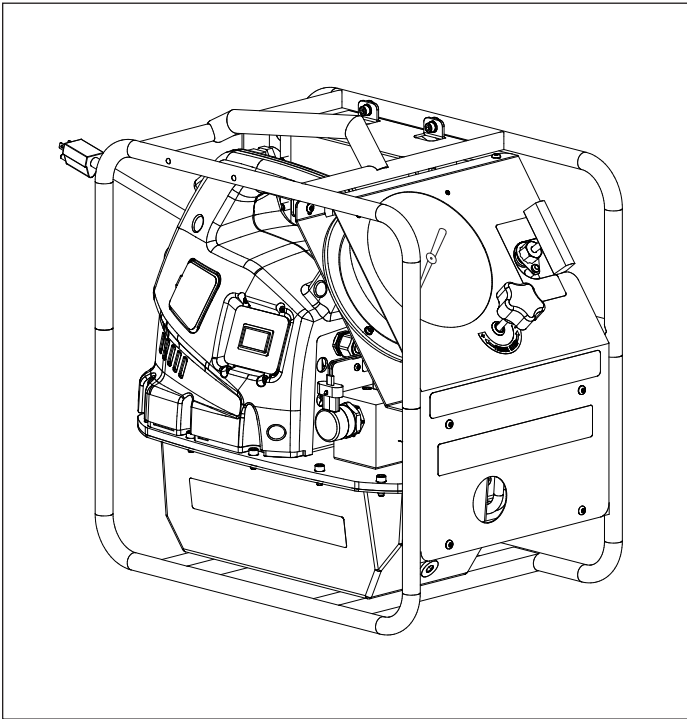


		Repair Parts Sheet	
		ZUTP-1500S Series Electric Tensioning Pump 21,750 psi [1500 bar]	
Document Number	Document Revision	Document Revision Date	Product Date Code Beginning With
L4280	F	09/2025	A
To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil. Enerpac recommends that all kit components be installed to insure optimum performance of the repaired product.			

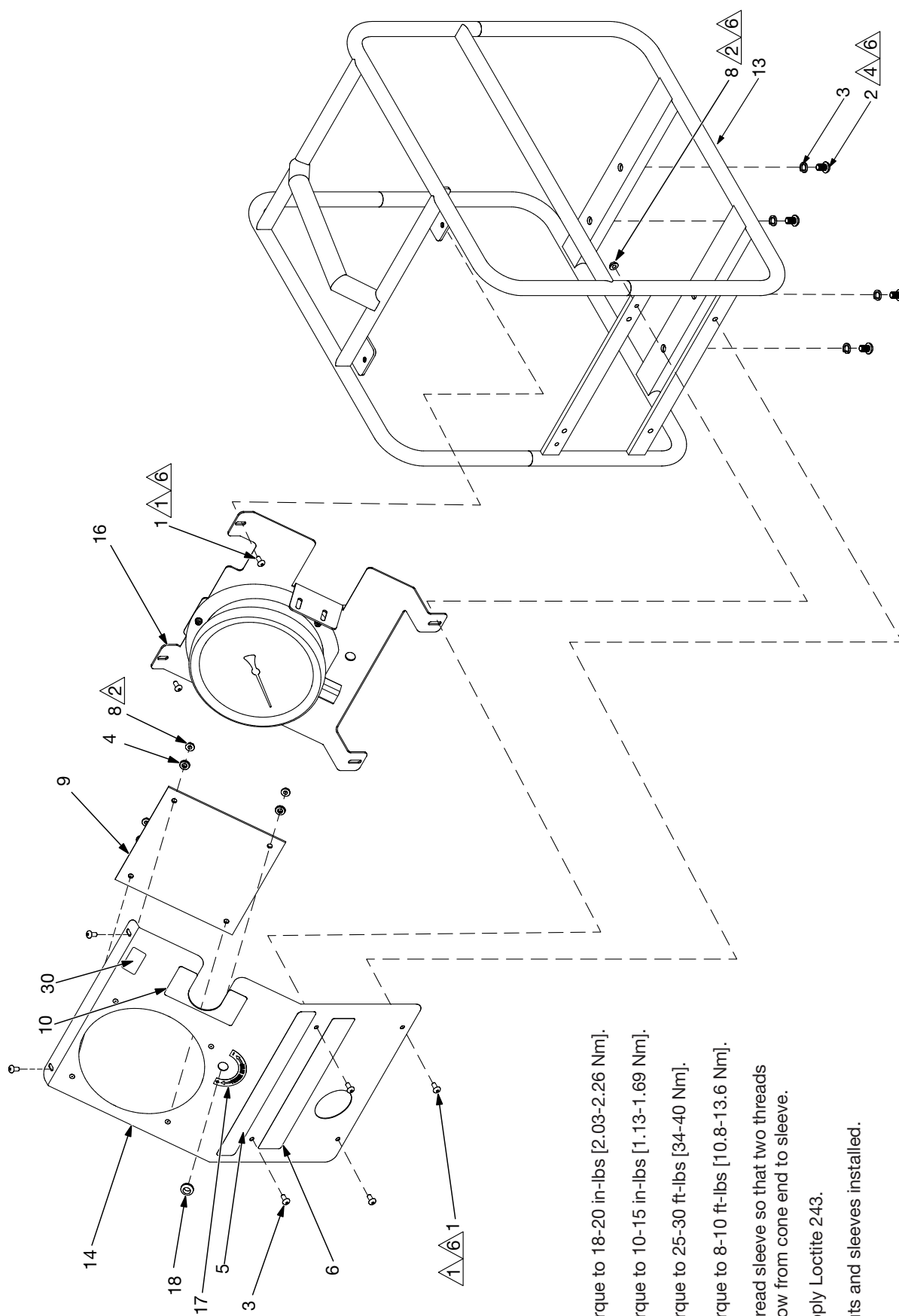
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WARNING

Fully relieve hydraulic pressure, disconnect hydraulic hose from pump and disconnect electrical cord from AC power source before beginning any maintenance, repair or inspection procedures. Failure to observe these precautions could result in death or serious personal injury.



- 1 Torque to 18-20 in-lbs [2.03-2.26 Nm].
- 2 Torque to 10-15 in-lbs [1.13-1.69 Nm].
- 3 Torque to 25-30 ft-lbs [34-40 Nm].
- 4 Torque to 8-10 ft-lbs [10.8-13.6 Nm].
- 5 Thread sleeve so that two threads show from cone end to sleeve.
- 6 Apply Loctite 243.
- 7 Nuts and sleeves installed.

Figure 1, Pump Roll Cage, Front Panel and Pressure Gauge Assemblies

Repair Parts List (Refer to Figures 1 and 2)			
Item	Part Number	Qty.	Description
1	CBE15028-1E	8	Screw-BHCS, Hex, M5 x 0.8 x 10, 10.9, Zinc
2	CBE817028-1E	4	BHCS M8 X 12 mm Lg Zinc Finish Grade 10.8
3	CCE1008108-5C	4	Service Only - Spring Washer
4	DC1073108	4	Sealing Washer
5	DC7812026	1	Warning Decal Blue
6	DC9596026	1	Decal Enerpac Reservoir
7	DC9920026	1	Decal Read Instructions
8	DD1004122	8	Nut M5 Serrated
9	DD1005689	1	Gauge Guard
10	DD2453026	1	Decal ZUTP Valve Operation
11	DD2456038	1	Adaptor F250C To 1/4" JIC
12	DD2479026	1	Decal ZUTP 1500 Brush Cover
13	DD3344920K	1	Roll Cage
14	DD3345424	1	Front Panel
15	DD3353111	1	Cord Management Bracket ZUTP
16	DD3356900	1	Gauge Bracket ZUTP
17	DD3376026	1	Decal Relieve Valve ZUTP
18	DD3379808	1	Grommet 1/2" X 1/4"
19	DD7270660	1	Valve HIP 30-13HF4
20	DD7271268	1	Tube ZUTP Gauge
21	DD7272268	1	Tube ZUTP Valve
22	DD7273268	1	Tube Return
23	F100094-9	1	Male Connector 1/4 NPT - 1/4 Flare Tube
24	F160021	4	Gland Nut
25	F162232	4	Sleeve - Service Only
26	DD3338223	1	Pressure Gauge
27	CBE415028-1A	3	Screw-SHCS, Hex, M4 x 0.7 x 10, 8.8, Zinc
28	CAE1040108-1A	3	M4 Flat Washer
29	CBE529046-1A	2	SHCS, M5 x 40 mm
30	DD7547026	1	Indoor Use Decal

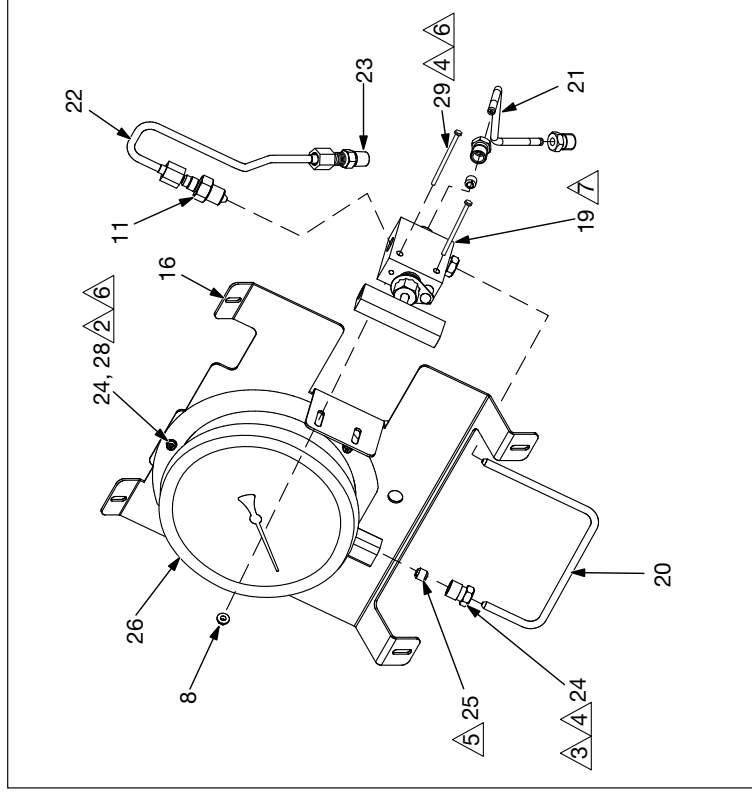


Figure 2, Pressure Gauge and Relief Valve Subassemblies

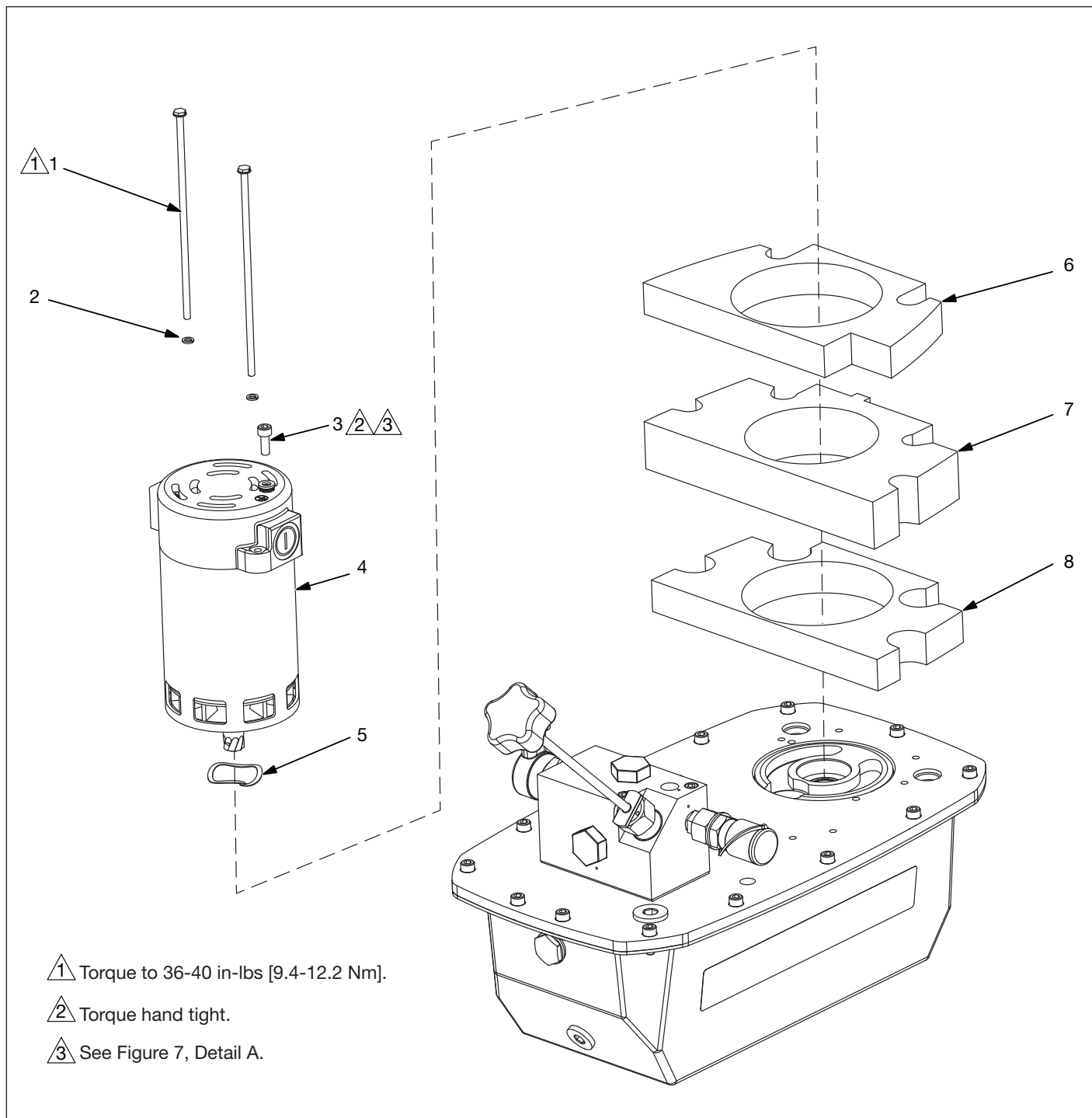


Figure 3, Electric Motor and Baffles

Repair Parts List for Figure 3						
Item	Part Number	Qty.	Description	Item	Part Number	Qty. Description
1	◆* DC9653028	2	Bolt, 10-32 x 6.5"	5	◆* DC9661066	1 Wavy Washer, 40 mm
2	◆* B1080066	2	Lockwasher	6	DC9402298	1 Baffle, Upper ZU4
3	CBE615028-1A	1	M6 x 10 Capscrew, Zinc	7	DC9400298	1 Baffle, Middle ZU4
4	◆ DC8244259	1	Motor, ZU4, 115V	8	DC9401298	1 Baffle, Lower ZU4
	* DC8245259	1	Motor, ZU4, 230V	9	◆* E1001181	2 Terminal, Flag (not shown)

◆ Items included as part of 115V motor service kit (DC8244259SR).

* Items included as part of 230V motor service kit (DC8245259SR).

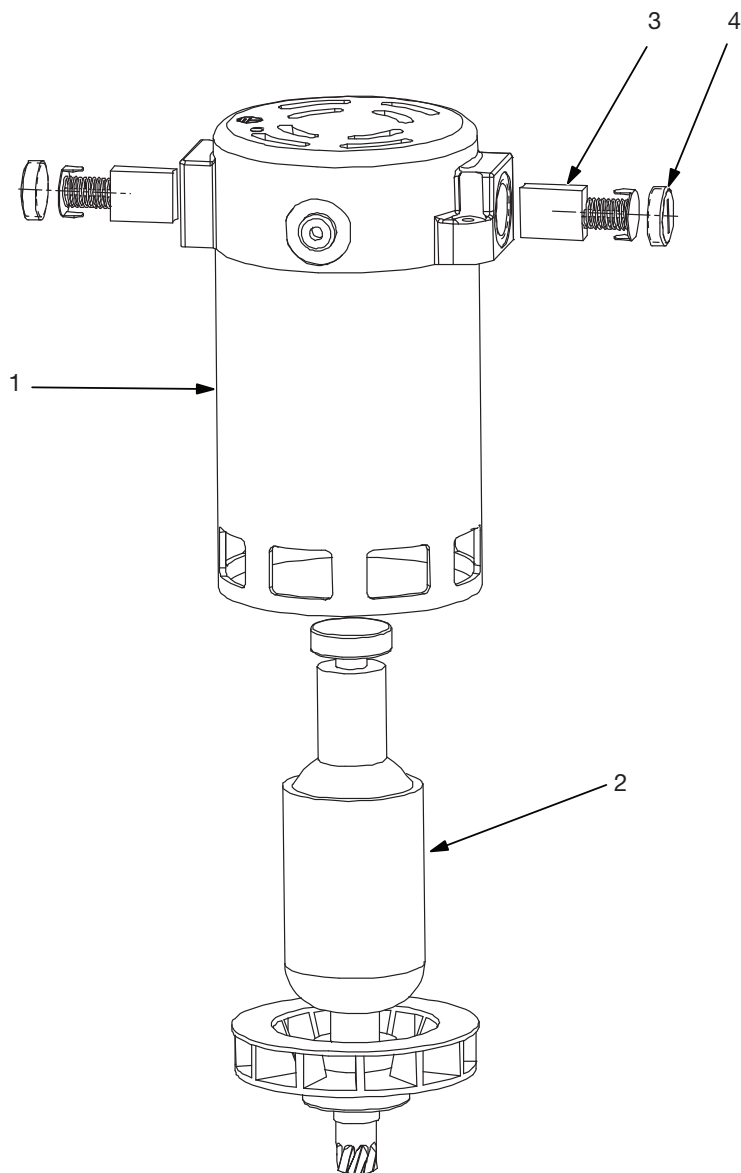


Figure 4, Electric Motor Components

Repair Parts List for Figure 4			
Item	Part Number	Qty.	Description
1	Not Available	-	Housing (order complete motor)
2	◆ DC9654736	1	Armature, 115V, ZU4
	* DC9662736	1	Armature, 230V, ZU4
3	◆* DC9656259	2	Brush, ZU4
4	◆* DC9655020	2	Brush Cap, ZU4

◆ Items included as part of 115V motor service kit (DC8244259SR).

* Items included as part of 230V motor service kit (DC8245259SR).

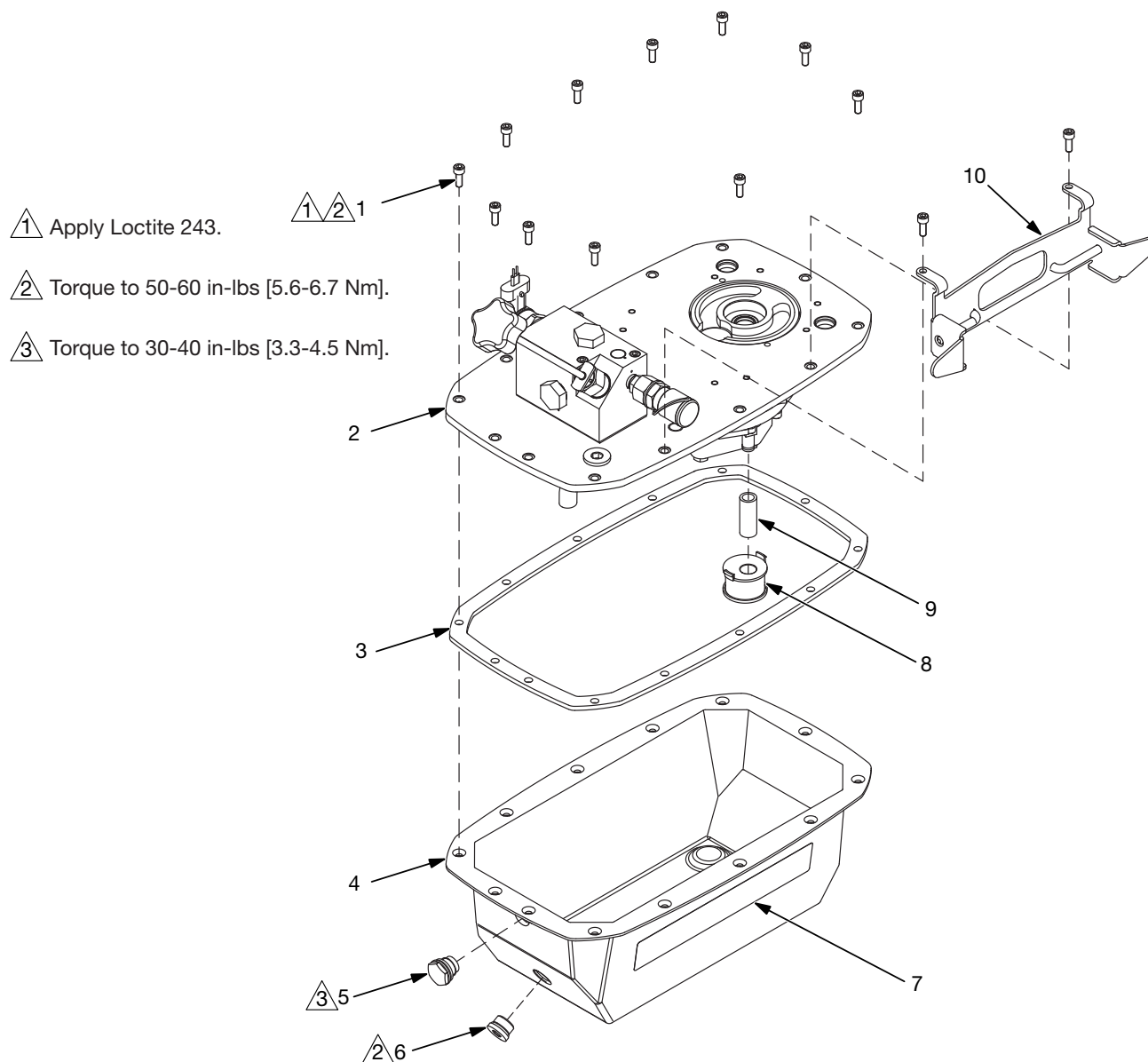


Figure 5, Reservoir and Gasket

Repair Parts List for Figure 5			
Item	Part Number	Qty.	Description
1	CBE619028-1A	13	Screw, SHCS M6 x 16 Zinc
2	(See Figure 6)		Pump and Coverplate Assemblies
3	DC9406037	1	Reservoir Gaskets
4	DD2070025	1	Reservoir, 4L, Aluminum
5	DC885900	1	Sight Glass Assembly
6	DC8249006	1	Threaded Magnetic Plug
7	DC9596026	1	Decal
8	◆ DC9178118	1	Filter Intake
9	◆ DC9603268	1	Tube, Intake, 4L
10	DD3353111	1	Cord Management Bracket

◆ Items included in ZUTP pump element replacement kit (DD3360900SR).

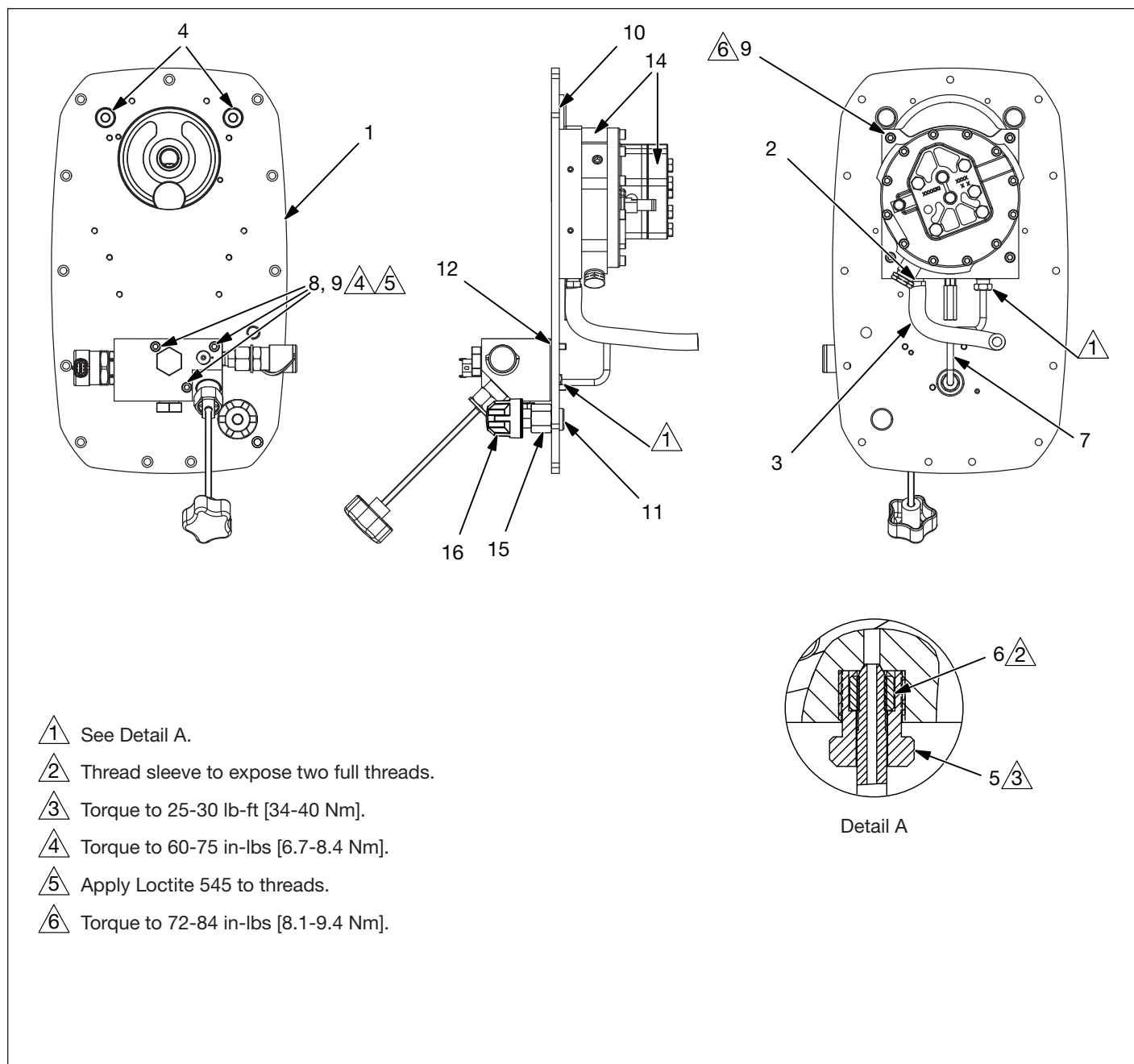


Figure 6, Pump Element and Coverplate Subassembly

Repair Parts List for Figure 6							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	DD2799101	1	Cover Plate	9	CBE643028-1A	3	SHCS, M6 x 80 mm Zinc
2	F100097-16	1	Fitting, Hose Barb	10	DC9550037	1	Gasket, Universal Pump
3	DC9335646	1	Hose, Bypass, 8"	11	B1007006	1	Plug, SAE # 10
4	B1006006	2	Plug, SAE #8	12	DD3366037	1	Gasket, Valve
5	F160021	2	Gland Nut	13	CBE621028-1A	4	SHCS, M6 x 20 mm Zinc
6	F162232	2	Sleeve	14	DD3360900SR	1	Pump Subassembly (see Figure 16)
7	DD2808268	1	Tube	15	F100096-39	1	FTG-FEM Adapter
8	S3037	3	Gasket	16	DD3397118	1	Filter Breather

NOTE: See Figure 11 for heat exchanger hoses and fittings (pumps equipped with optional heat exchanger only).

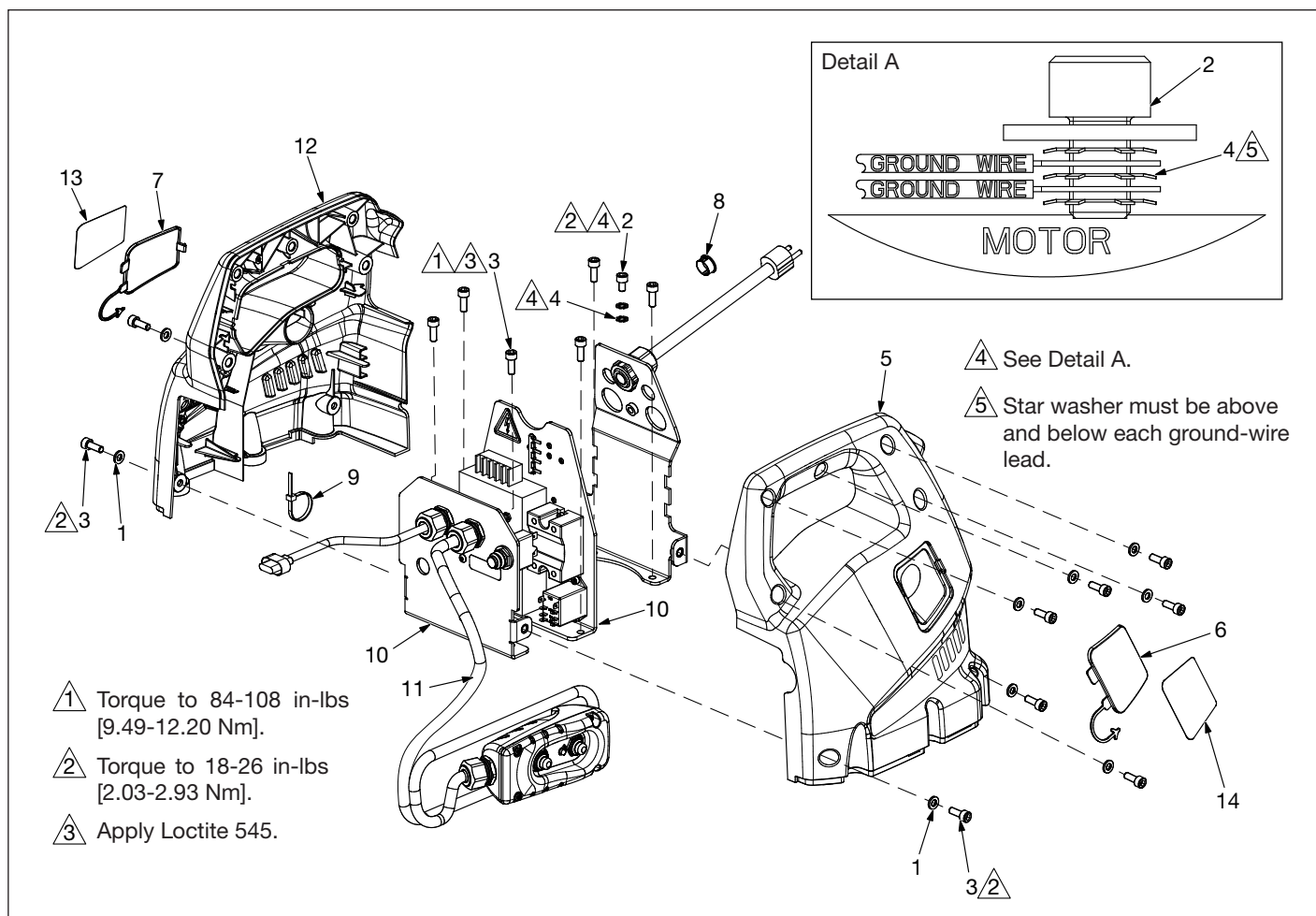


Figure 7, Pump Shroud and Electrical Assemblies

Repair Parts List for Figure 7			
Item	Part Number	Qty.	Description
1	CAE1060108-1A	9	Washer-Flat, M6, 6.4 ID x 12 OD x 1.6, DIN 125A, Zinc
2	CBE615028-1A	1	Screw-SHCS, Hex M6 x 1 x 10, 8.8, Zinc
3	CBE619028-1A	15	Screw-SHCS, Hex M6 x 1 x 16, 8.8, Zinc
4	CCE1060108-6A	2	6 mm Star Washer
5	DC9411424	1	Enclosure Right ZU4 Yellow
6	DC9413424	1	Brush Cap Right ZU4
7	DC9414424	1	Brush Cap Left ZU4
8	DC9436009	3	Plug Dome 16 mm
9	DC9876647	1	Black Cable Tie 6"
10	DD7552920SR	1	Front/Mid Bracket Assembly 115V (see Figure 9)
	DD7553920SR	1	Front/Mid Bracket Assembly 230V (see Figure 9)
11	DD7520960SR	1	Pendant Assembly (see Figure 10)
12	DD3373900	1	Shroud Left Assembly ZUTP
13	* - - -	1	Decal ZUTP Brush Cover, Left
14	* - - -	1	Decal ZUTP Brush Cover, Right

* Items included in brush cover decal kit (DD7430026).

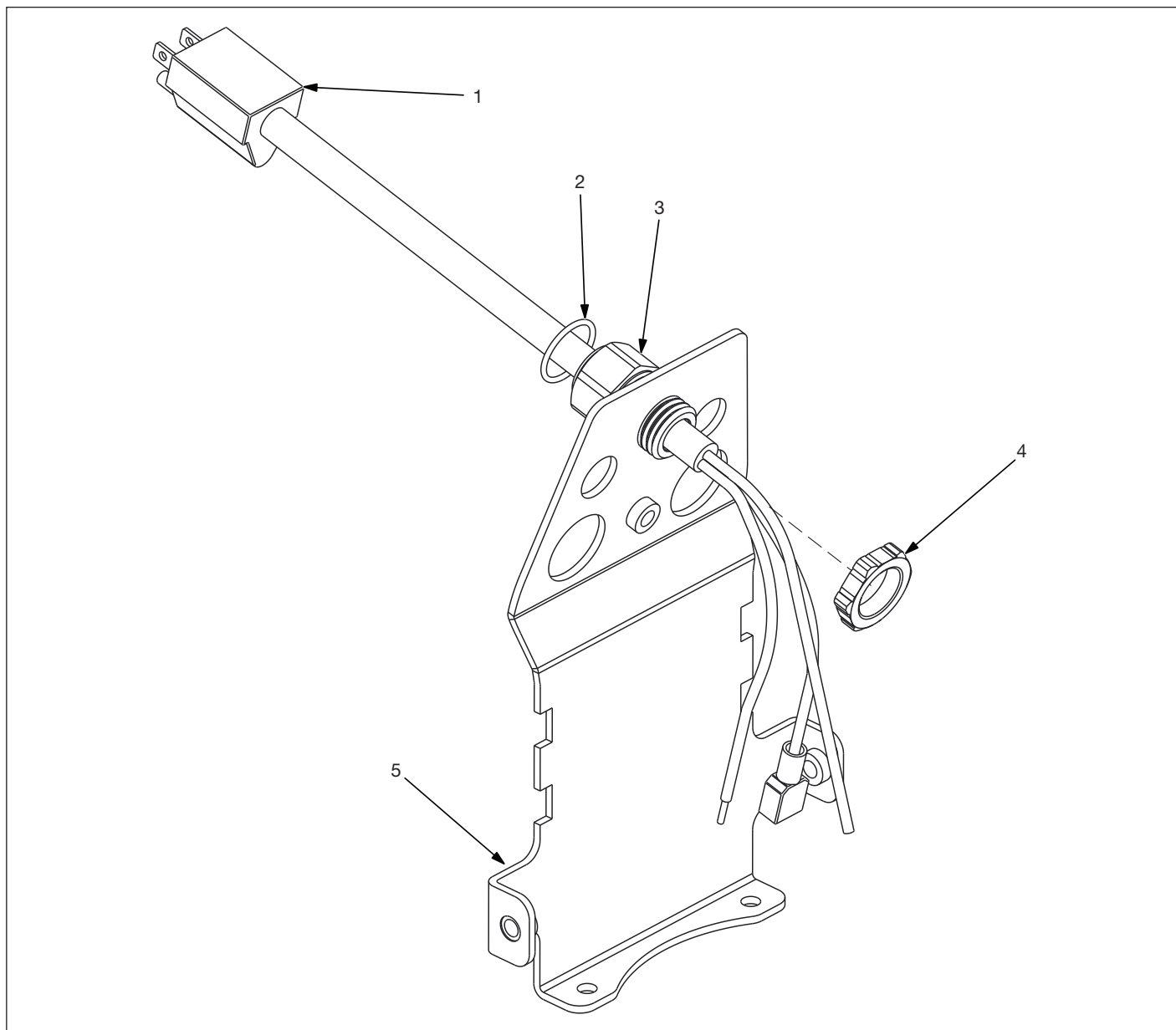


Figure 8, Electrical Components, Back Bracket

Repair Parts List for Figure 8			
Item	Part Number	Qty.	Description
1	* DD7624960SR	1	Power Cord, 115V
	▲ DD7625960SR	1	Power Cord, 230V
	† DD7626960SR	1	Power Cord, 230V CE
2	*▲† B1225503	4	O-ring
3	*▲† - - -	1	Cord Grip (included with Item 1)
4	*▲† DC9538021	4	Locking Nut, 20 mm
5	*▲† DC8354111	1	Bracket, Back

* Item included in front/mid bracket assembly ZUTP 115V service kit (DD3369960SR).

▲ Item included in front/mid bracket assembly ZUTP 230V service kit (DD3370960SR).

† Item included in front/mid bracket assembly ZUTP 230V CE service kit (DD3371960SR).

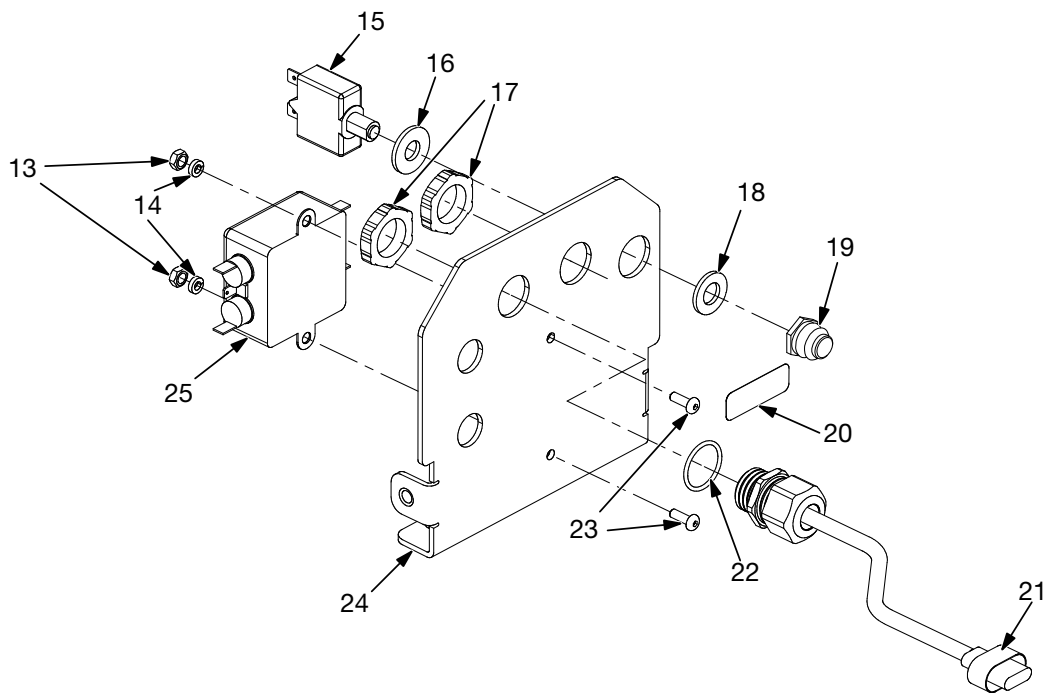
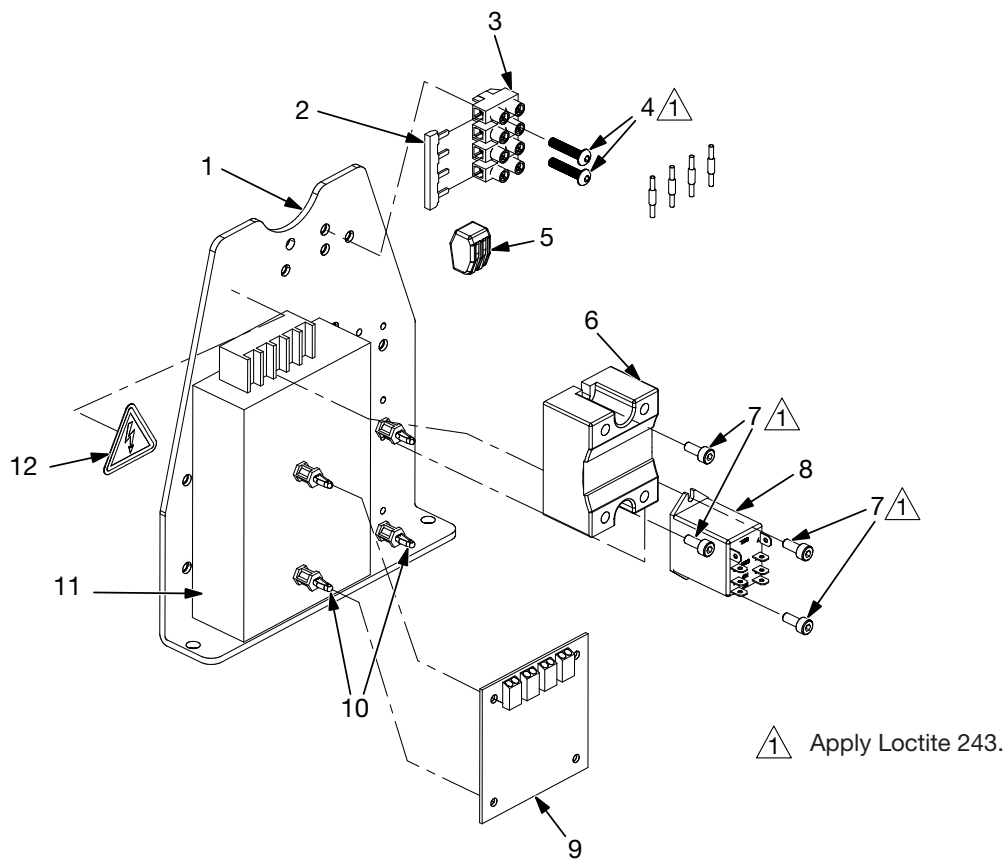


Figure 9, Electrical Components, Front and Middle Bracket

Repair Parts List for Figure 9				
Item	Part Number	Qty.	Description	
1	*▲† DC8354111	1	Bracket, Middle	
2	*▲† DD3498199	1	Terminal Jumper	
3	*▲† DD3497199	1	Terminal Block	
4	*▲† DD2374900	2	Screw, Button Hd. M4 x 20	
5	*▲† DD2374900	1	Wire Connector	
6	*▲† DD2211980	1	SSR, AC Fired	
7	*▲† CBE415028-1A	4	SHCS, M4 7 x 10 mm Zinc	
8	*▲† DD1095980	1	Relay	
9	*▲† DD7020827	1	Valve Controller	
10	*▲† DD7359111	4	Stand-off Support	
11	*▲† DD7041380	1	Transformer	
12	*▲† DC9922026	1	Decal, High Voltage	
13	*▲† CBB1040120-1D	2	Nut, M4	
14	*▲† CCE1040108-5A	2	Lockwasher, Nut M4	
15	▲† DD2790380	1	10 Amp Circuit Breaker with Cap	
	* DD3378380	1	20 Amp Circuit Breaker with Cap	
16	*▲† B1095108	1	Washer	
17	*▲† DC9538021	2	20 mm Locking Nut	
18	*▲† CAE1100108-1A	1	M10 Washer	
19	*▲† - - -		Circuit Breaker Reset Cap (included in Item 15)	
20	*▲† DC8237026	1	Decal, Circuit Breaker Reset	
21	*▲† DD7627960SR		Connector, Kompakt 1.1A	
22	*▲† B1225503	4	O-ring	
23	*▲† CBA417028-1E	2	SHCS, M4 7 x 12 mm	
24	*▲† DC8354111	1	Bracket, Front	
25	*▲† DC9580380	1	RF Inline Filter	

* Item included in front/mid bracket assembly ZUTP 115V service kit (DD3369960SR).

▲ Item included in front/mid bracket assembly ZUTP 230V service kit (DD3370960SR).

† Item included in front/mid bracket assembly ZUTP 230V CE service kit (DD3371960SR).

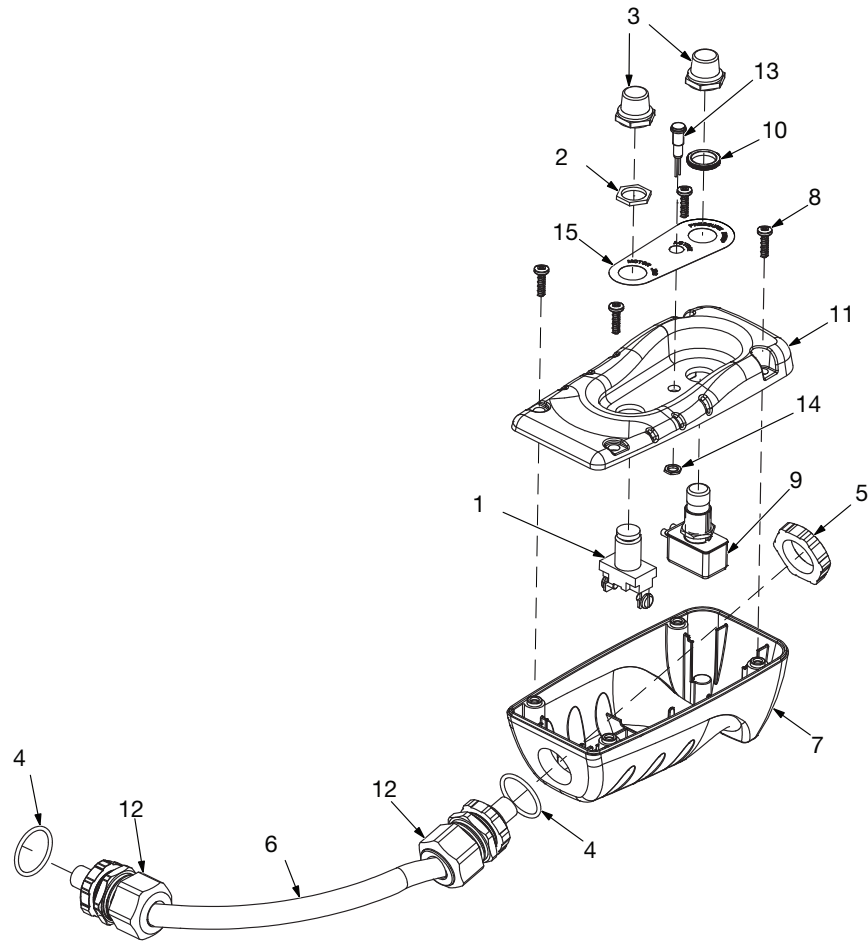


Figure 10, Pendant Assembly

Repair Parts List for Figure 10				
Item		Part Number	Qty.	Description
1	✿	DC8282379	1	Switch, Pushbutton, NO
2	✿	Not Available	1	Nut (included with Item 1)
3	✿	DC8284379	2	Boot, Pushbutton, Black
4	✿	B1225503	2	O-Ring
5	✿	DC9538021	1	Locking Nut, 20 mm
6	✿	DD3373960	1	Cable, 3-Wire, 20 ft. long
7	✿	DC9425424	1	Pendant Enclosure, Lower
8	✿	DC9428008	4	Screw, 8-32 x 0.50 HI-LO
9	✿	DD3439372	1	Switch, Pushbutton, NO
10	✿	Not Available	1	Nut (included with Item 10)
11	✿	DD3491424	1	Enclosure, Upper
12	✿	Not Available	1	Cord Grip, M20
13	✿	DD3440380	1	LED, Red
14	✿	Not Available	1	Nut (included with Item 13)
15	✿	DD3438026	1	Decal, Pendant

✿ Items included in pendant service kit (DD7520960SR).

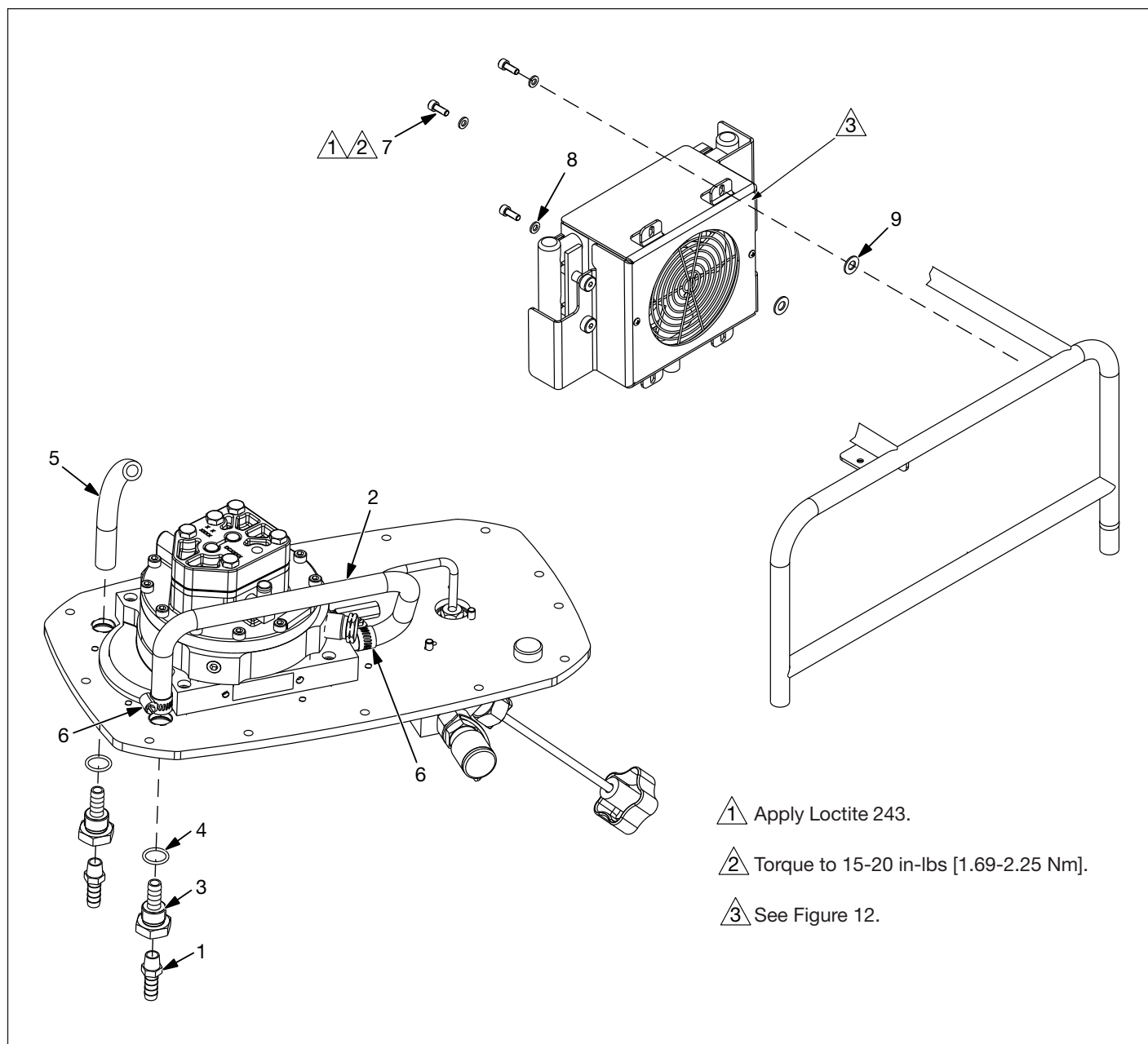


Figure 11, Mounting Hardware, Bypass Hose and Fittings (pumps equipped with optional heat exchanger only)

Repair Parts List for Figure 11			
Item	Part Number	Qty.	Description
1	F100097-16	2	Hose Barb
2	DC9416646	1	Hose, 23" Long
3	DC9273097	2	Fitting, Bypass
4	B1908503	2	O-Ring
5	DC9418646	1	Hose, Bypass, 5"
6	DC9639299	2	Hose Clip, Stl. 3/8 x 7/8"
7	CBE619028-1A	2	SHCS, M6 x 20, Zinc
8	CAE1060108-1A	4	Flat Washer
9	A8038108	2	Washer, Nylon

- △1 Use Loctite 243.
- △2 Use Loctite 592.
- △3 Torque to 80-90 in-lbs [9.03-10.17 Nm].
- △4 Hand tighten.

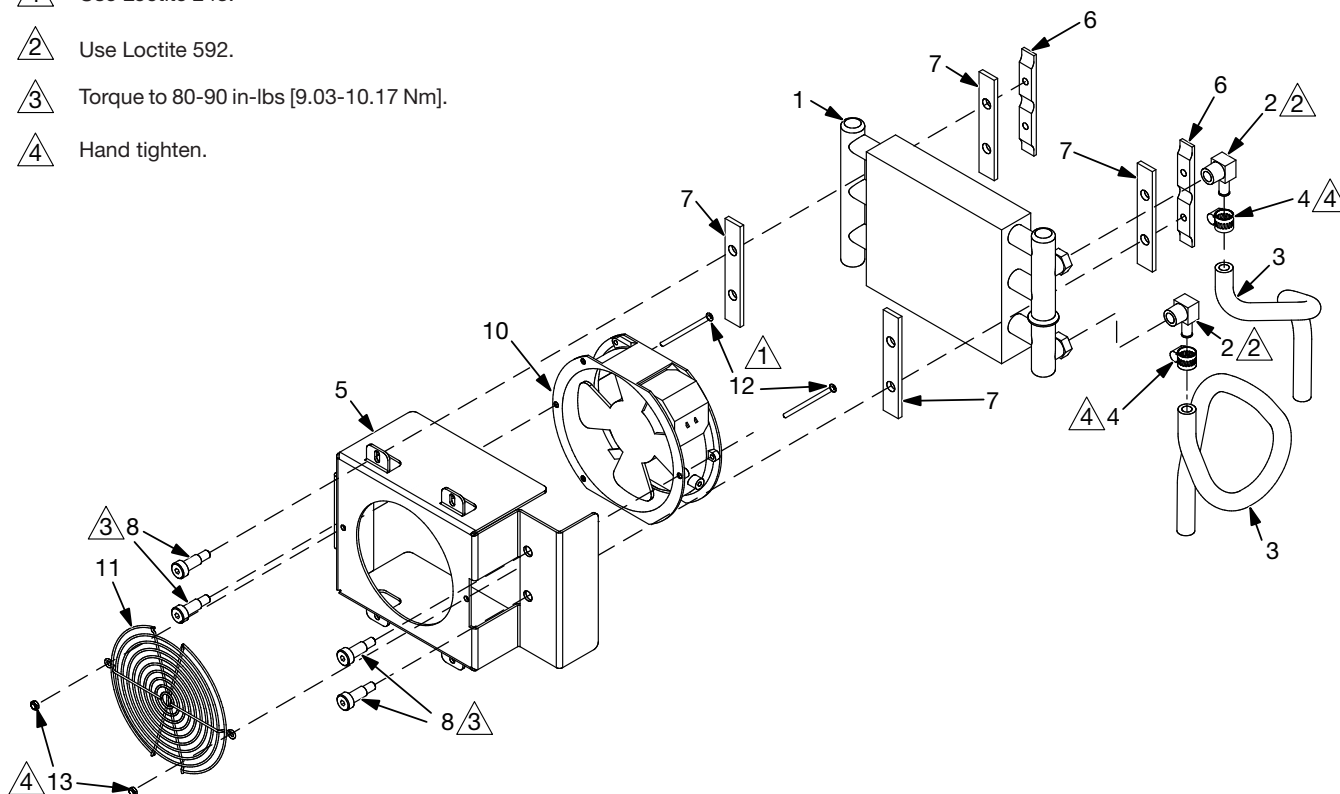


Figure 12, Heat Exchanger Assembly (Pumps equipped with optional heat exchanger only)

Repair Parts List for Figure 12				
Item	Part Number	Qty.	Description	
1	❖❖ DC9546471	1	Heat Exchanger Coils	
2	❖❖ PA2029097	2	Beaded Hose Barb Elbow	
3	❖❖ DC9417646	2	Heat Exchanger 19" Outside	
4	❖❖ DC9639299	2	Hose Clamp Steel 3/8-7/8	
5	❖❖ DD3346471	1	Bracket Heat Exchanger ZUTP	
6	❖❖ DC9555471	2	Bracket Heat Exchanger Mount	
7	❖❖ DC9554037	4	Gasket Heat Exchanger	
8	❖❖ DC9576242	4	Shoulder Bolt M8 X 20	
9	❖❖ DD7436960K	1	Heat Exchanger Cable Assembly ZU4 115/230 (not shown)	
10	* DD7436960	1	Fan ZU4 115V	
	❖ DC8277470	1	Fan ZU4 230V	
11	❖❖ DC3227689	1	Fan Guard 115/230 VAC	
12	❖❖ DC9575628	1	Bolt #8-32 X 2.50	
13	❖❖ DD8592055	2	Acorn Nut, 8-32, Stl, Zinc	

* Items included as part of 115V heat exchanger service kit (DD4075900SR).

❖ Items included as part of 230V heat exchanger service kit (DD4077900SR).

① Apply assembly grease.

② Apply Loctite 243.

③ DRV Valve installation instructions:

1. Special tool required see Figure 14.
2. Lubricate threads with oil.
3. Place the valve into the bore of the valve manifold and align electrical connector as shown.
4. Torque the flange nut of the DRV hand tight.
5. Torque the flange nut to 40-45 ft-lbs [54.2-61.0 Nm]. Be sure not to twist the electrical connection.
6. Slacken the flange nut by 90°.
7. Torque flange nut to 60-65 ft-lbs [81.3-88.1 Nm].

④ Torque to 65-70 ft-lbs [81.3-94.9 Nm].

⑤ Torque to 18-23 ft-lbs [24.4-31.2 Nm].

⑥ Torque to 15-20 in-lbs [1.69-2.26 Nm].

⑦ Coin item 2 onto item 10 at 620 psi [43 bar] with a 5 ton cylinder or 280 psi [19 bar] with a 10 ton cylinder.

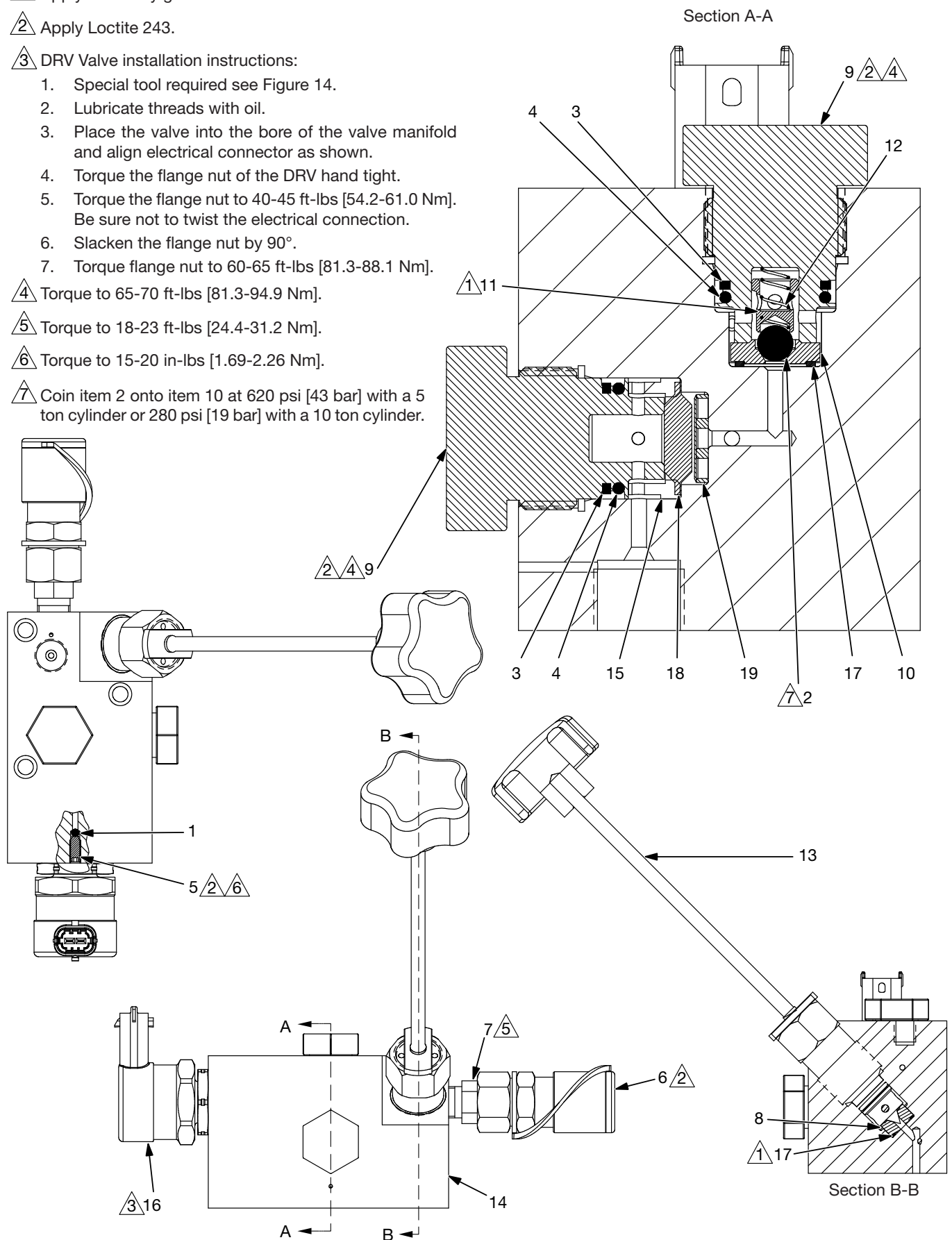


Figure 13, Valve Manifold Assembly

Repair Parts List for Figure 13			
Item	Part Number	Qty.	Description
1	B1003016	1	Ball, 1/8" Diameter
2	B1006016	1	Ball, 7/32" Diameter
3	B1015566	2	Back-Up Washer
4	B1015803	2	O-Ring 9/16", 1/16"
5	BF1907027D	2	Set Screw, #10-32 X 0.438
6	DC7495034	1	CEJN Female Coupler
7	DD1679038	1	Adaptor 1/4 HP To G1/4 Flare
8	* DD2109290	1	Seat ZUTP MPUARV
9	DD2737019	2	Check Gland
10	DD2738290	1	Check Seat
11	DD2740013	1	Guide Ball Check ZUTP
12	DD2742110	1	Spring Check ZUTP Valve
13	* DD3340900	1	MPUARV ZUTP
14	DD6709038	1	Manifold Valve ZUTP
15	DD6867097	1	Filter Spacer
16	◆ DD7019660SR	1	Control Valve, Bosch DRV
17	* P20037	2	Valve Plug Gasket
18	PA1931118	1	Filter Element, 10 MC
19	PA1933071	1	Anti-Extrusion Disc

◆ Special tool is required for removal and installation. Refer to Figure 14.

* Items included in MPUARV ZUTP service kit (DD3340900SR).



IMPORTANT:

- The thickness of the open end must be milled down to 0.296" [7.2 mm] before use.
- Grainger part number 19C332. Proto Products part number J5330MCF.

Available from:
www.grainger.com
www.protoindustrial.com

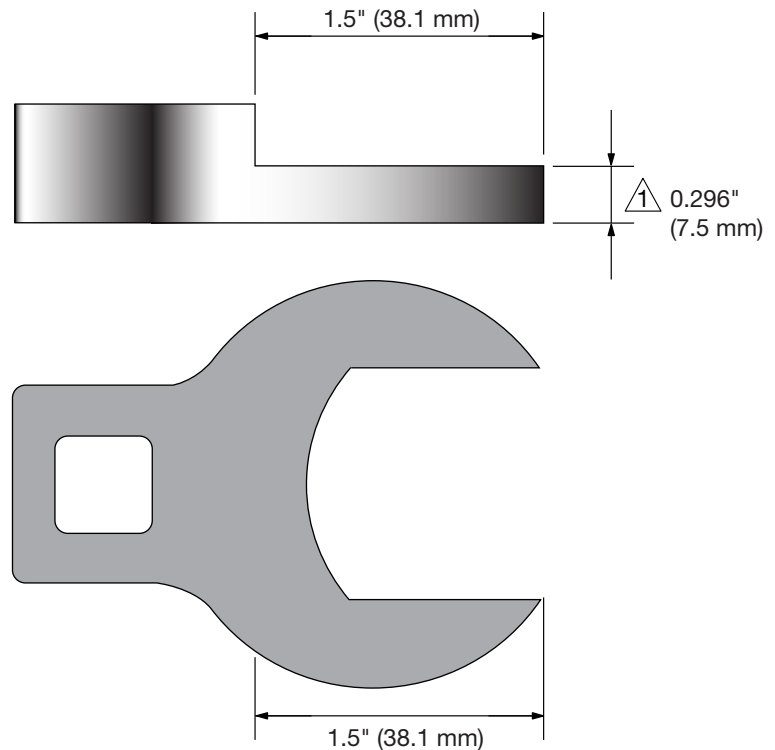
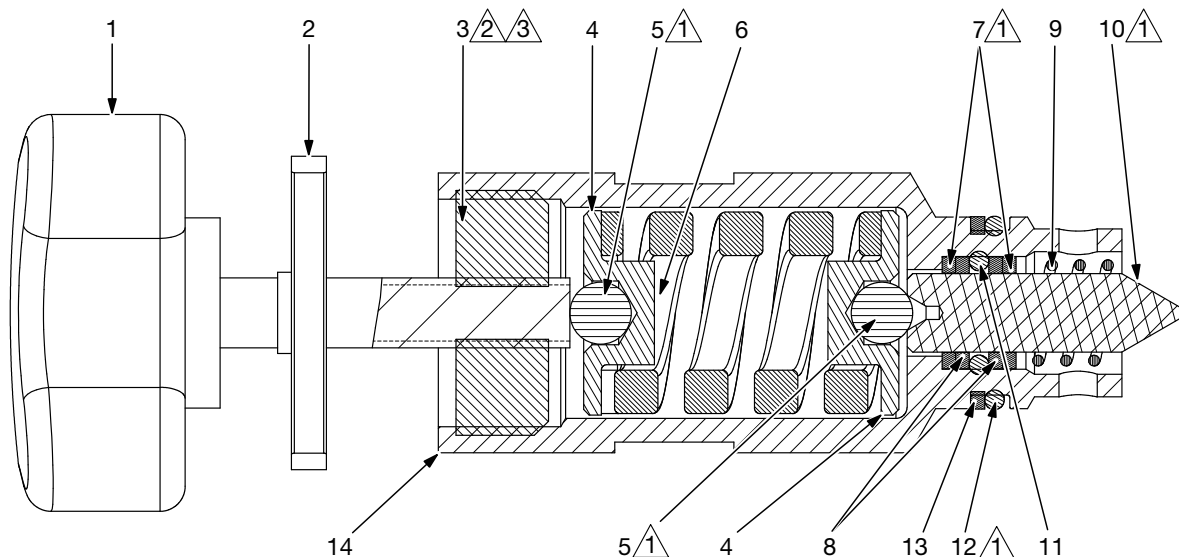


Figure 14, Special Tool - 30 mm Metric Crowfoot Wrench, 1/2" Drive



- △1 Apply a thin layer of grease before assembly.
- △2 Apply Loctite 243.
- △3 Torque to 10-12 ft-lbs [13-16 Nm].

Figure 15, User-Adjustable Relief Valve (MPUARV Style)

Repair Parts List for Figure 15				
Item	Part Number	Qty.	Description	
1	* DD3343070	1	Handle	
2	* DD2085021	1	Lock Nut	
3	* DD2079020	1	End Cap	
4	* DD2076013	2	Spring Guide	
5	* B1006016	2	Ball, 7/32" Diameter	
6	* CU315110	1	Compression Spring	
7	* CB956186	2	Spacer	
8	* CB957564	2	Back-Up Spacer	
9	* 68384	1	Spring	
10	* DD2077051	1	Piston	
11	* B1011803	1	O-Ring	
12	* B1015803	1	O-Ring	
13	* B1015566	1	Back-Up Washer	
14	* DD2075190	1	Body	

* Items included in MPUARV ZUTP service kit DD3340900SR.

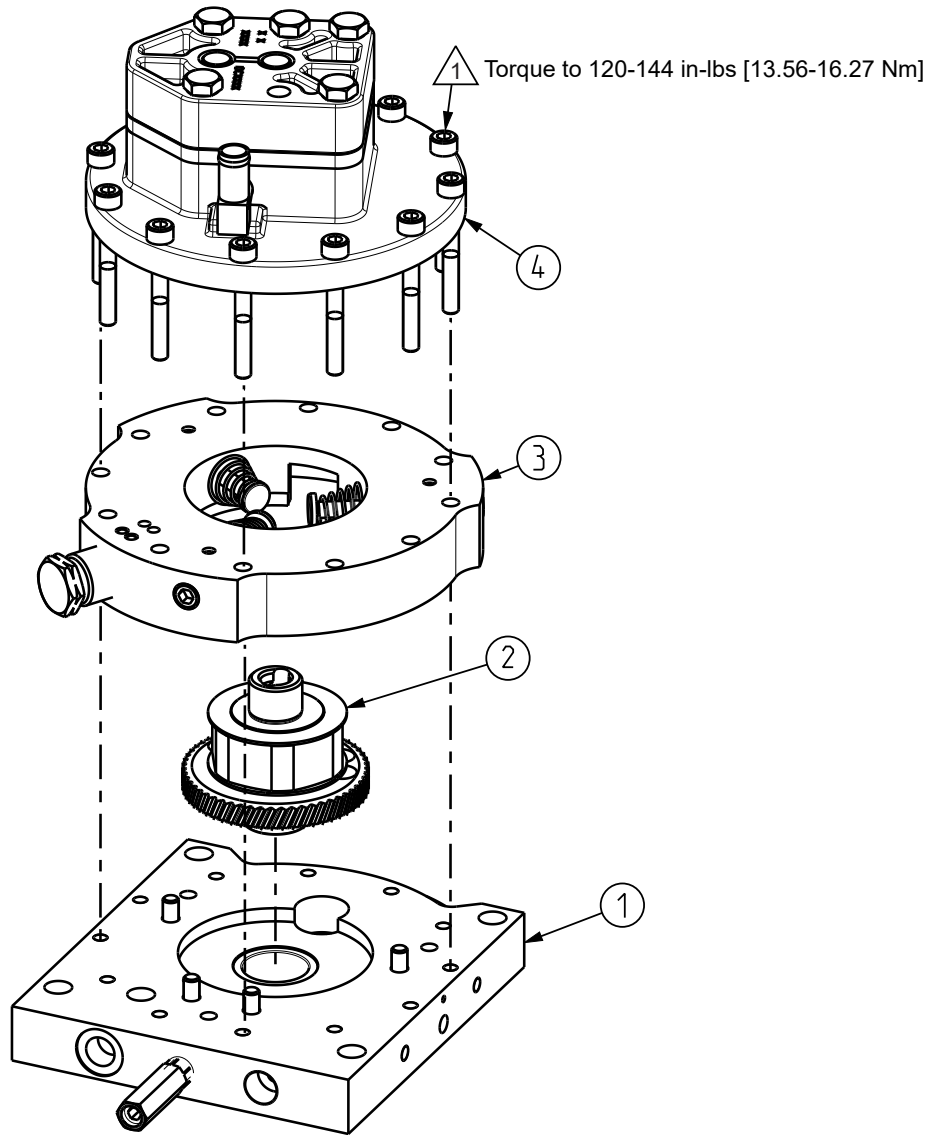


Figure 16, Pump Element Subassembly (3 Piston)

Repair Parts List for Figure 16			
Item	Part Number	Qty.	Description
1	◆ DD3362900	1	ZUTP1500 Top Plate Assembly (See Figure 17)
2	◆ DD3364900	1	Eccentric Assembly .05" Offset (See Figure 18)
3	◆ DD3363900	1	ZUTP1500 Piston Ring Assembly (See Figure 19)
4	◆ DC9285900	1	Gear Pump Assembly (See Figure 21)

◆ Items included in ZUTP pump element replacement kit (DD3360900SR).

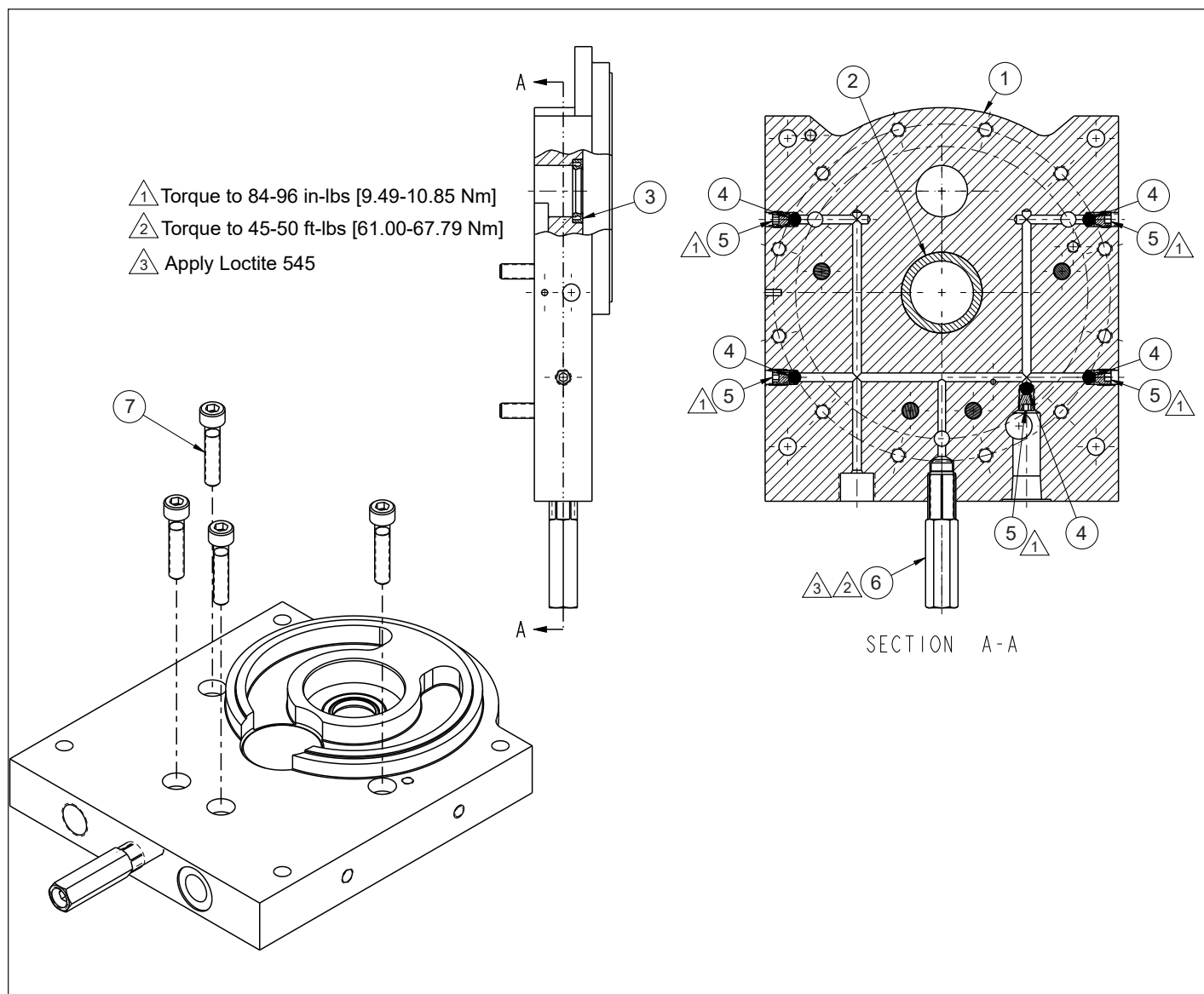


Figure 17, Top Plate Assembly

Repair Parts List for Figure 17				
Item		Part Number	Qty.	Description
1	*	DD2944101	1	Top Plate, 3 Piston MPE
2	*	DC9240155	1	Bearing, Needle 25 x 32 x 16 CL
3	*	DC9041776	1	Oil Seal, 17 x 25 x 4SC
4	*	B1005016	5	Ball, 3/16" Diameter
5	*	BC2504027D	5	Set Screw
6	*	DC7831900	1	Safety Relief Valve Assembly
7	*	CCA623028-1A	4	SHCS Screw

* Items included in ZUTP top plate service repair kit DD4098900 (shipped pre-assembled).

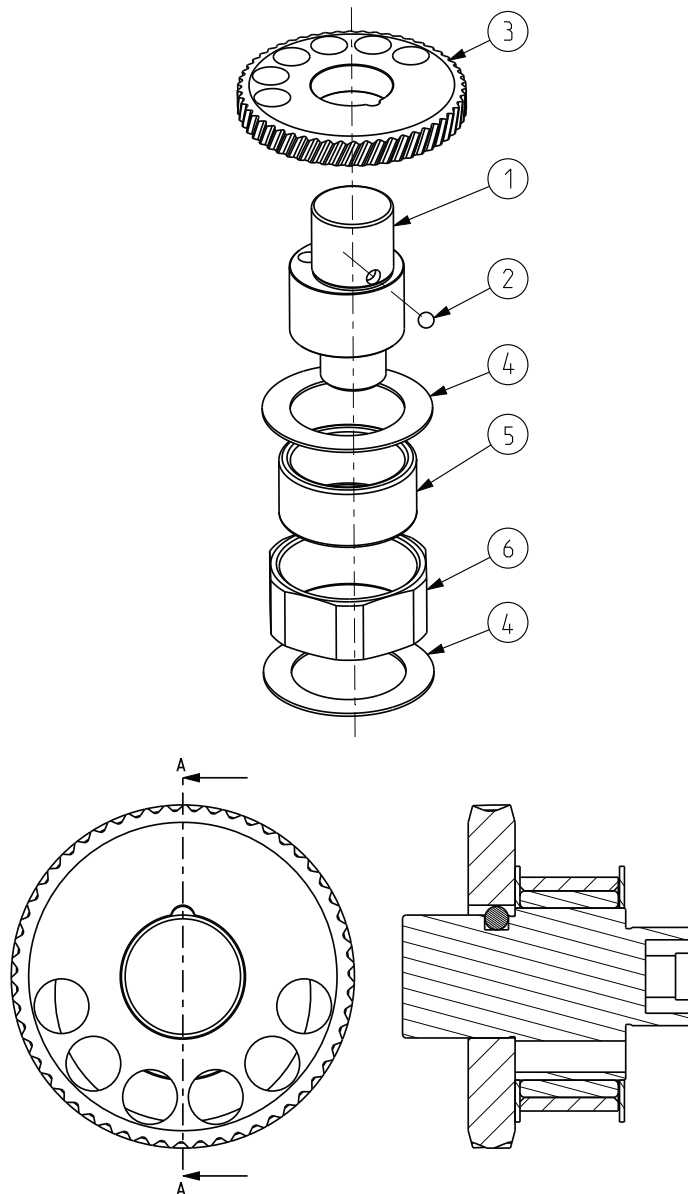


Figure 18, Eccentric Assembly

Repair Parts List for Figure 18			
Item	Part Number	Qty.	Description
1	♦ DD2960537	1	Eccentric
2	♦ B1005016	1	Ball
3	♦ DC9241228	1	Gear
4	♦ BS4725D	2	Ring
5	♦ DC4107155	1	Bearing
6	♦ DC4328350	1	Hex Cam

♦ Items included in ZUTP eccentric service repair kit DD4104900.

Items 1, 2 and 6 are available ONLY as part of the kit and cannot be ordered separately.

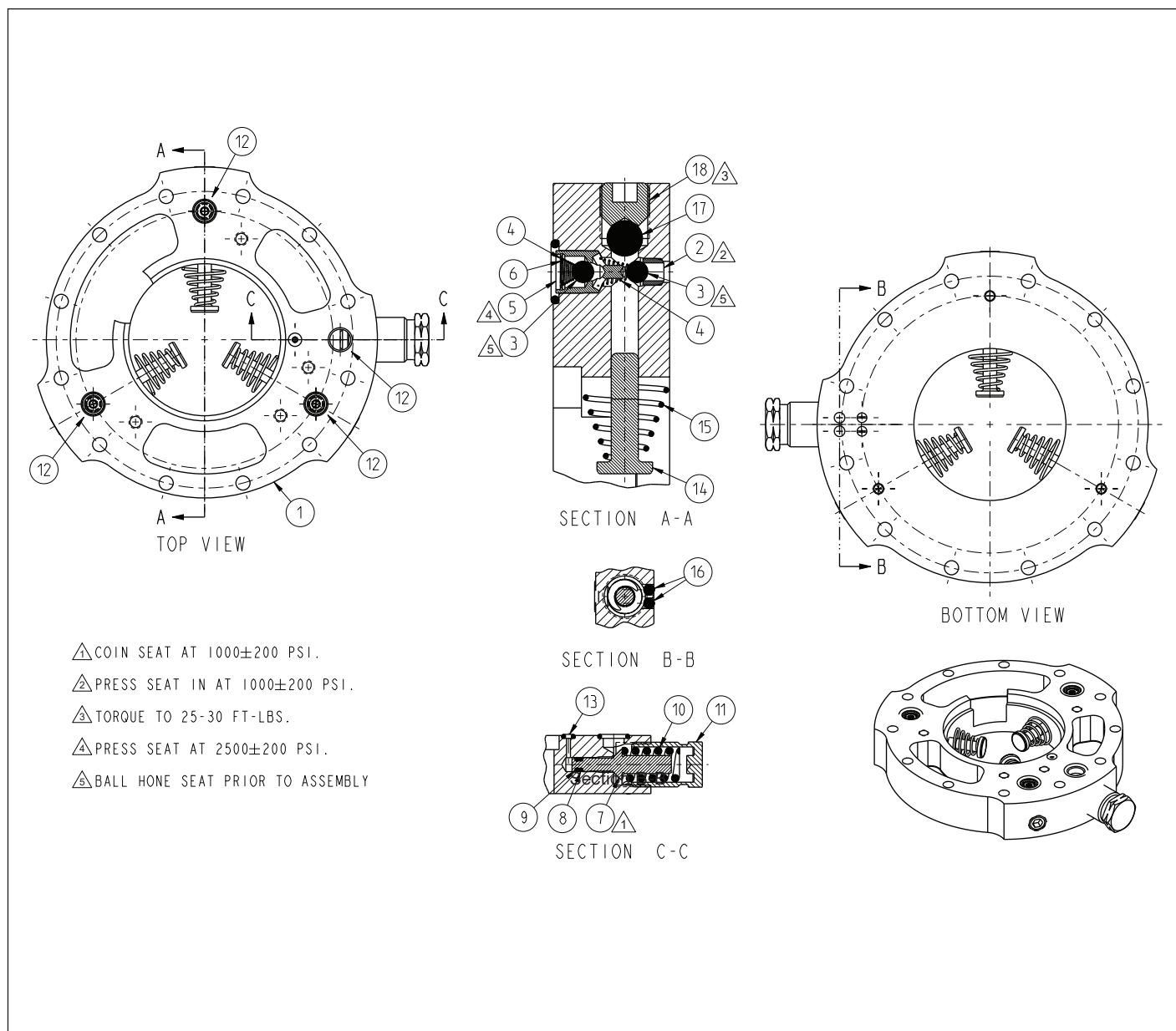


Figure 19, Piston Ring Assembly

Repair Parts List for Figure 19

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	* DD2937101	1	Piston Ring, 3 Piston	10	* DC394110	1	Spring, Bypass
2	* * BSS5358D	3	Seat, Piston Inlet	11	* DC9208080	1	End Cap, Bypass
3	* * B1005016	6	Ball	12	★★ B1013803	4	O-Ring
4	* * BSS5809D	6	Spring, Piston Check	13	★★ B1005403	1	O-Ring
5	* * BSS5357D	3	Seat, Piston Outlet	14	* CN691051	3	Piston Assembly
6	* * BSS5356D	3	Retaining Ring	15	* BSS5509D	3	Spring
7	* DC9292051	1	Piston Bypass	16	★★ DC9293016	2	Ball
8	★★ B1006564	1	Washer, Back-up	17	* B1009016	3	Ball
9	★★ B1006803	1	O-Ring, 1/4" O.D.	18	* BF4406027A	3	Set Screw

★ Items included in ZUTP soft parts service kit DD2492920SR.

* Items included in ZUTP piston ring service repair kit DD4102900.

Note: See Figure 20 for seat tool fabrication drawing.

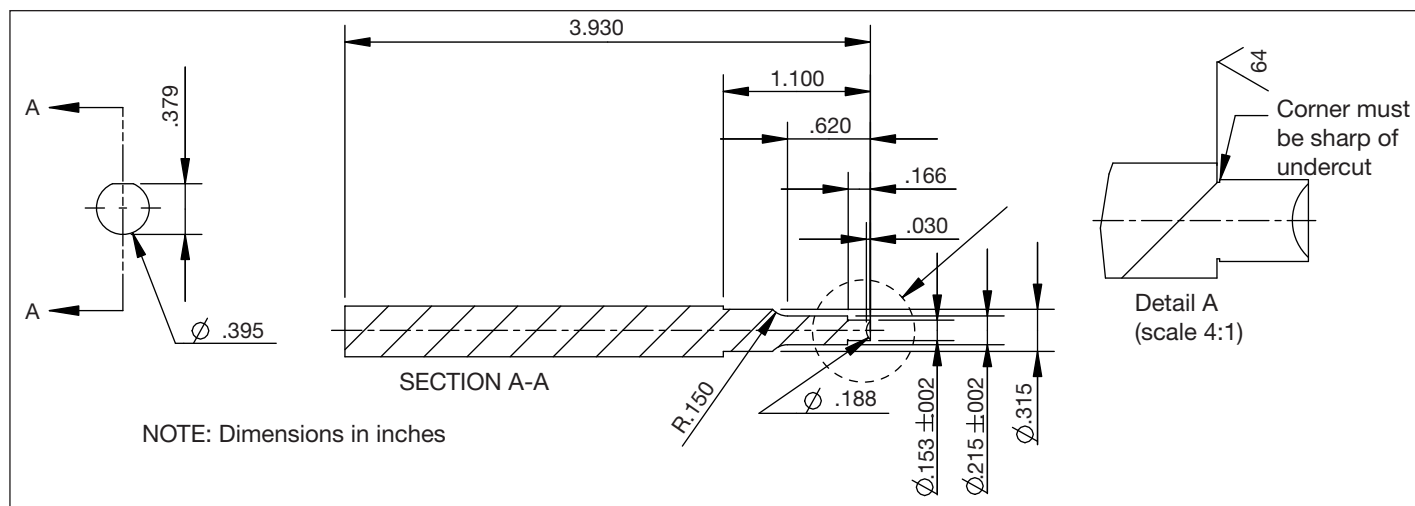


Figure 20, Seat Tool Fabrication Drawing

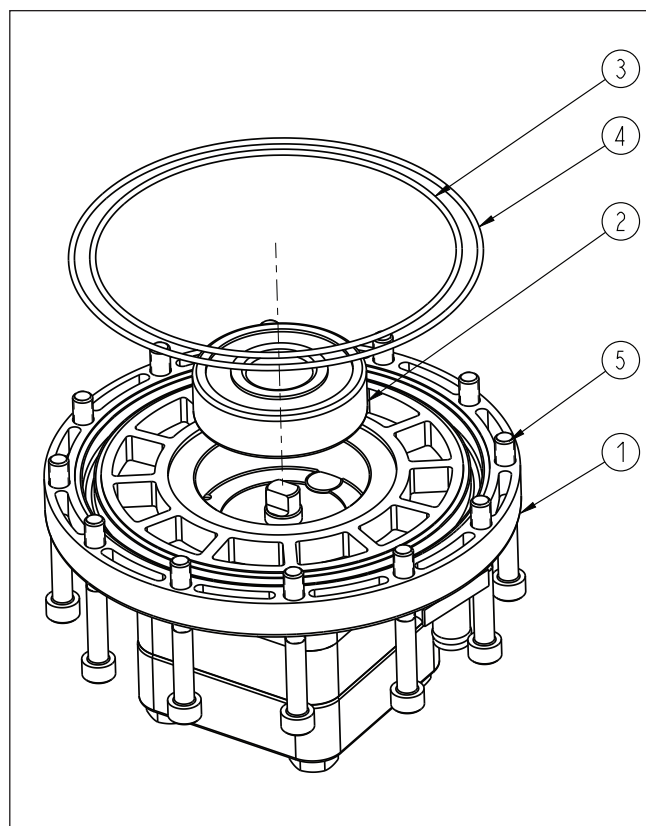


Figure 21, Gear Pump and O-Rings

Repair Parts List for Figure 21			
Item	Part Number	Qty.	Description
1	★ DC9296920	1	Gear Pump
2	★ DC9219155	1	Bearing, Ball 20 x 52 x 15
3	★ ★ B1400503	1	O-Ring
4	★ ★ B1402503	1	O-Ring
5	CCA633028-1A	12	SHCS Screw

★ Items included in ZUTP soft parts service kit DD2492920SR.

★ Items included in ZUTP gear pump replacement kit DC9296920SR.

Table 1 - Specifications and Settings ZUTP Three Piston Pump Element		
Bypass Setting	Bypass End Cap Height (see Fig. 20)	Safety Relief Valve Setting (see Fig. 18, Item 6)
2000-2200 psi [138-151 bar]	0.91 inch [23.1 mm]	23000 - 24000 psi [1585 - 1654 bar]

Table 2 - Service Repair Kits - ZUTP Three Piston Pump Element				
Pump Element Service Repair Kit	Top Plate Service Repair Kit	Eccentric Service Repair Kit	Piston Ring Replacement Kit	Gear Pump Replacement Kit
DD3360900SR See Figure 16	DD4098900 See Figure 17	DD4104900 See Figure 18	DD4102900 See Figure 19	DC9296920SR See Figure 21

Notes:



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