



Repair Parts Sheet

ZC-Series Cordless Electric Pumps

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L4243_J	D	02/2025	A

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.

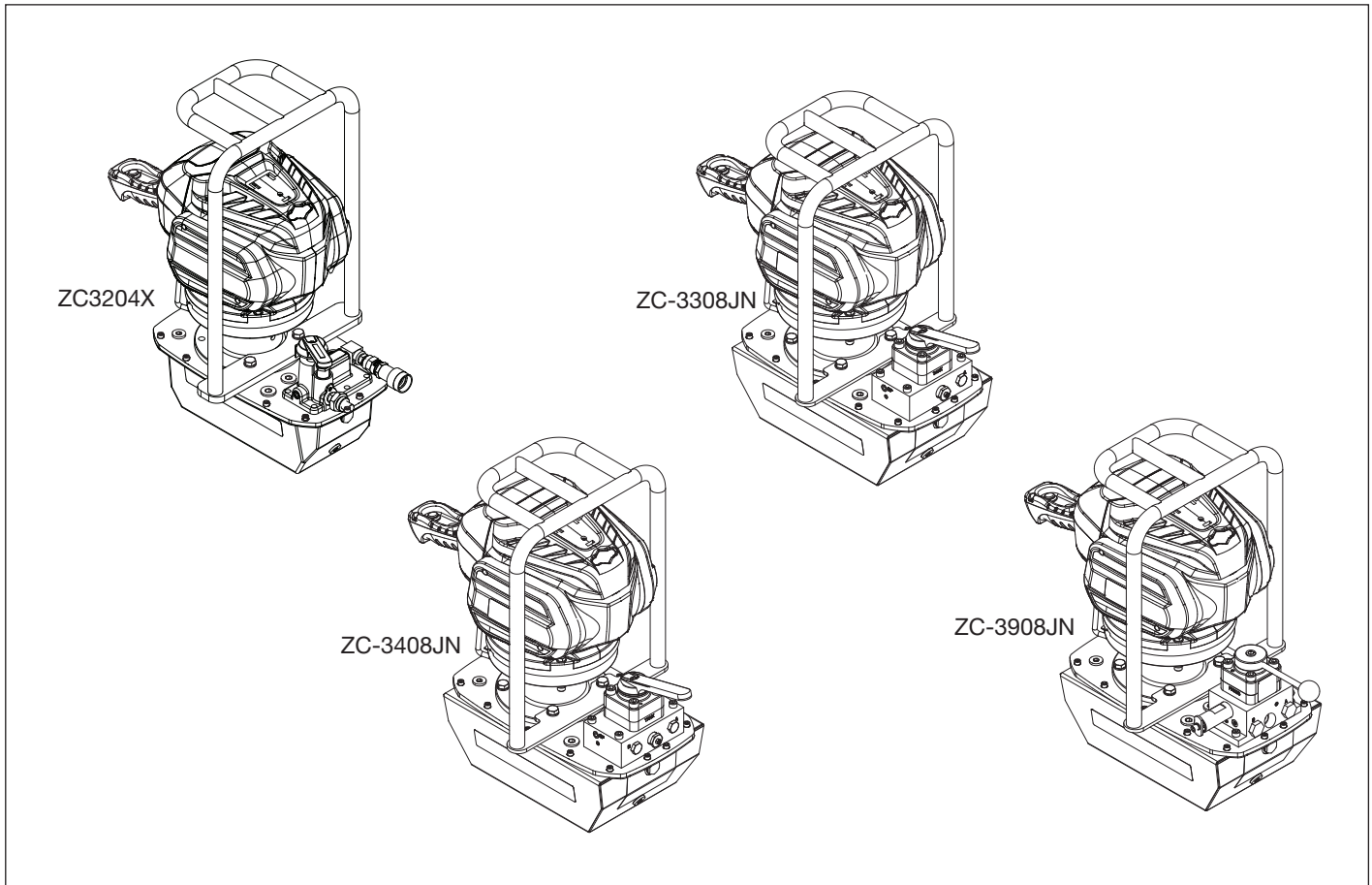


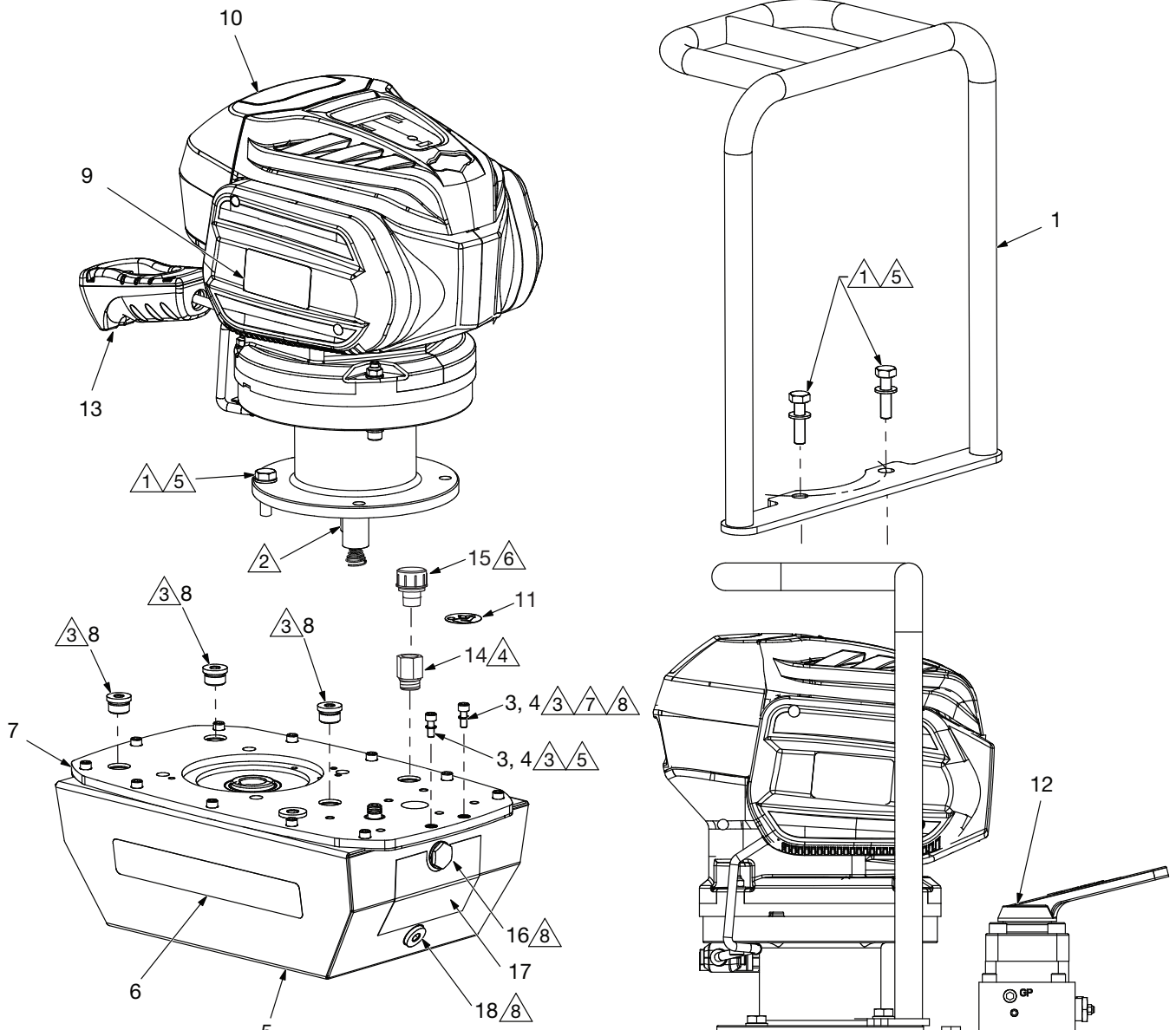
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WARNING

Fully relieve hydraulic pressure, remove battery, and disconnect hydraulic hoses before beginning any maintenance, repair or inspection procedures. Failure to observe these precautions could result in death or serious personal injury.



NOTES:

- ① Torque to 20-25 ft-lbs [26.4-33.0 Nm].
- ② After installing the motor key, apply anti-seize compound to the induction motor shaft and key surfaces.
- ③ Torque to 60-75 ft-lbs [6.8-8.5 Nm].
- ④ Torque to 16-19 ft-lbs [21.7-25.8 Nm].
- ⑤ Apply Loctite 545.
- ⑥ Torque to 5-7 in-lbs [0.5-0.8 Nm].
- ⑦ Torque SHCS in a crossing pattern to ensure even sealing of gasket.
- ⑧ Torque to 50-60 in-lbs [5.6-6.8 Nm].

Figure 1, ZC-Series Pump

Repair Parts List (Refer to Figure 1)			
Item	Part Number	Qty.	Description
1	DD7242920	1	Handle 4 and 8 Liter
2	DC2749768	1	Return Pipe 3/8 NPT x 5" (for 2.5 gal)
3	★ CBE619028-1A	13	SHCS M6-1 x 16 Zinc
4	★ DC9551920	13	Gasket
5	❖ DC8136025	1	8L Reservoir (used on pump models ZC3308J, ZC3408J and ZC3908J)
Note: For pump model ZC3204X, See Figure 1A for reservoir parts.			
6	❖ DC9596026	2	Decal Enerpac Reservoir
7	See Figure 6	1	Cover Plate and Pump Element Assy.
8	B1006006	3	Plug Socket SAE #8
9	DD7237026	2	Decal ZC Class
10	See Figure 4	1	Powerhead Assy.
11	DD9920026	1	Decal Read Instructions
12	See Figures 2 and 3	1	Directional Control Valve
13	See Figure 5	1	Remote Pendant
14	★ F100096-38	1	Fitting, Adapter
15	★ DC8250006	1	Plug, Breather
16	❖ DC85900SR	1	Sight Glass
17	DD7223026	1	Decal - Product
18	❖ DC8249006	1	Plug, Magnetic

★ Items included in Seal Kit, ZE3K. ❖ Items included in 8L Reservoir Kit, DC8136025SR.

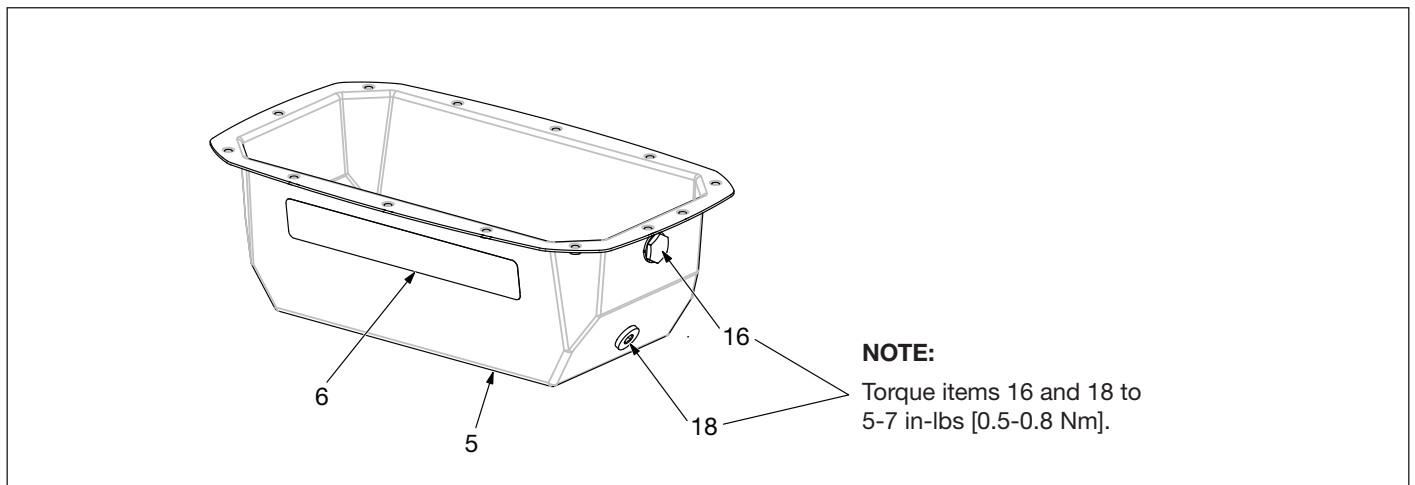
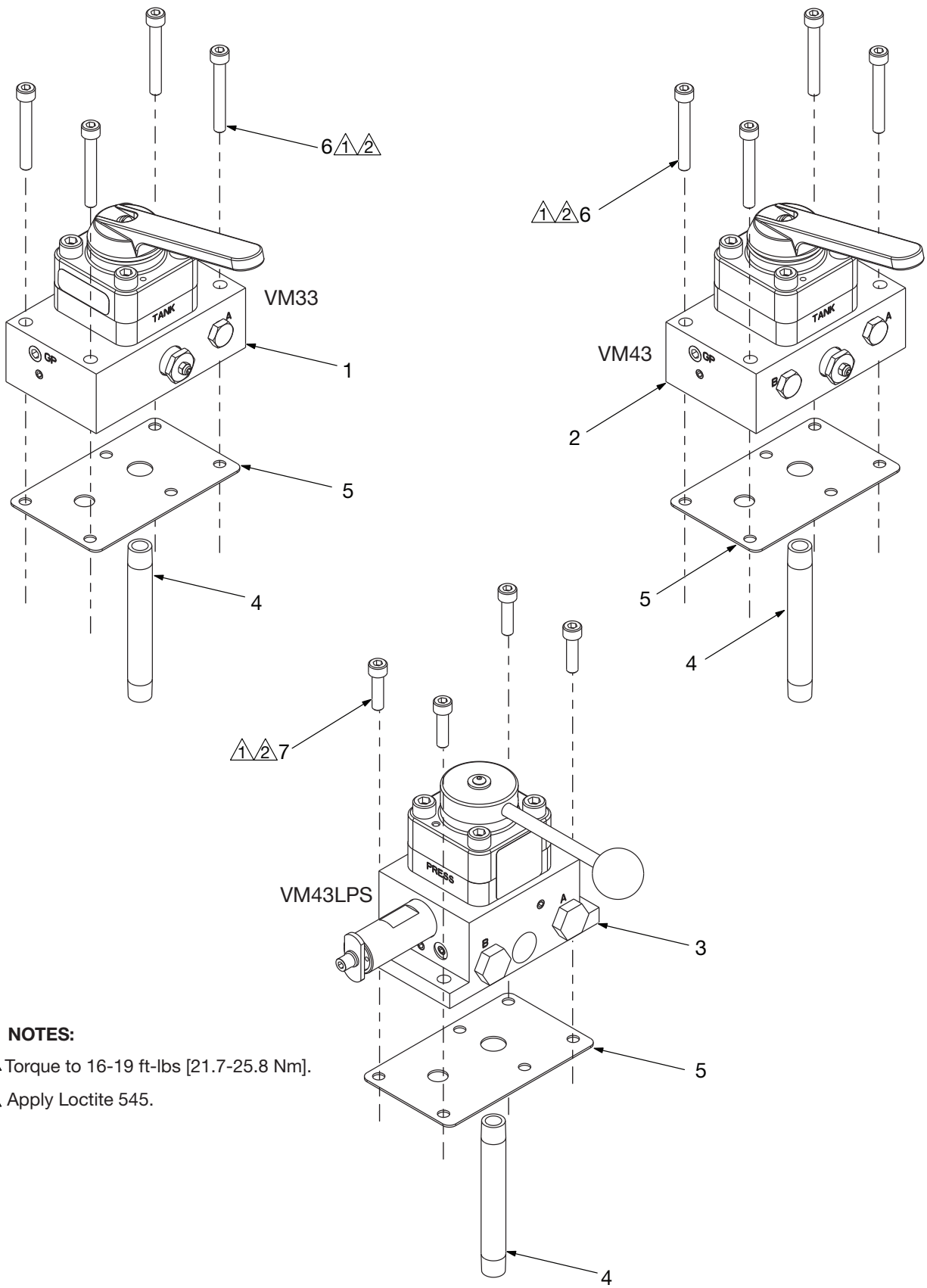


Figure 1A, 4 Liter Reservoir

Repair Parts List (Refer to Figure 1A)			
Item	Part Number	Qty.	Description
5	❖ DC9379025	1	4L Reservoir (used on pump model ZC3204X)
6	❖ DC9596026	2	Decal Enerpac Reservoir
16	❖ DC85900SR	1	Sight Glass
18	❖ DC8249006	1	Plug, Magnetic
NS	DD7223026	1	Decal - Product

❖ Items included in 4L Reservoir Kit, DC9379025SR. NS = Not shown.



NOTES:

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

Figure 2, Control Valve, Models VM33, VM43 and VM43LPS

Repair Parts List (Refer to Figure 2)			
Item	Part Number	Qty.	Description
1	DC6202900	1	VM33 Pump Mount DC5170 (used on pump model ZC3308J)
2	DC6204900	1	VM43 Pump Mount DC5190 (used on pump model ZC3408J)
3	DC8254900	1	VM43LPS Mount DC7425 (used on pump model ZC3908J)
4	DC2749768-1B	1	Return Pipe 3/8 NPT x 5"
5	DC9356037	1	Gasket, Valve
6	CBE837028-1A	4	Screw, Low Socket Head M8 x 1.25 x 60L Zinc
7	CBE825028-1A	4	Screw, Low Socket Head M8 x 1.25 x 30L Zinc

NOTE: Refer to repair parts sheet L2613 for VM33 control valve replacement parts.
Refer to repair parts sheet L2613 for VM43 control valve replacement parts.
Refer to repair parts sheet L2956 for VM43LPS control valve replacement parts.

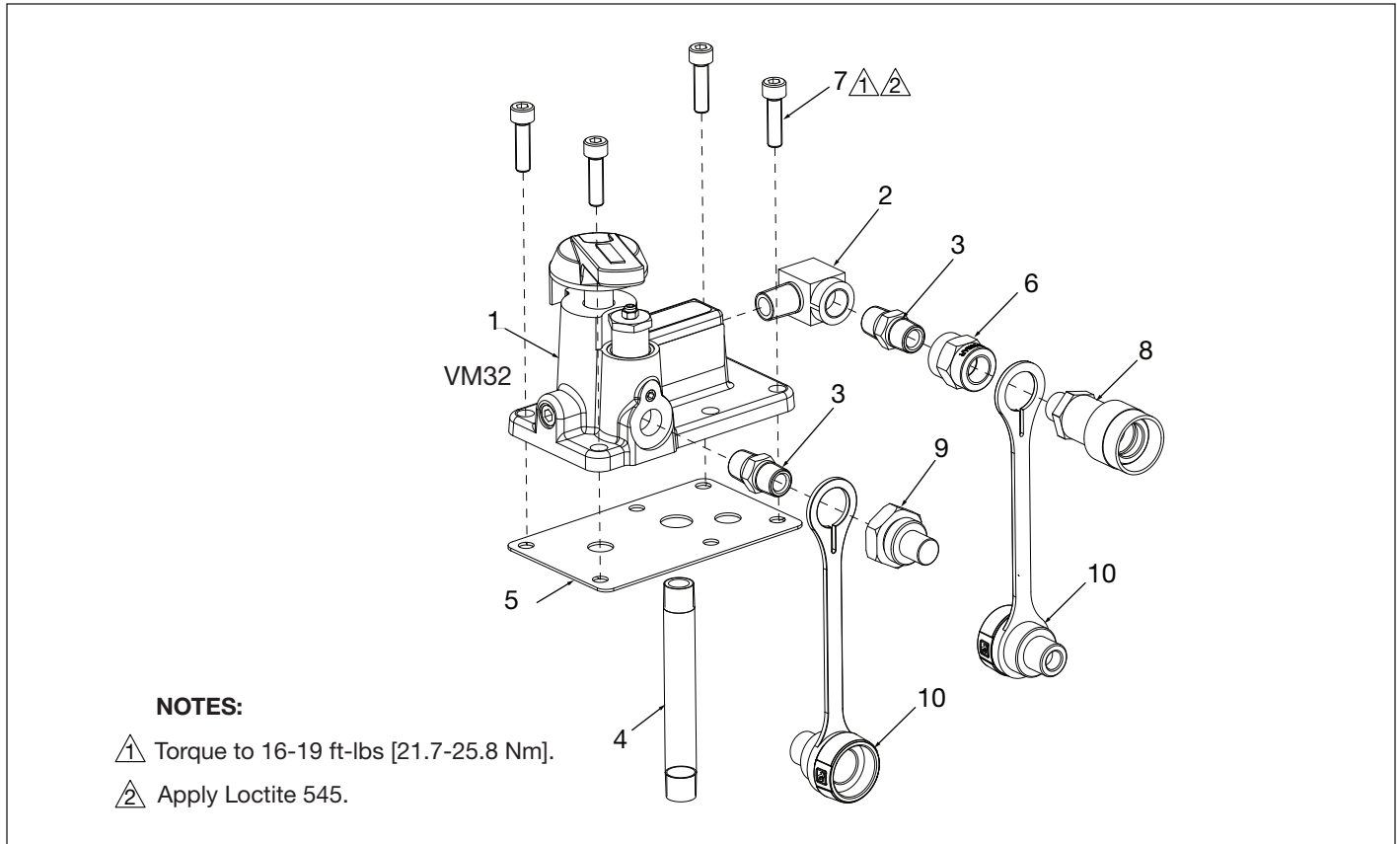
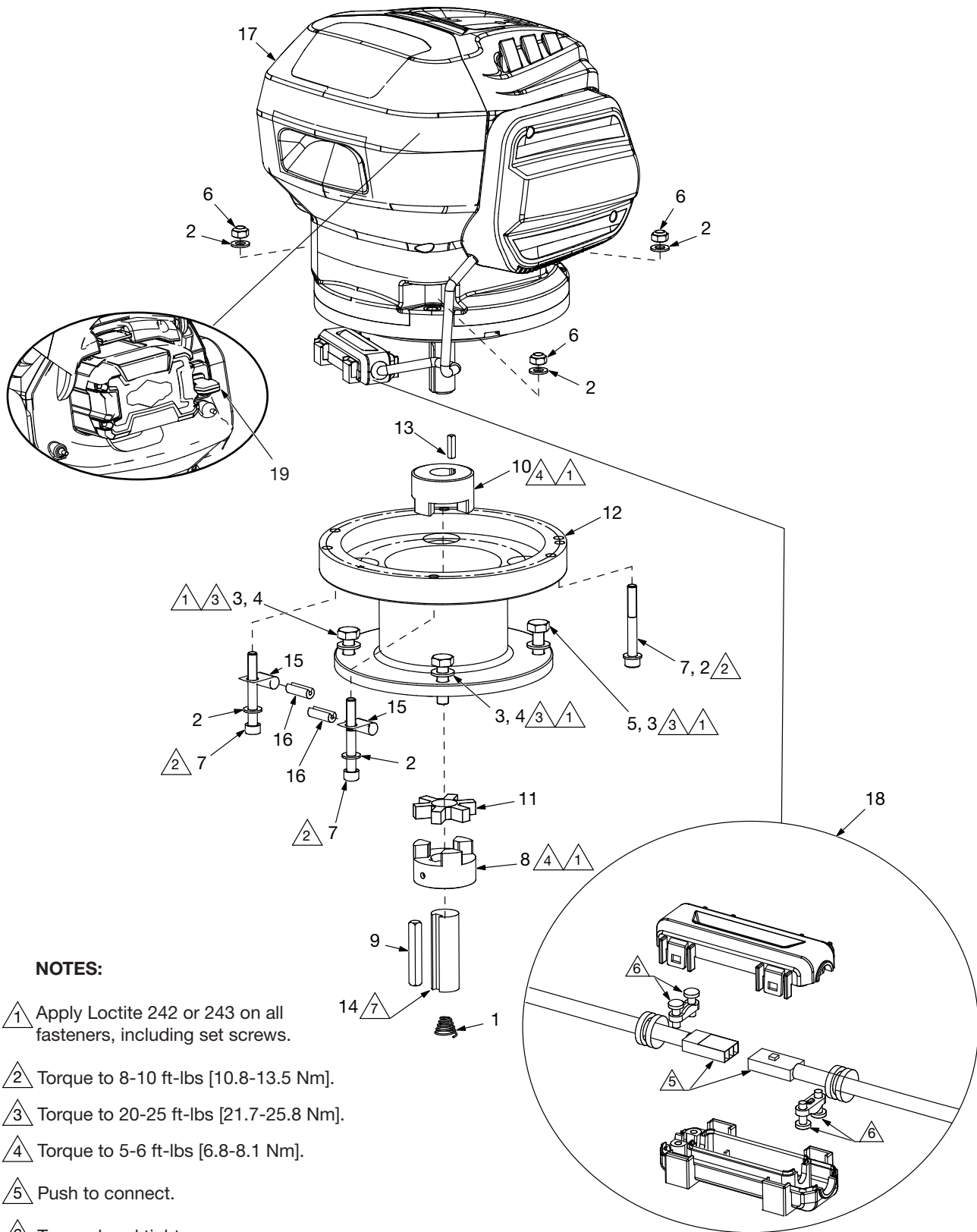


Figure 3, Control Valve, Model VM32

Repair Parts List (Refer to Figure 3)			
Item	Part Number	Qty.	Description
1	DD8256900	1	VM32 Pump Mount DD8255 (Used on pump model ZC3204X)
2	FZ1616	1	Street Elbow
3	FZ1619	2	Nipple, Hex
4	DC2749768-1B	1	Return Pipe 3/8 NPT x 5"
5	DC9356037	1	Gasket, Valve
6	FZ1614	1	Coupling
7	CBE825028-1A	4	Screw, Low Socket Head M8 x 1.25 x 30L Zinc
8	CR400	1	Coupler Half, High-flow (female)
9	CH604	1	Coupler Half, High-flow (male)
10	CD411	2	Dust Cap/Plug

NOTE: Refer to repair parts sheet L2614 for VM32 control valve replacement parts.



NOTES:

- ① Apply Loctite 242 or 243 on all fasteners, including set screws.
- ② Torque to 8-10 ft-lbs [10.8-13.5 Nm].
- ③ Torque to 20-25 ft-lbs [21.7-25.8 Nm].
- ④ Torque to 5-6 ft-lbs [6.8-8.1 Nm].
- ⑤ Push to connect.
- ⑥ Torque hand tight.
- ⑦ Apply anti-seize compound to shaft.

Figure 4, ZC-Series Powerhead

Repair Parts List (Refer to Figure 4)			
Item	Part Number	Qty.	Description
1	BSS5509D	1	Spring, Conical
2	CAE1080108-1A	6	Washer
3	CAE1100108-1A	4	Washer 10mm Zinc
4	CBE1027046-1B	2	Bolt, Hex Head M10 x 35 Zinc
5	CBE1029046-1B	2	Bolt, Hex Head M10 x 65 Zinc
6	CBE1080120-2A	3	M8 Lock Nut
7	CBE839028-1A	3	SHC M8 x 65 Zinc
8	DC2380034	1	Coupler
9	DC8087251	1	Key 5/16 ZG
10	DC8088034	1	Coupler
11	DC8089234	1	Coupling Spider
12	DC8130004	1	Adapter Flange
13	DC8146251	1	Key 2/16 ZG
14	DC9079104	1	Shaft Adaptor
15	DD7228299	2	Loop Clamp, Vibration-Dampening
16	DD7729037	2	Rubber Strip, Buna-n, Oil Resistant
17	PH-ZC	1	Powerhead Assembly
18	DD7361095	1	Clamshell Connector
19	DD7392146	1	Safety Key

NOTE: Powerhead assembly (item 17) does not contain any user serviceable parts.

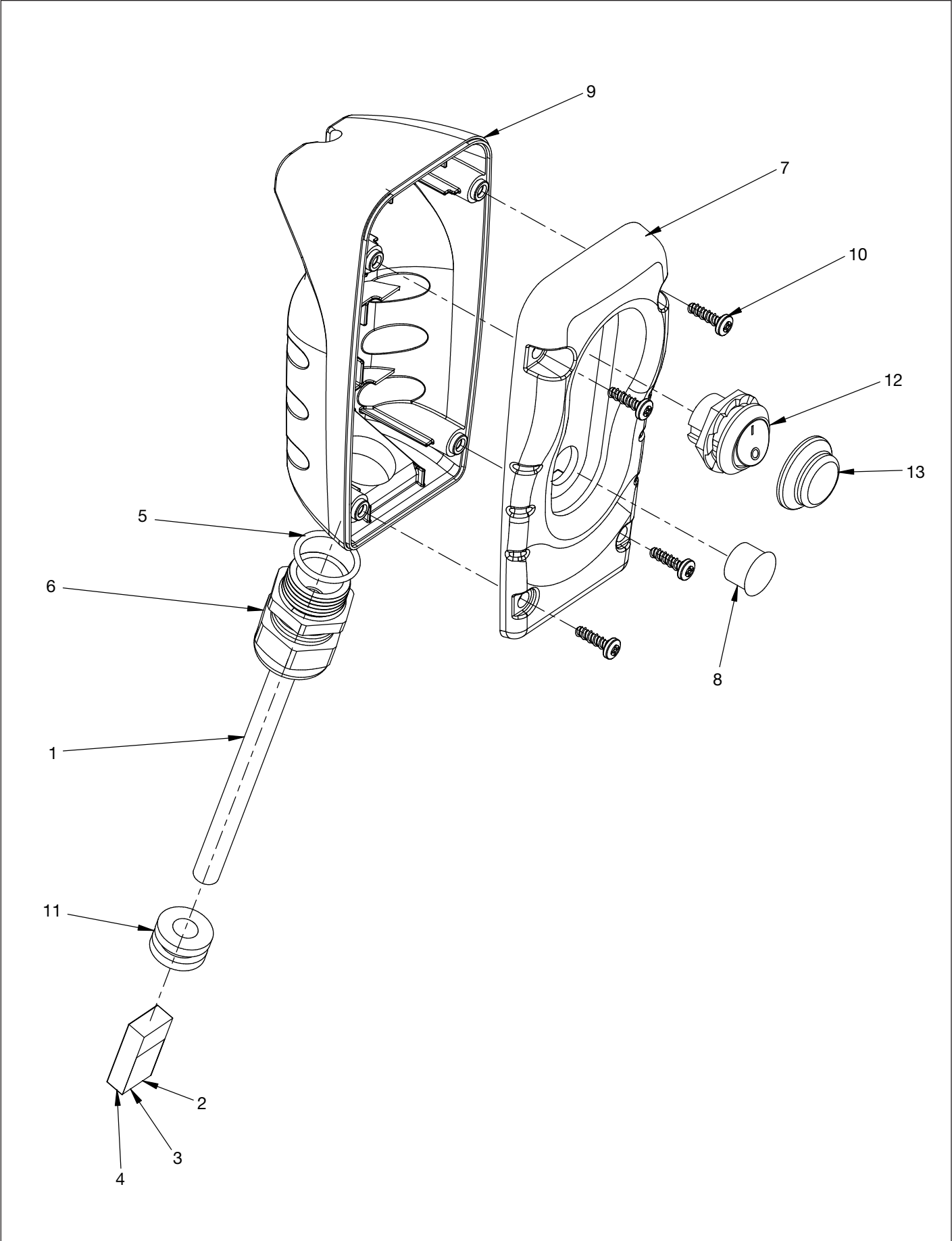


Figure 5, Remote Pendant Switch

Repair Parts List (Refer to Figure 5)			
Item	Part Number	Qty.	Description
1	● 19509	1	Cable
2	● 179464-1	1	Housing
3	● A106296-ND	1	Lock
4	● A122376-ND	3	Terminals 26-22
5	● B1223503	1	O-Ring
6	● CD20MA-BK	1	Domed Cord Grip 20mm
7	● DC8122424	1	Pendant Housing Upper ZA
8	● DC8228009	1	Dome Plug 1/2"
9	● DC9425424	1	Enclosure, Lower Pendant
10	● DC9428008	4	Screw, Hi-Lo #8 x 1/2
11	● DD7226380	1	Grommet
12	● EG1889-ND	1	Switch Rocker SPST 10A 125V
13	● RDR0940X0385	1	Crystal Switch Seal

● Items included in Remote Pendant Replace Kit, P-ZC.

NOTES:

- 1 Torque to 14-16 in-lbs [1.6-1.8 Nm].
- 2 Torque to 20-22 ft-lbs [27-30 Nm].
- 3 Torque to 45-47 ft-lbs [61-64 Nm].
- 4 Torque to 50-55 ft-lbs [68-74 Nm].
- 5 Torque to 15-18 ft-lbs [20-24 Nm].
- 6 Increase torque if needed to align item.
- 7 Apply Loctite 545.
- 8 Torque to 72-84 in-lbs [8.1-9.5 Nm].
- 9 Position item #4 to clear item #5.
- 10 Torque hand tight.

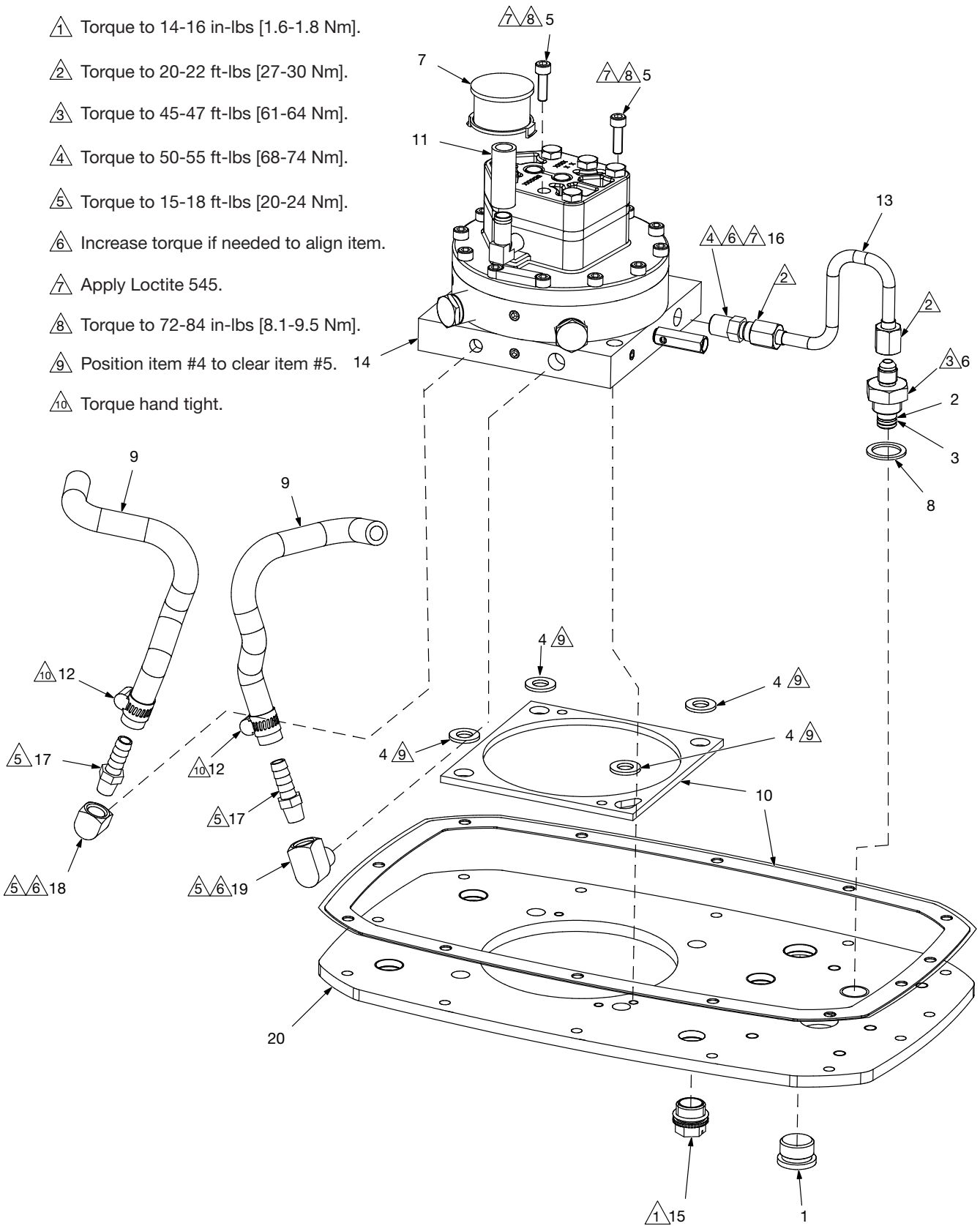


Figure 6, Cover Plate and Pump Element

Repair Parts List (Refer to Figure 6)			
Item	Part Number	Qty.	Description
1	B1007006	1	Plug Socket SAE #10
2	★ B1012566	1	Teflon Washer
3	★ B1012803	1	O-Ring (.38 x .50 x .06) Poly
4	DD7324108	4	Washer M10 0.8mm-1.0mm ALUM.
5	CBE621028-1A	2	SHCS M6 x 20 Zinc
6	DC9173690	1	Connector Tube/Fitting
7	DC9178118	1	Intake Filter
8	★ DC9271167	1	Gasket, Copper 0.754 x 1.017 x 0.064
9	DC9418646	2	Hose Bypass 5"
10	❖ ❖ ★ DC9551920	1	Gasket ASM Reservoir/Motor Z
11	DC9600268	1	Tube Intake 4L 1.6"
12	DC9639299	2	Hose Clamp Steel 3/8-7/8
13	DC9663920	1	Tube ASM Steel ZE Pump
14	See Figure 7	1	Pump Element Assembly
15	DD6321271	1	Thread Protector SAE #8 with O-ring
16	F100094-246	1	Connector, Flare
20	DC9451101-P01	1	ZE Cover Plate
Pump models ZC3308J, ZC3408J and ZC3908J only:			
17	F100097-16	2	Fitting, Hose Barb .25 NPT
18	F100097-79	1	Street Elbow, 1/4" NPT Female x 1/4" Male, Brass
19	F100097-81	1	Street Elbow, 1/4" NPT Female x 1/8" Male, Brass
Pump model ZC3204X only:			
17	F100097-9	2	Fitting, Hose Barb 1/8" NPT
18	U190300095	1	Street Elbow, 1/8" NPT Female x 1/4" NPT Male, Brass
19	F100097-78	1	Street Elbow, 1/8" NPT Female x 1/8" Male, Brass

★ Items included in Seal Kit, ZE3K.

❖ Item included in 4L Reservoir Kit, DC9379025SR.

❖ Item included in 8L Reservoir Kit, DC8136025SR.

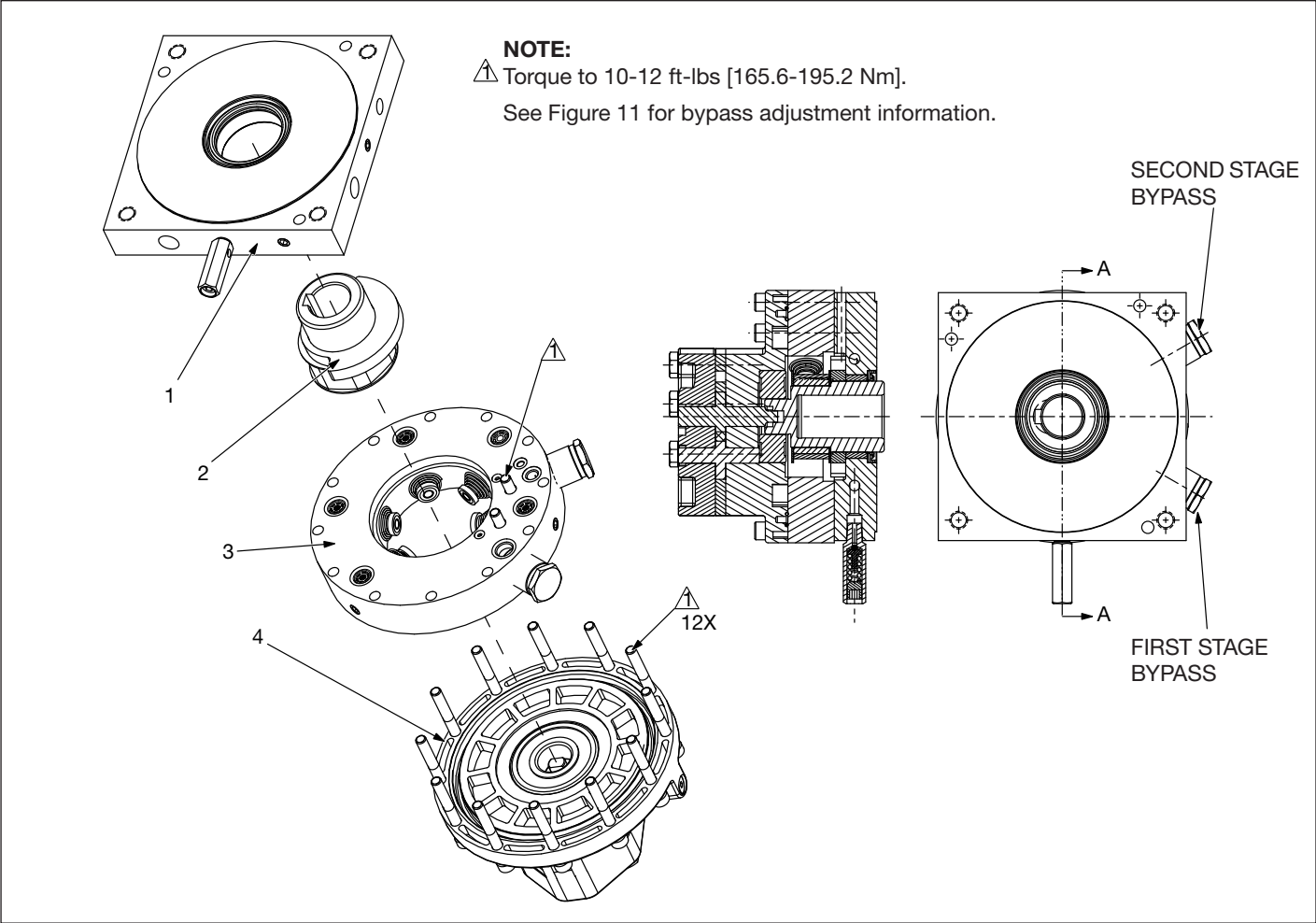


Figure 7, Pump Element Assembly

Repair Parts List (Refer to Figure 7)			
Item	Part Number	Qty.	Description
1	* See Figure 9	1	Assembly, Top Plate
2	* See Figure 8	1	Eccentric Assy, 3-Stage MPE
3	* See Figure 10	1	Assembly, Piston Ring
4	* See Figure 14	1	Gear Pump and O-Rings

* Items included in 3-Stage MPE Replacement Kit, DD350900SR.

NOTE:

Press balance plate (item 2) onto eccentric shaft (item 1) using a 10 ton [101 kN] hydraulic cylinder at 400 psi [62 bar] maximum pressure. Be certain that the balance plate is properly oriented to the shaft keyway. Fully seat the balance plate onto the shaft shoulder. See Section A-A.

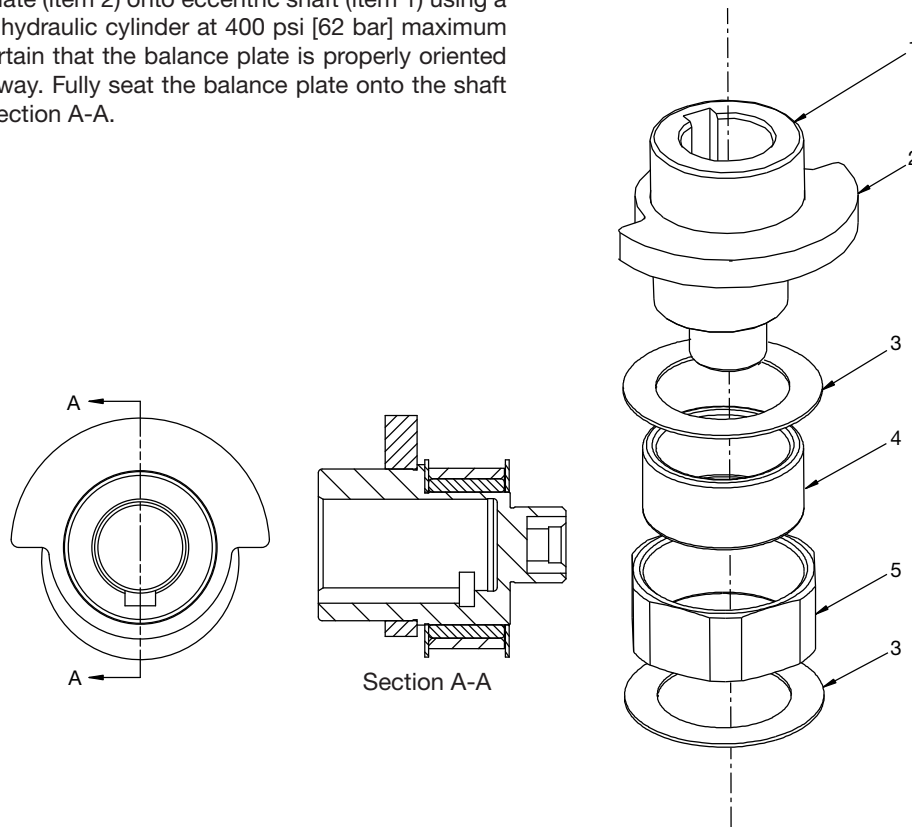
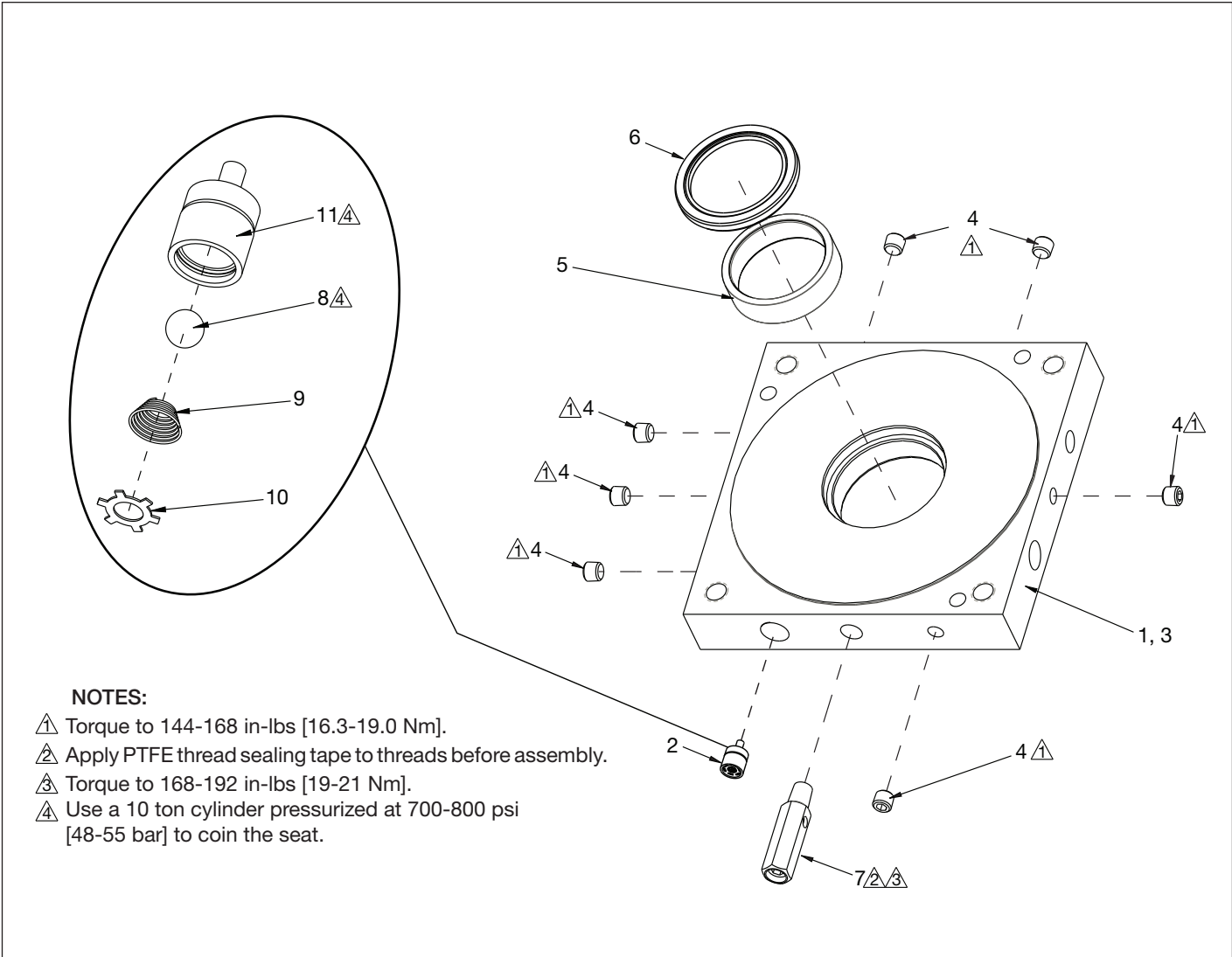


Figure 8, Eccentric Assembly

Repair Parts List (Refer to Figure 8)			
Item	Part Number	Qty.	Description
1	* DD3653537	1	Eccentric, Induction
2	* DC9023101	1	Plate, Balance
3	* BSS4725D	1	Ring
4	* DC4107155	1	Bearing, Needle
5	* DC4328350	1	Hex Cam

* Items included in Eccentric Replacement Kit, DD3826900SR.



NOTES:

- △ Torque to 144-168 in-lbs [16.3-19.0 Nm].
- △ Apply PTFE thread sealing tape to threads before assembly.
- △ Torque to 168-192 in-lbs [19-21 Nm].
- △ Use a 10 ton cylinder pressurized at 700-800 psi [48-55 bar] to coin the seat.

Figure 9, Top Plate Assembly

Repair Parts List (Refer to Figure 9)			
Item	Part Number	Qty.	Description
1	* DD2802101	1	Top Plate, 3 Stage MPE
2	* DD3825900	1	Subassembly, Check Valve (includes items 8, 9, 10 and 11)
3	* DD3833900	1	Top Plate with Check Valve Assembly
4	** A1006245	7	Flush Plug, 1/16"
5	* DC9026155	1	Bearing, Needle
6	◆* DC9027776	1	Seal, Oil Lip
7	* DA5999900SR	1	Relief Valve, 1/8" NPT
8	* B1005016	1	Check Ball, 3/16" Diameter
9	* BSS5809D	1	Spring, Piston Check Ball
10	* BSS5356D	1	Ring, Retaining
11	* BSS5357D	1	Piston Seat, Upper

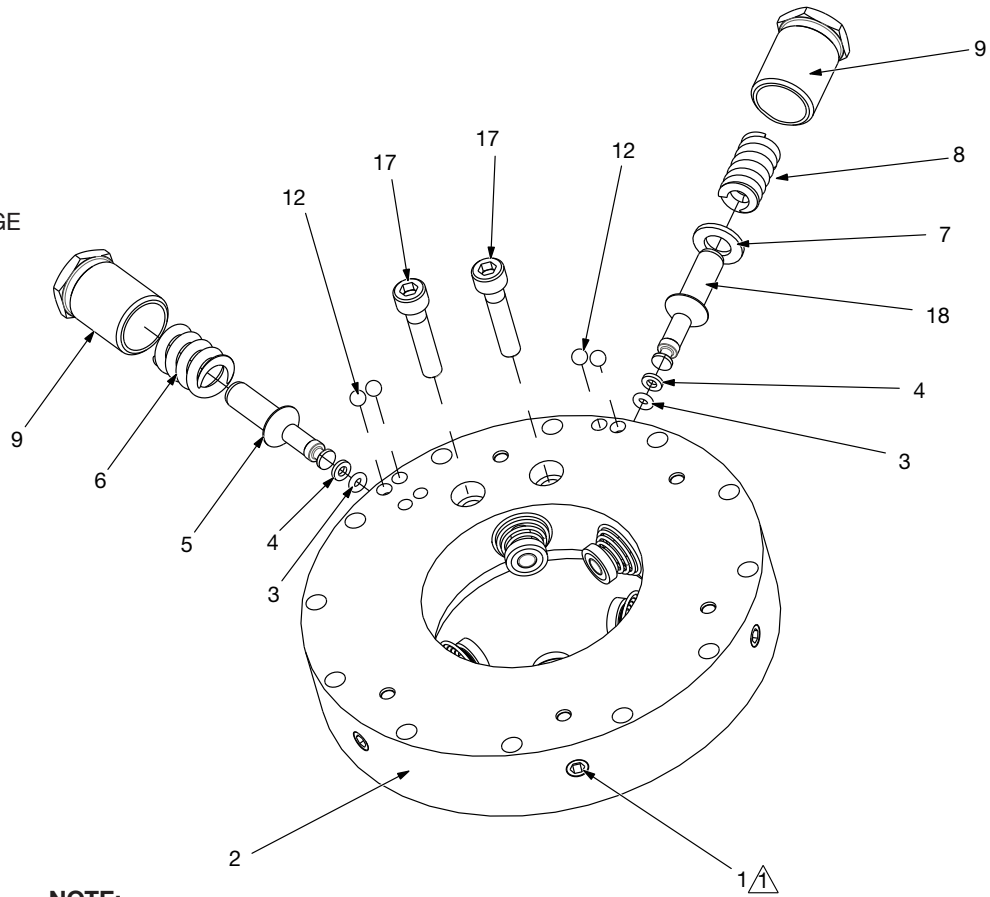
* Items included in 3-Stage MPE Repair Kit, Z3STGRPK.

* Items included in 3-Stage Top Plate Replacement Kit, DD3824900SR.

◆ Items included in 3-Stage MPE Seal Kit, Z3STGSLK.

FIRST STAGE
BYPASS

SECOND STAGE
BYPASS



NOTE:

▲ Torque to 144-168 in-lbs [16.3-19.0 Nm].

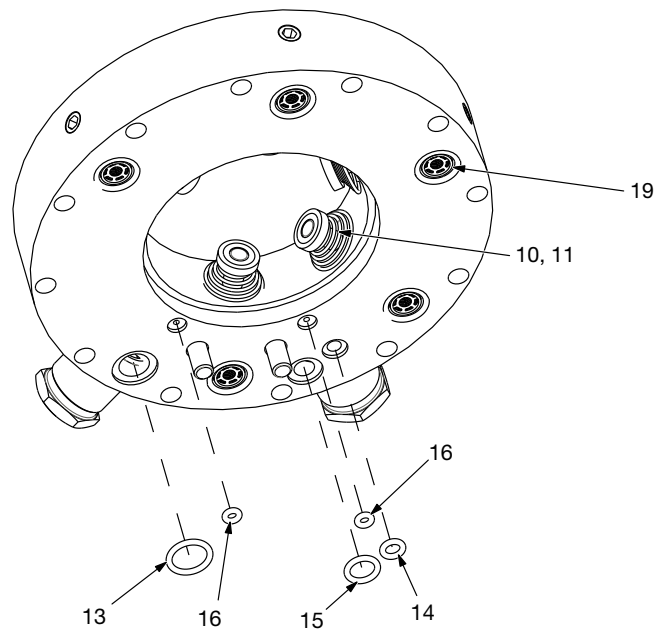


Figure 10, Piston Ring Assembly, 3-Stage

Repair Parts List (Refer to Figure 10)			
Item	Part Number	Qty.	Description
1	* A1006245	5	Flush Plug, 1/16"
2	+* DD2803101	1	Piston Ring, 5-Piston, 3-Stage
3	B1006803	2	O-Ring
4	B1006564	2	Washer, Back-Up
5	+* DC929051	1	Piston, 1st Stage Bypass
6	DC394110	1	Spring, 1st Stage Bypass
7	+* DD4954108	1	Washer, 2nd Stage Bypass, TQ700 II
8	+* DD5926110	1	Spring, 2nd Stage Bypass
9	+* DC9208020	2	End Cap, Bypass
10	+* BSS5509D	5	Spring
11	*+* DC9244920	5	Piston Assembly, MPE
12	DC9293016	4	Ball, Nylon 3-1/16"
13	*+★ B1013803	1	O-Ring, Disogrin, -013
14	+★* B1008803	1	O-Ring, Disogrin, -008
15	+★* B1011803	1	O-Ring, Disogrin, -011
16	+★* B1005403	2	O-Ring, Disogrin, -005
17	+ CCA625028-1A	2	SHCS M6 x 1.0 x 30
18	+* DD5925051	1	Piston, 2nd Stage Bypass
19	See Figure 12	5	Check Ball Assemblies

* Items included in 3-Stage MPE Repair Kit, Z3STGRPK.

+ Items included in 3-Stage Piston Ring Replacement Kit, DD3822900SR.

◆ Items included in 3-Stage MPE Seal Kit, Z3STGSLK.

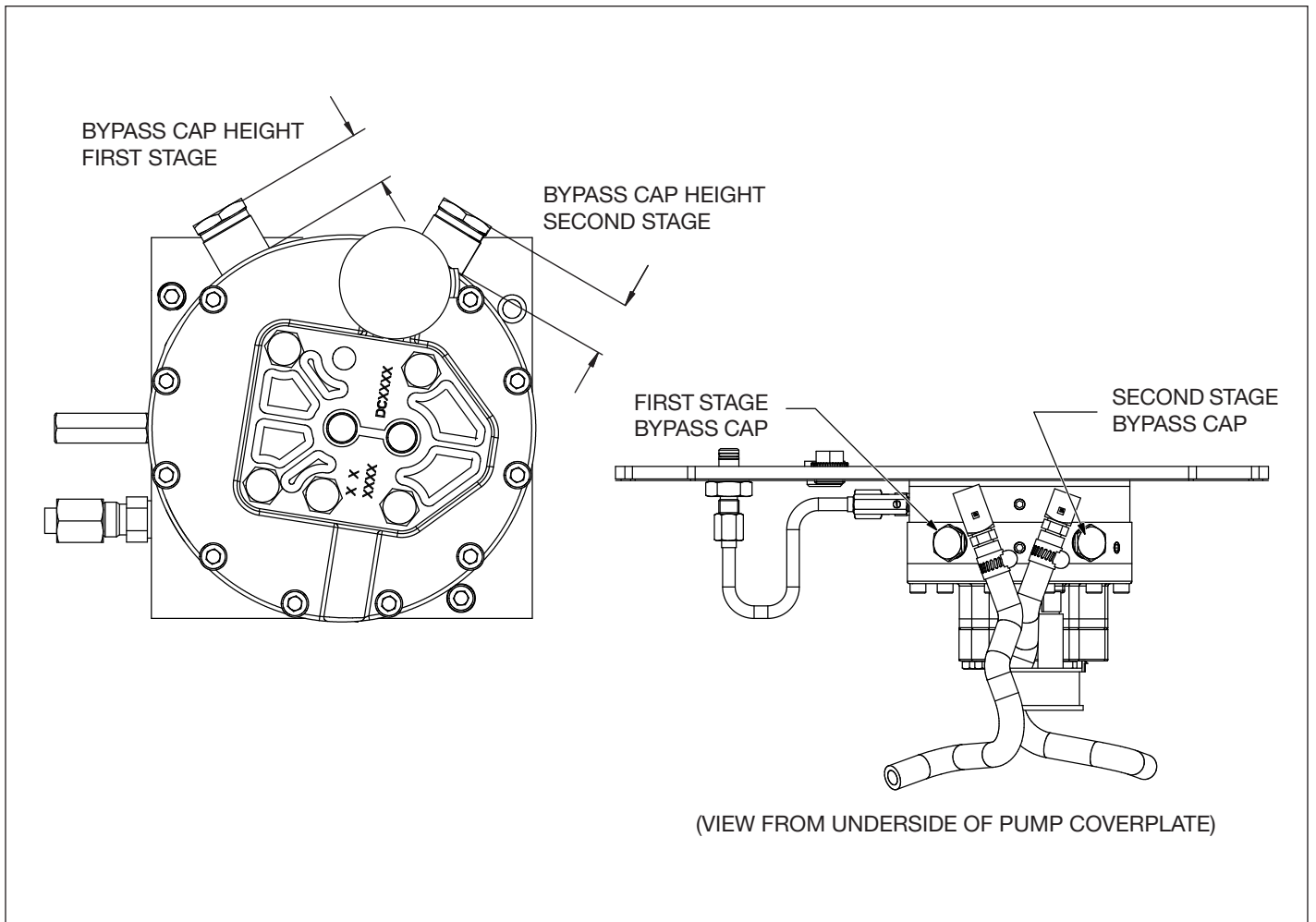


Figure 11, Bypass Pressure Adjustment

Repair Parts List (Refer to Figure 11)					
Pump Model Number	Element Model Number	First Stage Bypass Pressure	First Stage Bypass Cap Height (A)	Second Stage Bypass Pressure	Second Stage Bypass Cap Height (B)
ZC3204X ZC3308J ZC3408J ZC3908J	DD3850900SR	1,100-1,150 psi [76-79 bar]	0.95" [24.1mm]	3,600-3,700 psi [249-255 bar]	0.98" [24.9mm]

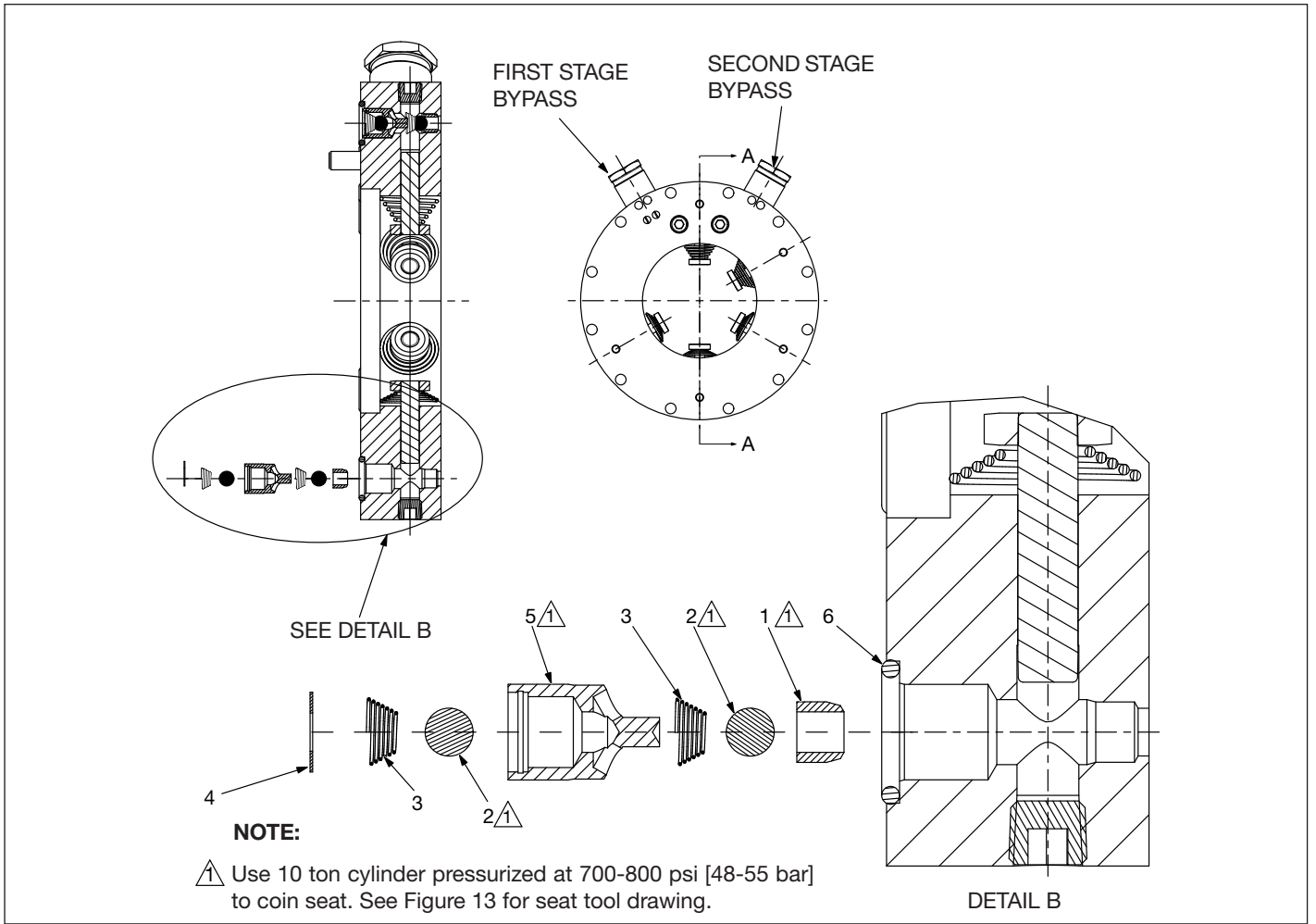


Figure 12, Check Ball Assemblies

Repair Parts List (Refer to Figure 12)				
Item	Part Number	Qty.	Description	
1	+ ▲ BSS5358D	5	Piston Seat, Lower	
2	+ ▲ B1005016	10	Ball, 3/16" Diameter	
3	+ ▲ BSS5809D	10	Spring, Piston Check	
4	+ ▲ BSS5356D	5	Retaining Ring	
5	+ ▲ BSS5357D	5	Piston Seat, Upper	
6	* ♦ + ▲ B1013803	5	O-Ring, Disogrin, -013	

+ Items included in 3-Stage Piston Ring Replacement Kit, DD3822900SR.

▲ Items included in Piston Check Kit, ZRKS.

* Items included in 3-Stage MPE Repair Kit, Z3STGRPK.

♦ Items included in 3-Stage MPE Seal Kit, Z3STGSLK.

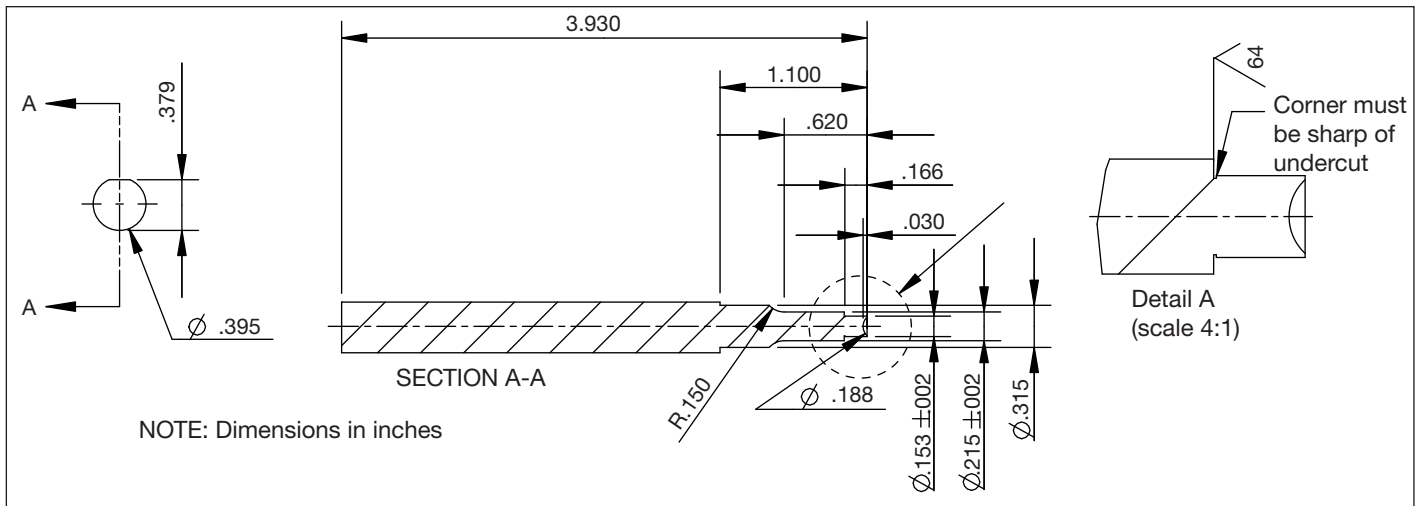


Figure 13, Seat Tool Drawing

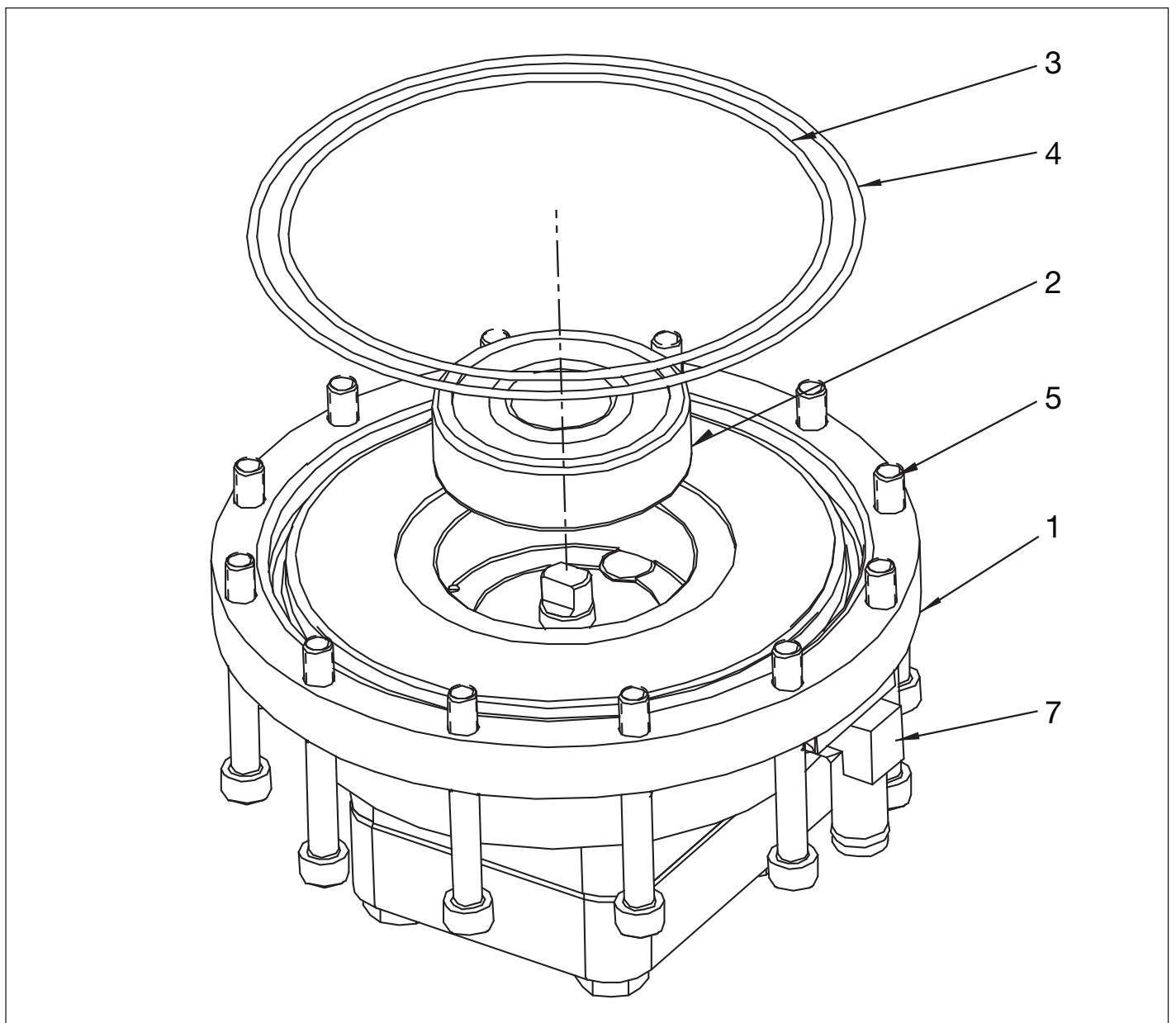


Figure 14, Gear Pump and O-Rings

Repair Parts List (Refer to Figure 14)				
Item	Part Number		Qty.	Description
1	+	DC9296920	1	Gear Pump
2	+	DC9219155	1	Bearing, Ball
3	* ♦ +	B1400503	1	O-Ring
4	* ♦ +	B1402503	1	O-Ring
5	* ♦ +	CCA633028-1A	1	SHCS M6 x 1.0 x 50
6		DC9642097	1	Intake Elbow

+ Items included in 3-Stage Piston Ring Replacement Kit, DD3822900SR.

* Items included in 3-Stage MPE Repair Kit, Z3STGRPK.

♦ Items included in 3-Stage MPE Seal Kit, Z3STGSLK.

Notes:

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