

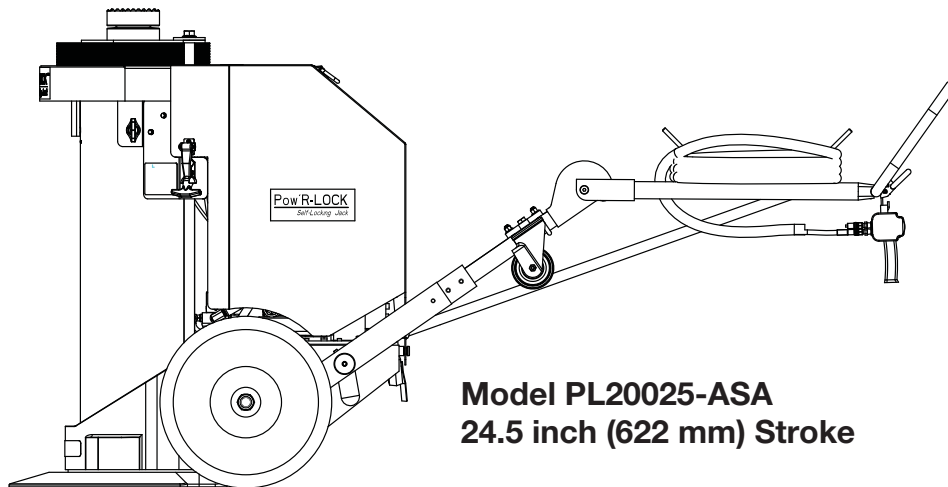
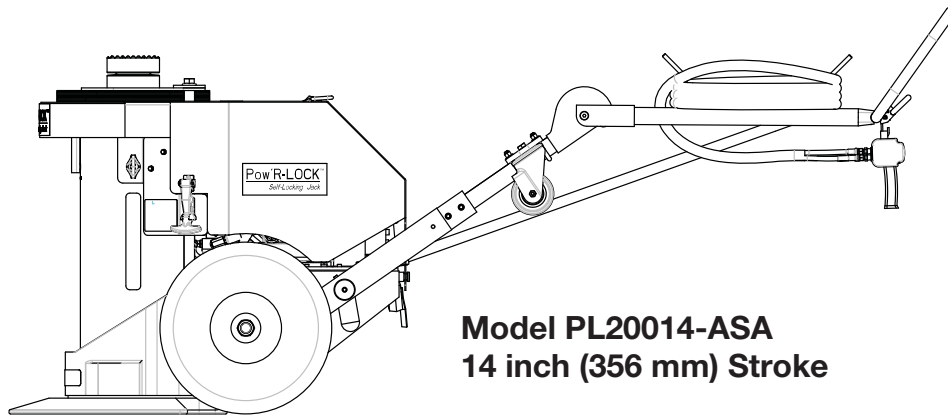
**Pow'R-LOCK™ Portable Lift System  
PL200 Series Models (air-operated)**

L4076 Rev. C 06/15

For date codes beginning with the letters "A", "B" and "D"

**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.

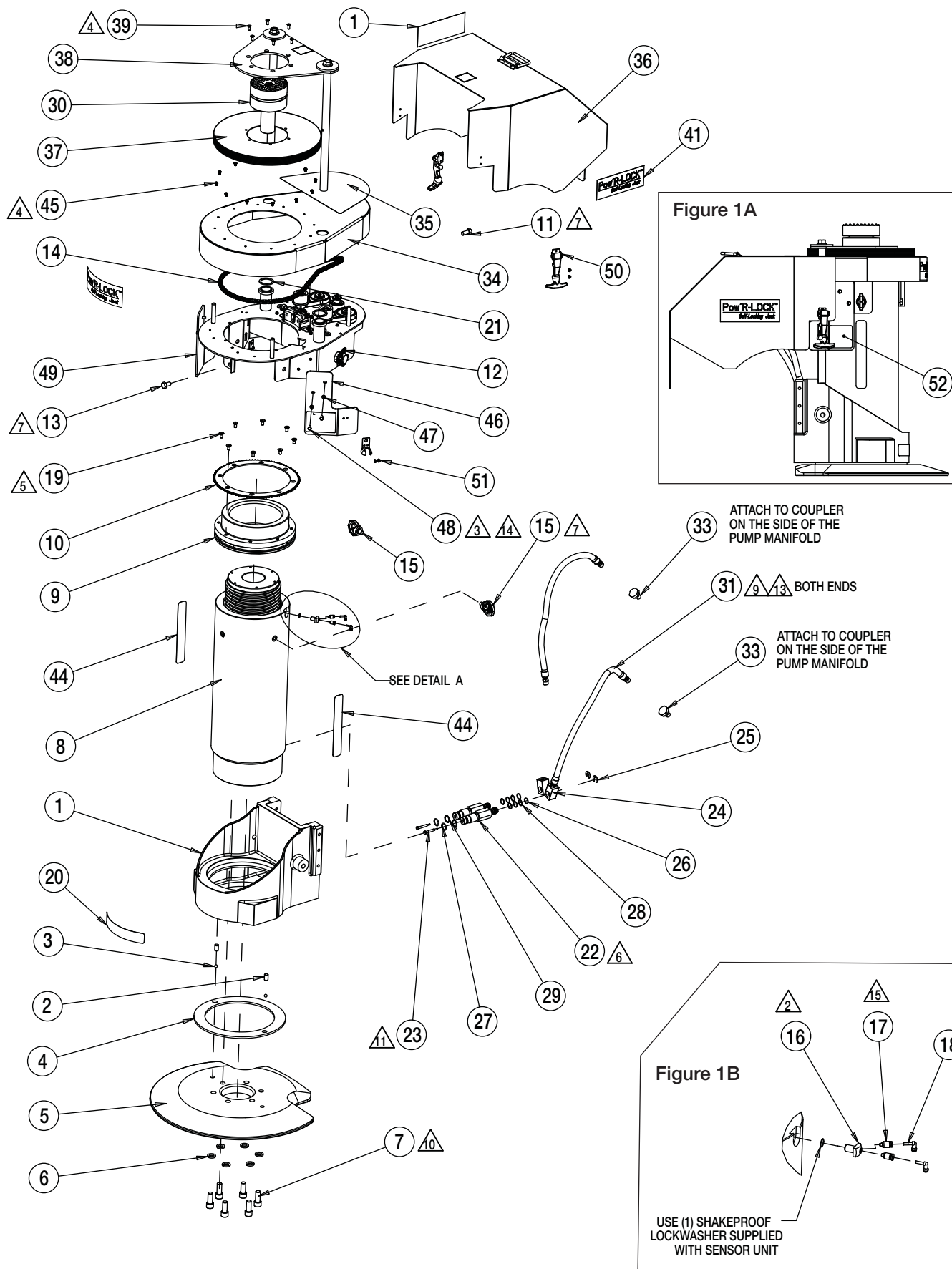




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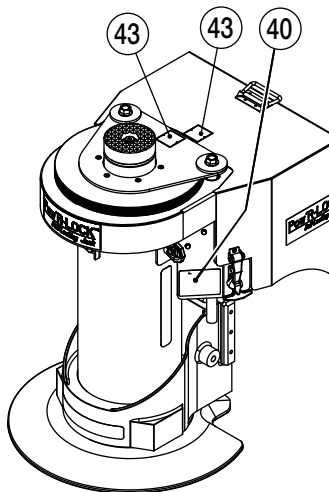
Figure 1 - Subassembly, Hydraulic Cylinder, Locknut and Locknut Chain Drive



### Repair Parts List (Refer to Figures 1A and 1B)

| Item | Part Number   | Qty. | Description                              | Item                               | Part Number   | Qty. | Description                                   |
|------|---------------|------|------------------------------------------|------------------------------------|---------------|------|-----------------------------------------------|
| 1    | DD5147005     | 1    | Base, Pow'r Lock Cylinder                | 29                                 | ★ B1117565    | 2    | Back-Up Washer                                |
| 2    | 42275E        | 2    | Base Pin                                 | 30                                 | DD4880045SR   | 1    | Load Cap Assembly, Swivel                     |
| 3    | 44968E        | 2    | Ball, Rubber, 3/8" 70                    | 31                                 | DD4760646     | 2    | Hose, Cylinder to Pump                        |
| 4    | ★ 43286E      | 1    | Gasket                                   | 33                                 | DC1392900     | 2    | Coupler Half, Male                            |
| 5    | DD4552101     | 1    | Base Plate                               | 34                                 | DD4384500     | 1    | Chain Cover (top half)                        |
| 6    | 93947E        | 6    | Lockwasher, 5/8"                         | 35                                 | DD4913098     | 1    | Cover, Inner Shroud                           |
| 7    | B1407028X     | 6    | Screw, SHCS, 5/8-11 x 1.5" Zinc Plated   | 36                                 | DD4884424     | 1    | Shroud, Outer (short jacks)                   |
| 8    | DD4488900SR   | 1    | Cylinder, 14 Inch Stroke                 | 36                                 | DD4899424     | 1    | Shroud, Outer (tall jacks)                    |
|      | DD4492900SR   | 1    | Cylinder, 24.5 Inch Stroke               |                                    | DD4756446     | 1    | Boot, Short, Pow'r Lock                       |
| 9    | DD4483004     | 1    | Locknut, Cylinder                        | 37                                 | DD4758446     | 1    | Boot, Tall, Pow'r Lock                        |
| 10   | DD4585228     | 1    | Sprocket, Locknut                        |                                    | DD4860500     | 1    | Weldment, Anti-Rotation Bracket (short jacks) |
| 11   | CBE1223046-1B | 1    | HHCS, M12 x 25 Zinc Plated               | 38                                 | DD4861500     | 1    | Weldment, Anti-Rotation Bracket (tall jacks)  |
| 12   | DD4379900SR   | 1    | Chain Cover (bottom half)                |                                    | CBE619028-1B  | 6    | Screw, FHCS, M6 x 16 Zinc Plate               |
| 13   | CBE1221046-1B | 1    | Screw, HHCS M12 x 20 Zinc Plated         | 39                                 | DD4912026     | 1    | Decal, Product Specification                  |
| 14   | DD4701063     | 1    | Chain, #35 128 Links                     | 40                                 | DD4809026     | 3    | Decal, Pow'r Lock                             |
| 15   | DD4544008     | 2    | Lifting Eye, Cylinder                    | 41                                 | CU682026      | 2    | Warning Decal, 2.0 x 2.12"                    |
| 16   | DD4296372     | 1    | Sensor Unit, Air Proximity               | 43                                 | DC9596900     | 2    | Decal, Enerpac (short jacks)                  |
| 17   | DD4687097     | 2    | Fitting, 10-32, x 5/32 PTC, Straight     |                                    | DD4871026     | 2    | Decal, Enerpac (tall jacks)                   |
| 18   | DD5245097     | 2    | Fitting, Elbow 5/32" Tube Male to Female | 44                                 | CBE613028-1E  | 12   | Screw, BHCS M6 x 8 Zinc Plated                |
| 19   | CBE819028-1B  | 8    | Screw, FHCS M8 x x 16 Zinc Plated        | 45                                 | DD4917111     | 1    | Bracket Extension, Bolt-On (Left-Hand)        |
| 20   | DD4810026     | 1    | Decal, 200 Ton Model                     | 46                                 | CAE1060108-1A | 4    | Flat Washer, M6                               |
| 21   | DD4885037     | 2    | Gasket, Pow'r Lock Cover                 | 47                                 | CBE619046-1B  | 4    | Bolt, Hex, M6 x 16 Zinc Plated                |
| 22   | DD4606038     | 2    | Adapter, Hydraulic Cylinder              | 48                                 | DD4918111     | 1    | Bracket Extension, Bolt-On (Right-Hand)       |
| 23   | 43320E        | 2    | Inline Screen                            | 49                                 | DD4389070     | 2    | Strap Assembly, Cover                         |
| 24   | CJ204190      | 2    | Coupler Body, Air Pump                   | 50                                 | CSA5008003-1A | 8    | Pop Rivet, M5 x 8                             |
| 25   | CF874044      | 2    | Retaining Ring                           | 51                                 | DD5572026     | 1    | Decal, Warning                                |
| 26   | ★ B1017903    | 4    | O-Ring                                   | ★Item included in PL200K Seal Kit. |               |      |                                               |
| 27   | ★ B1117903    | 2    | O-Ring                                   |                                    |               |      |                                               |
| 28   | ★ B1017565    | 4    | Back-Up Washer                           |                                    |               |      |                                               |

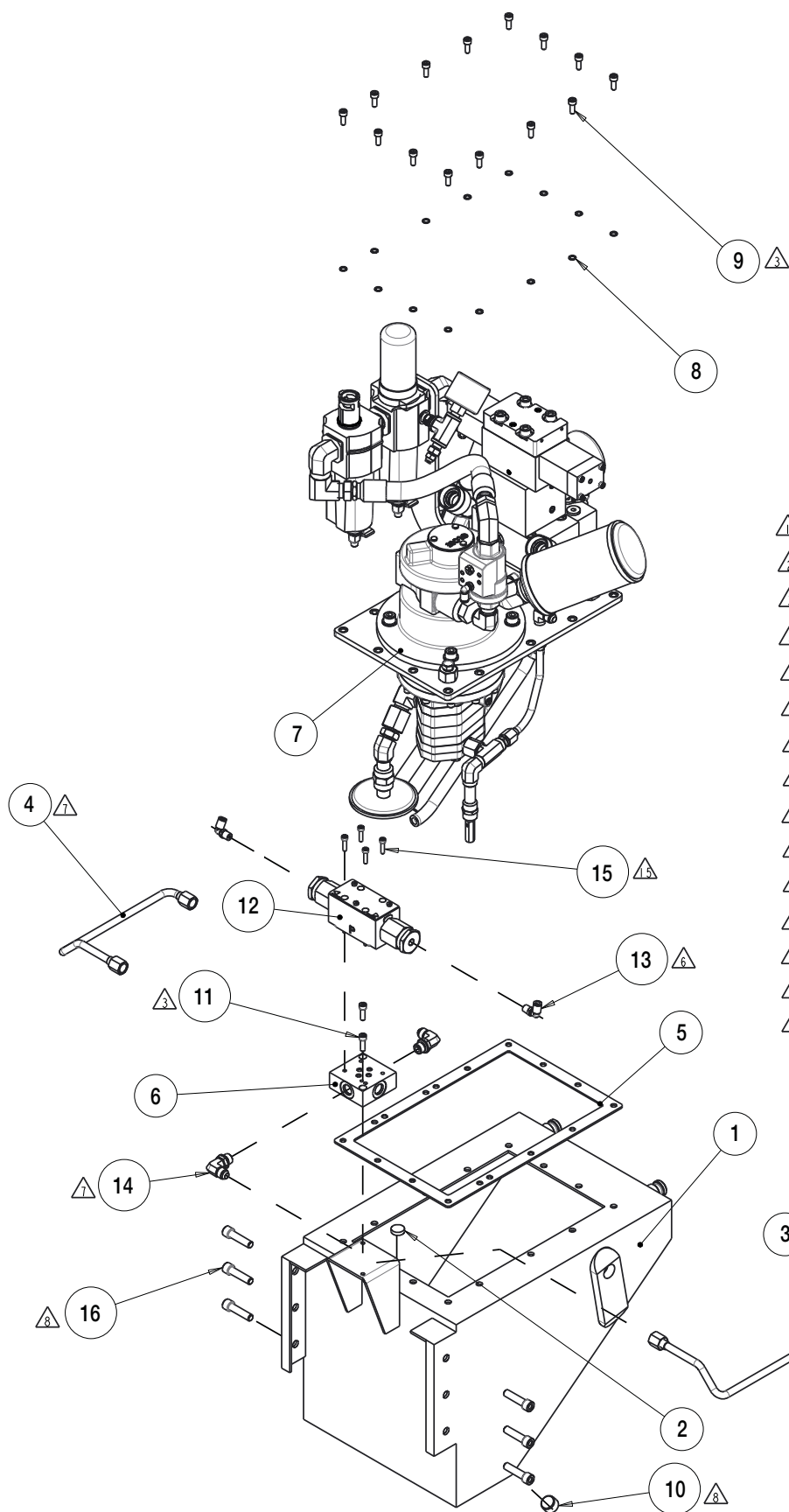
**Figure 1C**



#### NOTES:

- |                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| ① TORQUE TO 16-19 FT-LBS [1.8-2.15 Nm]  | ⑨ TORQUE TO 600 MIN IN-LBS [67.79 Nm]   |
| ② TORQUE TO 50 IN-LBS [5.66 Nm]         | ⑩ TORQUE TO 225 FT-LBS [305.05 Nm]      |
| ③ TORQUE TO 50-60 IN-LBS [5.65-6.78 Nm] | ⑪ STAKE (3) PLACES                      |
| ④ TORQUE TO 65 IN-LBS [7.35 Nm]         | ⑫ SNUG, BACK OFF 1/4 TURN               |
| ⑤ TORQUE TO 80 IN-LBS [9.04 Nm]         | ⑬ APPLY LOCTITE 545.                    |
| ⑥ TORQUE TO 100 IN-LBS [11.30 Nm]       | ⑭ APPLY LOCTITE 243                     |
| ⑦ TORQUE TO 220 IN-LBS [24.86 Nm]       | ⑮ TORQUE TO 12-18 IN-LBS [1.36-2.03 Nm] |
| ⑧ TORQUE TO 250 IN-LBS [28.25 Nm]       |                                         |

Figure 2A - Pump and Reservoir Assembly



NOTES:

- ⚠ TORQUE TO 16-19 FT-LBS [1.8-2.15 Nm]
- ⚠ TORQUE TO 50 IN-LBS [5.66 Nm]
- ⚠ TORQUE TO 50-60 IN-LBS [5.65-6.78 Nm]
- ⚠ TORQUE TO 65 IN-LBS [97.35 Nm]
- ⚠ TORQUE TO 80 IN-LBS [9.04 Nm]
- ⚠ TORQUE TO 100 IN-LBS [11.30 Nm]
- ⚠ TORQUE TO 220 IN-LBS [24.86 Nm]
- ⚠ TORQUE TO 250 IN-LBS [28.25 Nm]
- ⚠ TORQUE TO 600 MIN IN-LBS [67.79 Nm]
- ⚠ TORQUE TO 225 FT-LBS [305.05 Nm]
- ⚠ STAKE (3) PLACES
- ⚠ SNUG, BACK OFF 1/4 TURN
- ⚠ APPLY LOCTITE 545
- ⚠ APPLY LOCTITE 243
- ⚠ TORQUE TO 35 IN-LBS [3.9 Nm]

| Repair Parts List (Refer to Figure 2A) |              |      |                                         |
|----------------------------------------|--------------|------|-----------------------------------------|
| Item                                   | Part Number  | Qty. | Description                             |
| 1                                      | DD3949025    | 1    | Reservoir, Hydraulic                    |
| 2                                      | C187018      | 1    | Magnet                                  |
| 3                                      | DD4777268    | 1    | Tube, Hydraulic Supply                  |
| 4                                      | DD4778268    | 1    | Tube, Hydraulic Return                  |
| 5                                      | ★ 85469E     | 1    | Gasket, Reservoir                       |
| 6                                      | DD4682840    | 1    | Subplate                                |
| 7                                      | DD4295900SR  | 1    | Assembly, Coverplate                    |
| 8                                      | S3037        | 14   | Gasket                                  |
| 9                                      | CBE619028-1A | 14   | SHCS, M6-1 x 16 Zinc                    |
| 10                                     | A1010245     | 1    | Flush Plug, 1/2" with Sealant           |
| 11                                     | 93582E       | 2    | SHCS, 1/4-20 x 3/4" Long                |
| 12                                     | DD4717660    | 1    | Valve, Directional Control              |
| 13                                     | F100097-52   | 2    | Connector, 0.125-27, 90 Degree Male     |
| 14                                     | F100094-53   | 2    | Elbow, 37 Degree Flare, Straight Thread |
| 15                                     | B1325028X    | 4    | SHCS, 10-24 x 0.75 Zinc Plated          |
| 16                                     | B1073028X    | 6    | SHCS, 3/8-16 x 1.50 Long                |
| ★Item included in PL200K Seal Kit.     |              |      |                                         |

Figure 2B - Assembled Views

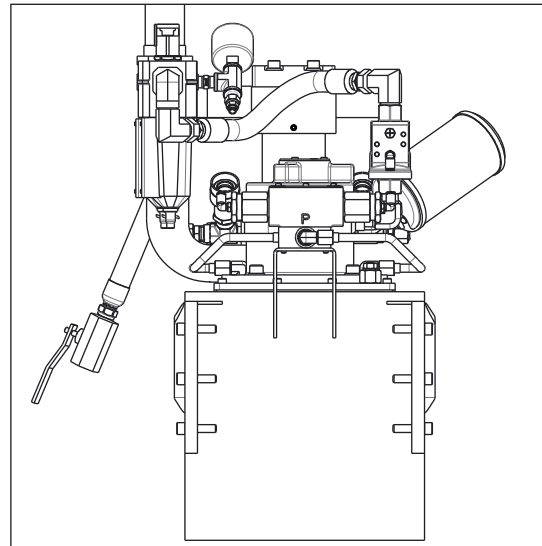
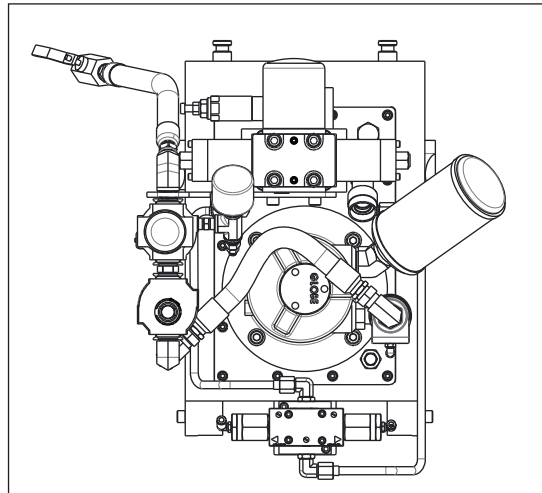
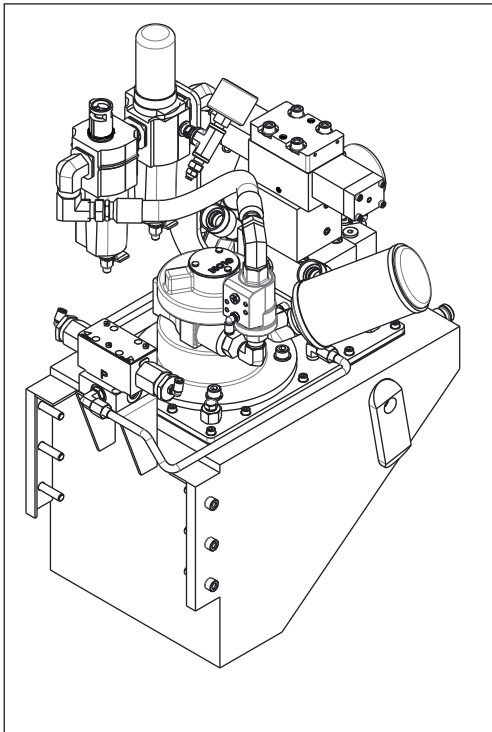
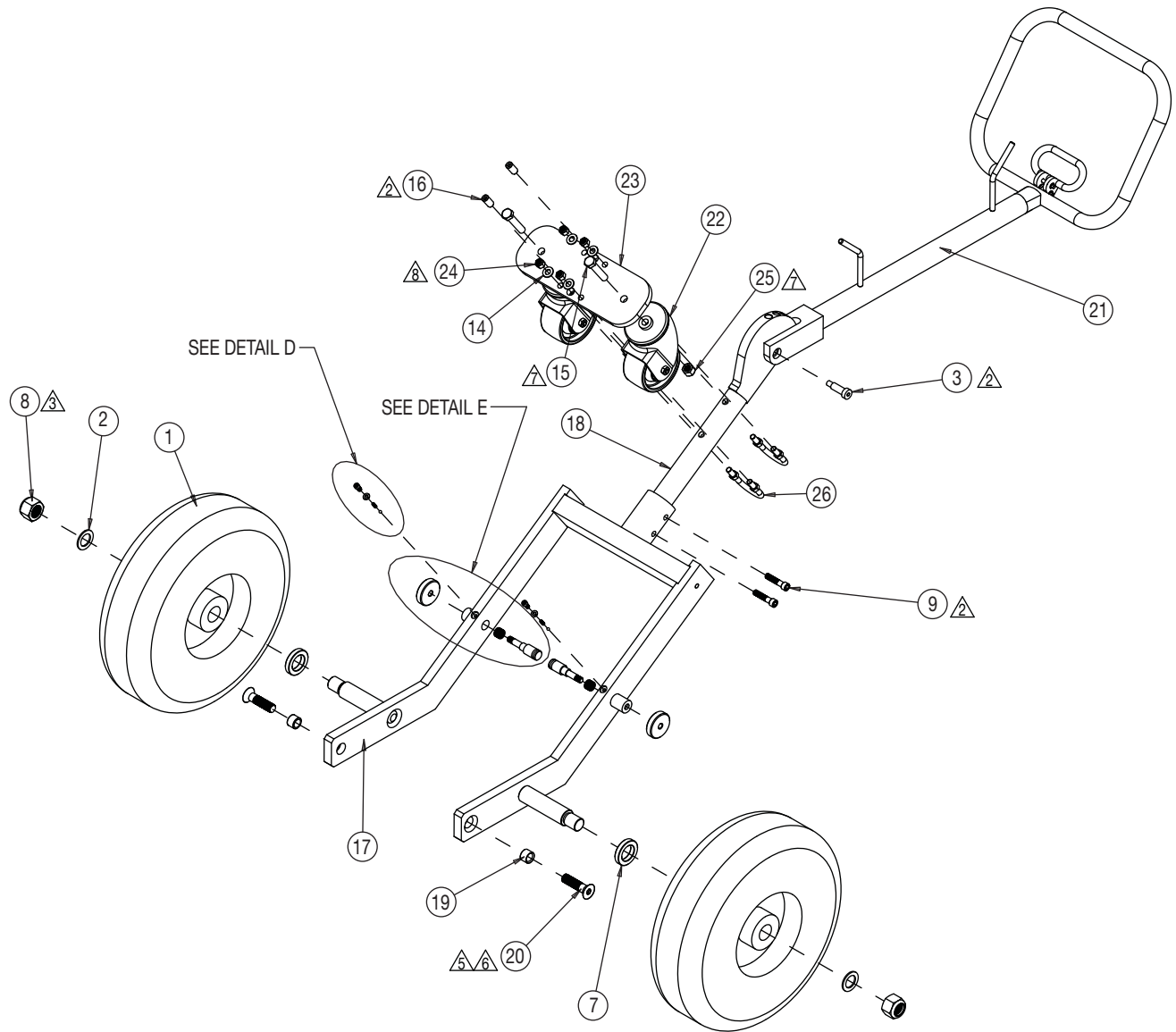


Figure 3A - Handle Assembly, Wheels and Tires



**NOTES:**

- △2 TORQUE TO 220 IN-LBS [24.86 Nm]
- △3 TIGHTEN SNUG TIGHT. THEN BACK OFF 1/4 TURN
- △5 APPLY NEVER SEIZE
- △6 TORQUE TO 85 FT-LBS [115.25 Nm]
- △7 TORQUE TO 45-50 FT-LBS [61.0-67.8 Nm]
- △8 TORQUE TO 140-150 IN-LBS [15.8-16.9 Nm]

| Repair Parts List (Refer to Figures 3A and 3B) |             |      |                                           |
|------------------------------------------------|-------------|------|-------------------------------------------|
| Item                                           | Part Number | Qty. | Description                               |
| 1                                              | 41944E      | 2    | Tire, Semi-Pneumatic                      |
| 2                                              | 41945E      | 2    | Spacer                                    |
| 3                                              | 41983E      | 1    | Screw, Shoulder                           |
| 4                                              | 43323E      | 2    | Plunger                                   |
| 5                                              | 43324E      | 2    | Spring                                    |
| 6                                              | 43327E      | 2    | Spring                                    |
| 7                                              | 43331E      | 2    | Spacer, Axle                              |
| 8                                              | 46053E      | 2    | Hex Lock Nut, 1" -8                       |
| 9                                              | 84692E      | 2    | Screw, 3/8-16 x 1.75"                     |
| 10                                             | 88508E      | 2    | Knob, Adjustment                          |
| 11                                             | B1003028X   | 2    | Screw, SHCS, 1/4-20 x 0.50", Zinc         |
| 12                                             | B1005016    | 2    | Ball, 3/16" Diameter                      |
| 13                                             | B1015066    | 2    | Washer, Lock, 0.25"                       |
| 14                                             | B1026108X   | 4    | Washer, 3/8" Zinc Plate                   |
| 15                                             | B1598046X   | 2    | Screw, Hex 1/2-13 x 2-1/2" Zinc,          |
| 16                                             | BC5016027AX | 2    | Setscrew, Cup Point, 1/2-13 x 1" Zinc     |
| 17                                             | DD4603500   | 1    | Weldment, Axle                            |
| 18                                             | DD4604500   | 1    | Weldment, Lower Handle                    |
| 19                                             | DD4696186   | 2    | Spacer, Axle Fork                         |
| 20                                             | DD4736047   | 2    | Screw, FHSC, 5/8-18 x 2.5"                |
| 21                                             | DD4737900SR | 1    | Handle, Upper Sub Assembly (See Figure 4) |
| 22                                             | DD5848706   | 2    | Caster, Pow'r Lock                        |
| 23                                             | DD5849101   | 1    | Plate, Caster, Pow'R Lock                 |
| 24                                             | DD5864021   | 4    | Nut, Lock 3/8"-16 Grade 5 Zinc            |
| 25                                             | DD5865021   | 2    | Nut, Lock 1/2"-13 Grade 5 Zinc            |
| 26                                             | F100089-9   | 2    | U-Bolt 3/8-16 x 1-1/4" pipe               |

**Figure 3B - Handle Lock Pin Assembly  
(Details D and E)**

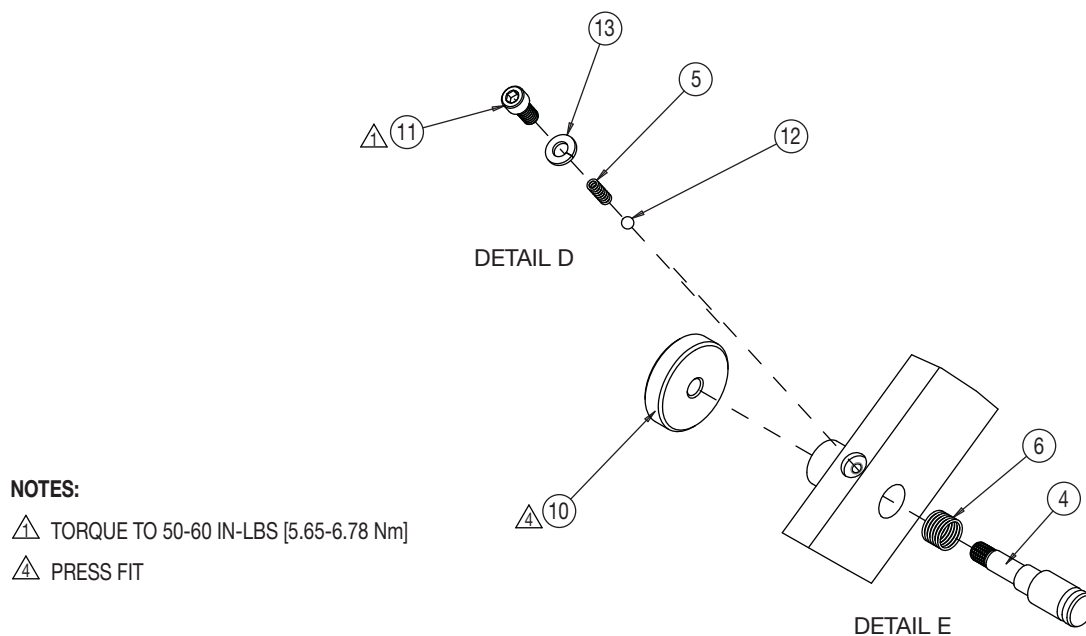
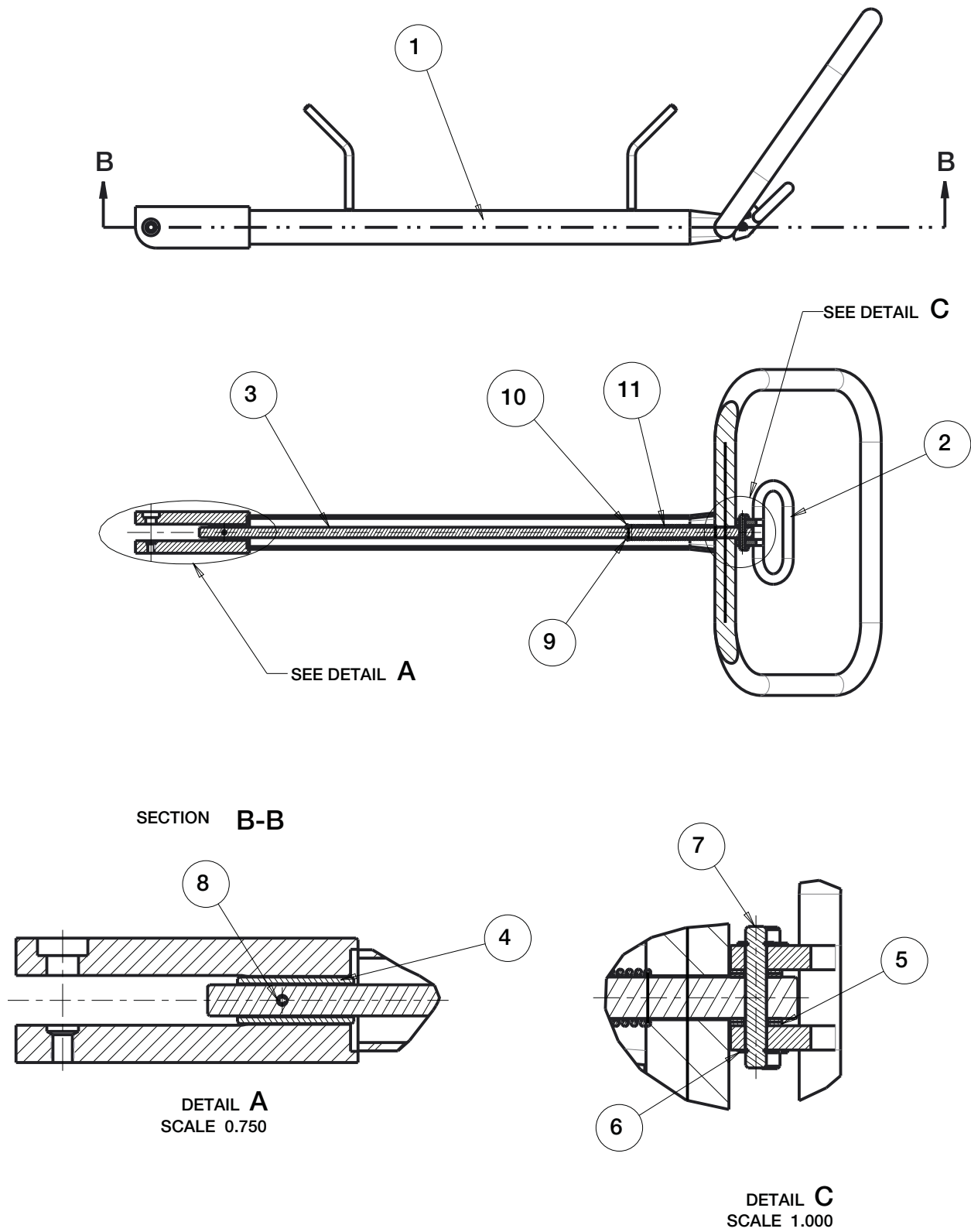
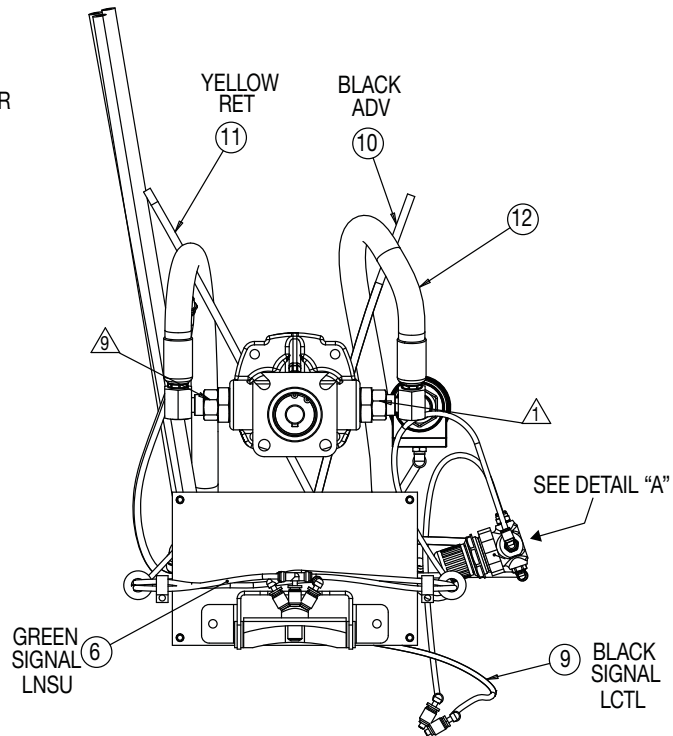
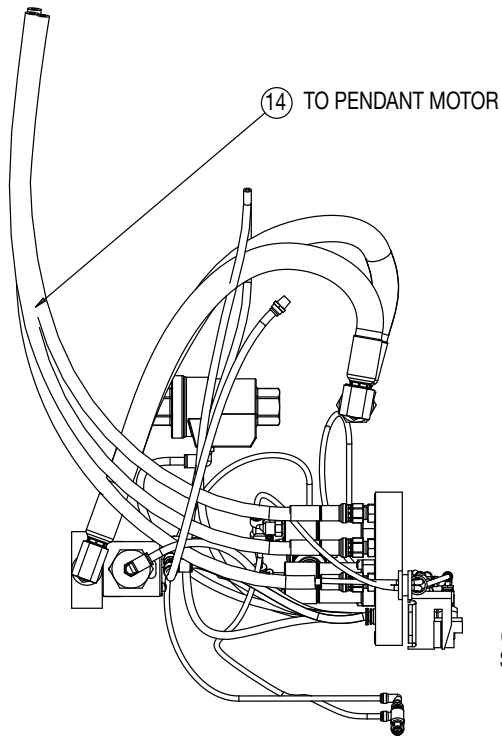


Figure 4 - Upper Handle Sub Assembly

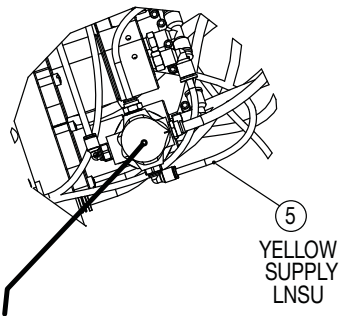


| Repair Parts List (Refer to Figure 4)                    |             |      |                              |
|----------------------------------------------------------|-------------|------|------------------------------|
| Item                                                     | Part Number | Qty. | Description                  |
| 1                                                        | * DD4705500 | 1    | Weldment, Upper Handle       |
| 2                                                        | * 42368E    | 1    | Lever, Handle Lock           |
| 3                                                        | * DD4703107 | 1    | Rod, Handle                  |
| 4                                                        | * 41600E    | 1    | Sleeve                       |
| 5                                                        | * 88429E    | 4    | Washer, 1/4" Stainless Steel |
| 6                                                        | * 42340E    | 4    | Pin Ring                     |
| 7                                                        | * 42338E    | 2    | Pin, Handle Lever            |
| 8                                                        | * 42497E    | 1    | Roll Pin, 5/32 x 7/8         |
| 9                                                        | * 41613E    | 1    | E-Ring, .8/.82 x .042        |
| 10                                                       | * 41614E    | 1    | Washer, 9/16 ID x 3/32 Inch  |
| 11                                                       | * 41602E    | 1    | Spring, 0.656 x 9.50         |
| * Item included in DD4737900SR Upper Handle Sub Assembly |             |      |                              |

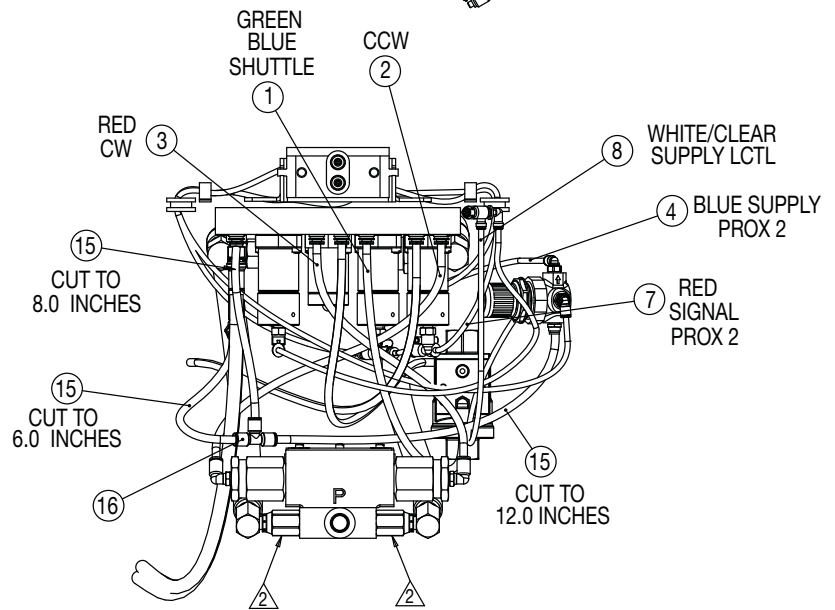
Figure 5 - Air and Hydraulic Lines



Detail "A"



SET TO 6 PSI WITH INPUT  
PRESSURE SET TO 100 PSI.



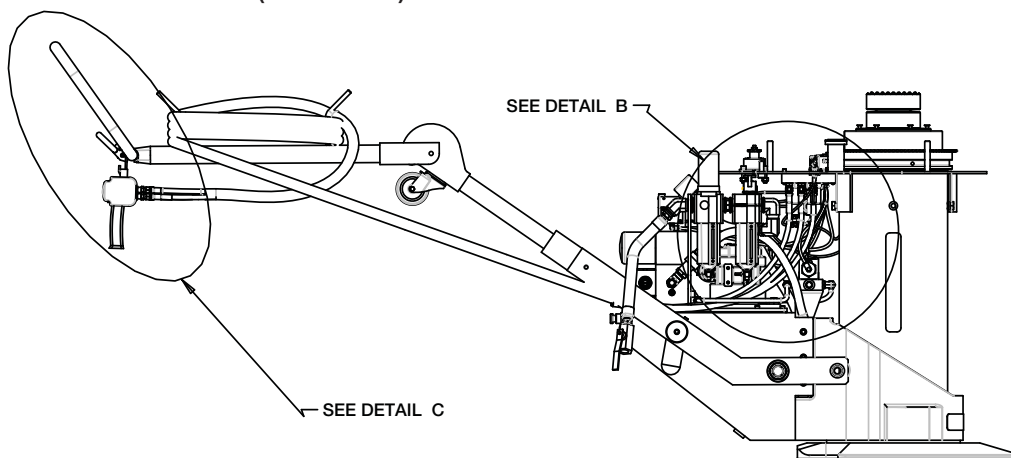
NOTES:

⚠ TORQUE TO 60 FT-LBS [81.34 Nm] FOR (2) #8 SAE HOSE FITTINGS

⚠ TORQUE TO 420 IN-LBS [47.45 Nm] FOR (2) #6 SAE HOSE FITTINGS

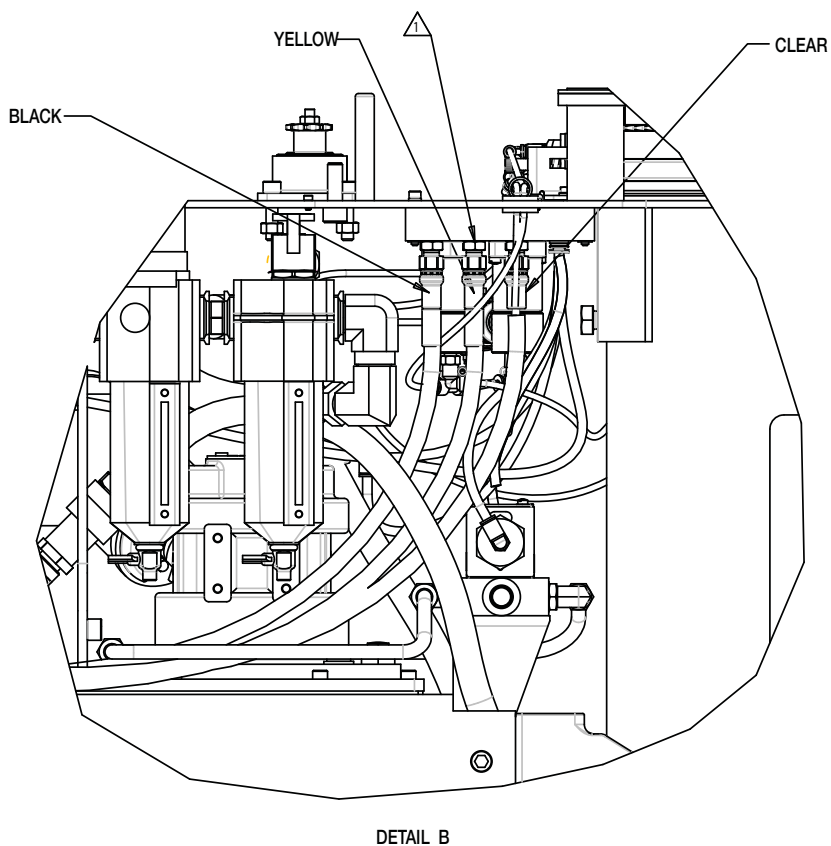
| Repair Parts List (Refer to Figure 5)                                                                                                                                         |             |      |                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|-------------------------------------------------|
| Item                                                                                                                                                                          | Part Number | Qty. | Description                                     |
| 1                                                                                                                                                                             | DD4822268SR | 1    | Tubing, 1/4" Green, Shuttle                     |
| 2                                                                                                                                                                             | DD4821268SR | 1    | Tubing, 1/4" Blue, Counter-Clockwise            |
| 3                                                                                                                                                                             | DD4823268SR | 1    | Tubing, 1/4" Red, Clockwise                     |
| 4                                                                                                                                                                             | DD4826268SR | 1    | Tubing, 5/32" Blue, Supply, Proximity #2 Sensor |
| 5                                                                                                                                                                             | DD4830268SR | 1    | Tubing, 5/32" Yellow, Supply LNSU               |
| 6                                                                                                                                                                             | DD4827268SR | 1    | Tubing, 5/32" Green, Signal LNSU                |
| 7                                                                                                                                                                             | DD4828268SR | 1    | Tubing, 5/32" Red, Signal, Proximity #2 Sensor  |
| 8                                                                                                                                                                             | DD4829268SR | 1    | Tubing, 5/32" White, Supply LCTL                |
| 9                                                                                                                                                                             | DD4825268SR | 1    | Tubing, 5/32" Black, Signal LCTL                |
| 10                                                                                                                                                                            | DD4820268SR | 1    | Tubing, 1/4" Black, Advance                     |
| 11                                                                                                                                                                            | DD4824268SR | 1    | Tubing, 1/4" Yellow, Retract                    |
| 12                                                                                                                                                                            | DD4742646   | 2    | Hose, Hydraulic Motor Tall                      |
| 14                                                                                                                                                                            | DD4761900   | 1    | Hose Assembly, 20 Foot Air Pendant              |
| 15                                                                                                                                                                            | DD5248268SR | 1    | Tubing, 1/4" White, Supply                      |
| 16                                                                                                                                                                            | DD5685097   | 1    | Fitting, Tee .25 Tube Connector                 |
| <b>Note:</b> Tubing is pre cut to the proper length for Model PL200025-ASA.<br>For Model PL200014-ASA, tubing can be cut to a shorter length (as required) if it is too long. |             |      |                                                 |

Figure 6A - Air Lines and Pendant (View 1 of 3)



**Note:** Access cover and various other parts are removed in these views for illustrative purposes.

Figure 6B - Air Lines and Pendant (View 2 of 3)



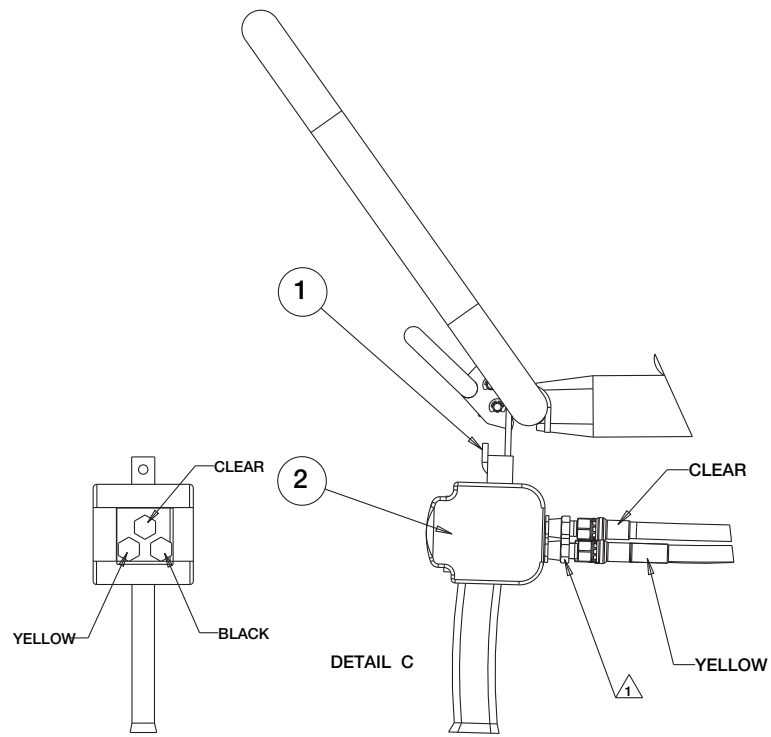
NOTES:

△ TORQUE TO 70-90 IN\*LBS [7.9-10.2 Nm]

**Repair Parts List (Refer to Figures 6A through 6C)**

| Item | Part Number | Qty. | Description                       |
|------|-------------|------|-----------------------------------|
| 1    | 42367E      | 1    | S-Hook, Pendant                   |
| 2    | 41950SR     | 1    | Motor Pendant, Air (See Figure 8) |

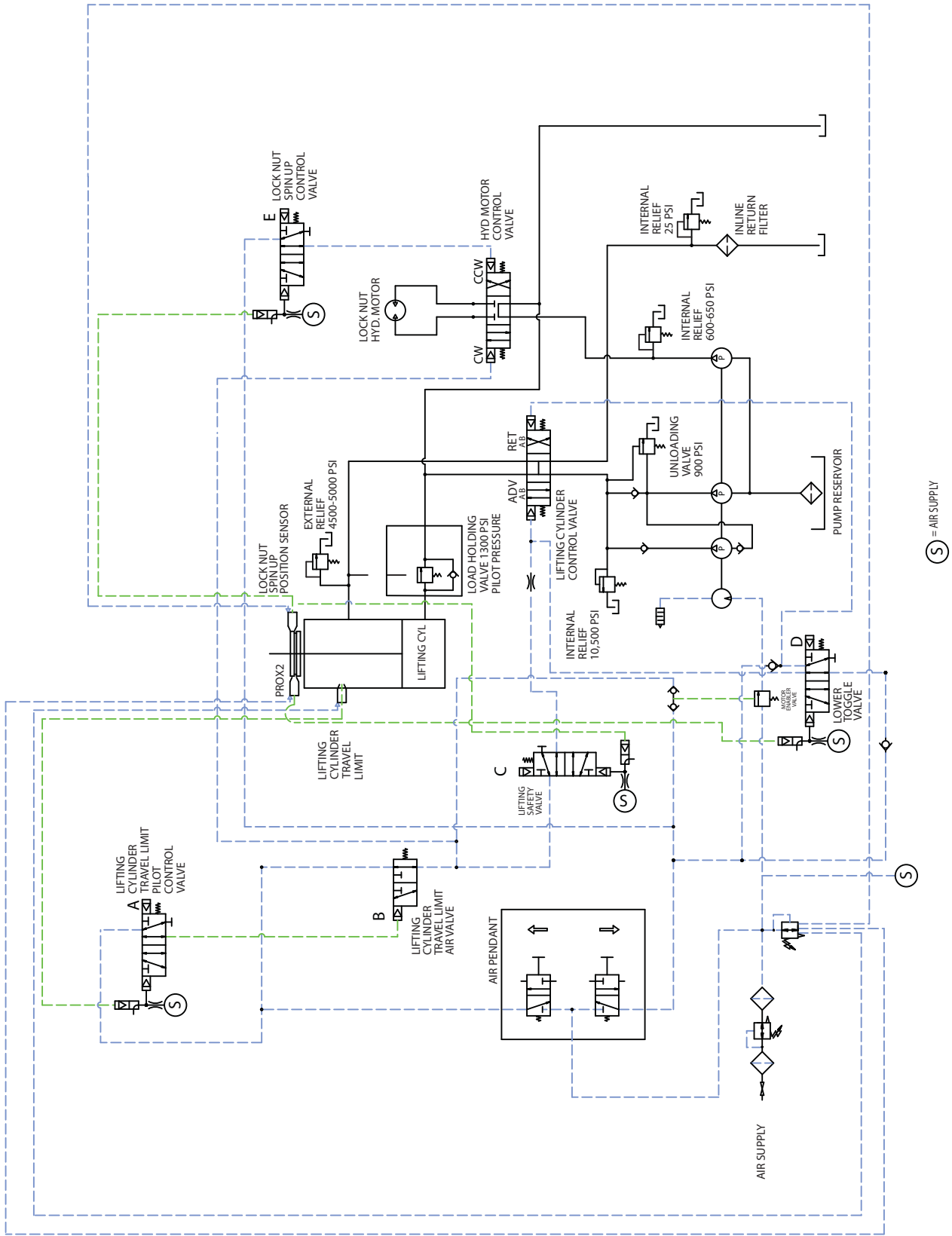
Figure 6C - Air Lines and Pendant (View 3 of 3)



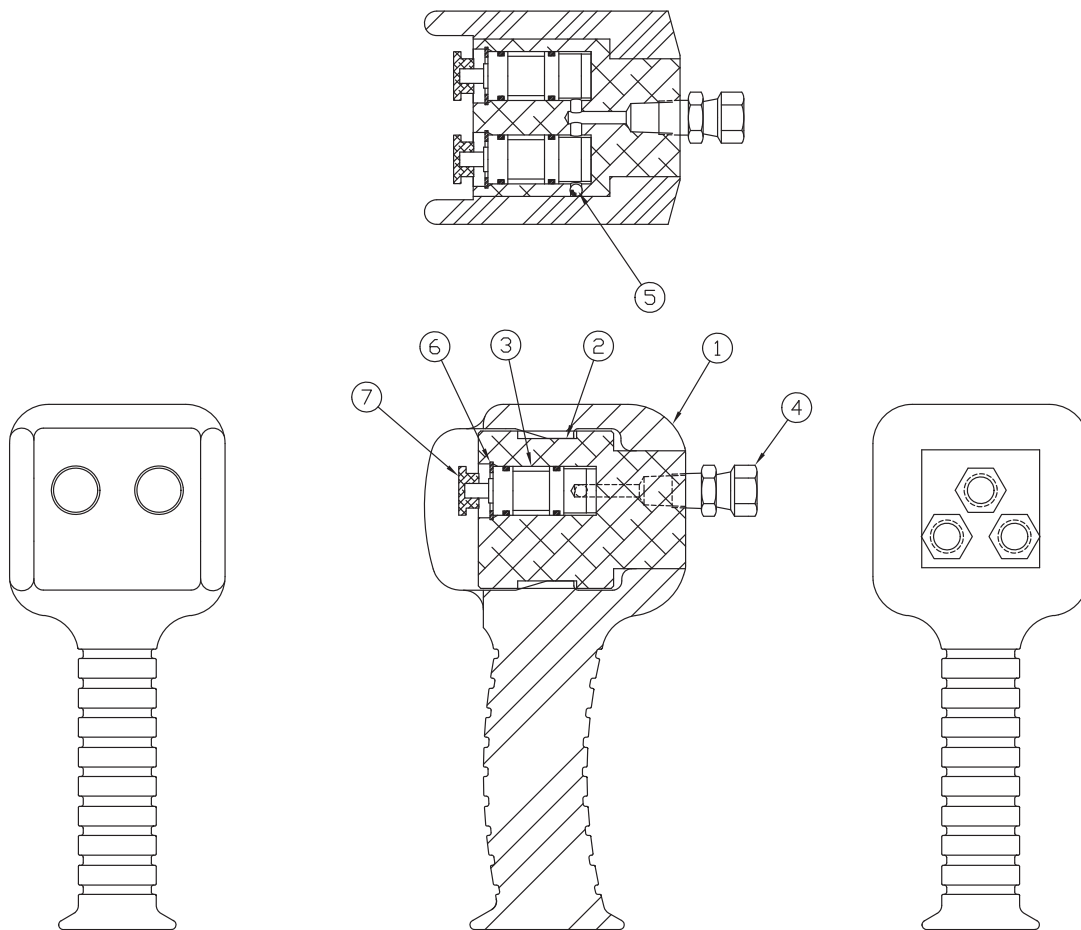
PENDANT AIR CONNECTIONS  
(REAR VIEW)  
NOTES:

 TORQUE TO 70-90 IN\*LBS [7.9-10.2 Nm]

Figure 7 - Hydraulic and Pneumatic Diagram



**Figure 8 - Motor Pendant**

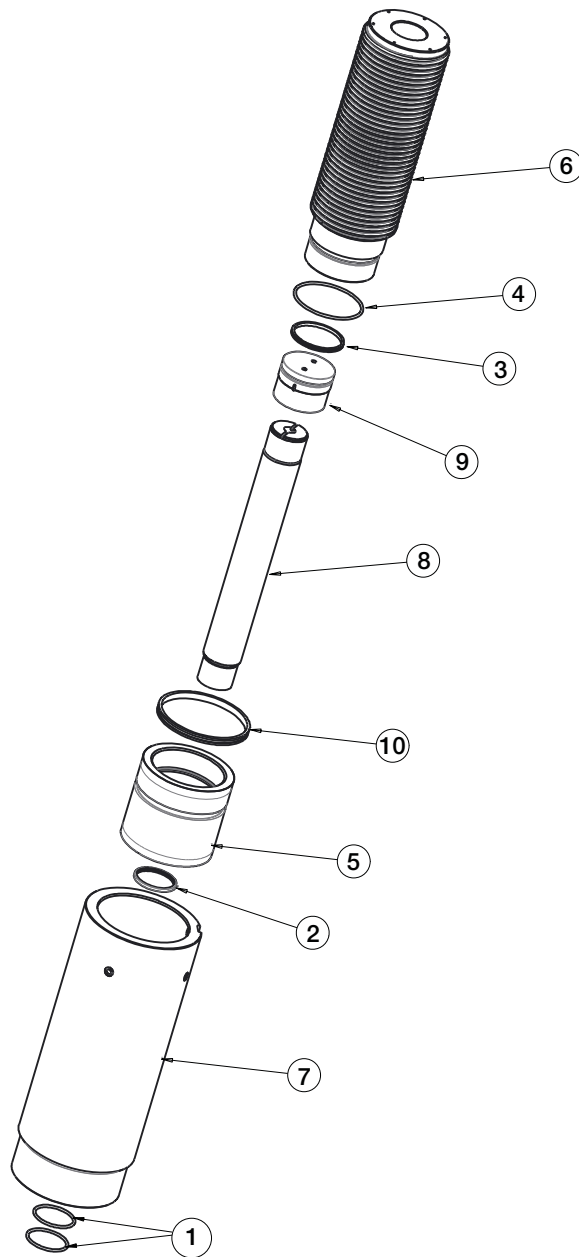


**Repair Parts List (Refer to Figure 8)**

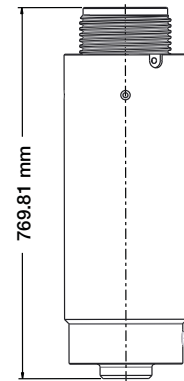
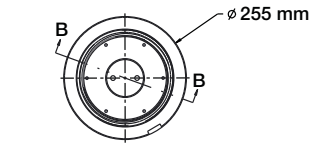
| Item | Part Number | Qty. | Description       |
|------|-------------|------|-------------------|
| 1    | ■ 41968E    | 1    | Pendant Body      |
| 2    | ■ 41969E    | 1    | Block Air Pendant |
| 3    | ■ 41963E    | 2    | Cartridge-Air     |
| 4    | ■ 42381E    | 3    | Swivel ADP 1/8"   |
| 5    | ■ 6069613E  | 3    | Ball 5/32"        |
| 6    | ■ 68808E    | 2    | Retaining Ring    |
| 7    | ■ 41970E    | 2    | Cartridge Cap     |

■ Item included in 41950SR Motor Pendant Service Assembly.

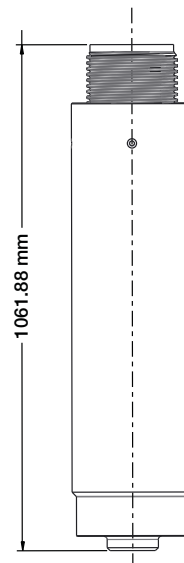
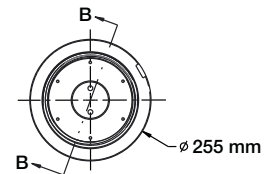
Figure 9A - Hydraulic Cylinder



- ⚠ APPLY LOCTITE 243.
- ⚠ TORQUE TO 70-80 FT-LBS [95-108 Nm].
- ⚠ APPLY NEVER SEIZE TO THREADS.
- ⚠ TORQUE TO 200 FT-LBS [271 Nm].
- ⚠ TORQUE TO 175 FT-LBS [237 Nm].



**ASSEMBLED HEIGHT  
PL20014-ASA**

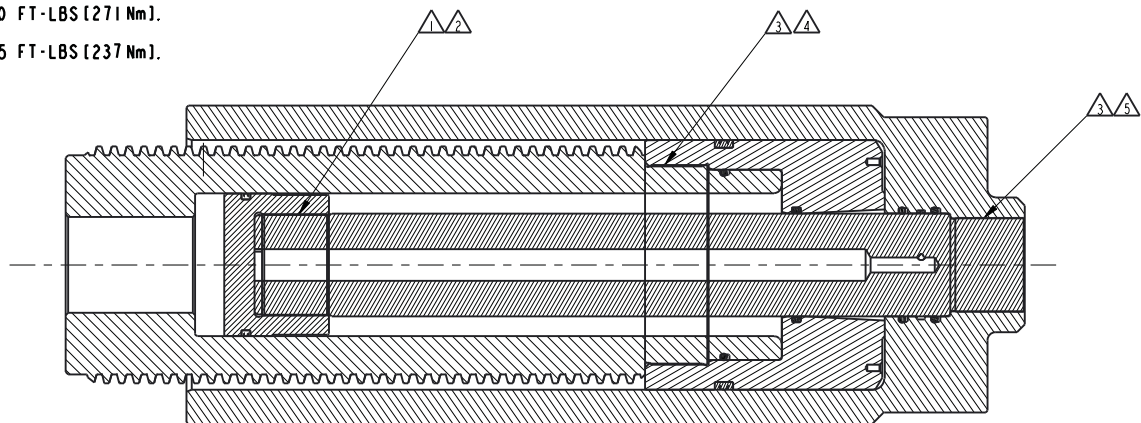


**ASSEMBLED HEIGHT  
PL20025-ASA**

| Repair Parts List (Refer to Figure 9A and 9B)   |                      |                      |      |                              |
|-------------------------------------------------|----------------------|----------------------|------|------------------------------|
| Item                                            | Part Number          |                      | Qty. | Description                  |
|                                                 | Model<br>PL20014-ASA | Model<br>PL20025-ASA |      |                              |
| 01                                              | ◆ B1339403           | ◆ B1339403           | 2    | O-Ring, Polyurathane -339    |
| 02                                              | ◆ B1339514           | ◆ B1339514           | 1    | GT Ring, Rod Seal -339       |
| 03                                              | ◆ DD5822476          | ◆ DD5822476          | 1    | Seal Assembly, Piston        |
| 04                                              | ◆ B1358403           | ◆ B1358403           | 1    | O-Ring, Polyurathane -358    |
| 05                                              | DD4468040            | DD4468040            | 1    | Plunger, Lower               |
| 06                                              | DD4469040            | - - -                | 1    | Plunger, Upper, 14" Stroke   |
|                                                 | - - -                | DD4493040            | 1    | Plunger, Upper, 24.5" Stroke |
| 07                                              | DD4485030            | - - -                | 1    | Base, Cylinder, 14" Stroke   |
|                                                 | - - -                | DD4490030            | 1    | Base, Cylinder, 24.5" Stroke |
| 08                                              | DD4486416            | - - -                | 1    | Stem, 14" Stroke             |
|                                                 | - - -                | DD4491416            | 1    | Stem, 24.5" Stroke           |
| 09                                              | DD4487051            | DD4487051            | 1    | Piston, Retract              |
| 10                                              | ◆ DD4538476          | ◆ DD4538476          | 1    | GT Ring, Piston (metric)     |
| ◆Item included in DD4488900K Cylinder Seal Kit. |                      |                      |      |                              |

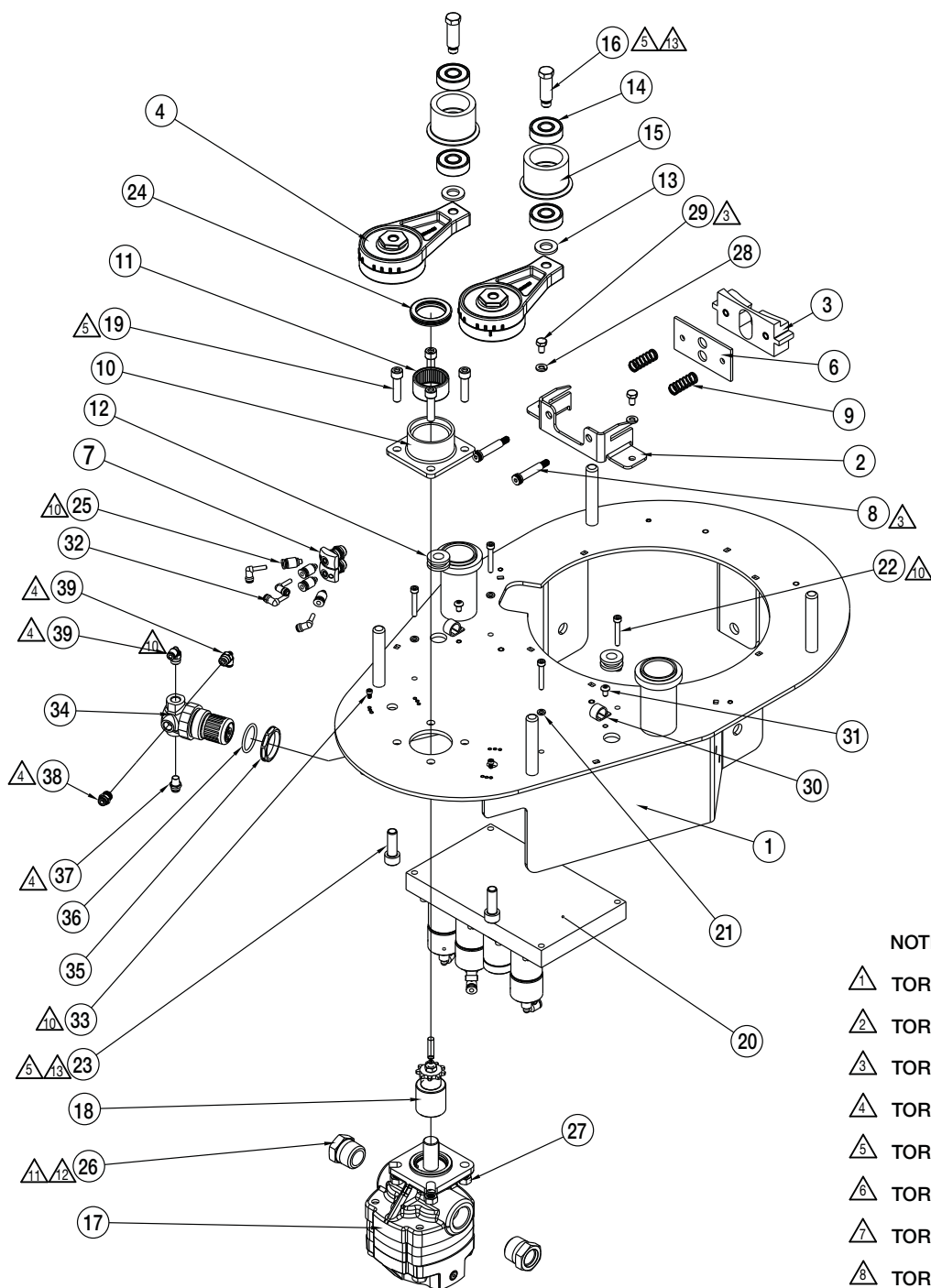
Figure 9B - Sectional View

- △ APPLY LOCTITE 243.
- △ TORQUE TO 70-80 FT-LBS [95-108 Nm].
- △ APPLY NEVER SEIZE TO THREADS.
- △ TORQUE TO 200 FT-LBS [271 Nm].
- △ TORQUE TO 175 FT-LBS [237 Nm].



**Note:** Invert cylinder when testing to eliminate air in the cylinder

Figure 10 - Lower Chain Cover Assembly

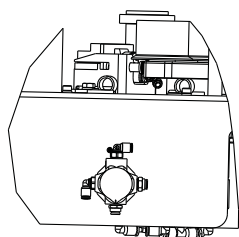


NOTES:

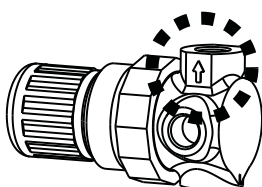
- △1 TORQUE TO 10 FT-LBS [1.13 Nm]
- △2 TORQUE TO 45 IN-LBS [5.08 Nm]
- △3 TORQUE TO 50 IN-LBS [5.65 Nm]
- △4 TORQUE TO 80 IN-LBS [9.04 Nm]
- △5 TORQUE TO 100 IN-LBS [11.30 Nm]
- △6 TORQUE TO 200 IN-LBS [22.60 Nm]
- △7 TORQUE TO 360 IN-LBS [40.67 Nm]
- △8 TORQUE TO 375 IN-LBS [42.37 Nm]
- △9 TORQUE TO 550 IN-LBS [56.49 Nm]
- △10 TORQUE TO 10 IN-LBS [1.5 Nm]
- △11 TORQUE TO 125 FT-LBS [170 Nm]
- △12 APPLY LOCTITE 545.
- △13 APPLY LOCTITE 243

Item 34 Installation:

SIDE VIEW

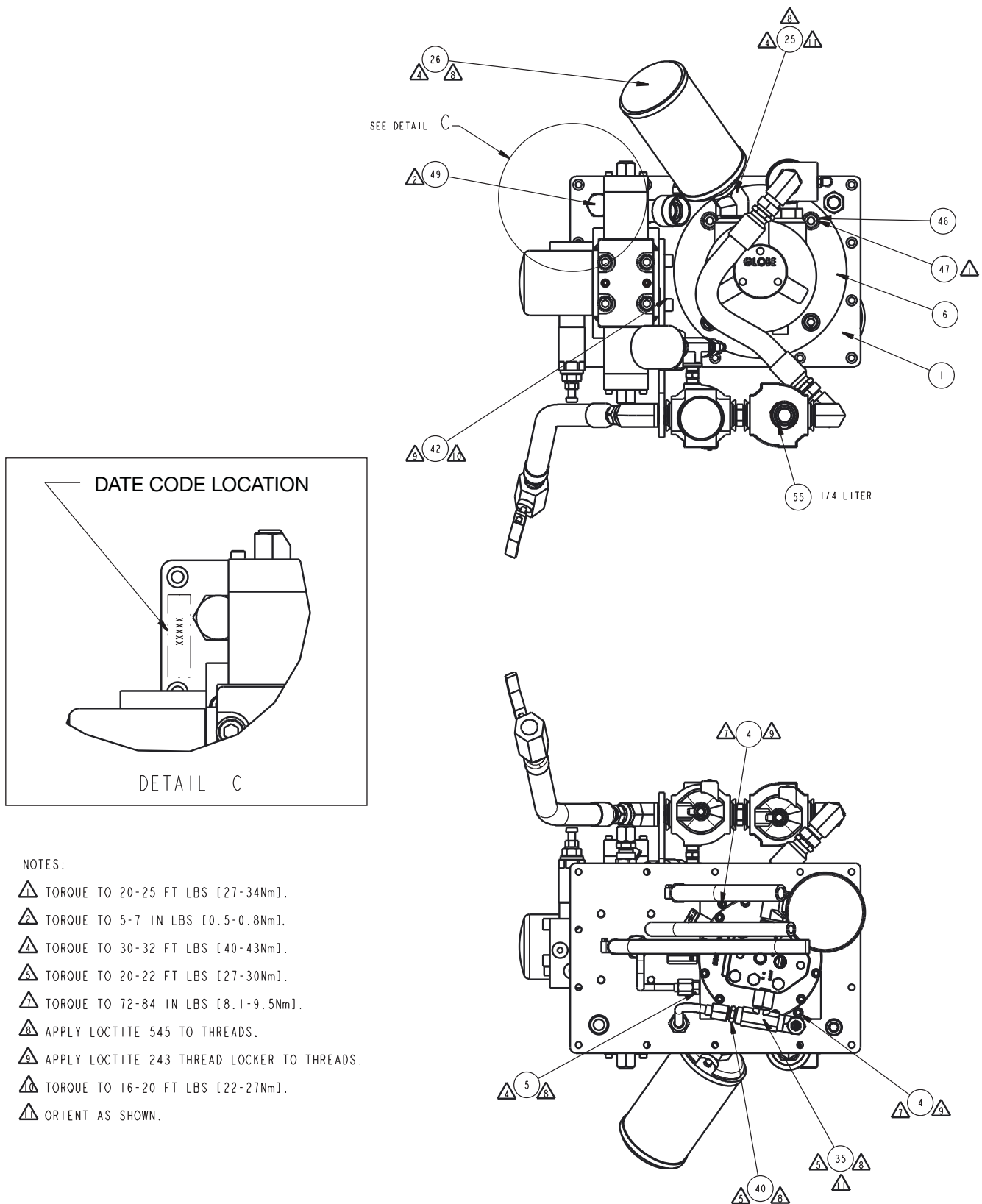


ARROW MUST FACE  
UP WHEN INSTALLED



| Repair Parts List (Refer to Figure 10)                                              |               |      |                                           |
|-------------------------------------------------------------------------------------|---------------|------|-------------------------------------------|
| Item                                                                                | Part Number   | Qty. | Description                               |
| 1                                                                                   | DD4382500     | 1    | Weldment, Cover (bottom)                  |
| 2                                                                                   | DD4598111     | 1    | Bracket, Shoe Assembly                    |
| 3                                                                                   | DD4595900     | 1    | Assembly, Locknut Shoe                    |
| 4                                                                                   | DD4683103     | 2    | Tensioner, Chain                          |
| 6                                                                                   | DD4596101     | 1    | Plate, Backer Shoe                        |
| 7                                                                                   | DD4296372     | 2    | Sensor Unit, Air Proximity                |
| 8                                                                                   | DD4685130     | 2    | Screw, Shoulder, 1/4-20 x 1.25            |
| 9                                                                                   | DD4684110     | 2    | Spring, Compression, 0.48 x 1.25"         |
| 10                                                                                  | DD4612001     | 1    | Bearing Housing                           |
| 11                                                                                  | 66030E        | 1    | Roller Bearing, 1-1/4 x 1/2 x 3/4" wide   |
| 12                                                                                  | DD4624808     | 2    | Grommet, Rubber                           |
| 13                                                                                  | CAE1120108-1A | 2    | Washer, M12                               |
| 14                                                                                  | DD4902155     | 4    | Bearing, Double Seal                      |
| 15                                                                                  | DD4896281     | 2    | Roller, Chain                             |
| 16                                                                                  | DD4765242     | 2    | Bolt, Tensioner Roller                    |
| 17                                                                                  | DD4718259     | 1    | Motor, Hydraulic, Chain Drive             |
| 18                                                                                  | DD4009900     | 1    | Gear, Pinion, Hydraulic Motor             |
| 19                                                                                  | B1351028X     | 4    | SHCS, 5/16-18 x 1.25" Long                |
| 20                                                                                  | ▲ DD4694840   | 1    | Manifold, Air Logic                       |
| 21                                                                                  | B1080066X     | 4    | Lock Washer, #10 Zinc                     |
| 22                                                                                  | B1332028X     | 4    | Screw, SHC, #10-32 x 1.25, Zinc Plated    |
| 23                                                                                  | CBE1025028-1A | 2    | SHCS, M10 x 30                            |
| 24                                                                                  | 45930E        | 1    | Shaft Seal, G5                            |
| 25                                                                                  | DD4687097     | 4    | Fitting, 10-32 x 5/32 PTC, Straight       |
| 26                                                                                  | DD4772095     | 2    | Adapter, 3/4" NPT #8 SAE                  |
| 27                                                                                  | DD4757122     | 4    | Nut, Lock, 5/16-18 Grade 2                |
| 28                                                                                  | CCE1060108-5A | 2    | Lock Washer, M6                           |
| 29                                                                                  | CBE615046-1B  | 2    | HHCS, M6 x 10 Zinc Plated                 |
| 30                                                                                  | DD4797017     | 2    | Clip, 1/2" Cable                          |
| 31                                                                                  | CBE513028-1E  | 2    | BHCS, M5 x 8, Zinc Plated                 |
| 32                                                                                  | DD5245097     | 4    | Fitting, Elbow, 5/32 Tube, Male to Female |
| 33                                                                                  | DD5246028     | 2    | Screw, SHC, #6-32 x 0.25, Zinc Plated     |
| 34                                                                                  | DD5683664     | 1    | Valve, Reducing Air, 10 psi               |
| 35                                                                                  | DD5684021     | 1    | Nut, Panel Mount, Metal                   |
| 36                                                                                  | B1256503      | 1    | O-Ring                                    |
| 37                                                                                  | F100097-33    | 1    | Fitting, .125 NPT Male, .25 Tube          |
| 38                                                                                  | DD5687097     | 1    | Fitting, .125 NPT Male, .156 Tube         |
| 39                                                                                  | DC8066097     | 2    | Elbow, 1/8 x 5/32 #3109-04-11             |
| ▲ <b>Note:</b> Air logic unit contains no user-replacable or user servicable parts. |               |      |                                           |

Figure 11A - Pump and Coverplate Assembly (View 1 of 3)



| Repair Parts List (Refer to Figure 11A) |               |      |                                      |
|-----------------------------------------|---------------|------|--------------------------------------|
| Item                                    | Part Number   | Qty. | Description                          |
| 1                                       | DD4233101     | 1    | Plate, Reservoir Cover               |
| 4                                       | CBE621028-1A  | 2    | SHCS M6x20 Zinc                      |
| 5                                       | F100094246    | 1    | Connector, Flare                     |
| 6                                       | DD4436259     | 1    | Air Motor                            |
| 25                                      | F100095-108   | 1    | Elbow, Street, 45 Degree, 3/4 CD45-S |
| 26                                      | DD4791116     | 1    | Muffler, Air Exhaust                 |
| 35                                      | F100095-35    | 1    | 0.25 NPT Tee                         |
| 40                                      | F100094-5     | 1    | Male Connector                       |
| 42                                      | B1065028X     | 2    | 3/8-16 SHCS, 0.75" Lg.               |
| 46                                      | CAE1100108-1A | 4    | Washer, 10mm Zinc                    |
| 47                                      | CBE1027028-1A | 4    | SHCS, M10 x 35                       |
| 49                                      | B1022006      | 1    | Hex Plug                             |
| 55                                      | DD5142835     | 1    | Lubricant, Air Motor                 |
| ★Item included in PL200K Seal Kit.      |               |      |                                      |

Assembled View

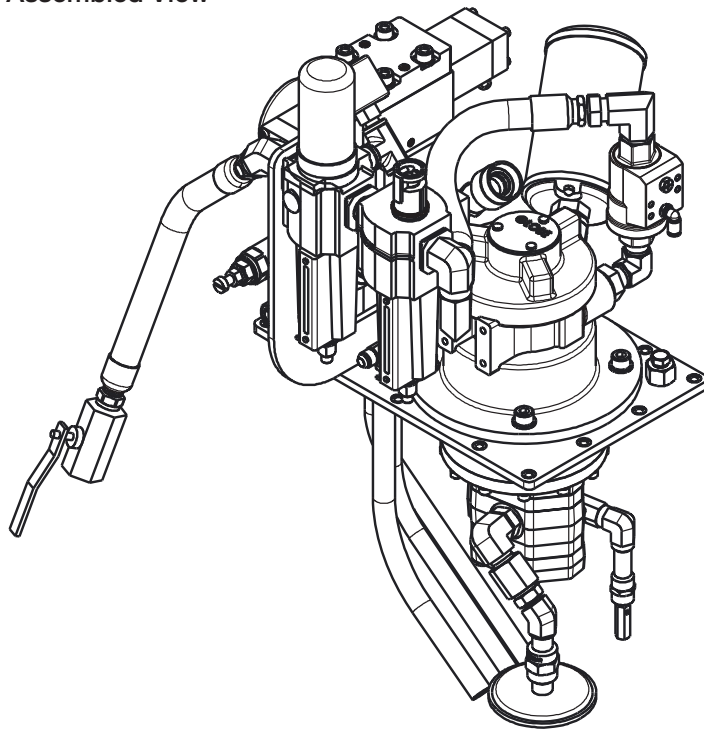
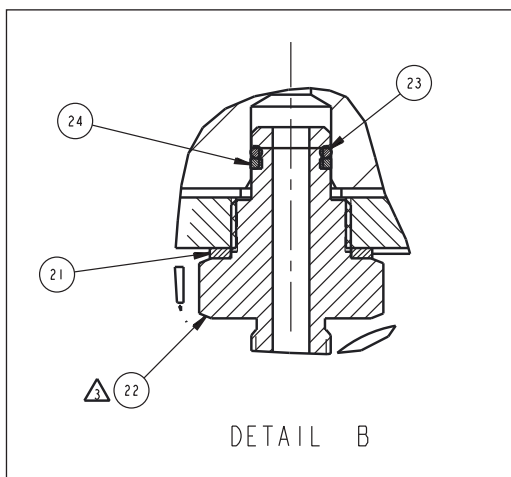
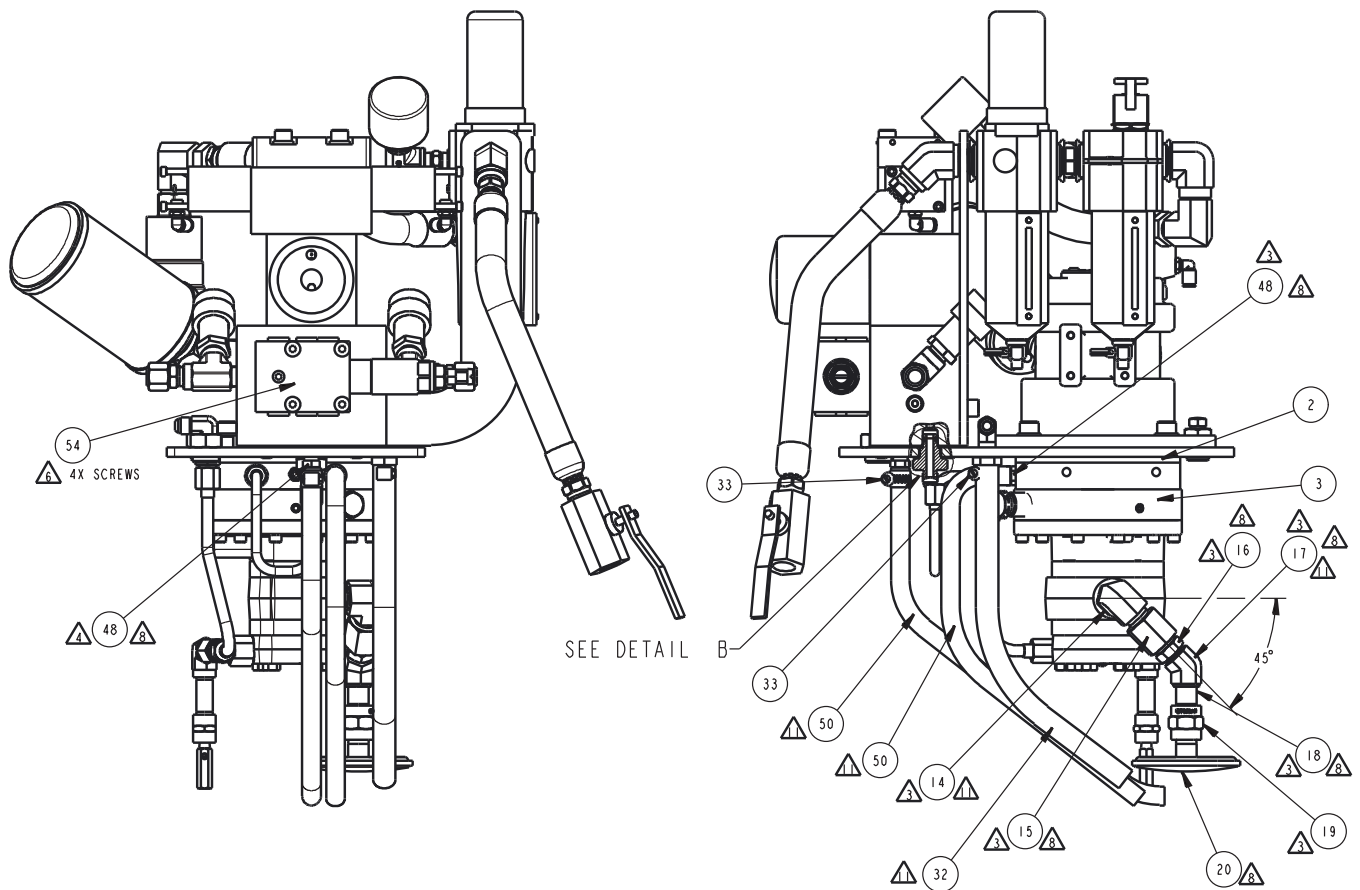


Figure 11B - Pump and Coverplate Assembly (View 2 of 3)

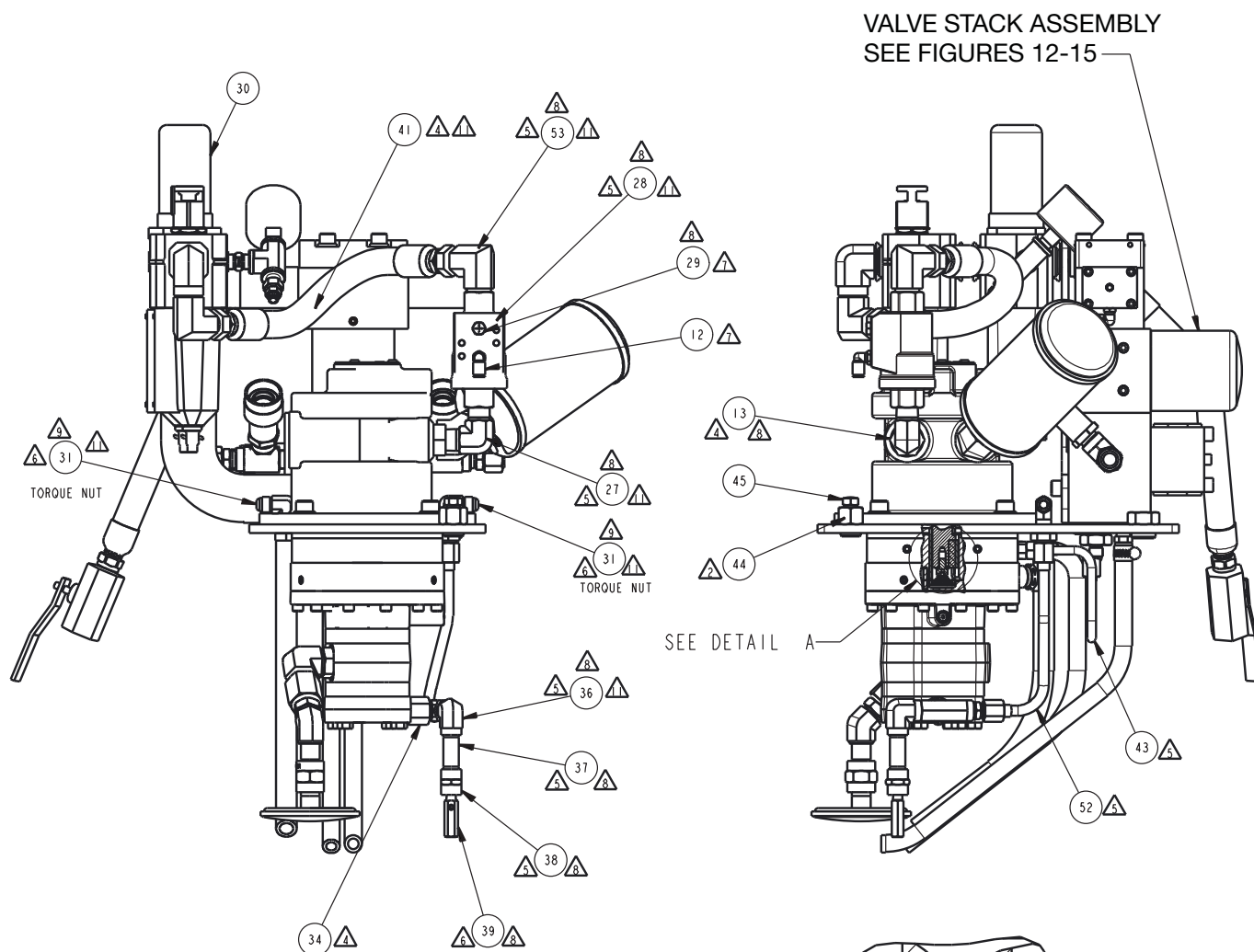


NOTES:

- △ TORQUE TO 45-47 FT LBS [61-64Nm].
- △ TORQUE TO 30-32 FT LBS [40-43Nm].
- △ TORQUE TO 15-18 FT LBS [20-24Nm].
- △ APPLY LOCTITE 545 TO THREADS.
- △ ORIENT AS SHOWN.

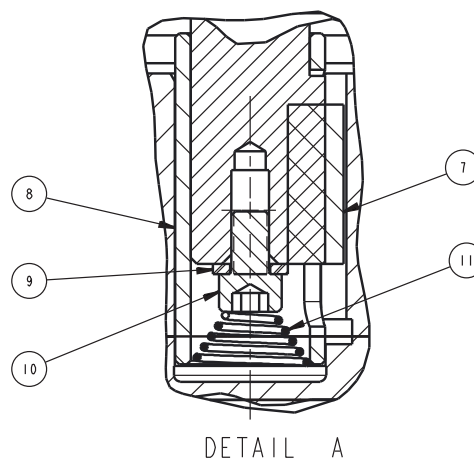
| Repair Parts List (Refer to Figure 11B) |              |      |                                      |
|-----------------------------------------|--------------|------|--------------------------------------|
| Item                                    | Part Number  | Qty. | Description                          |
| 2                                       | ★ DC95511920 | 1    | Gasket, Air Reservoir/Motor Z        |
| 3                                       | DD3954900SR  | 1    | Assembly, Pump                       |
| 14                                      | F100096-48   | 1    | NPT-SAE Adapter                      |
| 15                                      | DD4676095    | 1    | Fitting, Adapter                     |
| 16                                      | F100095-49   | 1    | Reducer, Pipe Thread, 1/2 x 3/8      |
| 17                                      | CU235096     | 1    | Street Elbow, 0.375-18, 45 Degree    |
| 18                                      | F100431-63   | 1    | Nipple, 0.375 NPTF, 1.5 inch         |
| 19                                      | CJ649096     | 1    | Fitting                              |
| 20                                      | DD4627118    | 1    | Filter, Intake                       |
| 21                                      | DC9271167    | 1    | Gasket, Copper, 0.75 x 1.017 x 0.064 |
| 22                                      | DC9173690    | 1    | Connector, Tube/Fitting              |
| 23                                      | B1012803     | 1    | O-Ring, (0.38 x 0.50 x 0.06) Poly    |
| 24                                      | BSS0368D     | 1    | Ring, Back-up                        |
| 32                                      | DD4677646    | 1    | Hose, Return Tube, 13"               |
| 33                                      | DC9639299    | 2    | Hose Clamp, Steel, 3/8-7/8"          |
| 48                                      | F100097-16   | 2    | Fitting, Hose Barb, 0.25 NPT         |
| 50                                      | DD2645646    | 2    | Hose, Rubber, 3/8" ID x 16" Lg.      |
| 54                                      | DD5146900SR  | 1    | Valve, Overcenter, Torque Adjust     |
| ★Item included in PL200K Seal Kit.      |              |      |                                      |

Figure 11C - Pump and Coverplate Assembly (View 3 of 3)



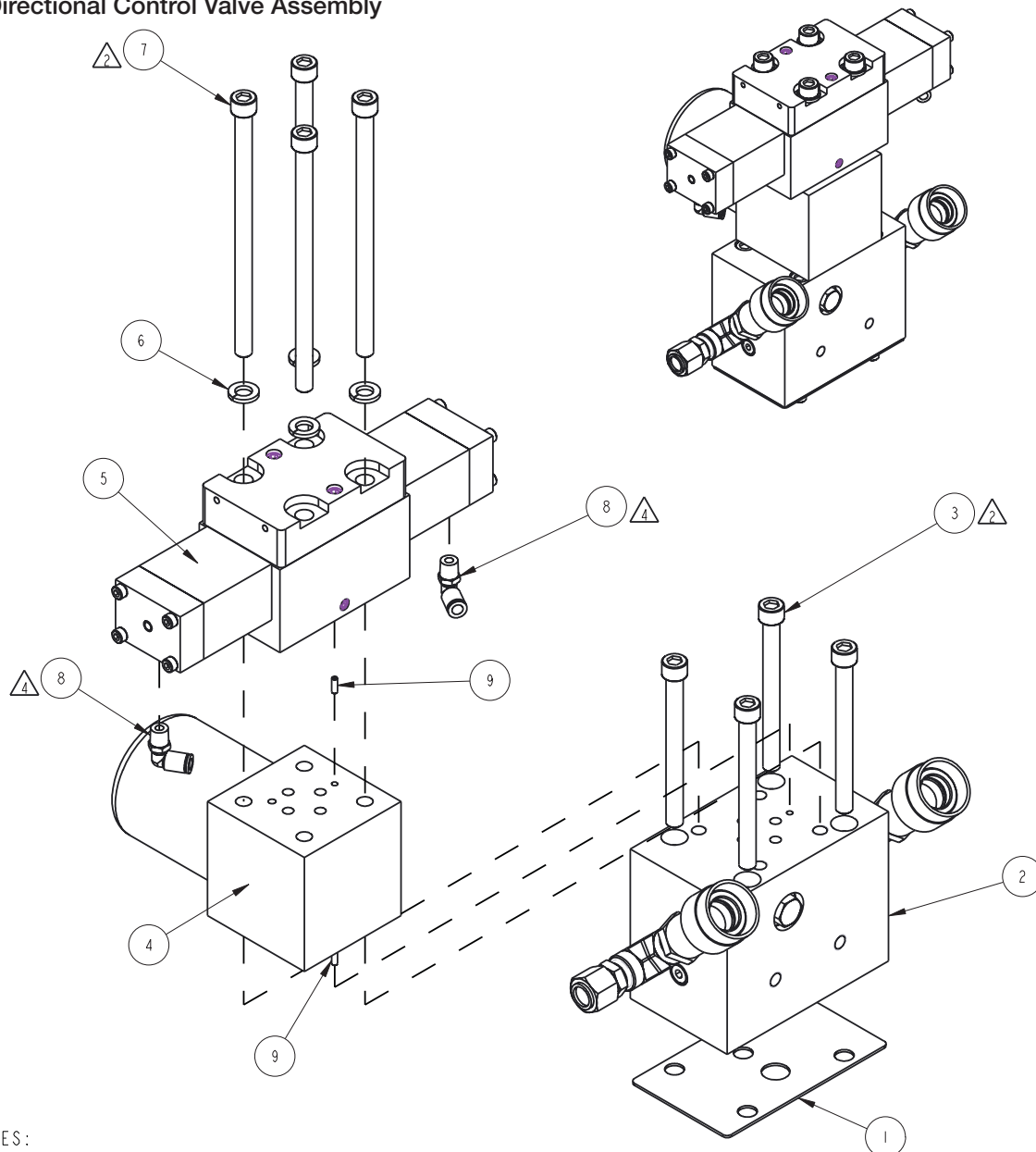
NOTES:

- △2 TORQUE TO 5-7 IN LBS [0.5-0.8Nm].
- △4 TORQUE TO 30-32 FT LBS [40-43Nm].
- △5 TORQUE TO 20-22 FT LBS [27-30Nm].
- △6 TORQUE TO 15-18 FT LBS [20-24Nm].
- △1 TORQUE TO 72-84 IN LBS [8.1-9.5Nm].
- △8 APPLY LOCTITE 545 TO THREADS.
- △9 APPLY LOCTITE 243 THREAD LOCKER TO THREADS.
- △△ ORIENT AS SHOWN.



| Repair Parts List (Refer to Figure 11C) |               |      |                                       |
|-----------------------------------------|---------------|------|---------------------------------------|
| Item                                    | Part Number   | Qty. | Description                           |
| 7                                       | DC8091251     | 1    | Stepped Key, 8mm/6mm                  |
| 8                                       | DA4918038     | 1    | Sleeve                                |
| 9                                       | CAE1060108-1A | 1    | Flat Washer M6                        |
| 10                                      | CBE615028-1A  | 1    | SHCS, M6x10mm Lg Zinc Plated          |
| 11                                      | BSS5509D-330  | 1    | Spring, Conical                       |
| 12                                      | F100097-52    | 1    | Connector, 0.125-27 90 Deg. Male      |
| 13                                      | F100095-50    | 1    | Reducer, Pipe Thread                  |
| 27                                      | 86243E        | 1    | Elbow, Male, 1/2" NPT Pipe            |
| 28                                      | DS10024660E   | 1    | Air Control Valve                     |
| 29                                      | DC352118      | 1    | Breather Vent                         |
| 30                                      | DD4475900SR   | 1    | Assembly, Filter-Regulator-Lubricator |
| 31                                      | F100094-172   | 2    | Elbow, 37 Degree Flare Bulkhead, 3/8" |
| 34                                      | F100096-37    | 1    | Pipe Adapter, Female                  |
| 36                                      | F100095-7     | 1    | Street Elbow, 0.25"                   |
| 37                                      | F100431-14    | 1    | Nipple, 0.250 NPTF, 2"                |
| 38                                      | F100095-40    | 1    | Pipe Connector, 0.125 x 2.50          |
| 39                                      | DD4626900SR   | 1    | Relief Valve, 1/8" NPTF               |
| 41                                      | DD4782900     | 1    | Hose Assembly, Air motor to FRL       |
| 43                                      | DD4713268     | 1    | Tube Assembly, Pressure               |
| 44                                      | F100096-9     | 1    | Adapter, Female Pipe, 8-1/4" F50GS    |
| 45                                      | 69264E        | 1    | Breather, Vent                        |
| 52                                      | DD4712268     | 1    | Tube Assembly, Gear Pump              |
| 53                                      | 41763E        | 1    | Swivel, Male, 1/2" NPTF               |

**Figure 12 - Directional Control Valve Assembly**



**NOTES:**

1. THIS DRAWING REPRESENTS THE ASSEMBLY, PUMP VALVE SECTION. SHOWN ON (SHT 1 OF 2) PART NUMBER DD4399900.

2 TORQUE TO 20-25 FT LBS [27-34 Nm].

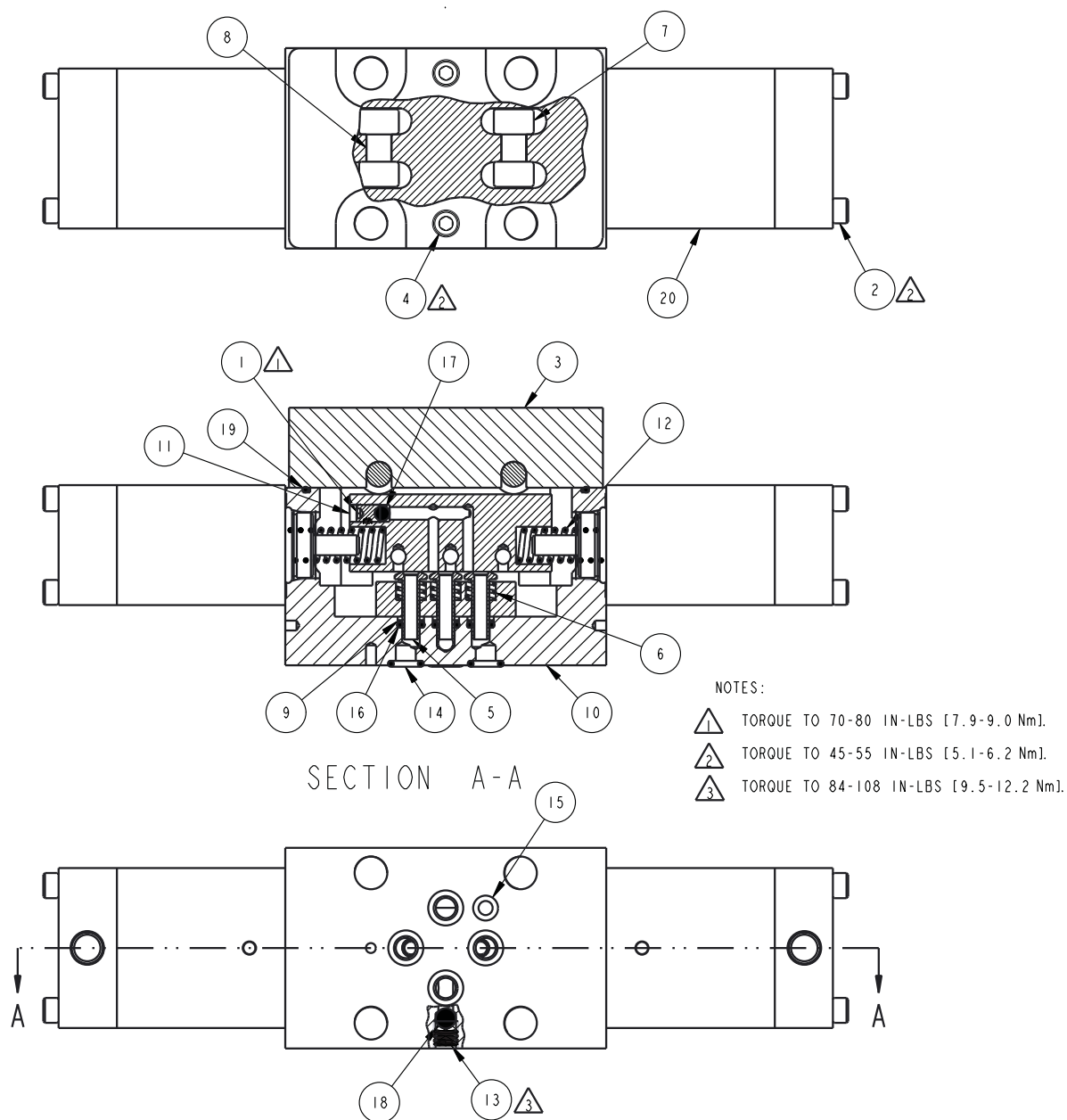
3 APPLY LOCTITE 545 TO THREADS.

4 TORQUE TO 70-90 IN-LBS [7.9-10.2 Nm].

**Repair Parts List (Refer to Figure 12)**

| Item | Part Number   | Qty. | Description                        | Item | Part Number | Qty. | Description                 |
|------|---------------|------|------------------------------------|------|-------------|------|-----------------------------|
| 01   | DD4695037     | 1    | Gasket, Valve                      | 06   | C432108     | 4    | Lock Washer                 |
| 02   | (See Fig.14)  | 1    | Manifold 2 Assembly                | 07   | 42366E      | 4    | SHCS, 3/8-16 x 6.5          |
| 03   | B1091028X     | 4    | Screw, SHCS 3/8-16 x 4" Zinc Plt   | 08   | F100097-52  | 2    | Connector, 0.125-27 90 Deg. |
| 04   | (See Fig. 15) | 1    | Filter Block, With Relief Assembly | 09   | B1049057    | 2    | Spring Pin                  |
| 05   | (See Fig. 13) | 1    | Solenoid, Air 4W/3P                |      |             |      |                             |

**Figure 13 - Air Solenoid Valve Assembly**



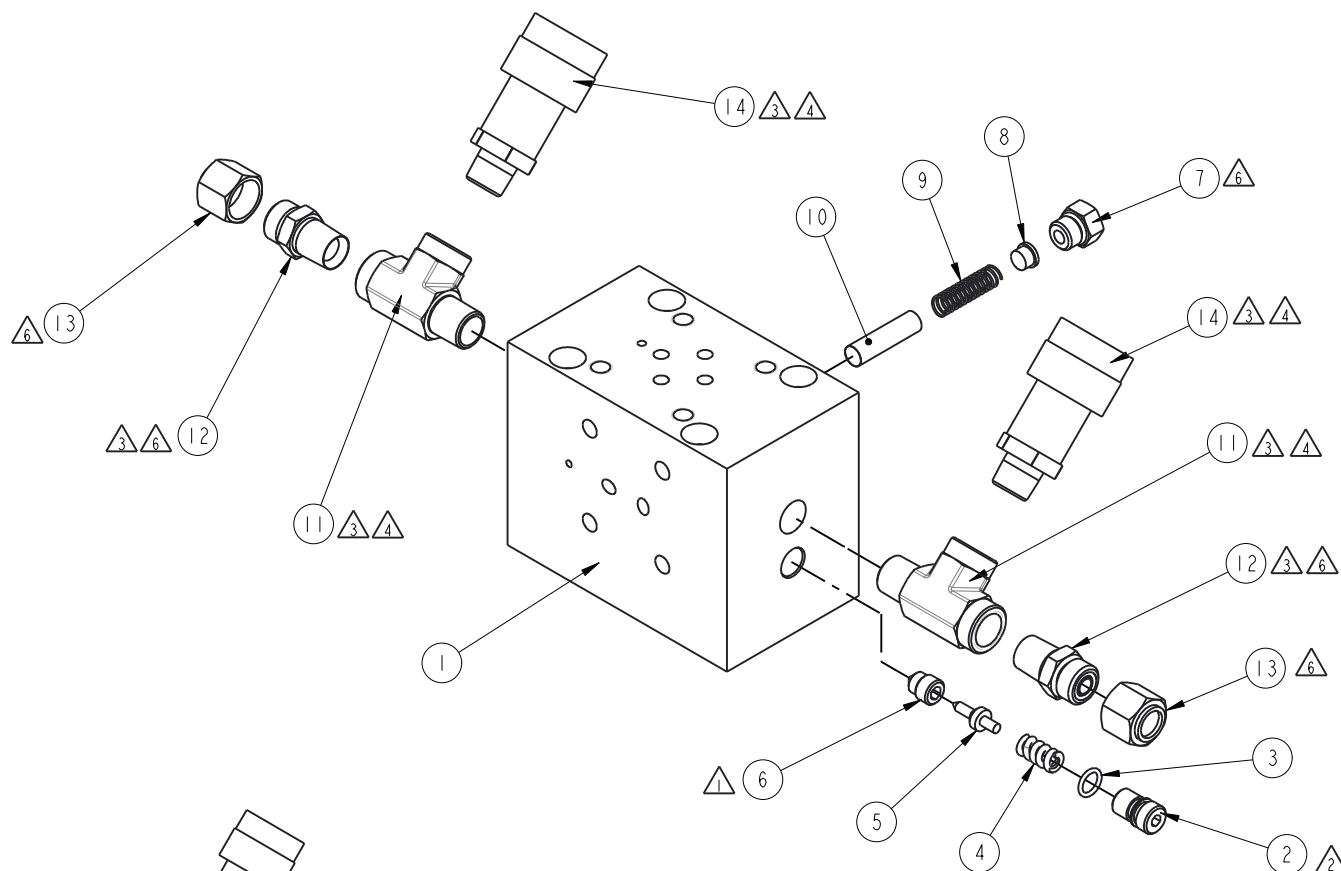
**Repair Parts List (Refer to Figure 13)**

| Item | Part Number | Qty. | Description                        | Item | Part Number   | Qty. | Description                      |
|------|-------------|------|------------------------------------|------|---------------|------|----------------------------------|
| 01   | † 40254E    | 1    | Set Screw, 1/4-28 x 1/4 Cup        | 11   | † 68709E      | 1    | Slider, Tandem Center            |
| 02   | † 41959E    | 8    | SHCS # 10-24 x 3.25"               | 12   | † 68711E      | 2    | Spring                           |
| 03   | † 46272E    | 1    | Valve Top Plate, Machined          | 13   | † 94418E      | 1    | Set Screw, 5/16-18 x 1/4 Cup     |
| 04   | † 68264E    | 2    | SHCS #10-32 x 1" Long, Plated      | 14   | ★† 56020112E  | 4    | O-Ring, 5/16 x 7/16 URE          |
| 05   | † 68383E    | 3    | Seal, Metal                        | 15   | ★† B1003503   | 1    | O-Ring, 0.19 x 0.31 x 0.06" Buna |
| 06   | † 68384E    | 3    | Spring                             | 16   | ★† B1004503   | 3    | O-Ring                           |
| 07   | † 68385E    | 4    | Roller Bearing, 5/16 x 1/2 x 5/16" | 17   | † B1005016    | 1    | Ball, 3/16" Diameter             |
| 08   | † 68390E    | 2    | Pin, Bearing                       | 18   | † B1007016    | 1    | Ball, 1/4" Diameter              |
| 09   | ★† 68391E   | 3    | Back-up Washer                     | 19   | ★† B1246503   | 1    | O-Ring                           |
| 10   | † 68708E    | 1    | Valve Body                         | 20   | † DD2956900SR | 2    | Air Cylinder Assembly            |

† Item included in DD4401900SR Air Solenoid Service Assembly.

★ Item included in PL200K Seal Kit.

Figure 14 - Manifold 2 Assembly



NOTES:

- ▲ TORQUE TO 15-17 FT-LBS (20-23 Nm)
- ▲ SCREW IN TO A RELIEF VALVE PRESSURE OF 4,500-5,000 PSI (310-344 Bar).
- ▲ APPLY TEFLON TAPE TO THREADS, LEAVING 1-2 FIRST THREADS EXPOSED.
- ▲ TORQUE TO 44-53 FT-LBS (60-72 Nm). ORIENT AS SHOWN
- ▲ TORQUE TO 16-18 FT-LBS (21-24 Nm)
- ▲ TORQUE TO 25-27.5 FT-LBS (33.8-37.3 Nm).

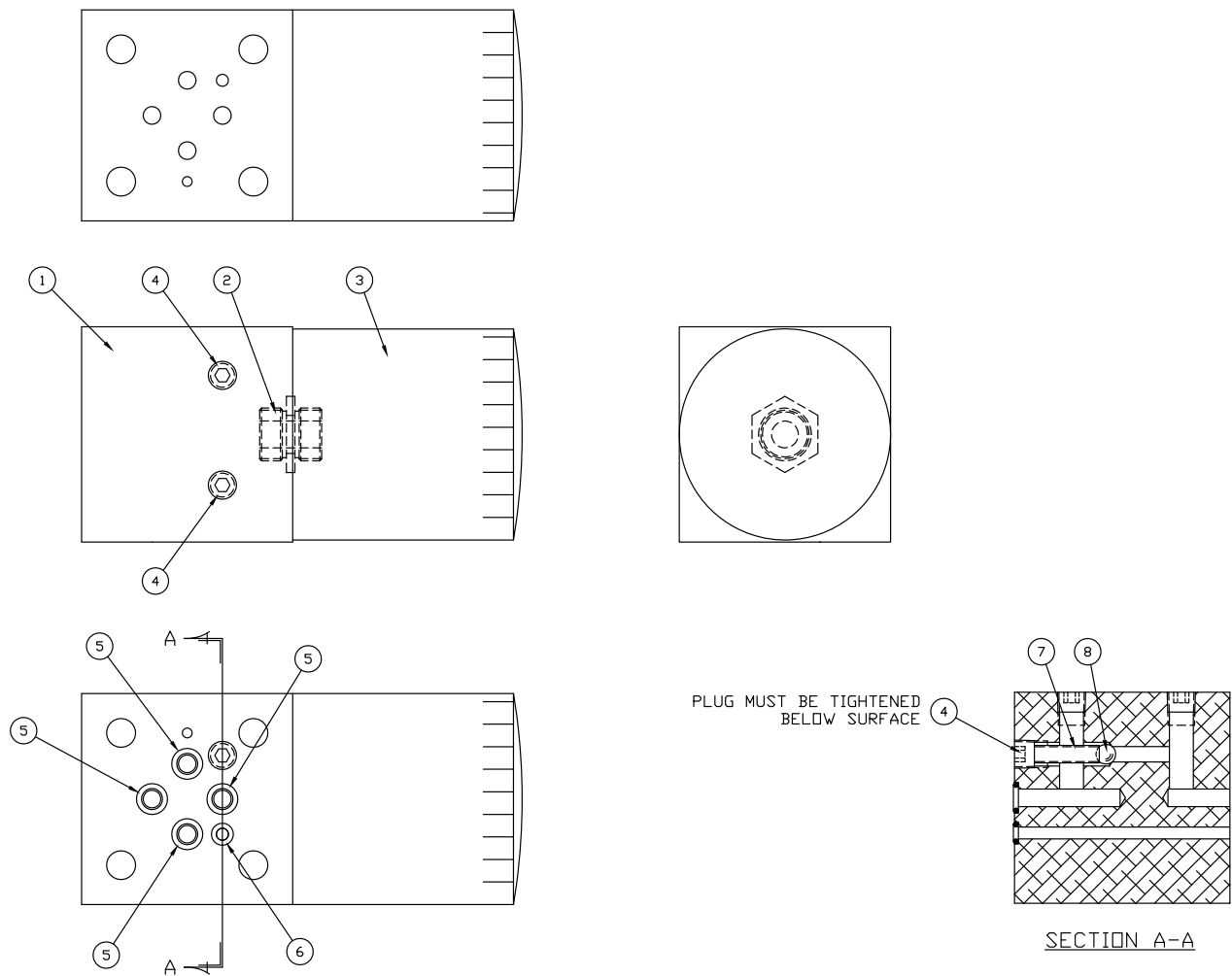
Repair Parts List (Refer to Figure 14)

| Item | Part Number | Qty. | Description                     | Item | Part Number  | Qty. | Description               |
|------|-------------|------|---------------------------------|------|--------------|------|---------------------------|
| 01   | ± DD4589840 | 1    | Manifold, Hyd Over Center Valve | 08   | ± 69517E     | 1    | Screen Cap                |
| 02   | ± 43274E    | 1    | Screw, Adjusting                | 09   | ± 43423E     | 1    | Spring, OC Valve Spring   |
| 03   | ±± B1007503 | 1    | O-Ring -012, 70                 | 10   | ± 69518E     | 1    | Screen, Over Center Valve |
| 04   | ±± 66085E   | 1    | Spring, Relief Valve            | 11   | ± F100095-37 | 2    | Street Tee, 0.375-18 NPTF |
| 05   | ±± 68003E   | 1    | Cone, External Relief           | 12   | ± 45666E     | 2    | O-Ring, Fitting 3/8 NPTF  |
| 06   | ±± 68004E   | 1    | Seat, External Relief           | 13   | ± 45664E     | 2    | O-Ring Face Seal Plug     |
| 07   | DD5141900SR | 1    | SAE Plug Assembly               | 14   | ± DC1389900  | 2    | Female Coupler            |

± Item included in 55057K Relief Valve Replacement Kit.

± Item included in DD4686900SR Manifold2 Service Assembly.

**Figure 15 - Filter Block Assembly**



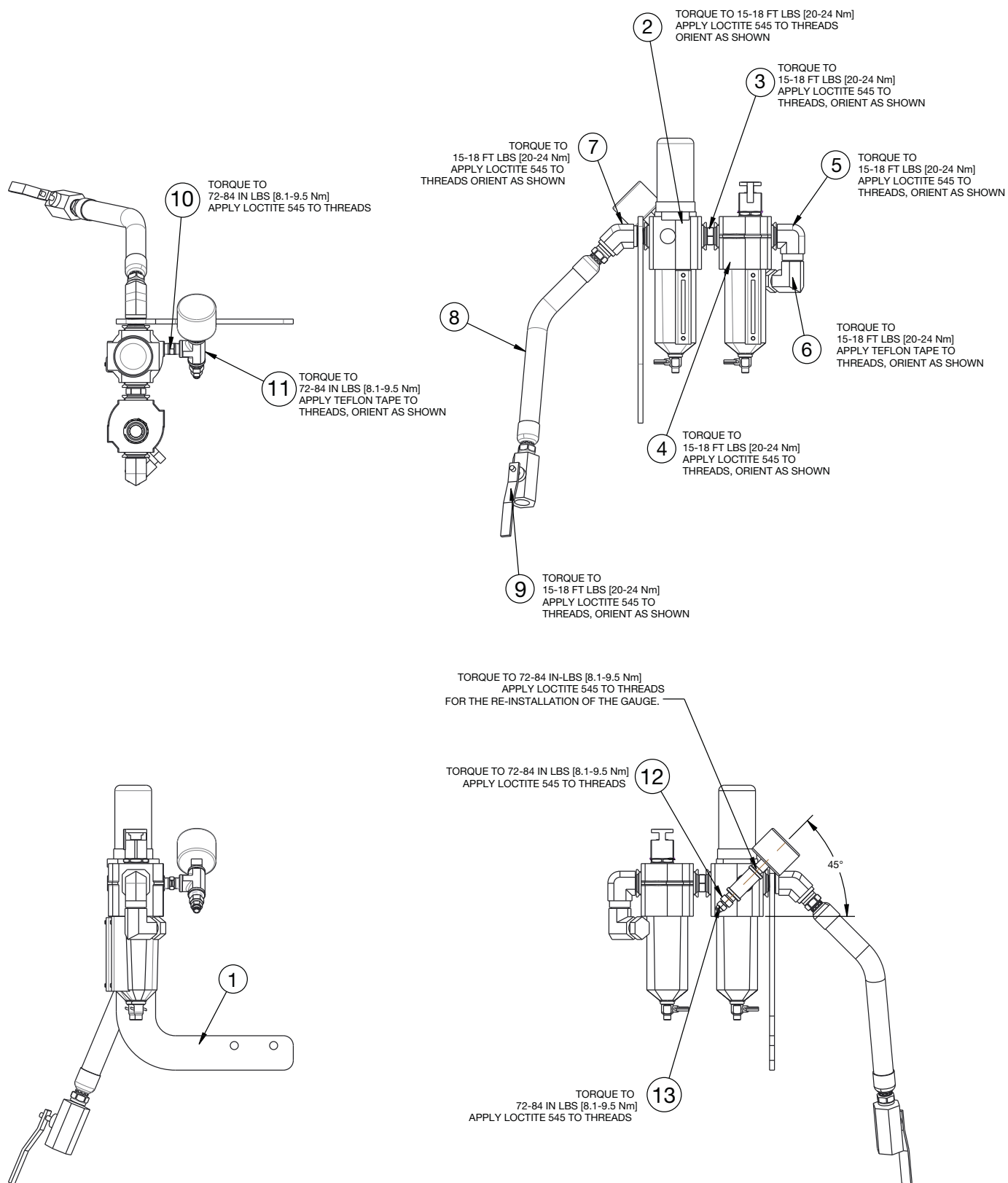
**Repair Parts List (Refer to Figure 15)**

| Item | Part Number   | Qty. | Description             |
|------|---------------|------|-------------------------|
| 1    | * 46569E      | 1    | Filter Block            |
| 2    | * 69670E      | 1    | Oil Filter Power Pump   |
| 3    | * 69144E      | 1    | Adapter Filter          |
| 4    | * 93950E      | 3    | 1/4" Soc Pipe Plug      |
| 5    | ★ * 56020112E | 4    | O-Ring 5/16 x 7/16" URE |
| 6    | * 5602008E    | 1    | O-Ring 3/16 x 5/16"     |
| 7    | * 46572E      | 1    | Spring, Compression     |
| 8    | * B1007016    | 1    | Ball, 1/4" Dia.         |

\* Item included in 46568SR Filter Block Kit.

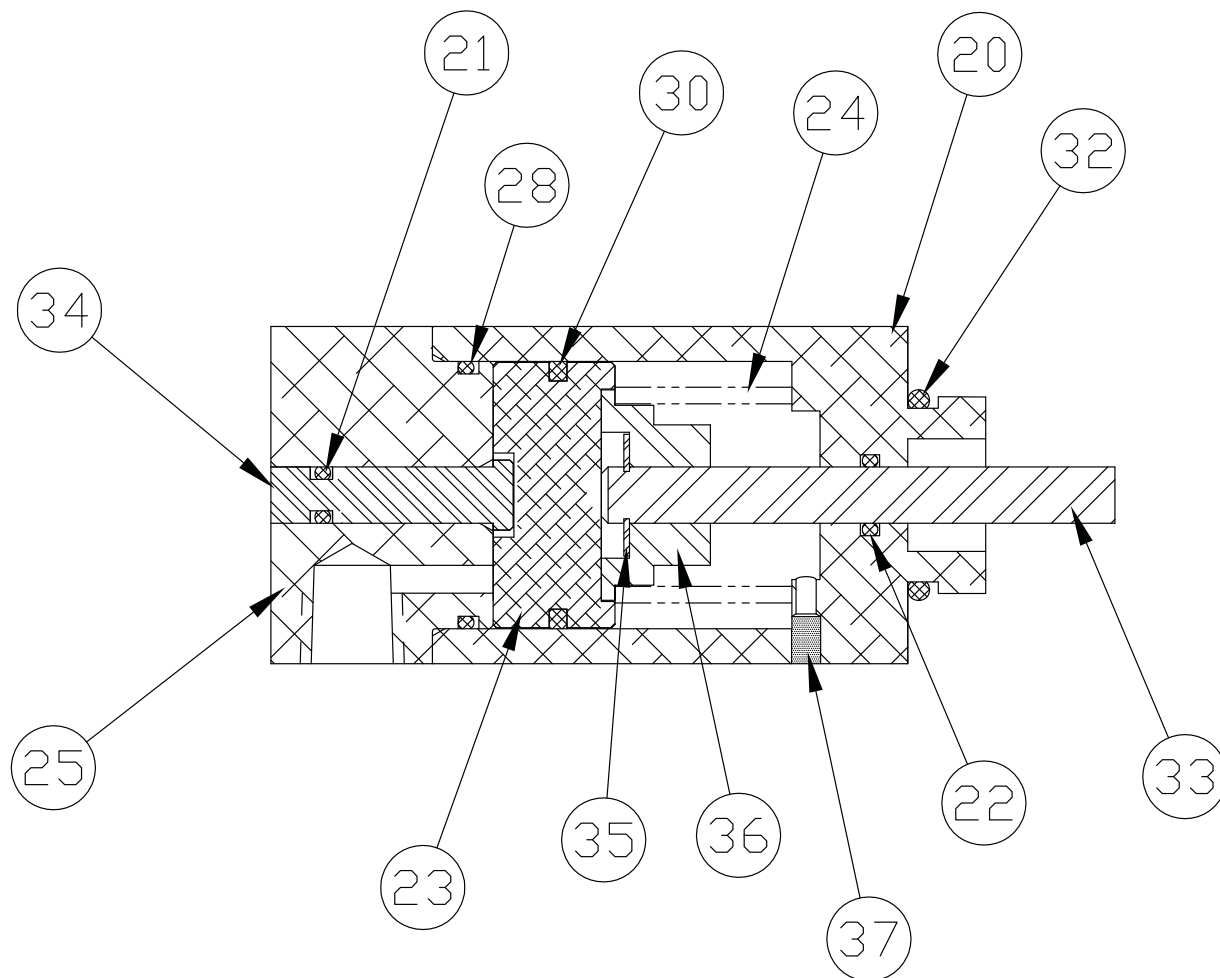
★ Item included in PL200K Seal Kit.

Figure 16 - Filter/Regulator/Lubricator Assembly



| Repair Parts List (Refer to Figure 16)                                                                                                                                                         |              |      |                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|------------------------------------|
| Item                                                                                                                                                                                           | Part Number  | Qty. | Description                        |
| 1                                                                                                                                                                                              | * DD3958338  | 1    | Assembly, Bracket                  |
| 2                                                                                                                                                                                              | * DS1018118  | 1    | Filter/Regulator                   |
| 3                                                                                                                                                                                              | * F100095-43 | 1    | Pipe Nipple 0.5 x 1.89"            |
| 4                                                                                                                                                                                              | * 86242E     | 1    | Air Lubricator                     |
| 5                                                                                                                                                                                              | * F100095-45 | 1    | Fitting, Street Elbow, 1/2" NPT    |
| 6                                                                                                                                                                                              | * 41763E     | 1    | Swivel, Male 1/2 NPTF              |
| 7                                                                                                                                                                                              | * F100095-82 | 1    | Elbow, 0.500-14 45 Deg.            |
| 8                                                                                                                                                                                              | * DD4782900  | 1    | Hose Assembly, Air Motor to FRL    |
| 9                                                                                                                                                                                              | * 85851E     | 1    | Air Valve                          |
| 10                                                                                                                                                                                             | * CJ647096   | 1    | 0.250 NPTF Nipple                  |
| 11                                                                                                                                                                                             | * CK907096   | 1    | 0.25 NPT Tee                       |
| 12                                                                                                                                                                                             | * CH943096   | 1    | Reducer                            |
| 13                                                                                                                                                                                             | * F100097-33 | 1    | Fitting, 0.125 NPT Male, 0.25 Tube |
| * Item included in DD4475900SR Filter Assembly.<br><b>Note:</b> Filter/Regulator and air lubricator are manufactured by Norgren.<br>Contact Norgren for filter elements and replacement parts. |              |      |                                    |

Figure 17 - Air Cylinder Assembly



Repair Parts List (Refer to Figure 17)

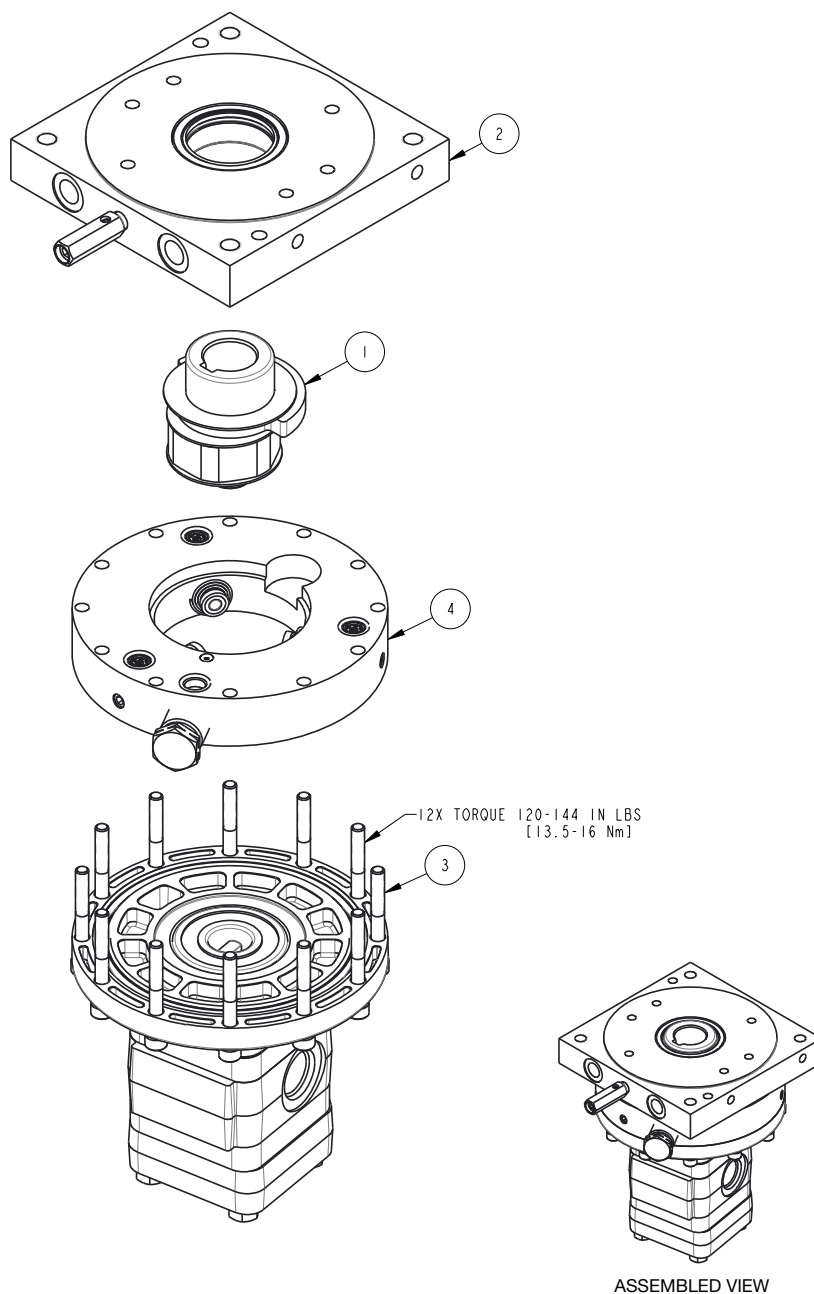
| Item | Part Number  | Qty. | Description                 |
|------|--------------|------|-----------------------------|
| 20   | + DD2756190  | 1    | Body Air Cylinder           |
| 21   | ★+ B1001503  | 1    | O-Ring, 0.12 x 0.25 x 0.06" |
| 22   | ★+ B1005503  | 1    | O-Ring                      |
| 23   | + DD2758051  | 1    | Air Cylinder Piston         |
| 24   | + 42749E     | 1    | Spring, Air Cylinder        |
| 25   | + 41956E     | 1    | End Cap                     |
| 28   | ★+ B1229503  | 1    | O-Ring                      |
| 30   | ★+ DD2957141 | 1    | Ring, Glide, 1-3/16"        |
| 32   | ★+ B1910503  | 1    | O-Rng                       |
| 33   | + 42746E     | 1    | Push Pin Air Valve          |
| 34   | + 41958E     | 1    | Override Pin                |
| 35   | + 42750E     | 1    | E-Ring 1/4" Shaft           |
| 36   | + 42748E     | 1    | Spring Plate Air Valve      |
| 37   | + DA4390118  | 1    | Filter                      |

+ Item included in DD2956900SR Air Cylinder Service Assembly.

★ Item included in PL200K Seal Kit.

**Figure 18 - Pump Element Assembly, Duplex**

| BYPASS PRESSURE<br>CRACKING<br>PSI (BAR) | RELIEF PRESSURE<br>NOMINAL<br>PSI (BAR) | 1ST STAGE FLOW<br>PER REVOLUTION<br>IN <sup>3</sup> (CC) | 2ND STAGE FLOW<br>PER REVOLUTION<br>IN <sup>3</sup> (CC) | WEIGHT<br>LBS (Kg) | BYPASS CAP<br>HEIGHT<br>INCH (mm) |
|------------------------------------------|-----------------------------------------|----------------------------------------------------------|----------------------------------------------------------|--------------------|-----------------------------------|
| 500 (35)                                 | 10,000 (700)                            | .252 (4.13)                                              | 0.035 (0.57)                                             | 16 (7.3)           | 0.99 (225.1)                      |

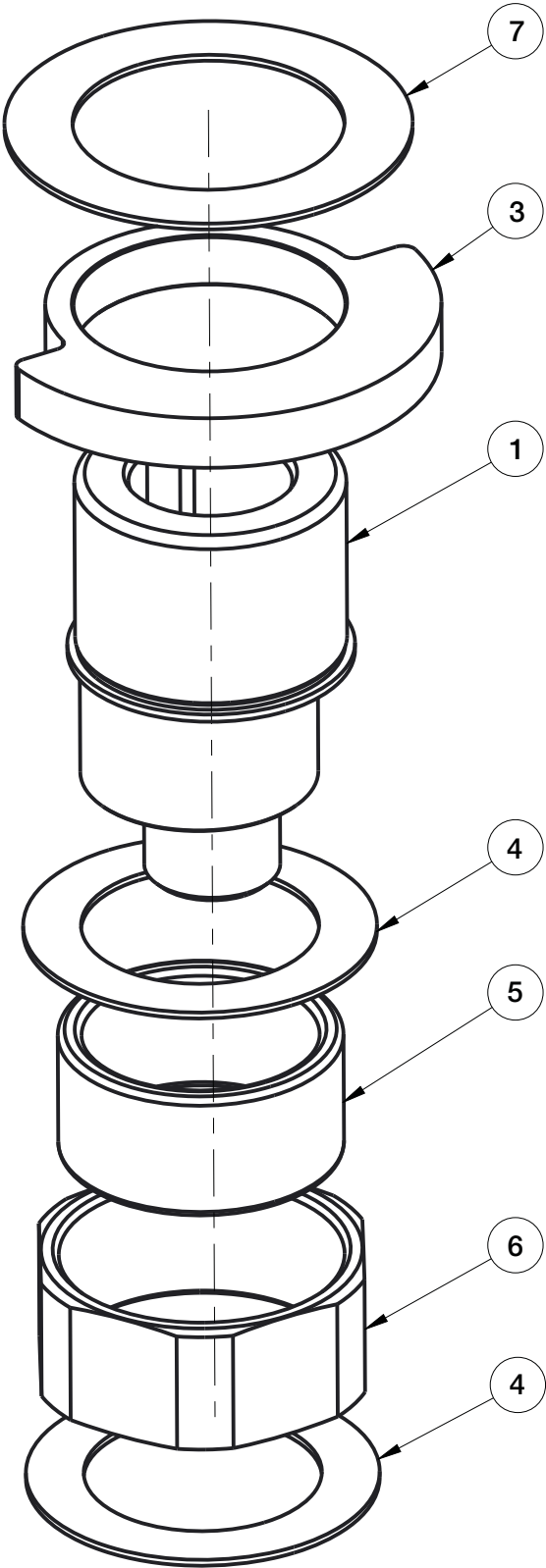


**Repair Parts List (Refer to Figure 18)**

| Item | Part Number   | Qty. | Description                                      |
|------|---------------|------|--------------------------------------------------|
| 1    | * DC9215900SR | 1    | Pump Eccentric (See Fig. 19A and 19B)            |
| 2    | * DC9279900SR | 1    | Pump Top Plate Components (See Fig. 20A and 20B) |
| 3    | * DD4625900SR | 1    | Gear Pump Assembly, Duplex (See Fig. 21)         |
| 4    | * DD4807900SR | 1    | Piston Ring Assembly 3P, 500 psi (See Fig. 22)   |

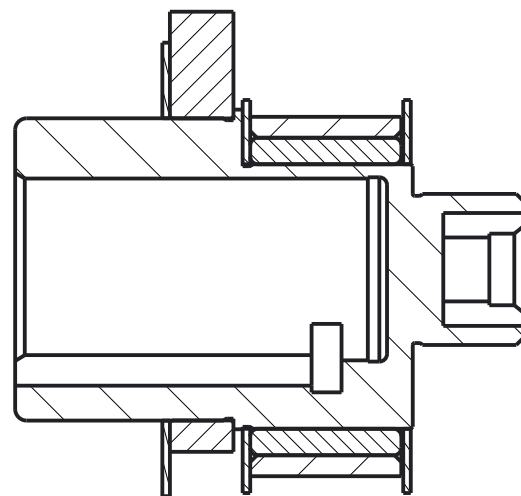
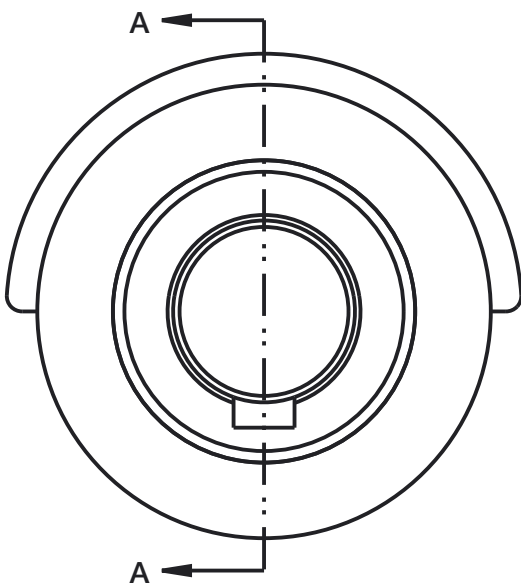
\* Item included in DD3954900SR Main Pump Element Service Assembly.

Figure 19A - Pump Eccentric (View 1 of 2)



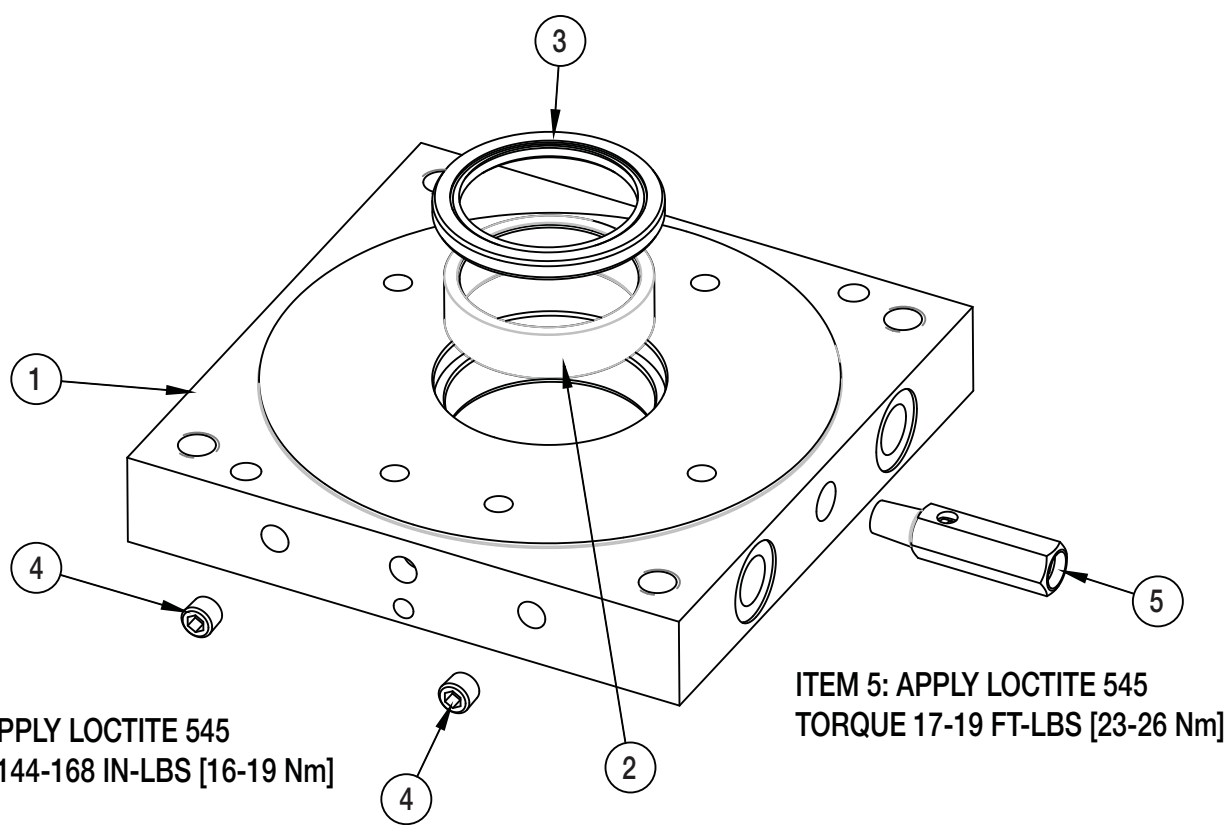
| Repair Parts List (Refer to Figure 19A)           |             |      |                                  |
|---------------------------------------------------|-------------|------|----------------------------------|
| Item                                              | Part Number | Qty. | Description                      |
| 01                                                | ❖ DC9214537 | 1    | Eccentric                        |
| 03                                                | ❖ DC9023101 | 1    | Balance Plate                    |
| 04                                                | ❖ BSS4725D  | 2    | Ring, 35 x 52 x 1                |
| 05                                                | ❖ DC4107155 | 1    | Needle Bearing, 35 x 42 x 20     |
| 06                                                | ❖ DC4328350 | 1    | Hex Cam                          |
| 07                                                | ❖ DD1277108 | 1    | Washer, Locating, 40 x 60 x 1 mm |
| ❖ Item included in DC921500SR Eccentric Assembly. |             |      |                                  |

Figure 19B - Pump Eccentric (View 2 of 2)



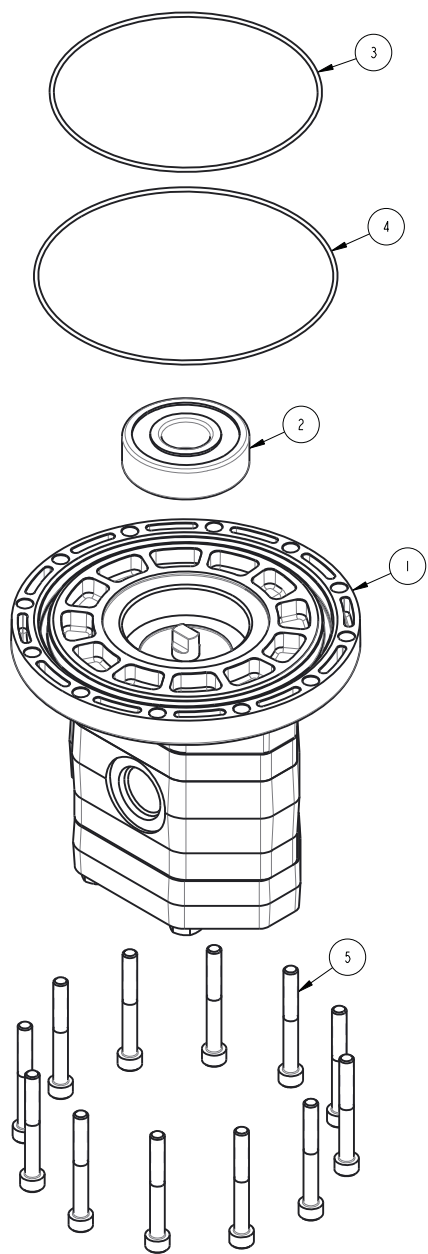
SECTION A-A

Figure 20 - Pump Top Plate Components



| Repair Parts List (Refer to Figure 20)             |               |      |                                     |
|----------------------------------------------------|---------------|------|-------------------------------------|
| Item                                               | Part Number   | Qty. | Description                         |
| 1                                                  | ► DC8105101   | 1    | Top Plate (piston, induction motor) |
| 2                                                  | ► DC9026155   | 1    | Needle Bearing, 40 x 47 x 12"       |
| 3                                                  | ► DC9027776   | 1    | Oil Lip Seal, 40 x 52 x 5"          |
| 4                                                  | ► A1006245    | 2    | Flush Plug, 1/16" with Sealant      |
| 5                                                  | ► DA5999900SR | 1    | Relief Valve, 1/8" NPT              |
| ► Item included in DC9279900SR Top Plate Assembly. |               |      |                                     |

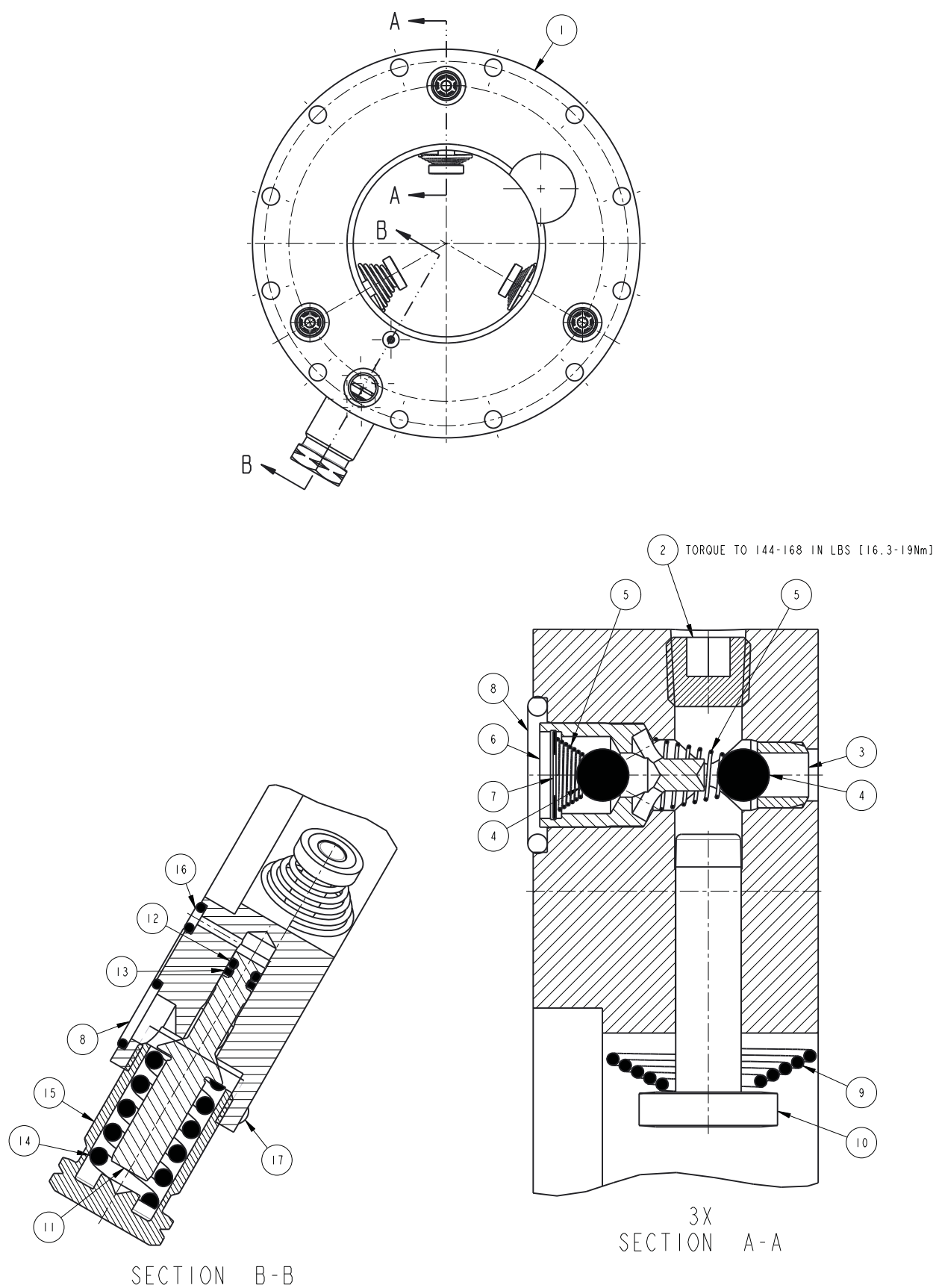
Figure 21 - Duplex Gear Pump Assembly



Repair Parts List (Refer to Figure 21)

| Item                                                                                                                                                    | Part Number    | Qty. | Description                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------|----------------------------|
| 1                                                                                                                                                       | ✳ DD3956221    | 1    | Assembly, Duplex Gear Pump |
| 2                                                                                                                                                       | ✳ DC9219155    | 1    | Ball Bearing, 20 x 52 x 15 |
| 3                                                                                                                                                       | †★✳ B1400503   | 1    | O-Ring, -046               |
| 4                                                                                                                                                       | †★✳ B1402503   | 1    | O-Ring, -048               |
| 5                                                                                                                                                       | ✳ CCA633028-1A | 12   | SHCS, M6 x 1.0 x 50        |
| ★ Item included in PL200K Seal Kit.<br>✳ Item included in DD4625900SR Gear Pump Block Service Assembly.<br>† Item included in ZRK Z-Class MPE Seal Kit. |                |      |                            |

Figure 22 - Piston Ring Assembly



| Repair Parts List (Refer to Figure 22)                                                                                                                                                                      |               |      |                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------|--------------------------------|
| Item                                                                                                                                                                                                        | Part Number   | Qty. | Description                    |
| 1                                                                                                                                                                                                           | ✳ DC9221101   | 1    | Piston Ring 3P MPE REF 9014    |
| 2                                                                                                                                                                                                           | ✳ A1006245    | 3    | Flush Plug, 1/16" with Sealant |
| 3                                                                                                                                                                                                           | * ✳ BSS5358D  | 3    | Piston Seat, Lower             |
| 4                                                                                                                                                                                                           | * ✳ B1005016  | 6    | BALL, 3/16"                    |
| 5                                                                                                                                                                                                           | * ✳ BSS5809D  | 6    | Spring, Piston Check           |
| 6                                                                                                                                                                                                           | * ✳ BSS5357D  | 3    | Seat, Piston Upper             |
| 7                                                                                                                                                                                                           | * ✳ BSS5356D  | 3    | Retaining Ring                 |
| 8                                                                                                                                                                                                           | *†★✳ B1013203 | 4    | O-Ring, Viton                  |
| 9                                                                                                                                                                                                           | ✳ BSS5509D    | 3    | Spring, Conical                |
| 10                                                                                                                                                                                                          | ✳ DC9244920   | 3    | Piston Assembly, MPE           |
| 11                                                                                                                                                                                                          | ✳ DC9292051   | 1    | Piston Bypass                  |
| 12                                                                                                                                                                                                          | †★✳ B1006803  | 1    | O-Ring                         |
| 13                                                                                                                                                                                                          | † ✳ B1006564  | 1    | Washer, Back-Up                |
| 14                                                                                                                                                                                                          | ✳ DC394110    | 1    | Spring, Bypass                 |
| 15                                                                                                                                                                                                          | ★✳ DC8374020  | 1    | End Cap, Bypass                |
| 16                                                                                                                                                                                                          | †★✳ B1005203  | 1    | O-Ring, Viton                  |
| 17                                                                                                                                                                                                          | † ✳ DC9293016 | 2    | Ball, Nylon 3/16"              |
| ★ Item included in PL200K Seal Kit.<br>✳ Item included in DD4807900SR Piston Ring Service Assembly.<br>† Item included in ZRK Z-Class MPE Seal Kit.<br>* Item included in ZRKS Z-Class MPE Check Valve Kit. |               |      |                                |

**NOTES:**

[illegible]

## This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a guide for handwriting or typing. The background is a clean, solid white color.

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