



Repair Parts Sheet

XC-1502 Series Cordless Electric Torque Wrench Pump

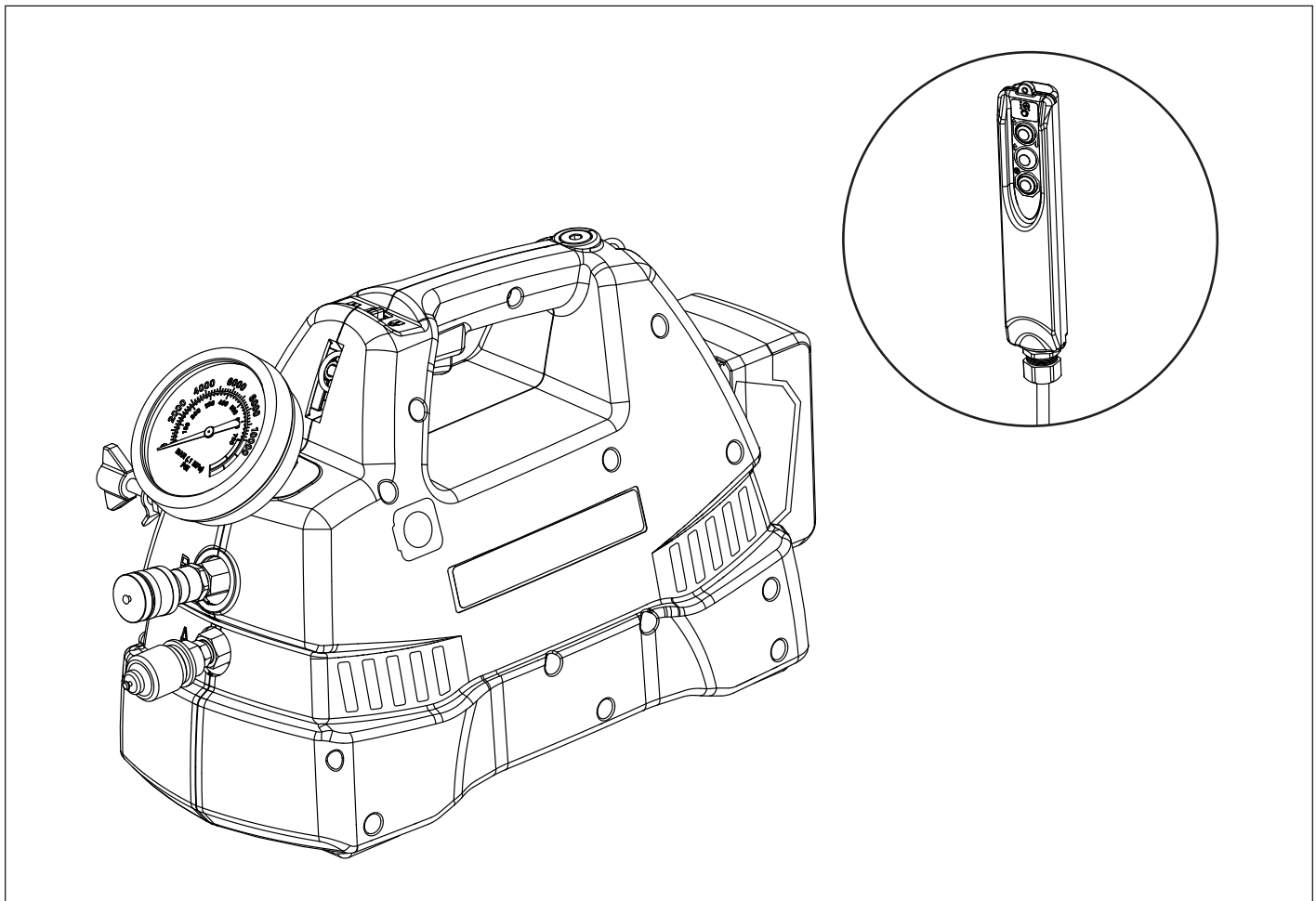
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To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

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, 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.

1 Apply PTFE thread sealing tape.

2 Torque 18-26 in-lbs [2-3 Nm].

3 Torque 8-10 in-lbs [0.9-1.1 Nm].

4 Torque 10-12 ft-lbs [13.56-16.27 Nm].

5 Thinnest section toward front and top as shown.

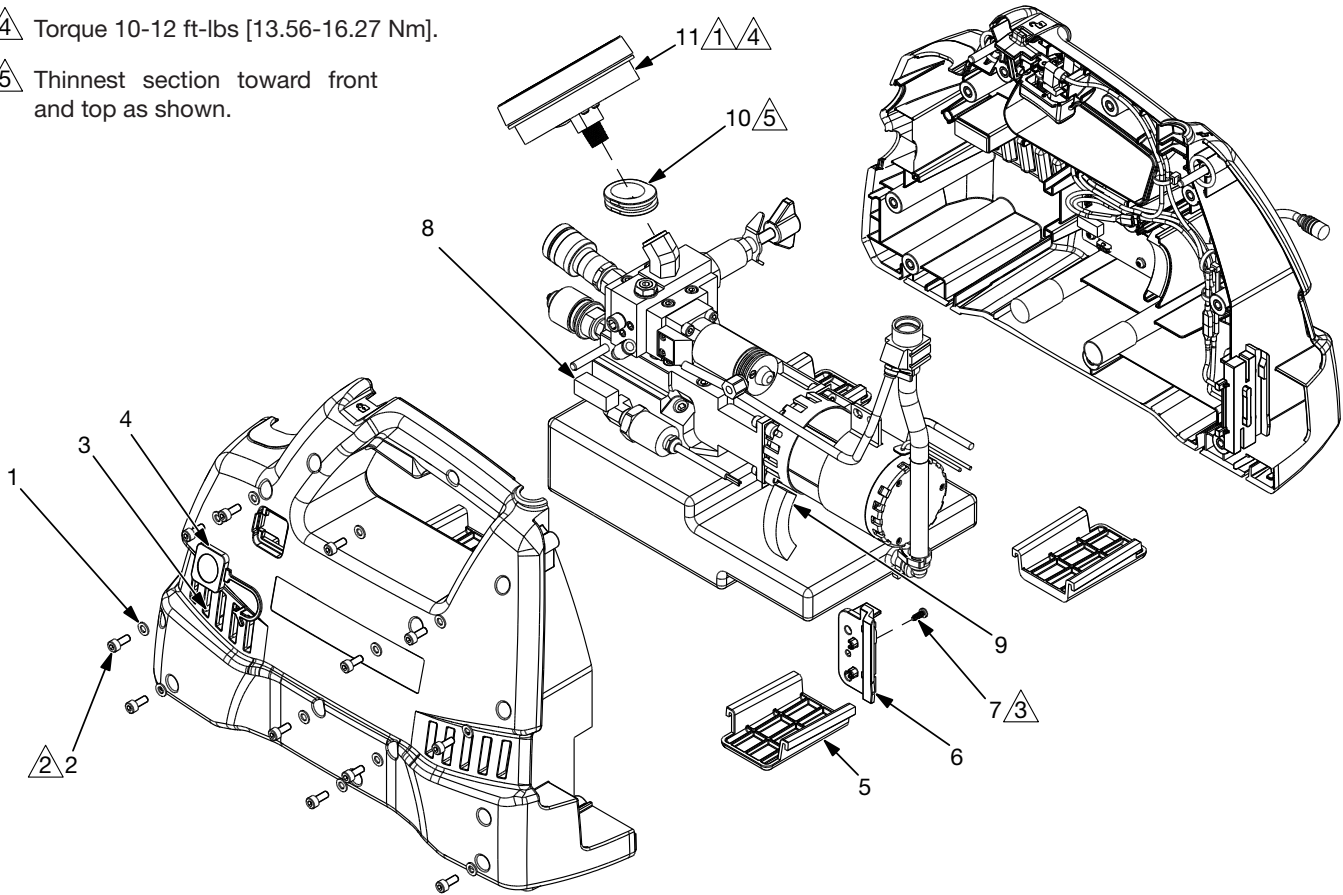


Figure 1, Pump Shroud

Repair Parts List (Refer to Figure 1)			
Item	Part Number	Qty.	Description
1	◆ CAE1050108-1A	12	Flat Washer DIN125A M5
2	◆ CBE517028-1A	12	Screw-SHCS, Hex, M5 x 0.8 x 12, 8.8, Zinc
3	◆ DD3405424	1	Shroud, LH
4	◆ DD3408098	1	Cover, UARV Access
5	♣ DD3414339	4	Foot, Slide
6	■ DD3420101	1	Guide, LH, Battery Lock
7	■ DD3883028	1	Screw (used to secure item 6 to LH shroud)
8	DD3887339	1	Bumper, Pump Isolator
9	DD4113339	1	Bumper, Isolator
10	◆ DD6566808	1	Gauge Grommet
11	DD7397223SR	1	Pressure Gauge

◆ Items included as part of shroud kit (XC3CSK).

■ Items included as part of battery guide kit (XC1BGK).

♣ Items included as part of rubber foot kit (XC1FK).

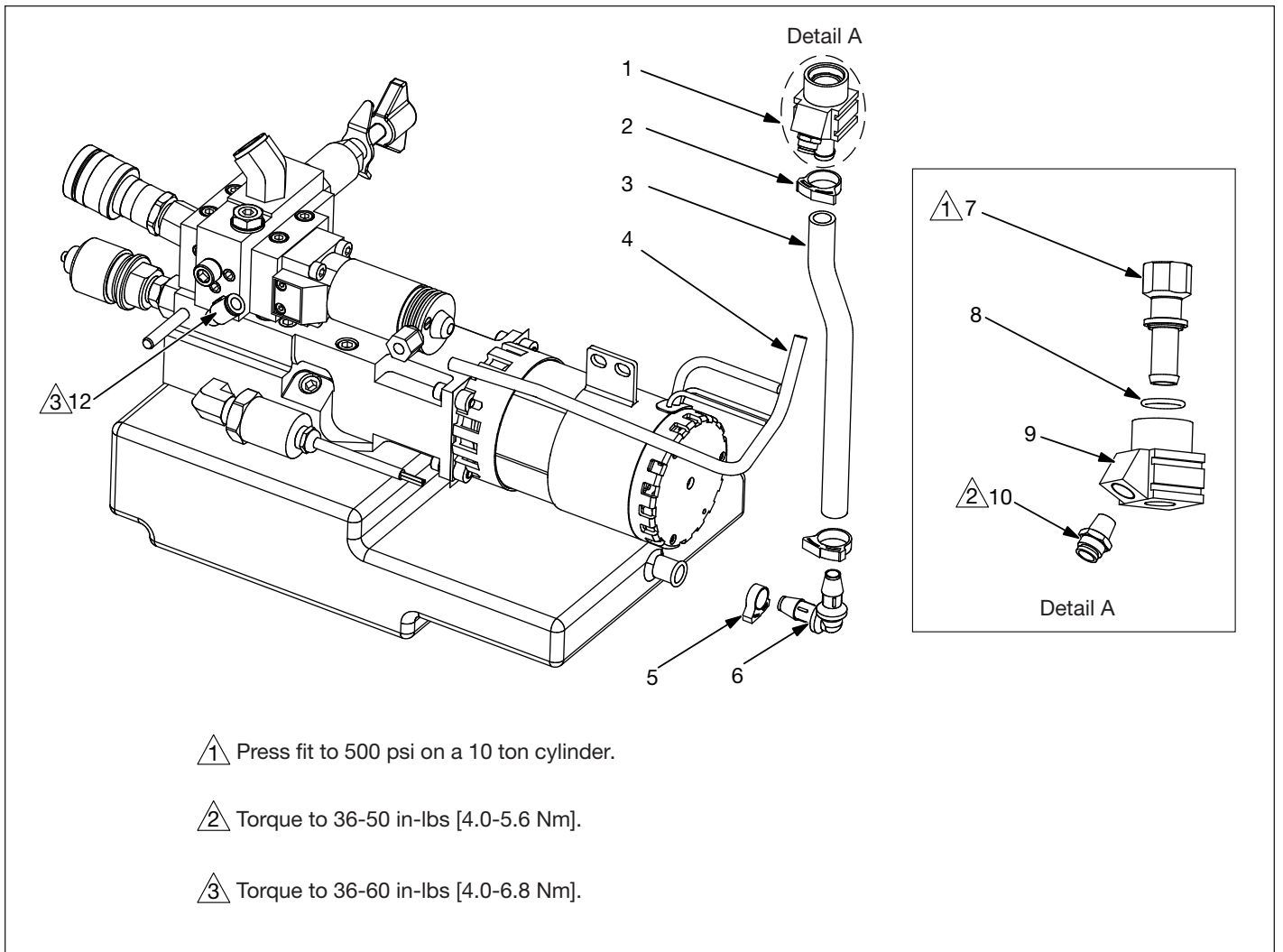
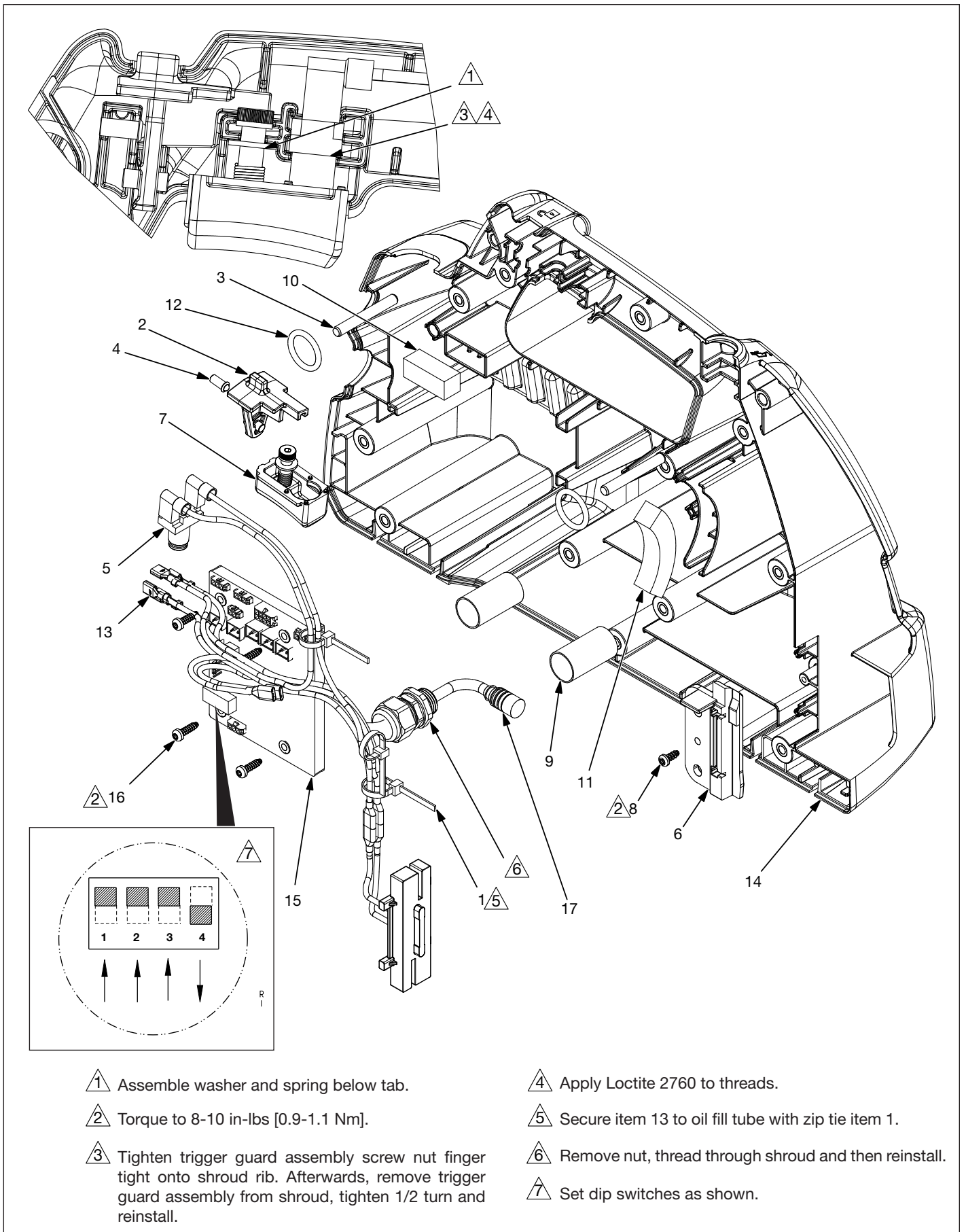


Figure 2, Oil Fill and Vent Assembly

Repair Parts List (Refer to Figure 2)			
Item	Part Number	Qty.	Description
1	○ DD3403900	1	Vented Fill Assembly
2	+ DD4118017	2	Reusable Oil Fill Clip
3	+ DD3415646	1	Oil Fill Hose
4	+ DD4108646	1	Oil Vent Hose
5	+ DD3885017	1	0.38 Reusable Clip
6	+ DD3416097	1	0.38 Barb Tube Elbow
7	○ DD3401097	1	Oil Vent/Fill Fitting
8	○ B1220503	1	O-Ring
9	○ DD3402097	1	Oil Vent/Fill Fitting
10	○ F100097-33	1	Fitting, 1/8" Male, 1/4" Tube
11	○ DD3948006	1	SAE #6 Plug (not shown)
12	+ F100097-52	1	90° Male Connector, 1/8"-27

+ Items included as part of oil fill tubing kit (XC1TK).

○ Items included as part of XC vented oil fill service kit (XC1VFK).



1 Assemble washer and spring below tab.

2 Torque to 8-10 in-lbs [0.9-1.1 Nm].

3 Tighten trigger guard assembly screw nut finger tight onto shroud rib. Afterwards, remove trigger guard assembly from shroud, tighten 1/2 turn and reinstall.

4 Apply Loctite 2760 to threads.

5 Secure item 13 to oil fill tube with zip tie item 1.

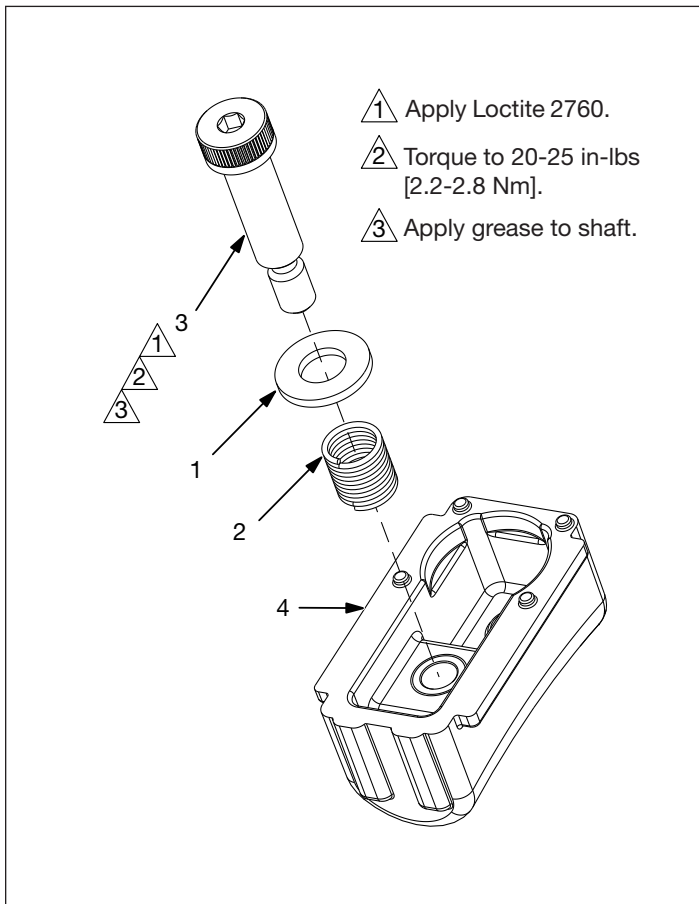
6 Remove nut, thread through shroud and then reinstall.

7 Set dip switches as shown.

Figure 3, Shroud and Electrical Components

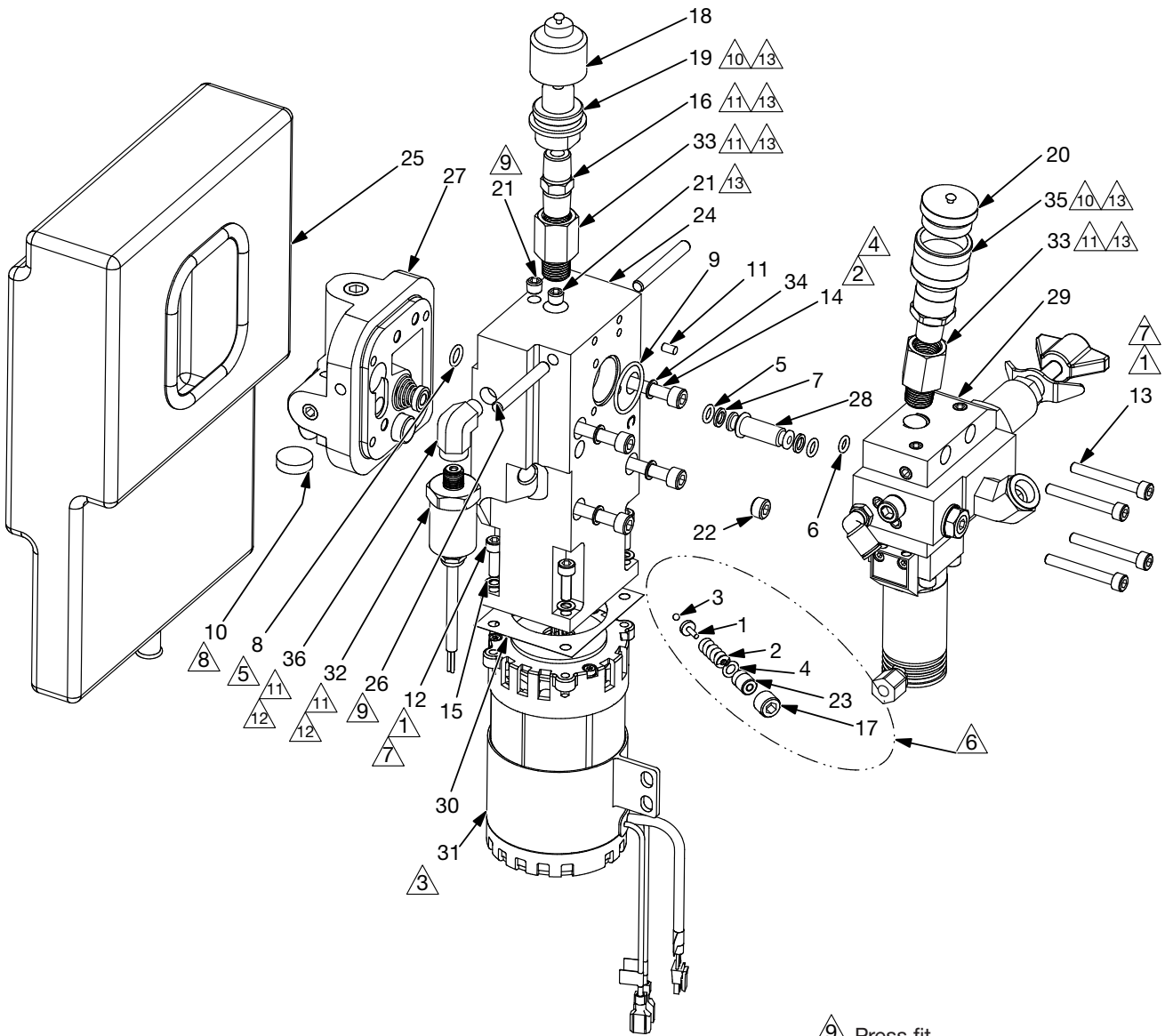
Repair Parts List (Refer to Figure 3)			
Item	Part Number	Qty.	Description
1	DC9876647	3	Black Cable Tie 6"
2	DD2998098	1	Safety Lock Cover
3	DD3417059	2	6 mm x 45 mm Long Pin
4	DD3421013	1	Safety Lock Detent
5	DD3423379	1	Switch, On-Off, Momentary
6	■ DD3426101	1	Guide, RH, Battery Lock
7	DD3882900	1	Trigger Guard Assembly
8	■ DD3883028	1	Screw (used to secure item 6 to RH shroud)
9	◆ DD3886268	2	Tube Guide Assembly
10	DD3887339	1	Pump Isolator Bumper
11	DD4113339	1	Isolator Bumper
12	DD4769667	2	Round Ring
13	DD6942960SR	1	Wire Harness for 60 amp 24 VDC XC Pump
14	◆ DD7332424	1	Shroud, RH
15	⊕ DD7368827	1	XCTW Application Board
16	⊕ DD7369128	4	Screw M4 x 14
17	DD7396960SR	1	Pigtail Pendant Connector

- ◆ Items included as part of shroud kit (XC3CSK).
- Items included as part of battery guide kit (XC1BGK).
- ⊕ Items included as part of XCTW PCB service kit (XC3ACK).



Repair Parts List (Refer to Figure 4)			
Item	Part Number	Qty.	Description
1	B1088108	1	Washer
2	DD4114098	1	Trigger Spring
3	DD4109028	1	Screw
4	DD3407110	1	Trigger Switch Cover

Figure 4, Trigger Guard Assembly



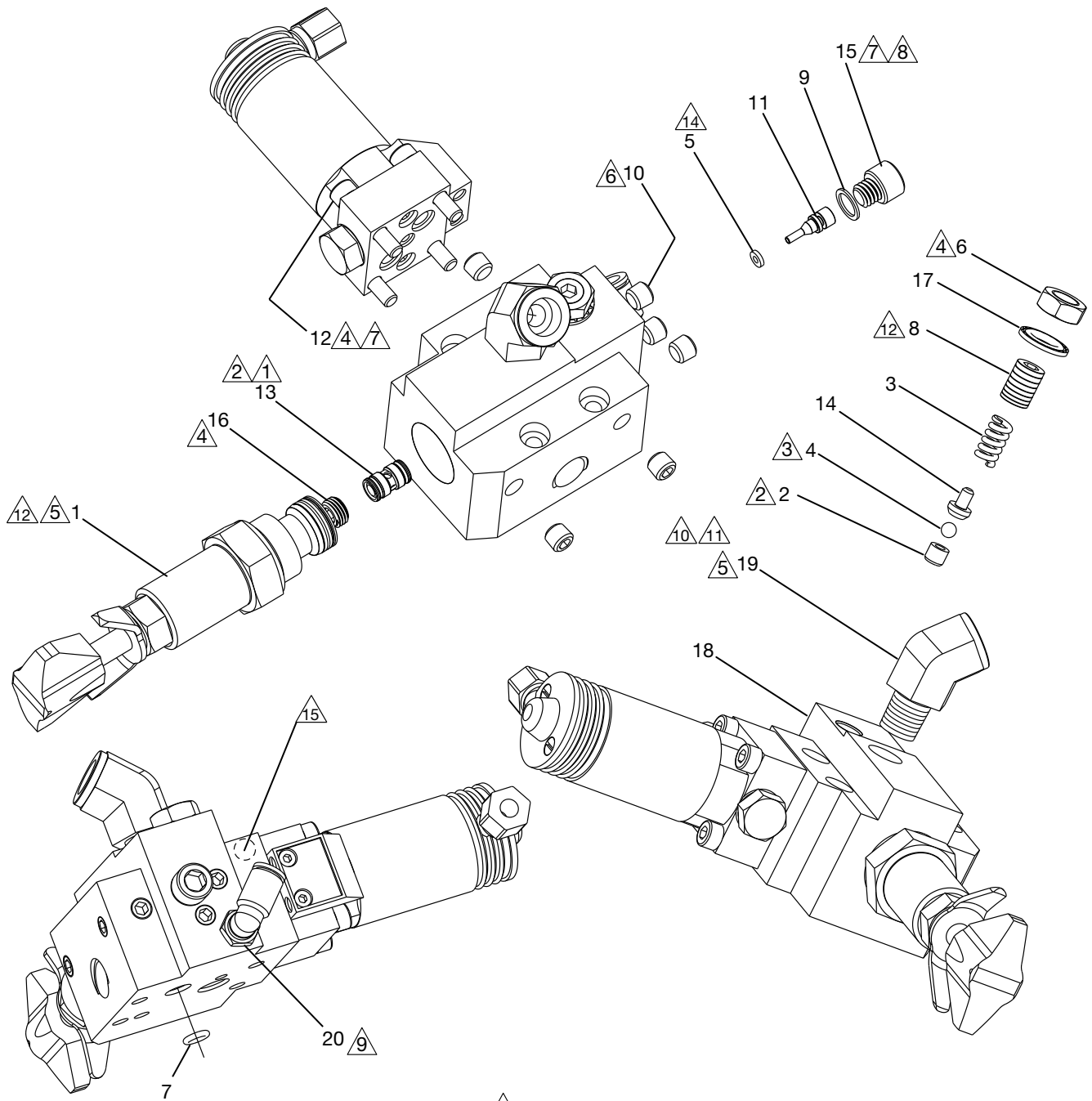
- ① Torque to 55-65 in-lbs [6.2-7.3 Nm].
- ② Torque to 10-12 ft-lbs [17-20.5 Nm].
- ③ Orient with mounting tab up.
- ④ Torque to 55-65 in-lbs [6.2-7.3 Nm].
- ⑤ Install on Item 24.
- ⑥ Install after pump, bladder and motor.
- ⑦ Apply Loctite 243.
- ⑧ Attach magnet (Item 10) to Item 27, prior to assembling bladder (Item 25).
- ⑨ Press fit.
- ⑩ Apply PTFE thread sealing tape prior to assembly.
- ⑪ Torque to 16-19 ft-lbs [22-26 Nm].
- ⑫ Torque to 32-39 ft-lbs [43-53 Nm].
- ⑬ Apply Loctite 2760.

Figure 5, Pump and Motor Assembly

Repair Parts List (Refer to Figure 5)			
Item	Part Number	Qty.	Description
1	✚ A8038570	1	Ball Cap
2	✚ A8126110	1	Spring
7	▲** B1010564	2	Backup Washer
8	❖ ❖ ▲ B1011803	1	O-ring 5/16", 7/16", 1/16"
9	** DD7437203	1	XCTW Quad-Ring
10	C187018	1	Magnet
11	* CAA411061-2B	1	4 mm x 8 mm Dowel Pin
12	❖* CBE519028-1A	4	Screw-SHCS, Hex, M5 x 0.8 x 16, 8.8, Zinc
13	** CCA529028-1A	4	Screw-SHCS, Hex, M5 x 0.8 x 40, 12.9, Plain
14	❖ CCA635028-1A	4	Screw-SHCS M6 x 55
15	❖* CCE1050108-6A	4	Lock Washer
16	CJ647096	1	Pipe Nipple, 1/4" x 1/4" NPTF
17	✚ DC10131048	1	Set Screw, 7/16-20 x 0.38
18	DC6187234	1	Dust Cap (for female coupler)
19	DC6188020	1	Coupler
20	DC6629020	1	Dust Cap (for male coupler)
21	❖ DC6792245	2	PTF-SAE Flush Plug 0.062"
22	❖ DC6793245	1	PTF-SAE Flush Plug 1/8"
23	✚ DC7234009	1	Plug
24	❖ DD2990900	1	Eccentric Housing Assembly
25	❖ DD2991025	1	2L Bladder
26	❖ DD3417059	2	Pin, 6 mm x 45 mm Long
27	DD3868900	1	Pump Assembly
28	* DD4798268	1	Tube Connector
29	* DD5653900 (see Figure 6)	1	Valve Assembly 24VDC
30	* DD6917037	1	Gasket
31	* DD7013259	1	Motor
32	DD7065960SR	1	Pressure Transducer
33	DD7386038	2	1/4" NPTF Female x Male Straight Adaptor
34	❖ ❖ ▲ S3037	4	Gasket
35	U962148134-2	1	Female Coupler
36	Y714291	1	Elbow

- ❖ Items included as part of eccentric housing service kit (XC1ECK).
- ❖ Items included as part of 2 liter bladder kit (XC1B2LK).
- ✚ Items included as part of UARV assembly kit (XA1UARVK).
- ▲ Items included as part of pump seal kit (XC3SK).
- * Items included as part of 0.5 HP motor service kit (XC3EMK).
- * Items included as part of torque wrench valve seal kit (XC3TVSK).
- * Items included as part of torque wrench valve replacement kit (XC3MVK).

IMPORTANT: Pumps with date code beginning with the letter "A": If the motor (Figure 5, Item 31) requires replacement, the application board (Figure 3, item 15) must be updated to the most recent firmware version OR replaced with a new application board containing the most recent firmware version.



▲1 Lubricate with oil prior to assembly.

▲2 Press fit to 825-875 psi on a 10 ton press.

▲3 Coin seat at 275-325 psi on a 10 ton press.

▲4 Torque to 55-65 in-lbs [66-7.3 Nm].

▲5 Torque to 49-59 ft-lbs [66.4-79.9 Nm].

▲6 Torque to 120-144 in-lbs [13.6-16.3 Nm].

▲7 Apply Loctite 243.

▲8 Torque to 90-100 in-lbs [10.2-11.3 Nm].

▲9 Torque to 30-60 in-lbs [3.38-6.77 Nm].

▲10 Torque to 32-39 ft-lbs [43.4-52.8 Nm].

▲11 Apply Teflon tape.

▲12 See instruction manual for relief valve setting instructions.

▲14 See seal replacement instructions in Figure 6A.
(early production pumps with 2 piece seal)

▲15 Valve date code location.

Figure 6, Valve Assembly

Repair Parts List (Refer to Figure 6)			
Item	Part Number	Qty.	Description
1	45423SR	1	Cartridge Relief Valve
2	A8015290	1	Seat
3	● * A8038110	1	Spring
4	● * B1005016	1	3/16" Diameter Ball
5	* B1005564	1	Back up Ring, Split, 0.094, 0.219, 0.045
6	● * B1006124	1	Hex Jam Nut
7	B1009803	1	O-Ring, Round, 0.219, 0.344, 0.063
8	● * BF3808027F	1	Set Screw, Flat Point
9	* C846037	1	Copper Gasket
10	DC6792245	6	PTF-SAE Flush Plug 0.062
11	* DD4790051	1	B-Side Pilot Piston
12	DD5655660SR	1	Solenoid Valve
13	DD6005900	1	Shuttle Cartridge Assembly
14	● * DD6573013	1	Ball Guide
15	* DD6576028	1	5/16-18 x 1/4 SHCS
16	DD6957027	1	Hollow Set Screw, 1/8"-24 UNF x 0.1875
17	● * DD7232314	1	Sealing Washer
18	DD7322840	1	Valve Manifold
19	F100095	1	45° Fitting Elbow, Male-Female, 1/4" NPTF
20	F100097-52	1	90° Fitting Elbow, Male, Brass

● Items included as part of B-side relief kit (XC3BRK).

* Items included as part of torque wrench valve seal kit (XC3TVSK).

Important: Seal change for early production pumps:

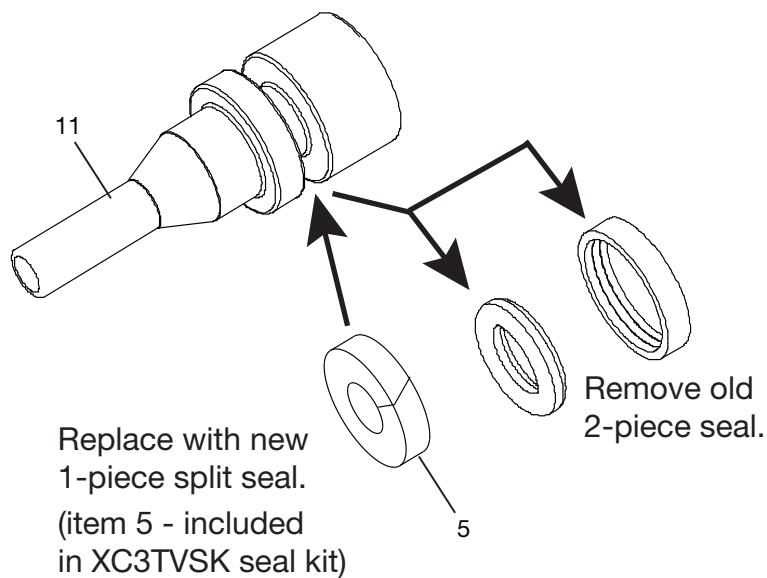


Figure 6A, Installation, 1-Piece Split Seal

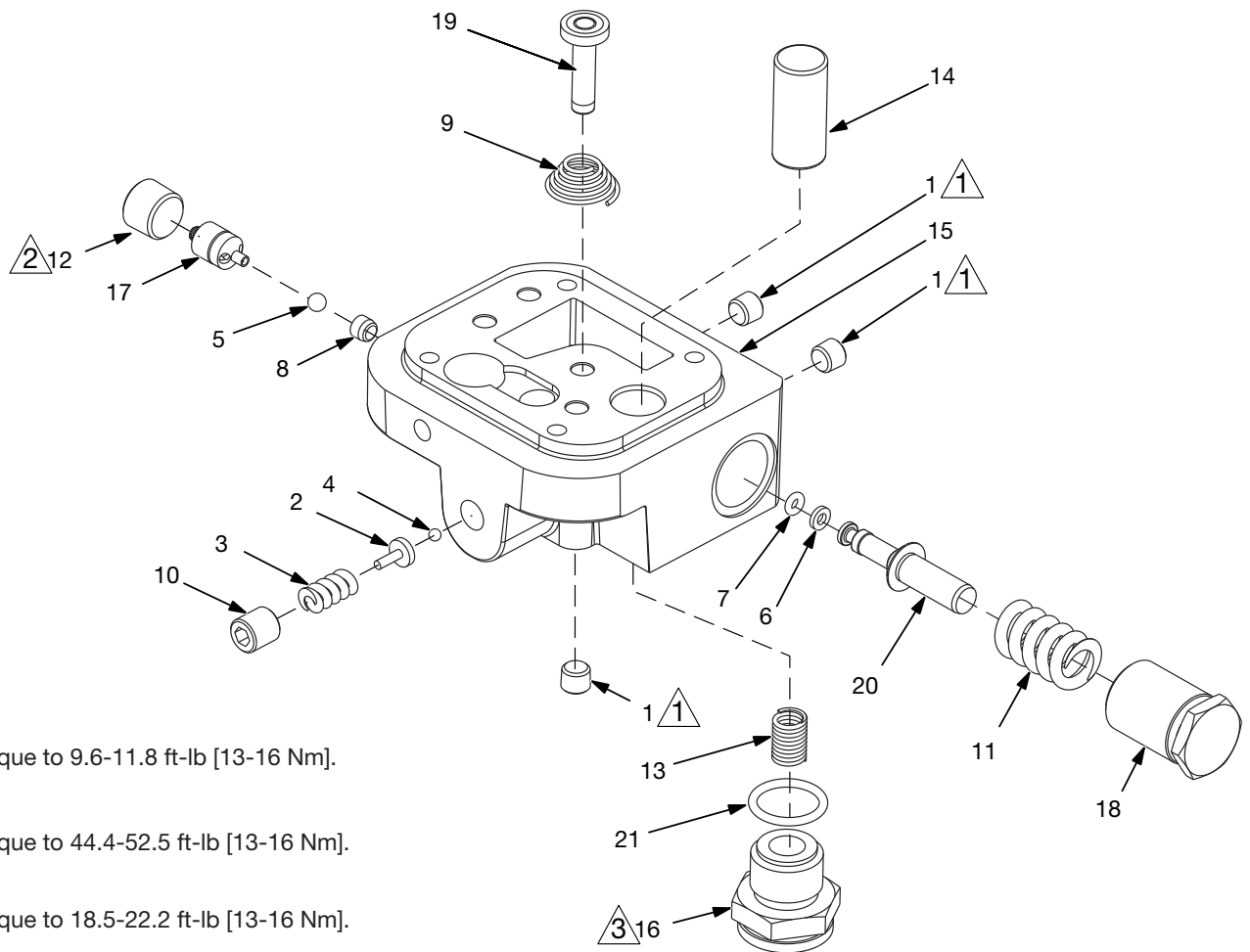


Figure 7, Pump Element Assembly

Repair Parts List (Refer to Figure 7)			
Item	Part Number	Qty.	Description
1	◆ A1006245	3	Plug, Flush, 1/16"
2	◆ A8038570	1	Ball Guide
3	◆ A8126110	1	Spring
4	◆ B1003016	1	Ball, 1/8" Diameter
5	◆ B1005016	1	Ball, 3/16" Diameter
6	▲ ◆ B1006564	1	Back-up Washer
7	▲ ◆ B1006803	1	O-ring
8	◆ BSS5358D	1	Lower Piston Seat
9	◆ BSS5509D	1	Conical Spring
10	◆ DC1185-048	1	Hex Head Set Screw
11	◆ DC394110	1	Spring Bypass
12	◆ DC6794245	1	PTF-SAE Flush Plug 0.250
13	◆ DC7026110	1	Spring
14	◆ DC7027051	1	Piston, 14mm Diameter, LG
15	◆ DC7201190	1	Pump Body
16	◆ DC7453950	1	Inlet Check Valve Plug Assembly
17	◆ DC7904900	1	Outlet Check Sub-Assembly
18	◆ DC9208020	1	Bypass End Cap
19	◆ DC9244920	1	Piston Assembly MPE
20	◆ DC9292051	1	Piston, Bypass
21	▲ ◆ B1908503	1	O-ring

◆ Items included as part of pump element kit (XA1PEK).

▲ Items included as part of pump seal kit (XC3SK).

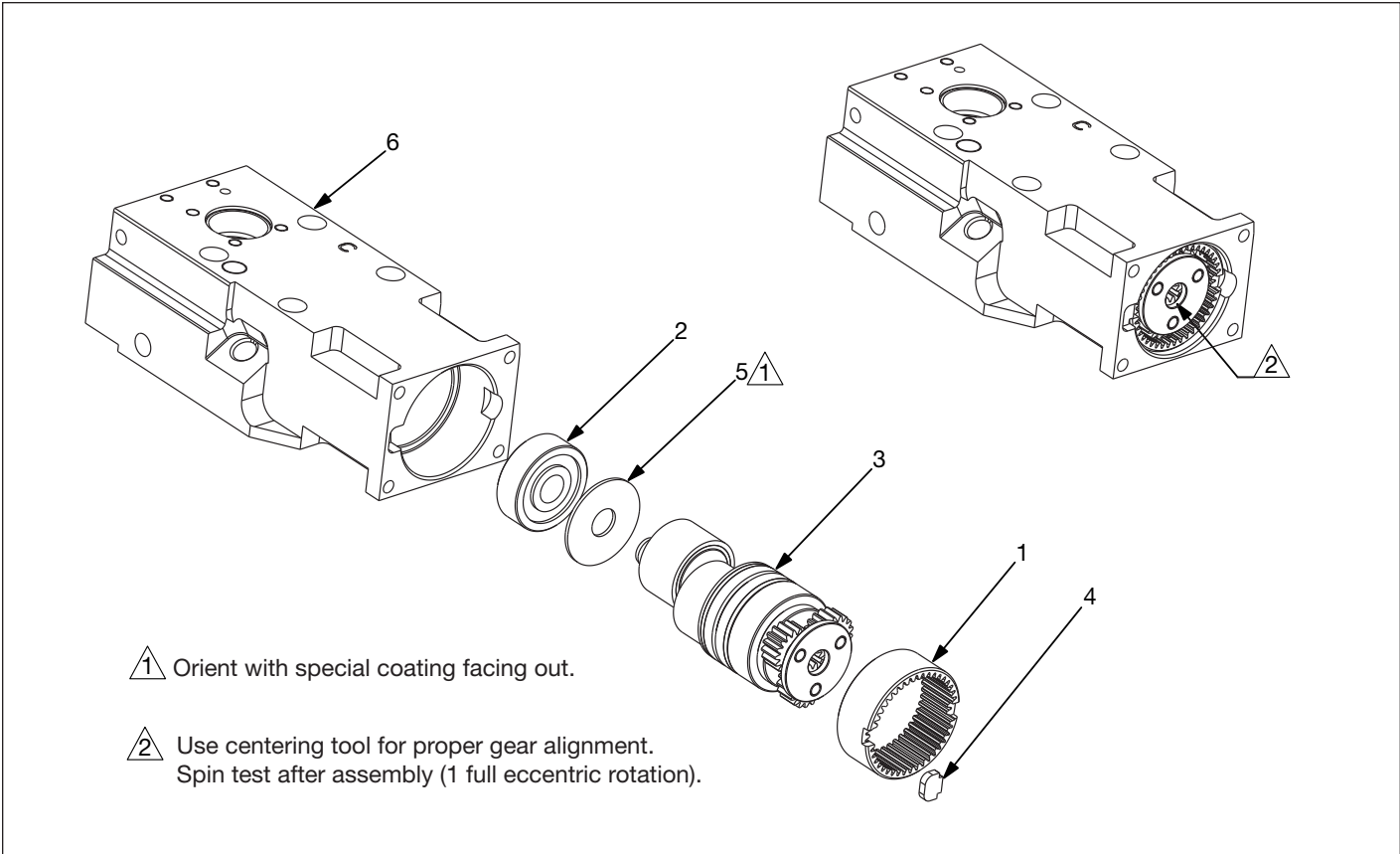


Figure 8, Eccentric Housing Assembly

Repair Parts List (Refer to Figure 8)			
Item	Part Number	Qty.	Description
1	❖ DC7089228	1	Inner-Gear-New (included in air motor kit)
2	❖ DC7096155	1	Bearing
3	❖ DC7177950 (see Figure 9)	1	Eccentric Shaft Sub-Assembly
4	*❖ DC7452251	1	Key, Gear Ring
5	❖ DC7464108	1	Bushing 12 x 37 x 1.5
6	❖ DD2989001	1	Eccentric Housing, XB

❖ Items included as part of Eccentric Housing Service Kit (XC1ECK).

* Items included as part of 0.5 HP Motor Service Kit (XC3EMK).

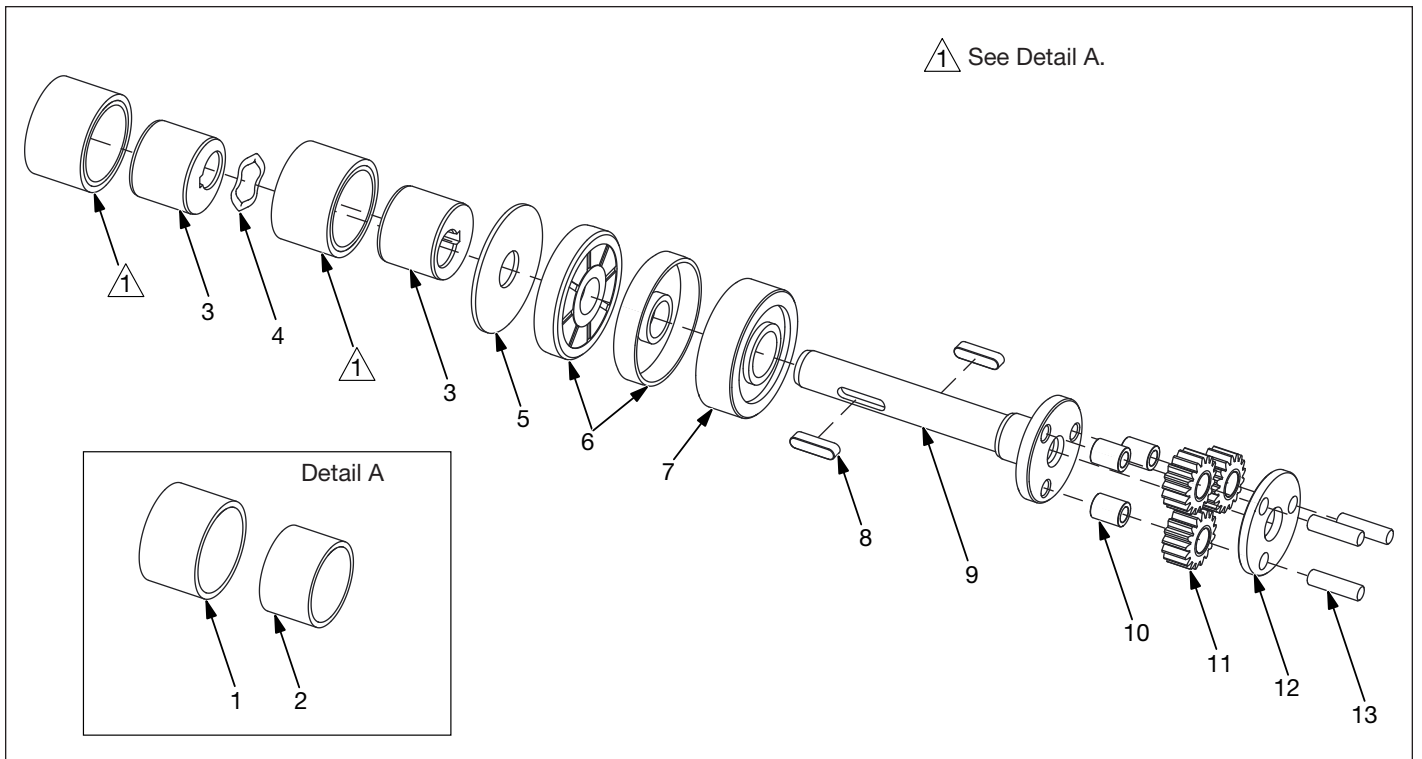


Figure 9, Eccentric Shaft Sub-Assembly

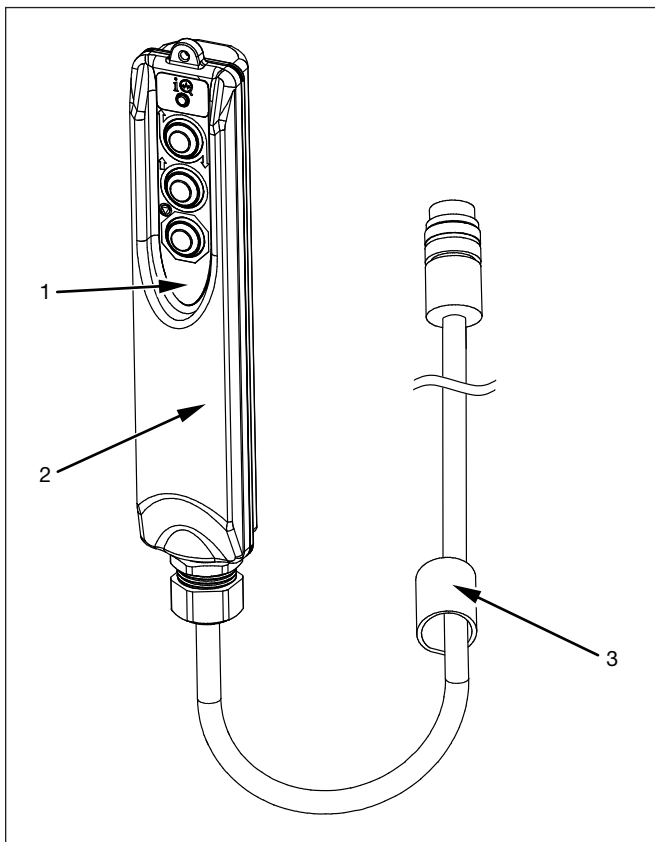


Figure 10, Pendant Assembly

Repair Parts List (Refer to Figure 9)			
Item	Part Number	Qty.	Description
1	❖ DC108950	2	Bushing
2	❖ (included w/ item 1)	2	Cam
3	❖ DC7117537	2	Eccentric, 4 mm Offset
4	❖ DC7750410	1	Wave Spring
5	❖ DC7186108	1	Thrust Washer
6	❖ DC7090476	2	Lip Seal
7	❖ DC7097155	1	Bearing
8	❖ DC7191251	2	Key
9	❖ DC7091104	1	Shaft
10	❖ DC7747155	3	Needle Bearing
11	❖ DC7100228	3	Planetary Gear
12	❖ DC7445101	1	Shaft Plate
13	❖ DC7166059	3	Axle Pin

❖ Items included in eccentric housing service kit (XC1ECK).

Repair Parts List (Refer to Figure 10)			
Item	Part Number	Qty.	Description
1	☆ DD7348026	1	Pendant Decal
2	☆ DD7283900	1	Pendant
3	☆ DA7570217	1	Cord Strap

☆ Items included as part of XCTW pendant replacement kit (XC3P3BK).

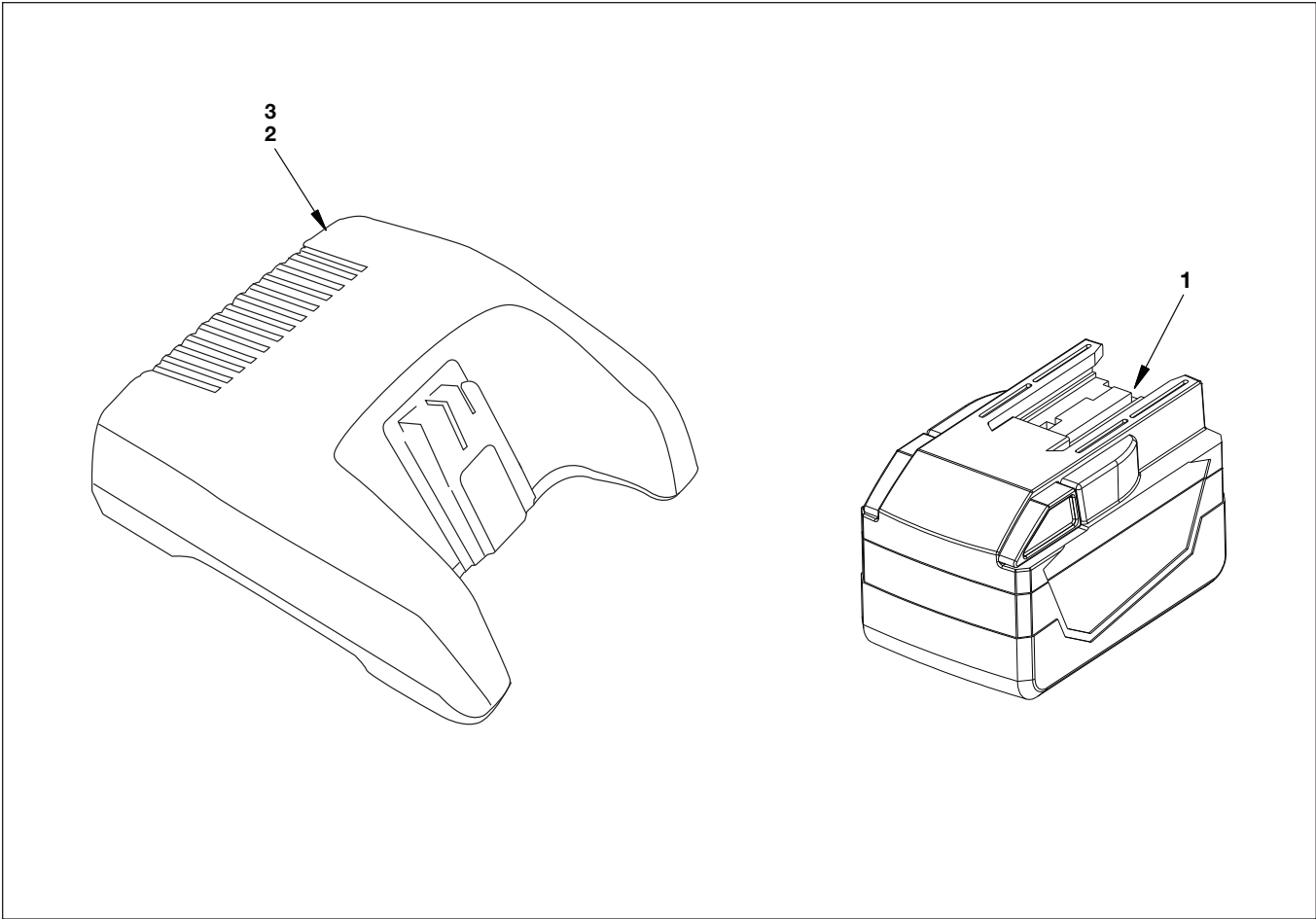


Figure 11, Battery and Charger

Repair Parts List (Refer to Figure 11)			
Item	Part Number	Qty.	Description
1	XC28V5	1	Battery, 28 Volt, 5 Ah, Li-Ion
2	XC115VC	1	Battery Charger, 115 VAC input
3	XC230VC	1	Battery Charger, 230 VAC input
<p>Note: "M28™" and the Milwaukee Electric Tool logo are trademarks and intellectual property of Milwaukee Electric Tool Corporation. Exact appearance of battery and charger may vary.</p>			

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