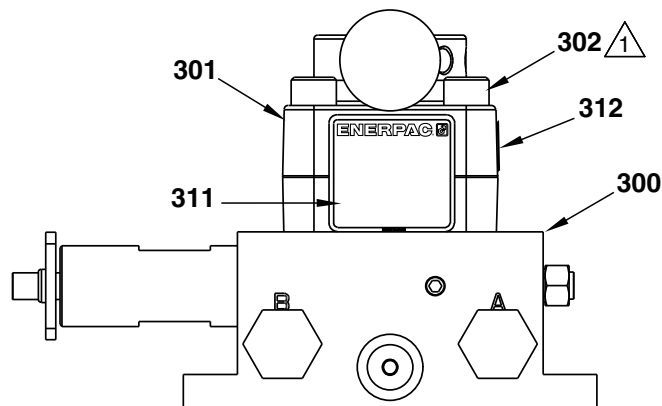


To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

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



 Torque screws to 45-52 Ft-Lbs [61.0-70.5 Nm].
Note: Screws (item 302) are not included with 4-Way valve assembly (item 301) and must be ordered separately.

Hydraulic Schematic

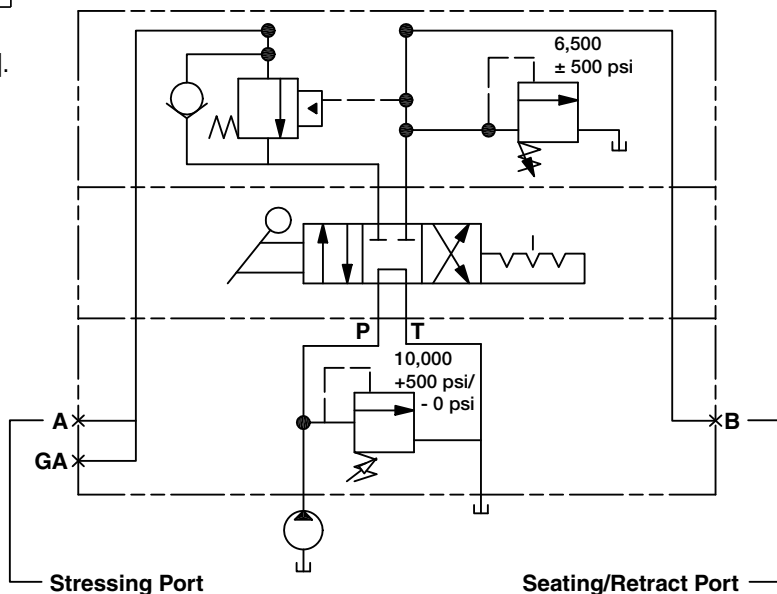


Figure 1, VM43-LPS Valve Assembly

Repair Parts List for Figure 1

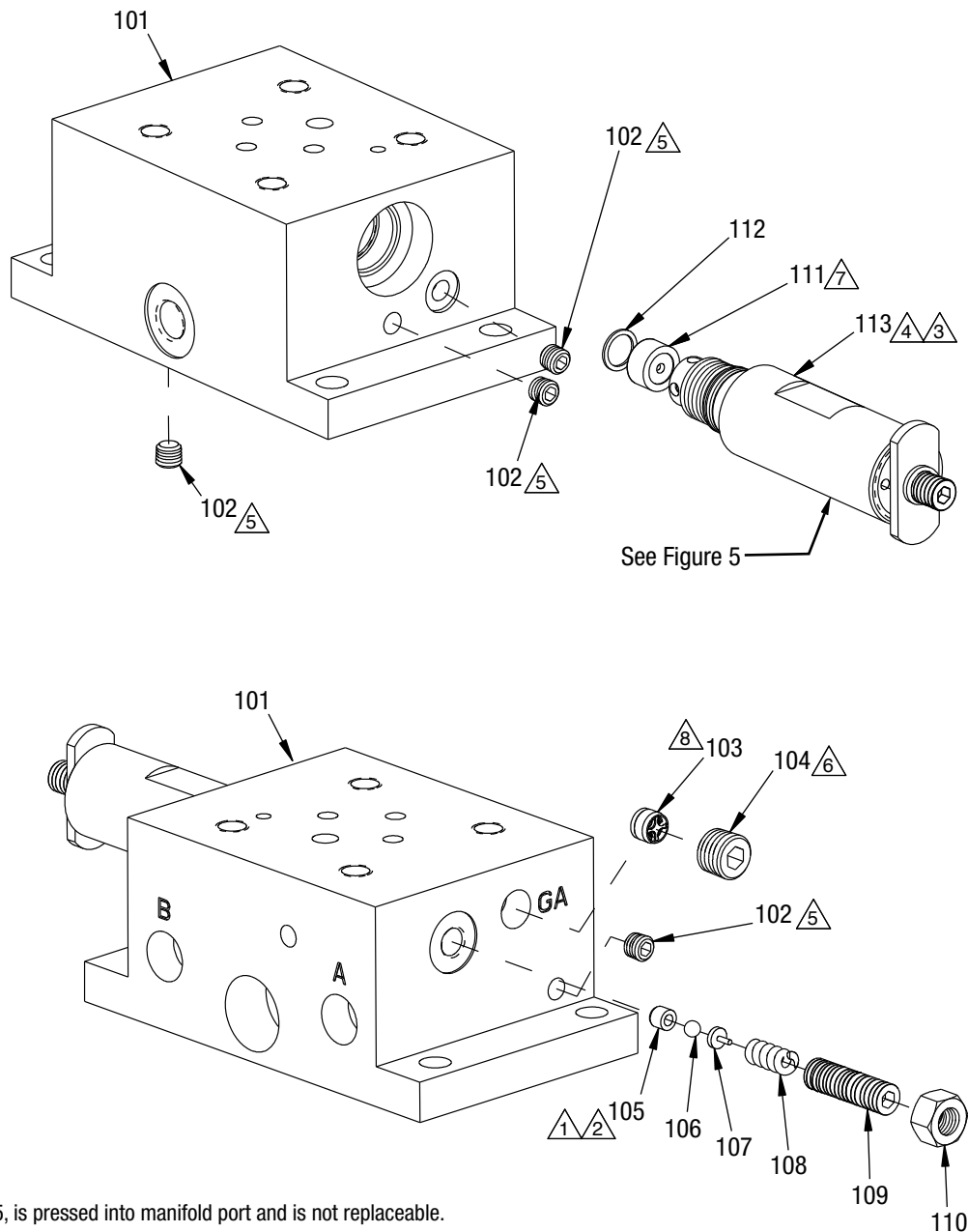
Item	Part Number	Qty.	Description	Notes:
300	DD1581900SR	1	Manifold Assembly	See Figures 3 and 4, Pages 4-7
301	DC7400950SR	1	4-Way Manual Valve	See Fig. 2, Pages 2-3
302	CBE1037028-1A	4	SHCS, M10-1.5 x 60mm	---
311	DD1415026	1	Decal, Valve	---
312	CH272026	1	Decal, Warning	---



1. Open center. Assemble disk, item #80, with center hole as shown. Hole must be in line with pin, item #83.
2. Torque to 28-38 In-Lbs [3-4 Nm].
3. Press item #97 into item #95.
4. Lubricate all seals and mating surfaces with grease prior to assembly.
5. Apply Loctite 222 to threads.

Figure 2, DC7400950SR, 4-Way Manual Valve Assembly (and related components)

Repair Parts List for Figure 2			
Item	Part Number	Qty.	Description
66	DC7246489	1	Handle, Cap
67	DC7304157	1	Lever
68	DC7288147	1	Knob
69	B1006016	1	Ball, 7/32" Dia.
70	A8039110	1	Spring
71	B1019108X	1	Washer
72	B2502028X	1	BHCS, 10-32 x .25"
80	* CH542950SR	1	Disk Assembly (Valve code begins with 40)
81	* B1109057	1	Roll Pin
82	* B1326028	2	#10-33 x .75" SHCS
83	* B1126057	1	Roll Pin
84	* ★ DC7250041	3	Seal
85	* ★ B1011564	3	Backup Washer
86	* ★ B1006503	3	O-Ring
87	* ★ CB28110	3	Spring
88	* CH536104	1	Shaft
89	* B1012564	1	Backup Ring
90	* B1007503	1	O-Ring
91	* CB327101	1	Bearing Plate
92	* CB328281	1	Bearing
93	* ★ B1269503	1	O-Ring
94	* CB324001	1	Valve Cap
95	* CH539190	1	Body
96	* B1111803	4	O-Ring
97	* B1051057	1	Locator Pin
* Included in DC7400950SR 4-Way Manual Valve Service Kit.			
★ Included in DC7250041SR Seal Service Kit.			



Notes:

- △1 Seat, item 105, is pressed into manifold port and is not replaceable.
- △2 Prepare seat, item 105, using a ball hone tool before installing parts 106-110.
- △3 Lubricate O-Ring with grease prior to assembly.
- △4 Torque to 90-100 Ft-Lbs [122-135 Nm].
- △5 Torque to 10-12 Ft-Lbs [14-16 Nm]. Apply Teflon tape to plug before installation.
- △6 Torque to 32-39 Ft-Lbs [43-53 Nm]. Apply Teflon tape to plug before installation.
- △7 Coin item 111 with piston (See Fig. 5, item 14) at 100 PSI [6,8 bar] with a 10 ton ram.
- △8 Refer to Figure 6 for additional information.

Figure 3, DC1581900SR Manifold Assembly (View 1 of 2)

Repair Parts List for Figure 3			
Item	Part Number	Qty.	Description
101	◆ * DD1383190	1	Manifold, Valve
102	◆ DC6792245	1	Plug, Flush PTF-SAE .062"
103	◆ * (See Fig. 6)	1	Check Assembly
104	◆ DC6794245	1	Plug, Flush PTF-SAE .25"
105	◆ * A8015290	1	Seat
106	◆ ❖ B1005016	1	Ball, 3/16" Dia.
107	◆ ❖ K1013	1	Guide
108	◆ ❖ A8126110	1	Spring
109	◆ ❖ BF3820027FX	1	Set Screw, 3/8-24 x 1.25"
110	◆ ❖ DC7451124	1	Nut, Hex
111	◆ ▲ DC5109290	1	Seat
112	◆ ▲ + P20037	1	Copper Gasket
113	◆ (See Fig. 5)	1	Assembly, Relief Valve
◆ Included in DD1581900SR LPS Manifold Assembly. * Available only as part of DD1581900SR. Not sold separately. ❖ Included in DD2503900K B-Side Relief Valve Repair Kit. ▲ Included in DD1408900SR PURAV Assembly Service Kit. + Included in DD2505900K Seal Repair Kit.			

Note: See Figure 4 for additional valve manifold components.

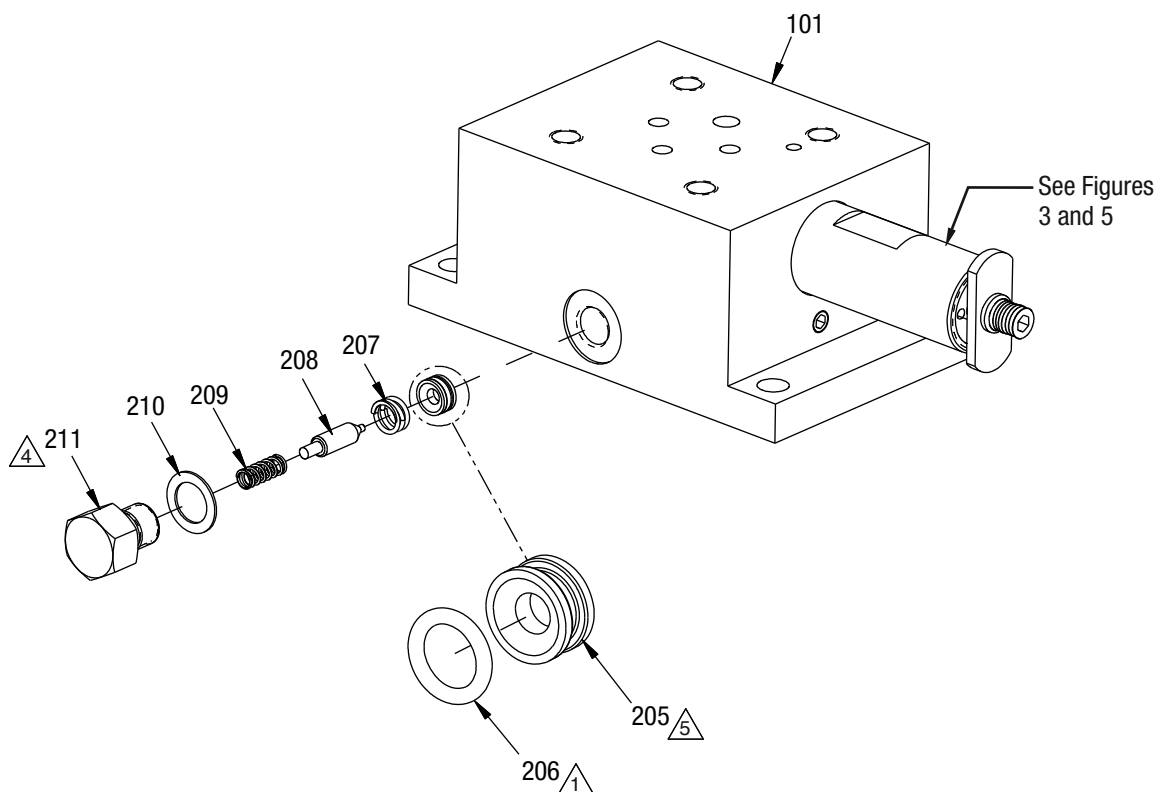
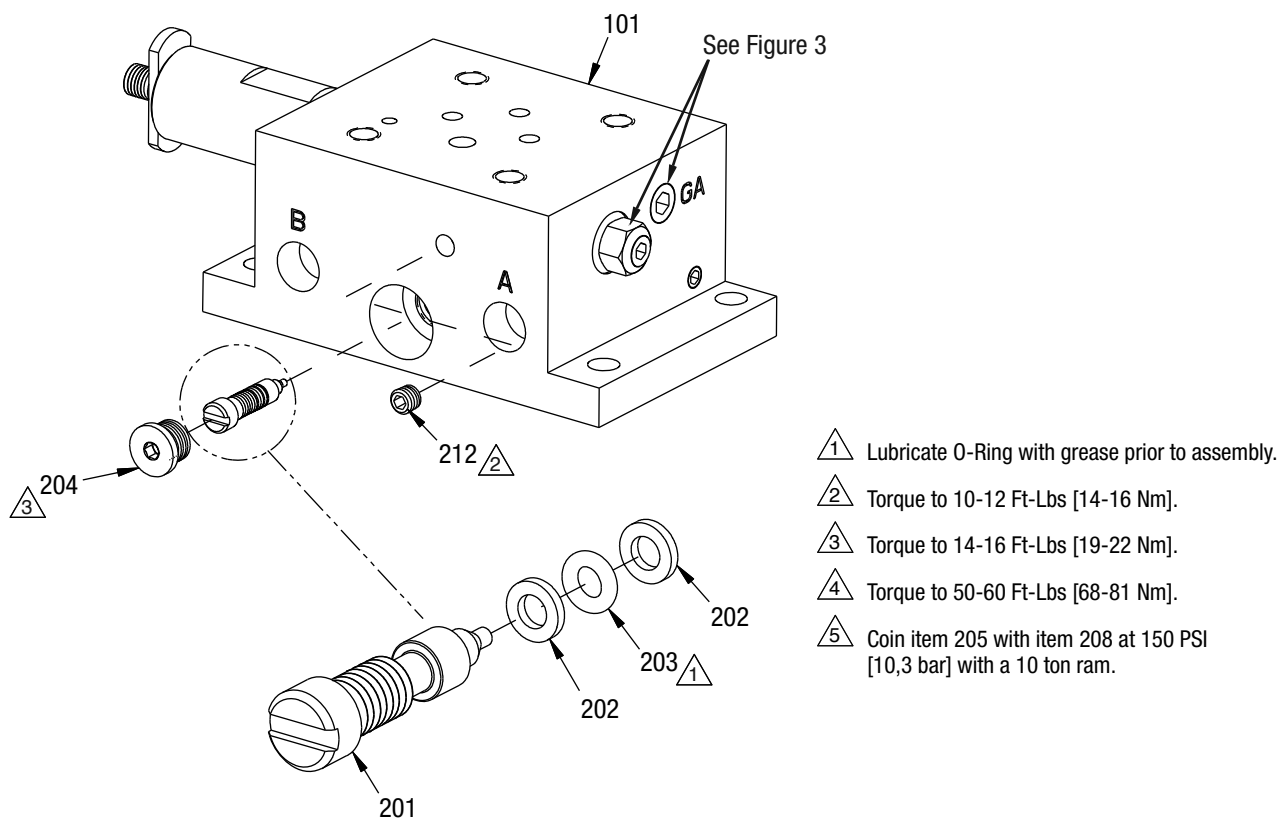


Figure 4, DC1581900SR Manifold Assembly (View 2 of 2)

Repair Parts List for Figure 4				
Item	Part Number		Qty.	Description
101	◆ *	DD1383190	1	Manifold, Valve
201	◆ *	DD1390040	1	Plunger
202	◆ * †	B1007564	2	Ring, Back-up
203	◆ * †	B1007803	1	O-Ring
204	◆ *	B1004006V	1	Plug, SAE #5
205	◆ *	DD1386290	1	Seat
206	◆ * †	B1011803	1	O-Ring
207	◆ *	DD1389110	1	Spring, 7/16 OD x 13/32" Lg
208	◆ *	DD1387051	1	Piston
209	◆ *	DD1388110	1	Spring, 1/4 OD x 5/8" Lg
210	◆ * †	S15167	1	Copper Washer
211	◆ *	DD1392006	1	Plug
212	◆	DC6792245	1	Plug, Flush PTF-SAE .062"
◆ Included in DD1581900SR LPS Manifold Assembly. * Available only as part of DD1581900SR. Not sold separately. * Included in DD2504900K LPS Repair Kit. † Included in DD2505900K Seal Repair Kit.				

Note: See Figure 3 for additional valve manifold components.

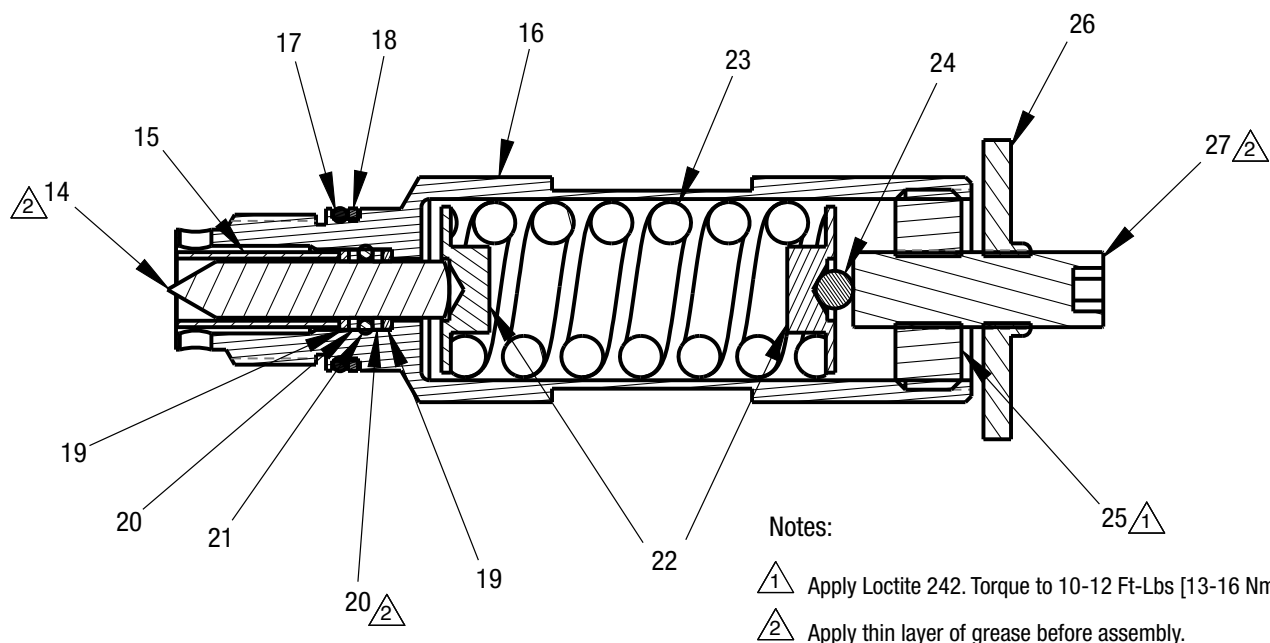
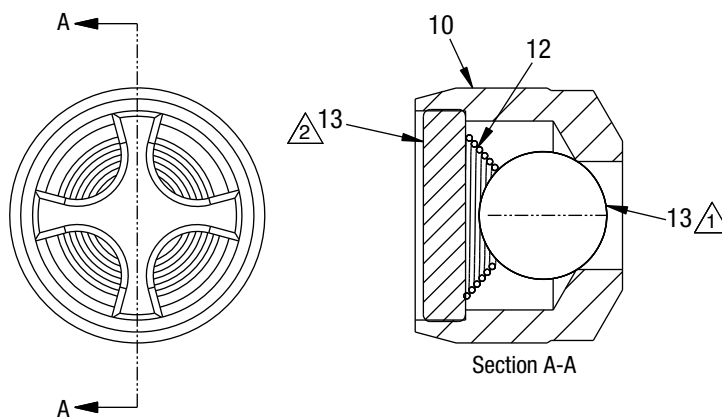


Figure 5, DD1408900SR, User Adjustable Relief Valve Assembly (sectional view)

Repair Parts List for Figure 5							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
14	▲ DC5182051	1	Piston	21	▲ + B1011203	1	O-Ring
15	▲ CB952013	1	Guide	22	▲ DC8331013	2	Spring Guide
16	▲ DC5150190	1	Body	23	▲ CS357110	1	Spring
17	▲ + B1017803	1	O-Ring	24	▲ B1005016	1	Ball
18	▲ + B1017566	1	Ring, Back-up	25	▲ DC5156290	1	Cap
19	▲ CB956186	2	Spacer	26	▲ DC4307021	1	Lock Nut
20	▲ + CB957564	2	Ring, Back-up	27	▲ CCA1029028-05A	1	Set Screw, M10-1.5 x 40
▲ Included in DD1408900SR PURAV Assembly Service Kit. + Included in DD2505900K Seal Repair Kit.							



Notes:

1 Before installing ball (item 13) prepare the seat (item 10) using a ball hone seat dressing tool (3/16" diameter ball).

2 Using a 10 Ton Cylinder at 500-750 PSI [34,4 - 51,7 bar] press retaining ring (item 13) flush with seat (item 10).

IMPORTANT: Seat (item 10) is pressed into GA port of valve manifold and is NOT REPLACEABLE. If seat is damaged, order complete DD1581900SR LPS manifold assembly.

Figure 6, DC9016900, Check Valve Assembly

Repair Parts List for Figure 6							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
10	(Not Available)	1	Seat	12	† DA10092210	1	Spring
11	† B1005016	1	Ball	13	† DA10434749	1	Retaining Ring

† Included in DC9016900 Check Valve Assembly.

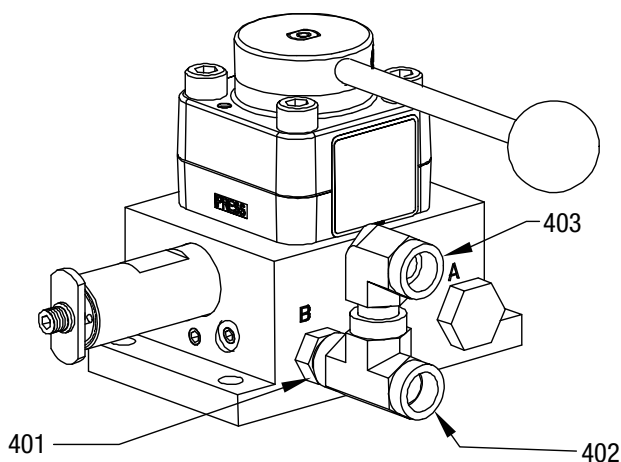


Figure 7, B-Port Hydraulic Fittings

Repair Parts List for Figure 7							
Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
401	* CJ651096	1	.375-18 NPTF Pipe Nipple	403	* F100095-17	1	.375-18 NPTF St. Elbow
402	* CJ652096	1	.375-18 NPTF Female Tee				

* Included in DD1672900K B-Port Fitting Kit. Note: For use only with jacks equipped with power seating feature.

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