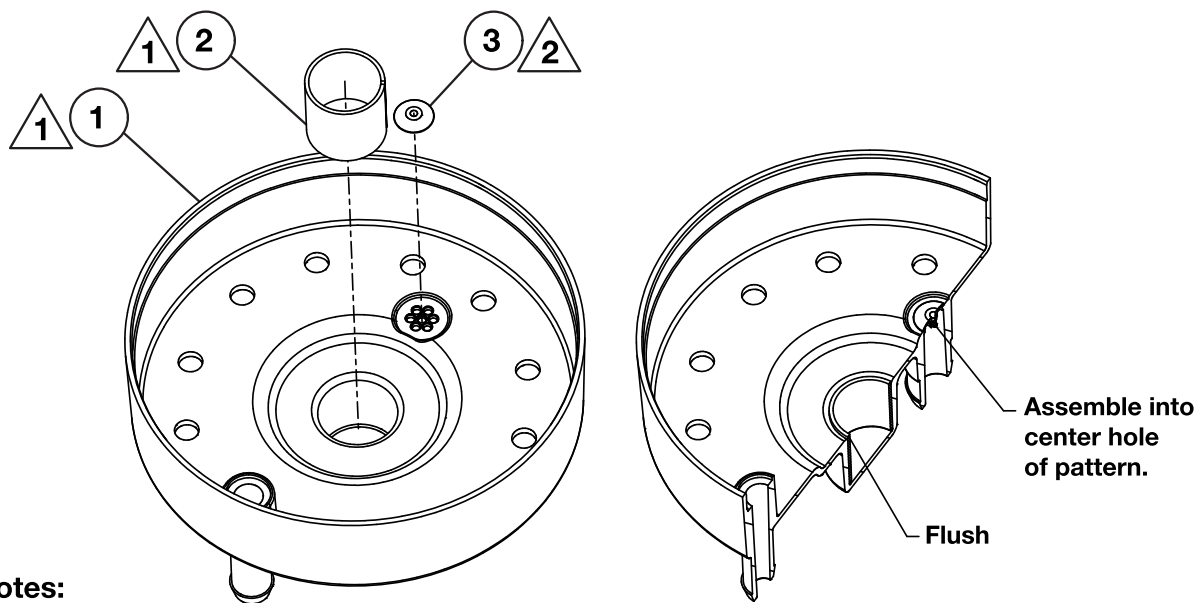
 Press fit item 13 onto item 21 with 1100 psi on 10 ton press.

Repair Parts List for Figure 9A			
Item	Part Number	Qty.	Description
1	CCA1018044-1A	1	Retaining Ring-Ext., 18mm, STL
2	CCA1028044-1A	1	Retaining Ring-Ext., 28mm, STL
3	DD6779350	1	Bearing, Sleeve, 28 x 32 x 15
4	DD7257537	1	Eccentric (3mm Offset)
5	DD7261350	1	Race, Cam

**Note:** Eccentric Kit DD72575375SR includes all items listed in the table above (pre-assembled).



**Figure 9B - Pump Housing Kit**

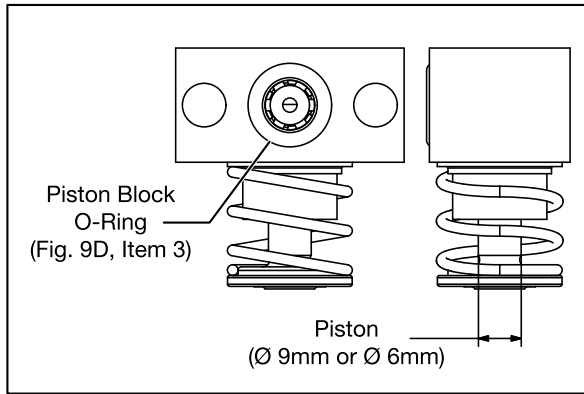


**Notes:**

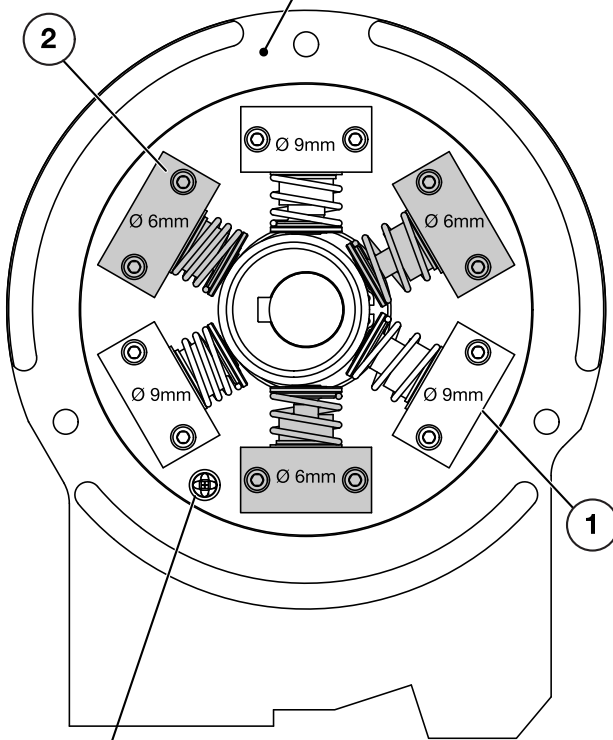
- △ 1 Press item 1 and 2 together flush as shown. 400 psi using 10 ton press.
- △ 2 Press using finger.

Repair Parts List for Figure 9B			
Item	Part Number	Qty.	Description
1	DD6762001	1	Housing, Pump
2	DD6775039	1	Bushing, 18 x 20 x 20, Housing
3	DD6965661	1	Inlet Check Umbrella Valve, Housing
<b>Note:</b> Pump Housing Kit DD7005900SR includes all items listed in the table above.			

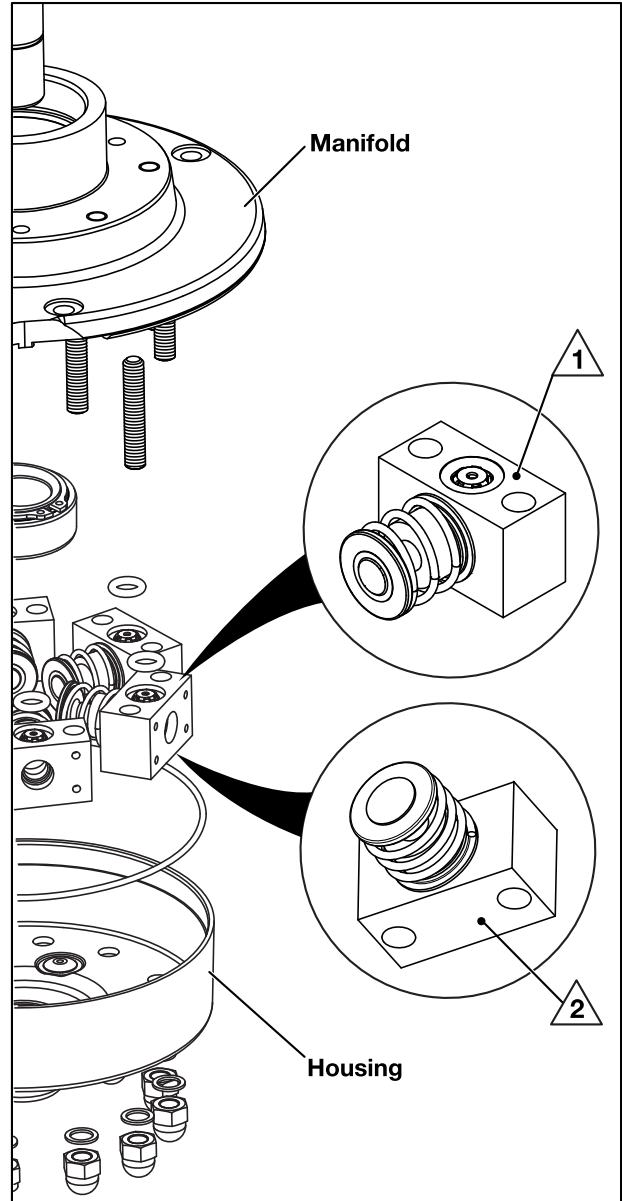
**Figure 9C - Piston Block Assembly Kits: DD7230900SR and DD7231900SR**



(Pump manifold viewed from below)



Oil Drain Hole



**IMPORTANT:**

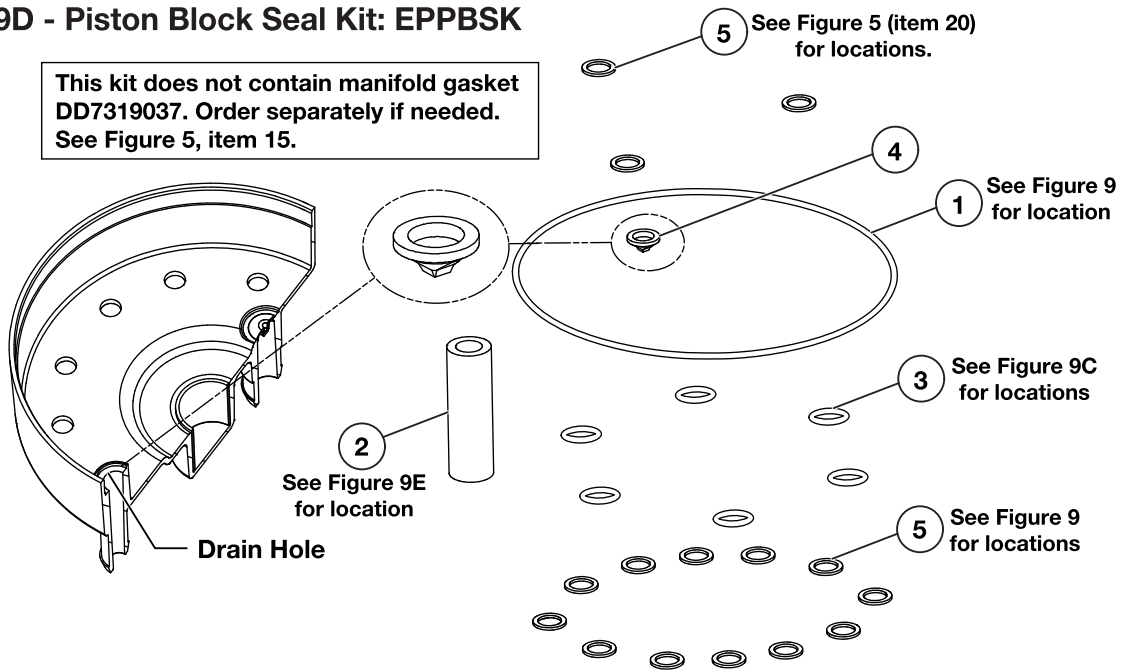
- 1** Side with oil port must face toward manifold.
- 2** Flat side must face toward housing.

- Each piston block kit includes 3 piston blocks and 3 piston block O-Rings (Figure 9D, item 3).
- It is recommended that new O-Rings be installed on ALL piston blocks, even if only some of the piston blocks are being replaced.
- A complete set of O-Rings and gaskets is provided in the piston block seal kit (order separately - See Figure 9D).
- Refer to Figures 9, 9A, 9B and 9D for torque values and additional assembly instructions.

Repair Parts List for Figure 9C			
Item	Part Number	Qty.	Description
1	DD7230900SR	3	Piston Block, Ø 9mm
2	DD7231900SR	3	Piston Block, Ø 6mm

### Figure 9D - Piston Block Seal Kit: EPPBSK

This kit does not contain manifold gasket DD7319037. Order separately if needed. See Figure 5, item 15.

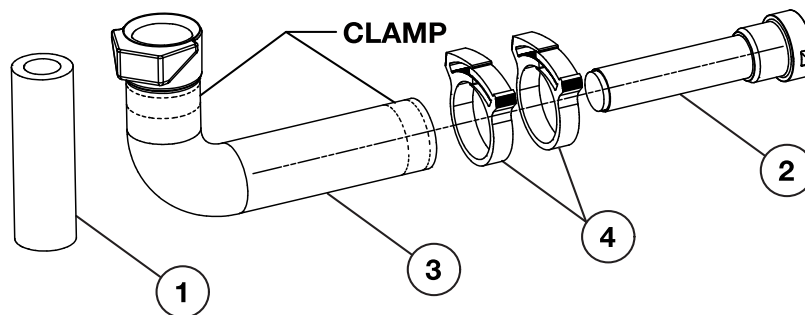


Repair Parts List for Figure 9D

Item	Part Number	Qty.	Description
1	B1400503	1	O-Ring 4-1/4", 4-3/8", 1/16", NBR, 70 Duro
2	DD7002646	1	Hose Rubber, 9.52 x 15.88 x 50L
3	DD7616903	6	O-Ring, Piston Block, Metric, 8 x 2, NBR, 90 Duro
4	DD7603101	1	Valve Mini, Cross-Slit
5	S3037	12	Gasket

**Note:** Piston Block Seal Kit EPPBSK includes all items listed in the table above.

### Figure 9E - Intake Suction Filter Kit: DD7176118K

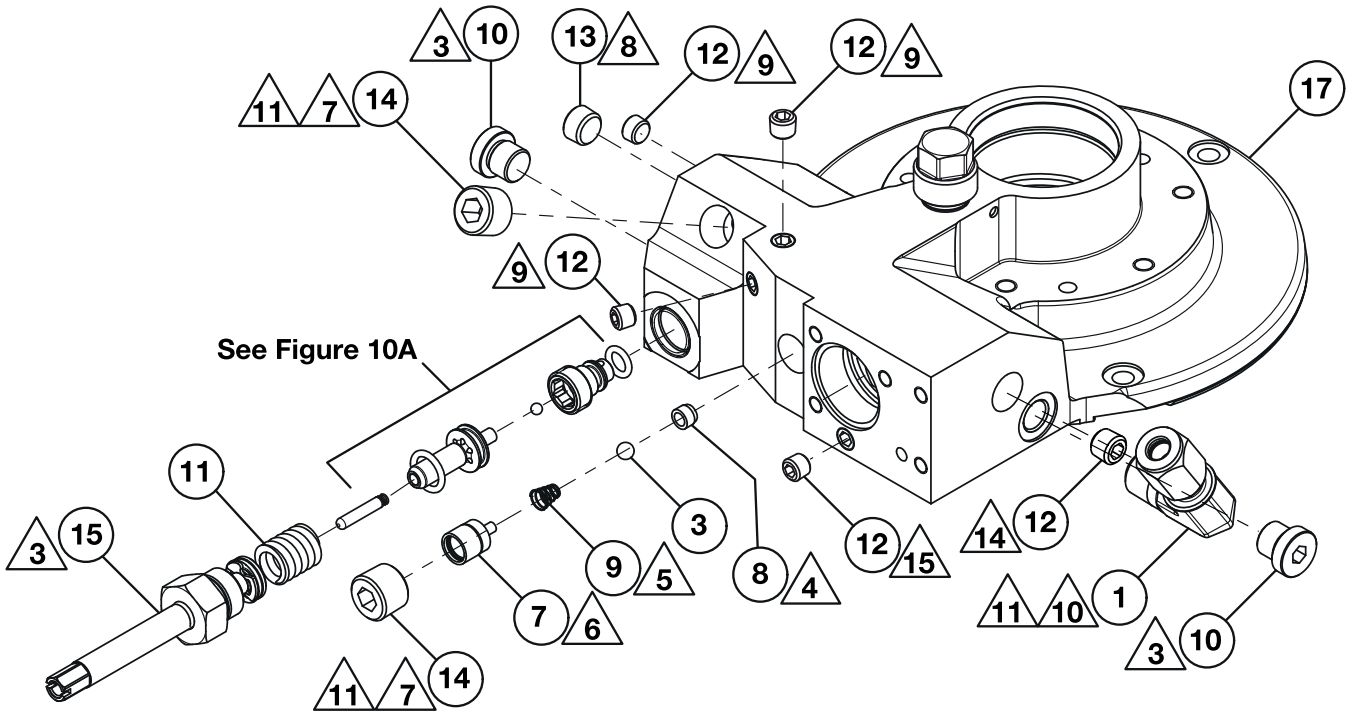


Repair Parts List for Figure 9E

Item	Part Number	Qty.	Description
1	DD7002646	1	Hose, Rubber, 9.52 x 15.88 x 50L
2	DD7176118	1	Filter, In Line
3	DD7177268	1	Tube, Inlet Filter
4	DD7222299	2	Clamp, Inlet Filter

**Note:** Intake Suction Filter Kit DD7176118K includes all items listed in the table above.

**Figure 10 - Direct Drive Pump Assembly**



**Notes:**

- △3 Torque to 13-16 ft-lbs [18-22 Nm].
- △4 Coin at 300 psi on 10 ton press after assembly, Press into manifold 500 psi on 10 ton press.
- △5 Observe direction.
- △6 Press fit at 1100 psi on 10 ton press.
- △7 Torque to 28-34 ft-lbs [38-46 Nm].
- △8 Torque to 10-12 ft-lbs [14-16 Nm].
- △9 Torque to 6-8 ft-lbs [8-11 Nm].
- △10 Torque to orientation, 28 ft-lbs [40 Nm] min.
- △11 Apply Teflon tape to NPTF thread.
- △14 Torque to 8-10 ft-lbs [10.8-13.6 Nm].
- △15 Torque to below flush, 7 ft-lbs [9.5 Nm] min.

**Repair Parts List for Figure 10**

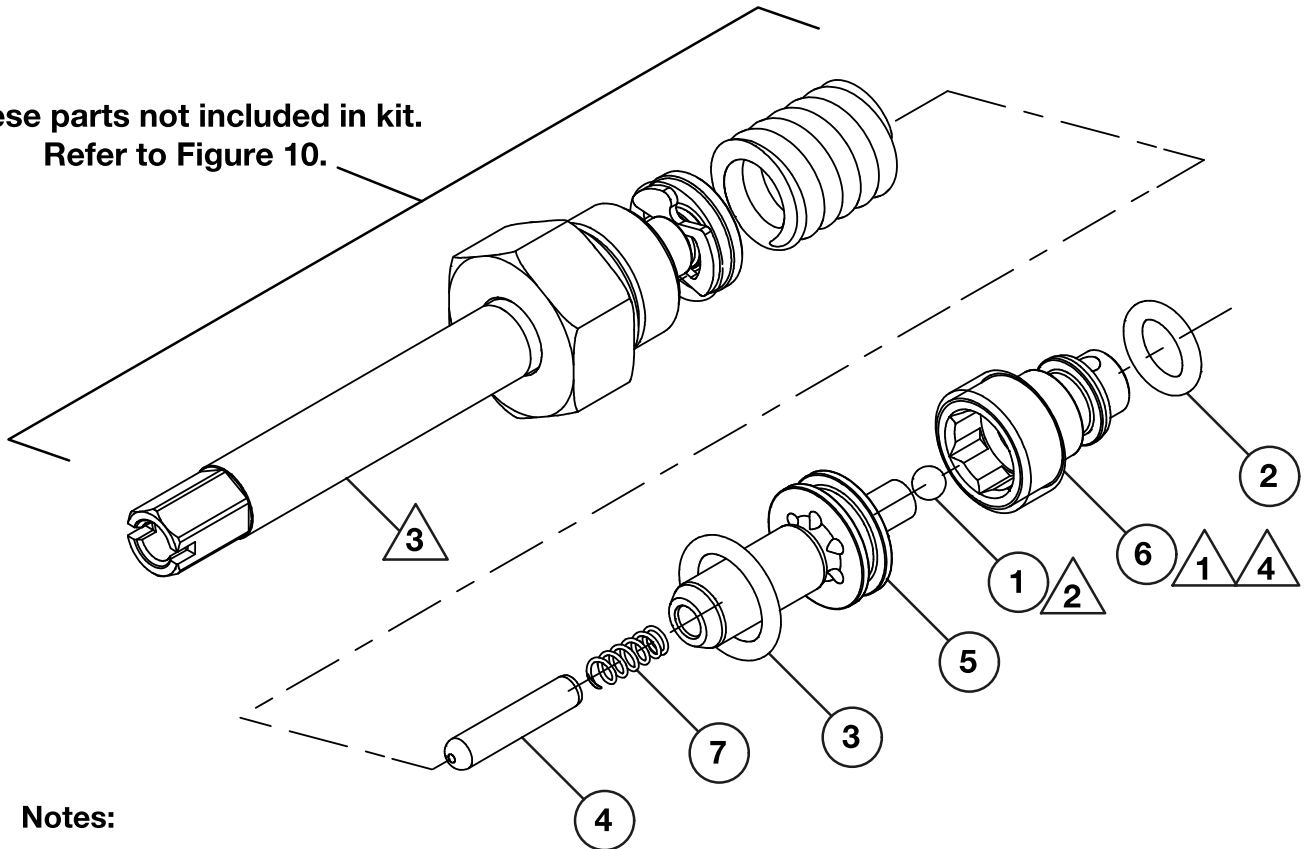
Item	Part Number	Qty.	Description
1	A8033096	1	Elbow Fitting 0.25 NPTF x 0.25 Flareless
3	B1005016	2	Ball, 3/16 Dia.
7	BSS5357D	1	Seat Piston Upper
8	BSS5358D	1	Seat Piston Lower
9	BSS5809D	2	Conical Spring
10	CS236006	2	Plug G1/8 Steel W/Seal
11	DA3282110	1	Spring-Comp., 320 lbs/in

**Repair Parts List for Figure 10 (Continued)**

Item	Part Number	Qty.	Description
12	DC6792245	5	PTF-SAE Flush Plug 0.062
13	DC6793245	1	PTF-SAE Flush Plug 0.125
14	DC6794245	2	PTF-SAE Flush Plug 0.250
15	DD6778900	1	Plug Asm. UARV
17	DD7052900	1	Direct Drive Pump, DMPE

**Figure 10A - Rebuild Kit, User-Adjustable Relief Valve: DD7234290K**

**These parts not included in kit.  
Refer to Figure 10.**



**Notes:**

- 1 Torque to 84-108 in-lbs [9.5-12.2 Nm].
- 2 Press fit 150-200 psi on 10 ton press, Item 1 onto item 5.
- 3 Torque to 13-16 ft-lbs [18-22 Nm].
- 4 Coin 150 psi on 10 ton press.

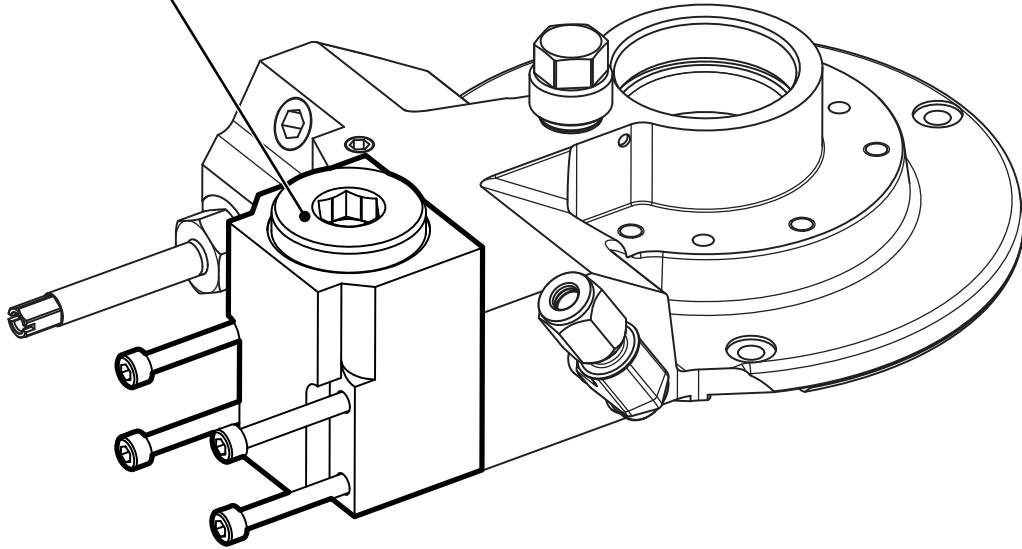
**Repair Parts List for Figure 10A**

Item	Part Number	Qty.	Description
1	B1003016	1	Ball, 0.125 Dia.
2	B1010803	1	O-Ring-1/4", 3/8", 1/16", Disogrin, 92 Duro
3	B1012203	1	O-Ring-3/8", 1/2", 1/16", Viton, 90 Duro
4	BA0210059	1	Dowel Pin 1/8" x 5/8" Long
5	DD6780013	1	Ball Guide
6	DD7234290	1	Ball Seat
7	PA27110	1	Spring-Comp., 8.30 lbs/in

**Note:** Rebuild Kit, User-Adjustable Relief Valve DD7234290K includes all items listed in the table above.

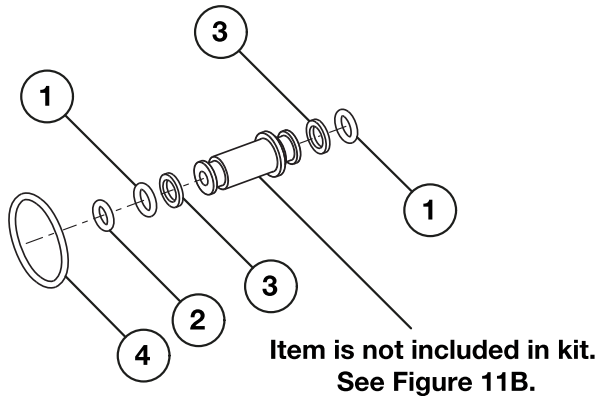
**Figure 11 - 3/2 Manual Valve Assembly**

**3/2 Manual Valve  
(See Figures 11A and 11B)**



Repair Kits for Figure 11		
Kit Number	Qty.	Description
See Figure 11A	1	Valve Manifold Seal Kit
See Figure 11B	1	Dump Valve Kits

**Figure 11A - Valve Manifold Seal Kit: DD7257537SR**



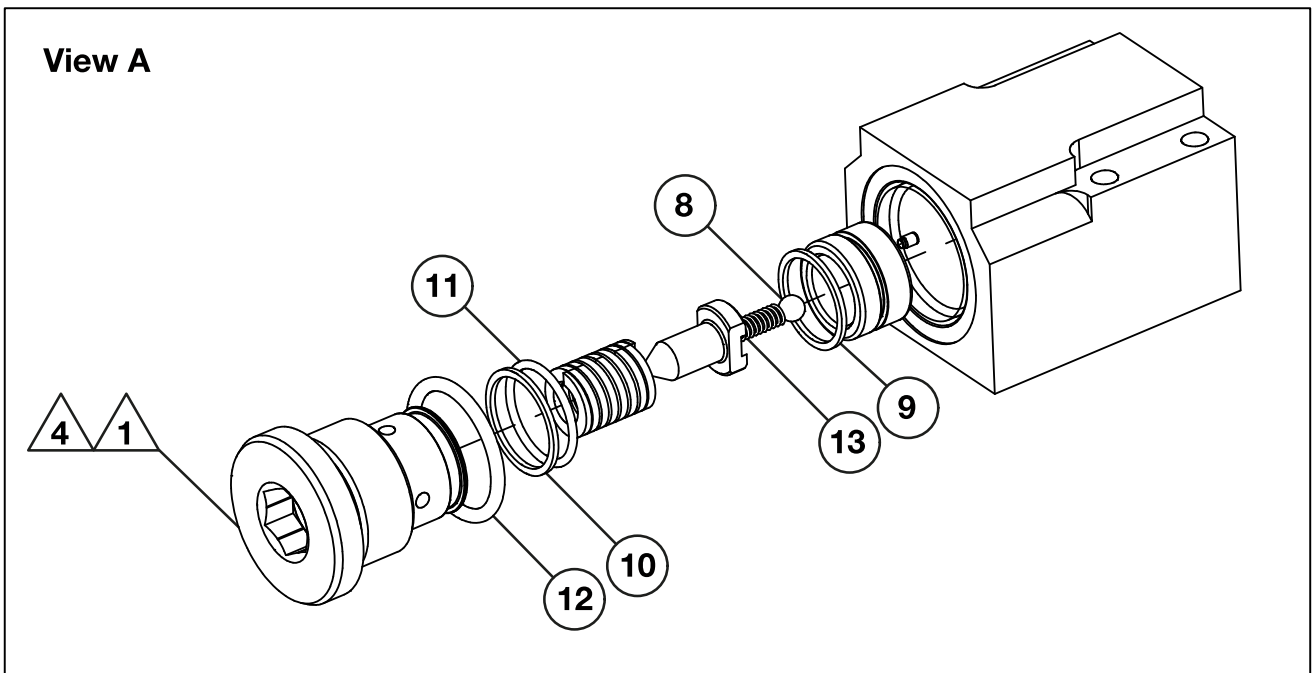
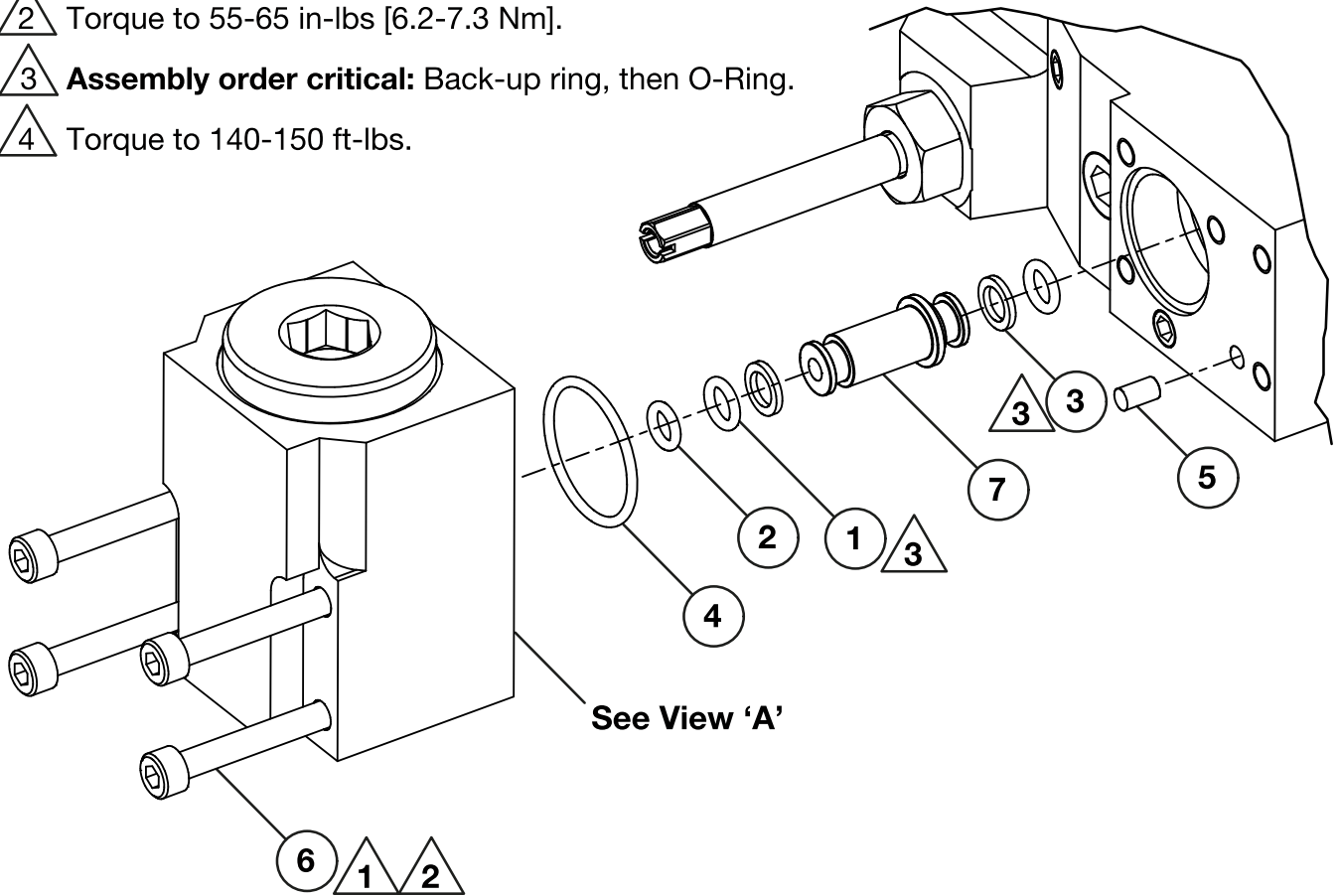
Repair Parts List for Figure 11A			
Item	Part Number	Qty.	Description
1	B1005503	2	O-Ring-1/4", 3/8", 1/16", NBR, 70 Duro
2	B1009803	1	O-Ring-7/32", 11/32", 1/16", Disogrin, 92 Duro
3	B1010564	2	Back Up
4	B1227503	1	O-Ring-15/16", 1-1/16", 1/16", NBR, 70 Duro

**Note:** Valve Manifold Seal Kit DD7257537SR includes all items listed in the table above.

**Figure 11B - Dump Valve Kits: EP1DVK and EP1DVSK**

**Notes:**

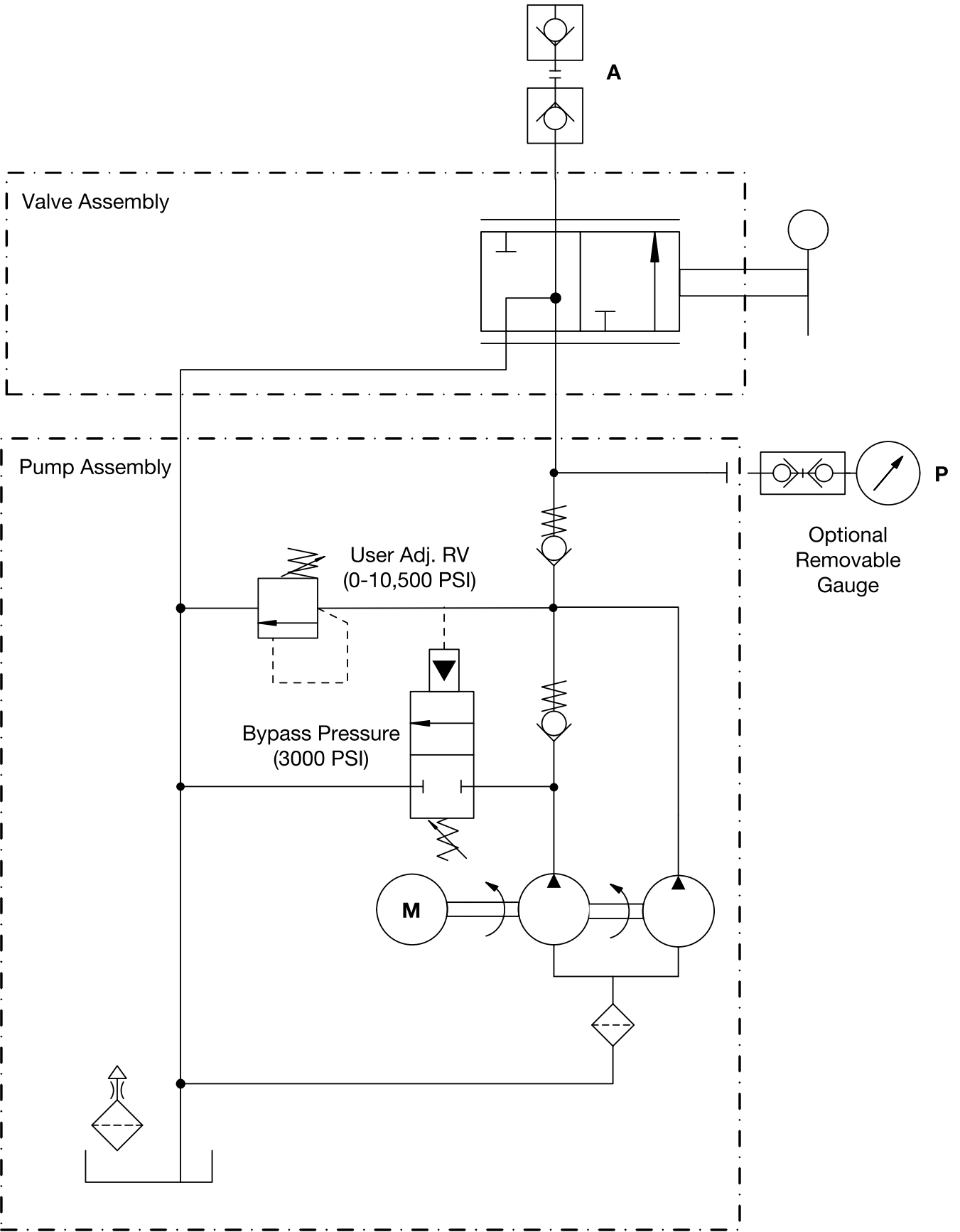
- ▲1 Apply Loctite 243.
- ▲2 Torque to 55-65 in-lbs [6.2-7.3 Nm].
- ▲3 **Assembly order critical:** Back-up ring, then O-Ring.
- ▲4 Torque to 140-150 ft-lbs.



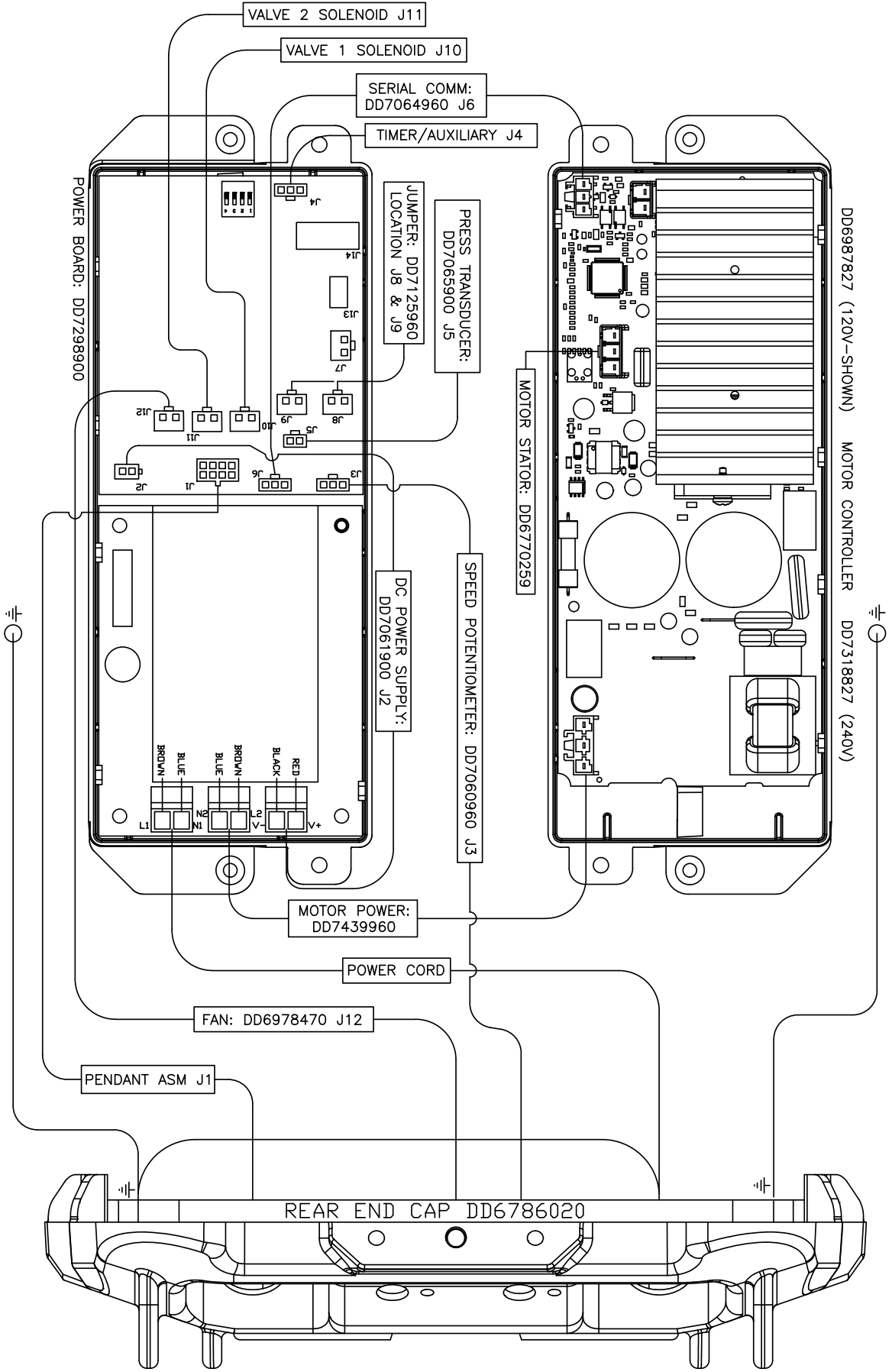


<b>Repair Parts List for Figure 11B</b>			
<b>Item</b>	<b>Part Number</b>	<b>Qty.</b>	<b>Description</b>
1	B1005503	2	O-Ring-1/4", 3/8", 1/16", NBR, 70 Duro
2	B1009803	1	O-Ring-7/32", 11/32", 1/16", Disogrin, 92 Duro
3	B1010564	2	Back Up
4	B1227503	1	O-Ring-15/16", 1-1/16", 1/16", NBR, 70 Duro
5	CAA411061-2B	1	4mm Dia x 8mm LG Dowel Pin
6	CCA531028-1A	4	Screw-SHCS, Hex, M5 x 0.8 x 45, 12.9, Plain
7	DD2996268	1	Tube, Connector, XCTW
8	B1006016	1	Ball, 7/32 Dia
9	B1018564	1	Split PTFE Back-Up Washer
10	B1019564	1	Teflon Back Up Split
11	B1019803	1	O-Ring 13/16", 15/16", 1/16", Disogrin, 92 Duro
12	B1914903	1	O-Ring
13	DD6886110	1	Spring-Comp 0.188 x 0.625
<b>Note:</b> Dump Valve Kits EP1DVK and EP1DVSK includes all items listed in the table above.			

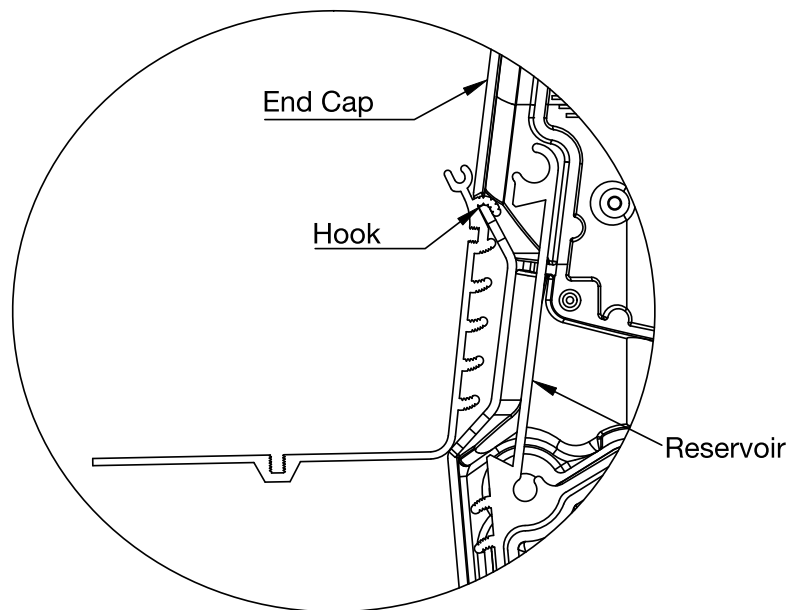
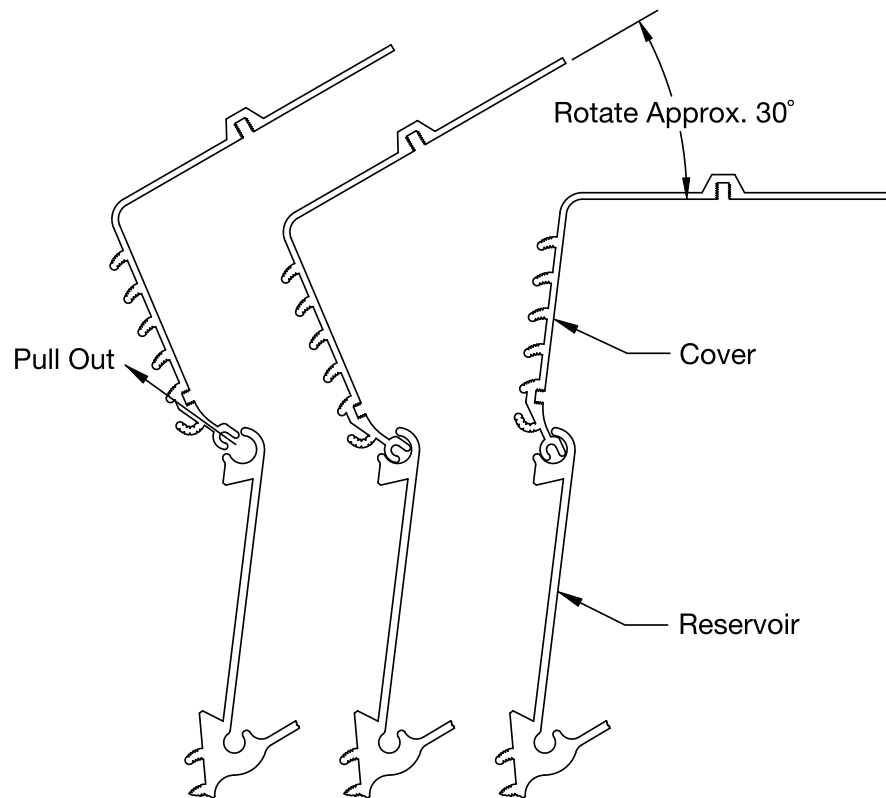
Figure 12 - Hydraulic Schematic Diagram



**Figure 13 - Electrical Wiring Diagram**



**Figure 14 - Pump Cover Removal/Installation Instructions**



**Removal/installation instructions:**

1. Remove 2 pump handle screws and washers.
2. Remove pump handle.
3. Open cover and remove wire connections.
4. Rotate cover approximately 30° from closed position.
5. Pull cover out as shown.
6. Reverse directions for installation. Refer to wiring diagram (Figure 13) and electrical subassembly diagrams (Figures 3 and 4) for wiring and torques.
7. Torque handle screws to 42-47 in-lbs [4.7-5.3 Nm].





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