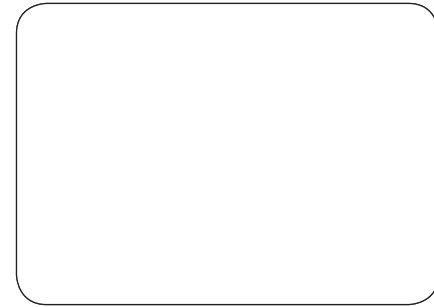
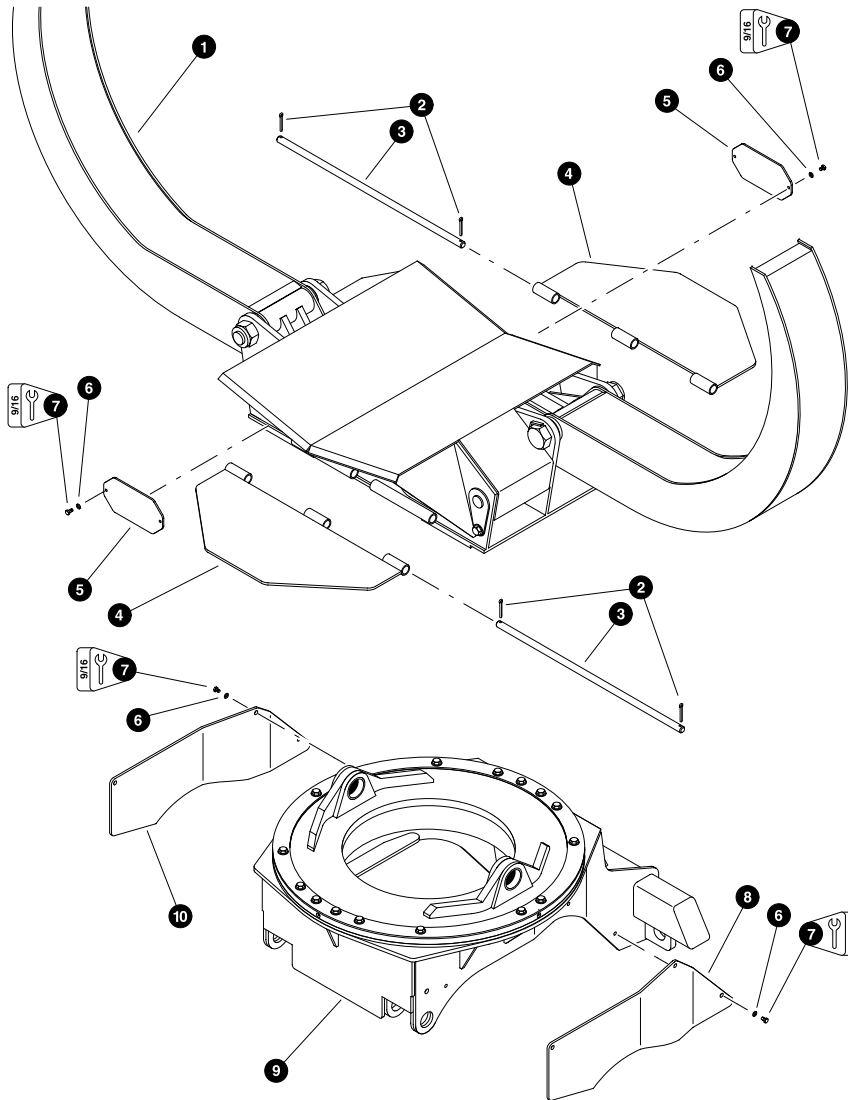


Section CB-1



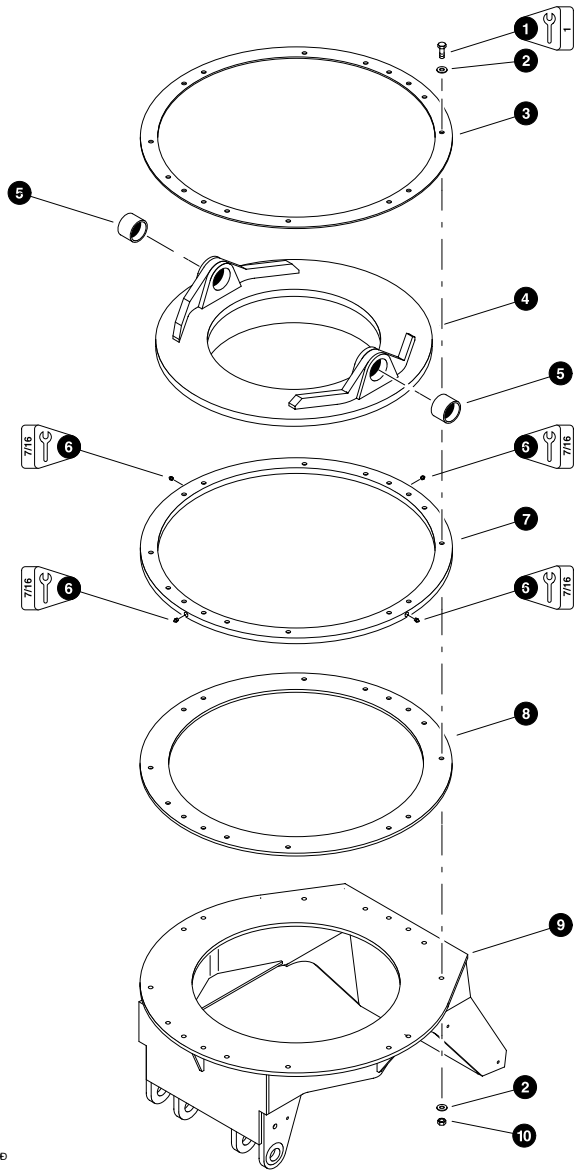
***Clam Bunk -
Structural***



CLAM BUNK ACCESS COVERS & GUARDS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	23992-CB	1	<input type="checkbox"/> CLAM BUNK COMPLETE (2.5" Pins)	
1	REF.	1	<input type="checkbox"/> CLAM BUNK UPPER COMPONENTS	CB-1
2	20249-CB	4	PIN, cotter - 1/4" x 2"	
3	13390-CB	2	SHAFT, hinge cover	
4	13385-CB	2	COVER, hinge	
5	13415-CB	4	COVER, access - arm mounting base	
6	15528-CB	14	WASHER, SAE flat - 3/8"	
7	11707-CB	14	BOLT - 3/8" x 1"	
8	13488-CB	1	COVER, access - clam mounting base - RH	
9	REF.	1	<input type="checkbox"/> CLAM BUNK LOWER BASE COMPONENTS	CB-1
10	13489-CB	1	COVER, access - clam mounting base - LH	

- See referenced page for component breakdown.
- Kit or Assembly - includes all items indented underneath.

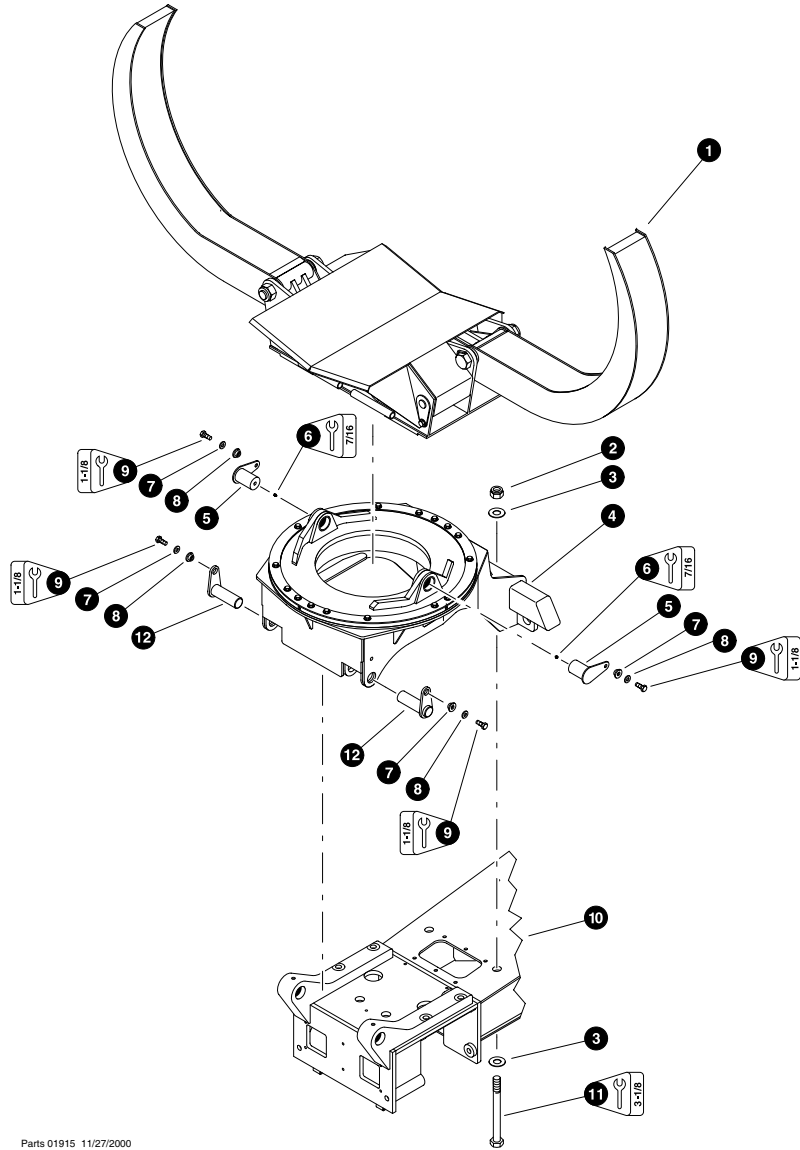


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1 001

CLAM BUNK LOWER BASE COMPONENTS

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	10773-CB	16	BOLT - 5/8" x 3-1/2"	
2	10771-CB	32	WASHER, SAE flat - 5/8"	
3	13380-CB	1	RING, clam pivot hold-down	
4	13465-CB	1	WELDMENT, clam pivot	
5	12397-CB	2	BUSHING - 3" x 2-1/2"	
6	10704-CB	4	FITTING, grease	
7	13463-CB	1	RING, clam pivot spacer	
8	13366-CB	1	RING, clam pivot wear	
9	13480-CB	1	WELDMENT, clam mounting base	
10	10816-CB	16	NUT, lock - 5/8"	

Kit or Assembly - includes all items indented underneath.

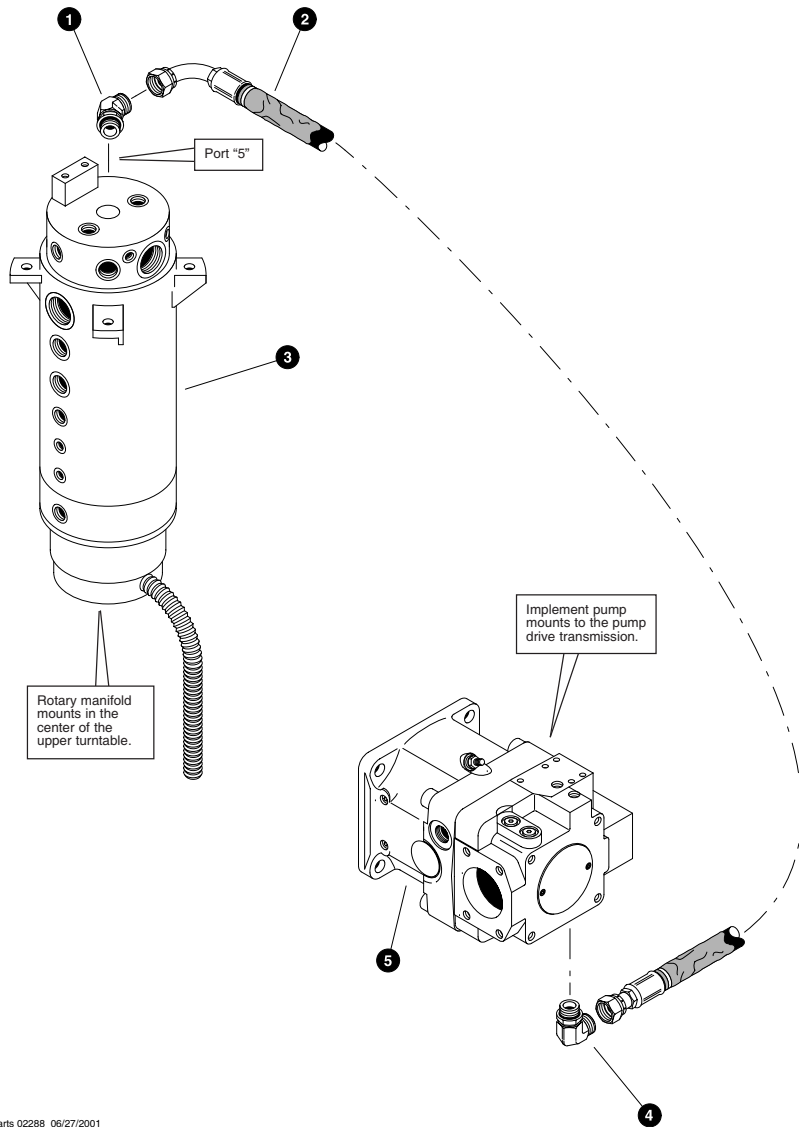


Parts 01915 11/27/2000
6.25

CLAM BUNK UNIT INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	CLAM BUNK UPPER COMPONENTS	CB-1
2	19614-CB	2	NUT, lock - 1-1/2"	
3	19613-CB	4	WASHER, flat - 1-1/2"	
4	REF.	1	CLAM BUNK LOWER BASE COMPONENTS	CB-1
5	19544-CB	2	PIN, clam bunk pivot	
6	10704-CB	1	FITTING, grease	
7	18570-CB	4	WASHER, pin retaining	
8	15550-CB	4	WASHER, SAE flat - 3/4"	
9	10549-CB	4	BOLT - 3/4" x 2"	
10	REF.	1	REAR FRAME WELDMENT	
11	20415-CB	2	BOLT - 1-1/2" x 19"	
12	23434-CB	2	PIN, floating bunk - 2-1/2" x 7-7/8"	

- ☞ See referenced page for component breakdown.
- ☐ Kit or Assembly - includes all items indented underneath.

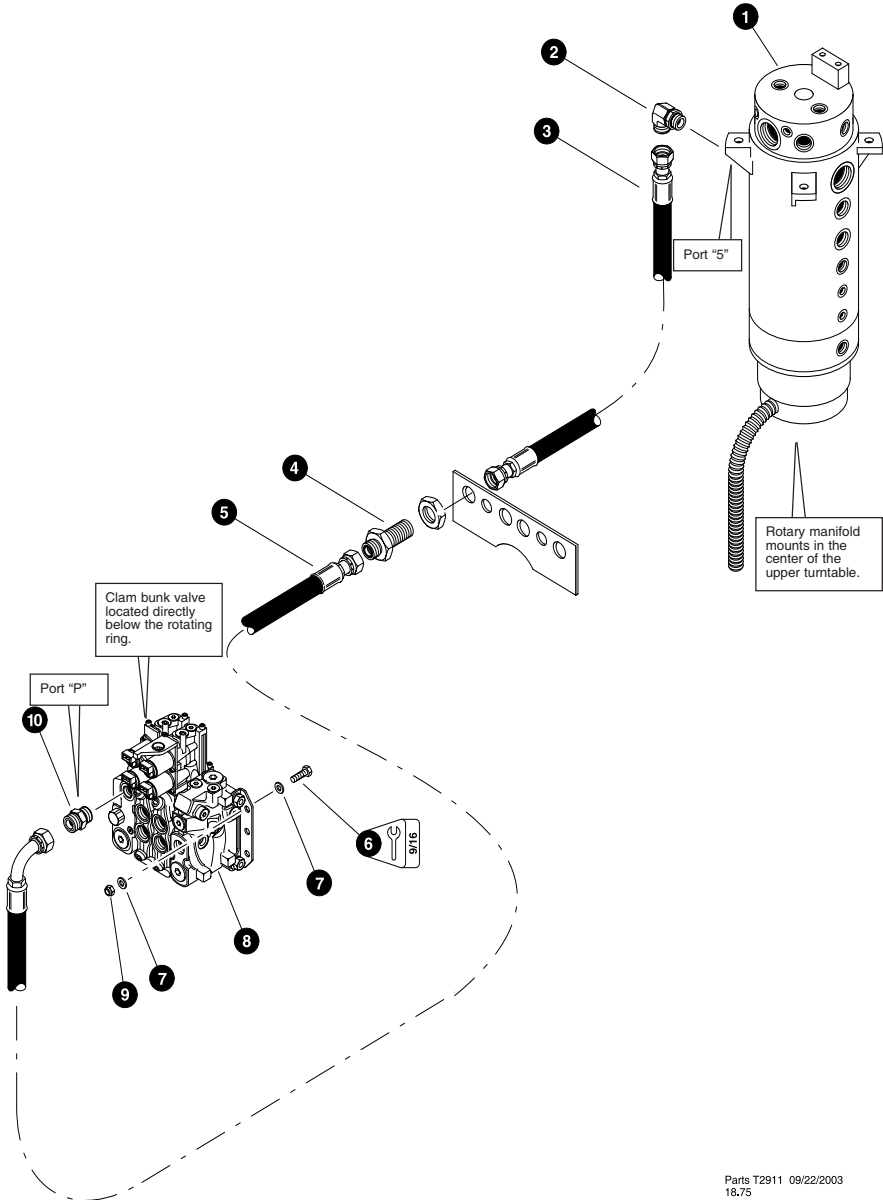


Parts 02288 06/27/2001
25.00

CLAM BUNK PRESSURE LINE
(Implement Pump To Upper Rotary Manifold)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	19127-CB	1	ELBOW, 45° - FF2068T-1212S	
2	23047-CB	1	HOSE ASSEMBLY - 4062-12-120S-1209-W (Implement pump pressure manifold to rotary manifold upper port "5")	
3	REF.	1	ROTARY MANIFOLD	UP-1
4	17688-CB	1	ELBOW, 90° - FF1868T-1212S	
5	REF.	1	IMPLEMENT PUMP	LH-1

See referenced page for component or assembly breakdown.

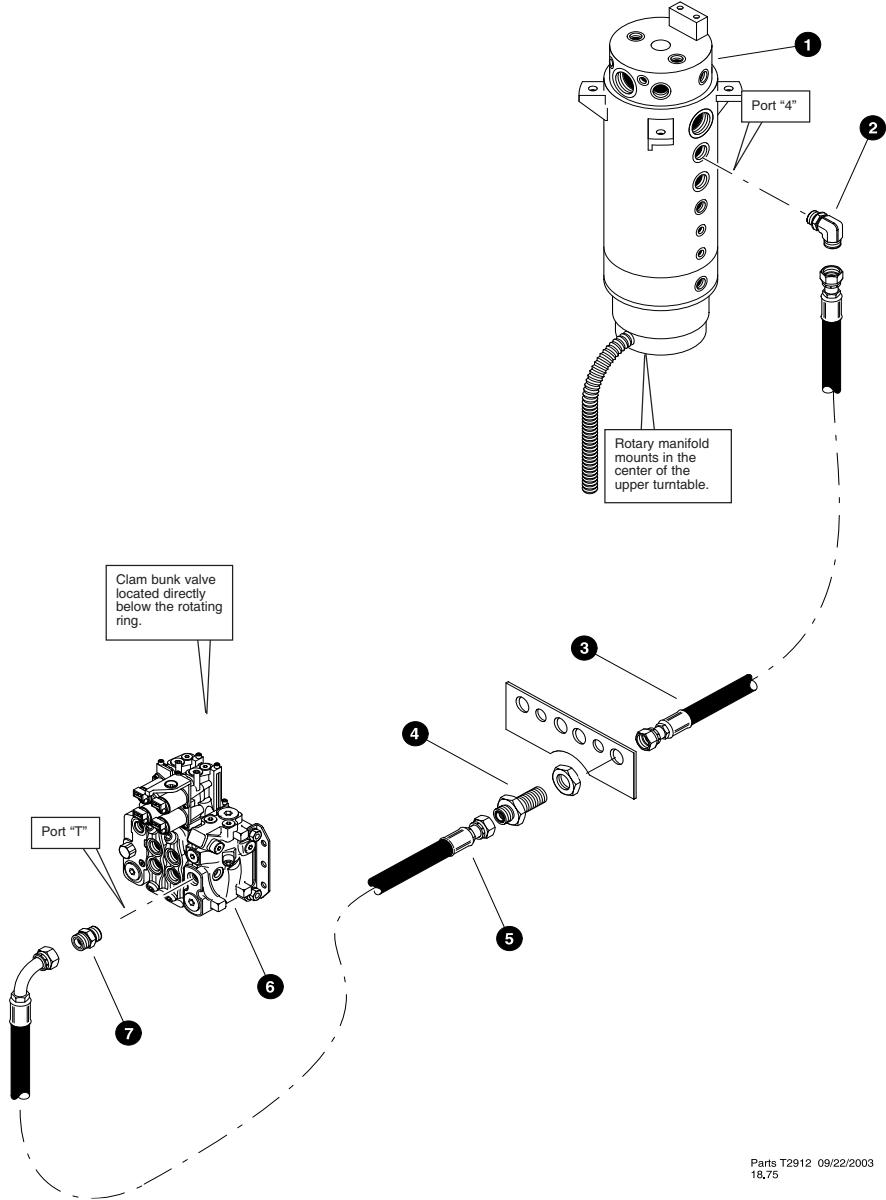


Parts T2911 09/22/2003
18.75

CLAM BUNK PRESSURE LINE
(Lower Rotary Manifold To Clam Bunk Valve)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	ROTARY MANIFOLD	UP-1
2	17688-CB	1	ELBOW, 90° - FF1868T-1212S	
3	51298-CB	1	HOSE ASSEMBLY - 4112-12-120S-120S (Rotary manifold lower port "5" to Bulkhead plate)	
4	19092-CB	1	CONNECTOR, STR - BULKHEAD 12	
5	50093-CB	1	HOSE ASSEMBLY - 4111-12-120S-1209-W (Bulkhead Plate to clam bunk valve port "P")	
6	15529-CB	2	BOLT - .375" x 2"	
7	15528-CB	2	WASHER, SAE flat - 3/8"	
8	REF.	1	CLAM BUNK CONTROL VALVE	CB-3
9	10813-CB	4	NUT, lock - .375"	
10	15152-CB	1	CONNECTOR, straight - FF1852T-1212S	

See referenced page for component or assembly breakdown.

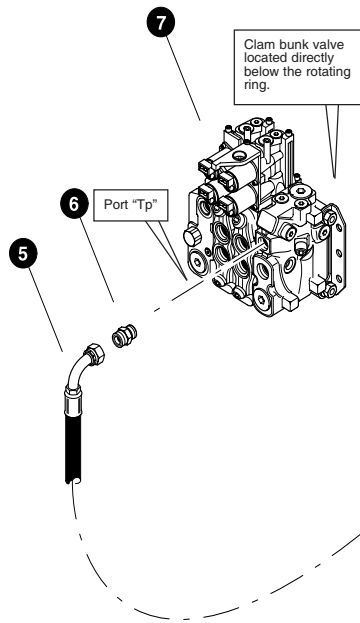
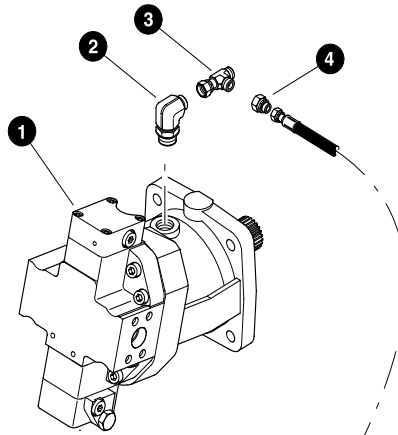


Parts T2912 09/22/2003
18,75

CLAM BUNK RETURN LINE
(Clam Bunk Valve To Lower Rotary Manifold)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	ROTARY MANIFOLD	UP-1
2	17688-CB	1	ELBOW, 90° - FF1868T-1212S	
3	51302-CB	1	HOSE ASSEMBLY - 4120-12-120S-120S (Rotary manifold lower port "4" to Bulkhead plate)	
4	19092-CB	1	CONNECTOR, STR - BULKHEAD 12	
5	50092-CB	1	HOSE ASSEMBLY - 4113-12-120S-1209-W (Bulkhead Plate to clam bunk valve port "T")	
6	REF.	1	CLAM BUNK CONTROL VALVE	CB-3
7	15152-CB	1	CONNECTOR, straight - FF1852T-1212S	

See referenced page for component or assembly breakdown

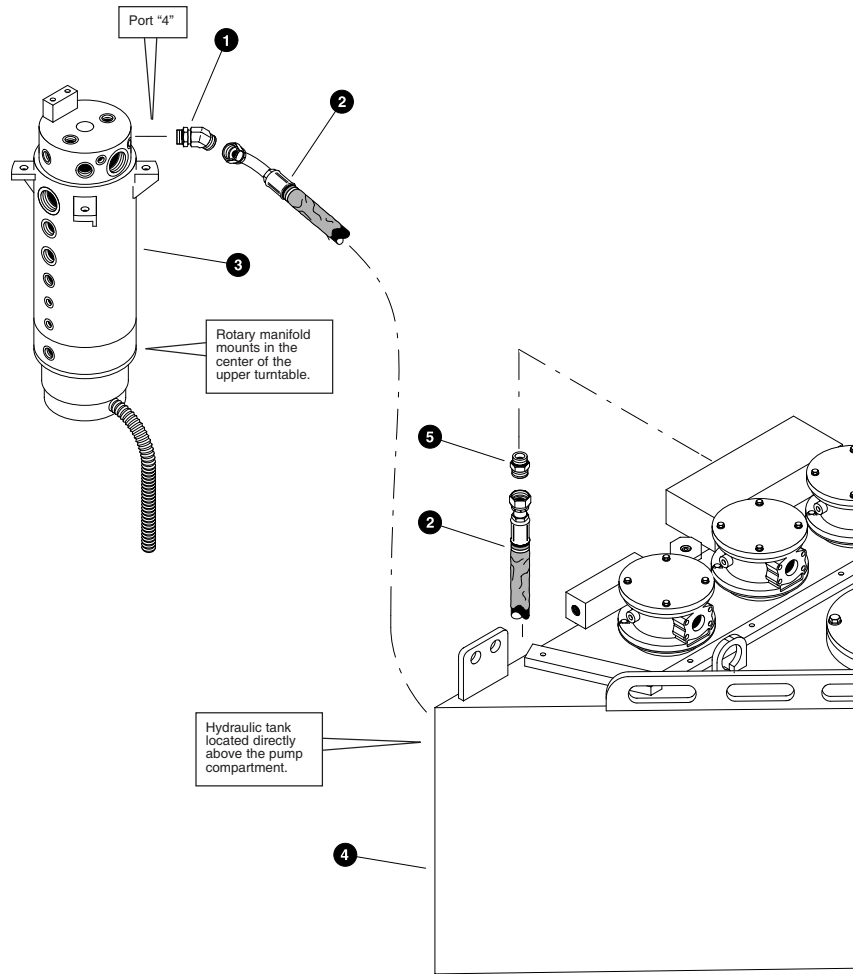


Parts T2913 09/22/2003
18.75

CLAM BUNK DRAIN LINE
(Clam Bunk Valve To Hydro Motor)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	HYDRO MOTOR	FR-4
2	15372-CB	1	ELBOW, 90 - FF1868T-0812S	
3	15433-CB	1	TEE, branch 08	
4	19221-CB	1	CONNECTOR, 04-08 bushing	
5	54094-CB	1	HOSE ASSEMBLY - 2076-04-040S-0409 (Drive Motor case to clam bunk valve port "TP")	
6	15504-CB	1	CONNECTOR, STR 04-08	
7	REF.	1	CLAM BUNK CONTROL VALVE.	CB-3

See referenced page for component or assembly breakdown

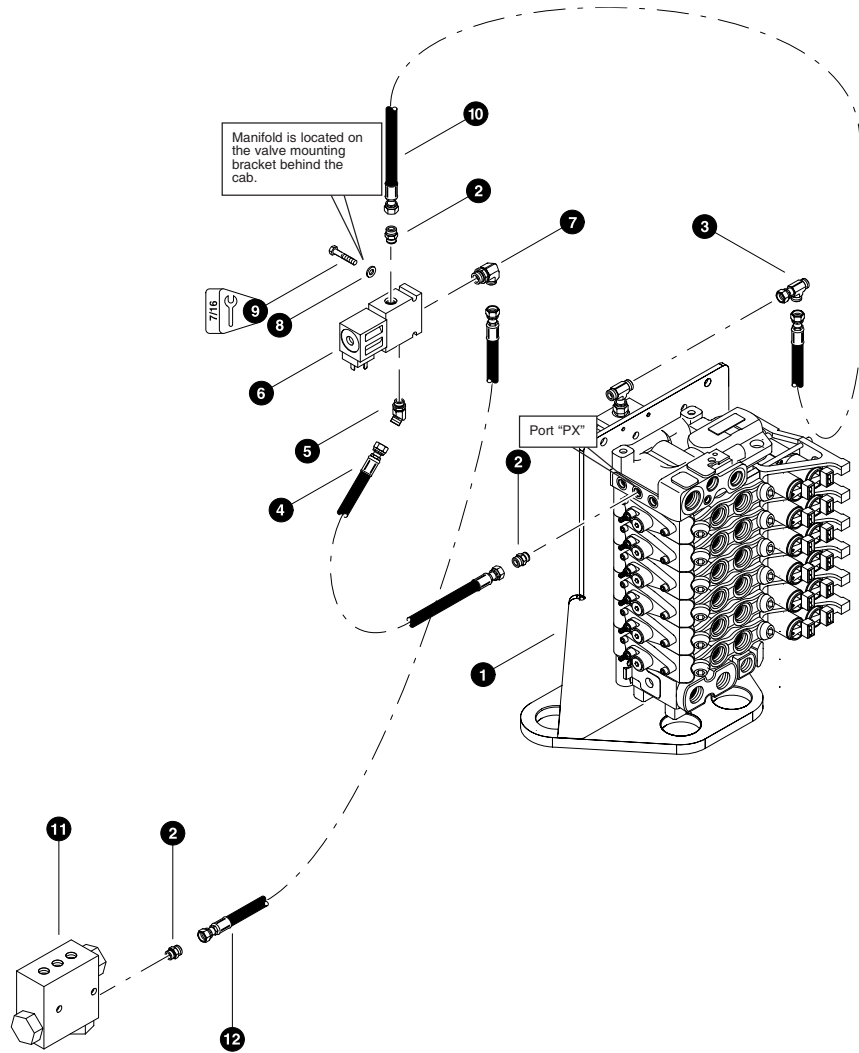


Parts 02017 12/12/2001
18.75

**CLAM BUNK RETURN LINE
(Upper Rotary Manifold To Tank)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	19127-CB	1	ELBOW, 45° - FF2068T-1212S	
2	24813-CB	1	HOSE ASSEMBLY - 4072-12-120S-1209-W (Rotary manifold upper port "4" to cab-side return filter)	
3	REF.	1	ROTARY MANIFOLD	UP-1
4	REF.	1	HYDRAULIC TANK	UP-4
5	15152-CB	1	CONNECTOR, straight - FF1852T-1212S	

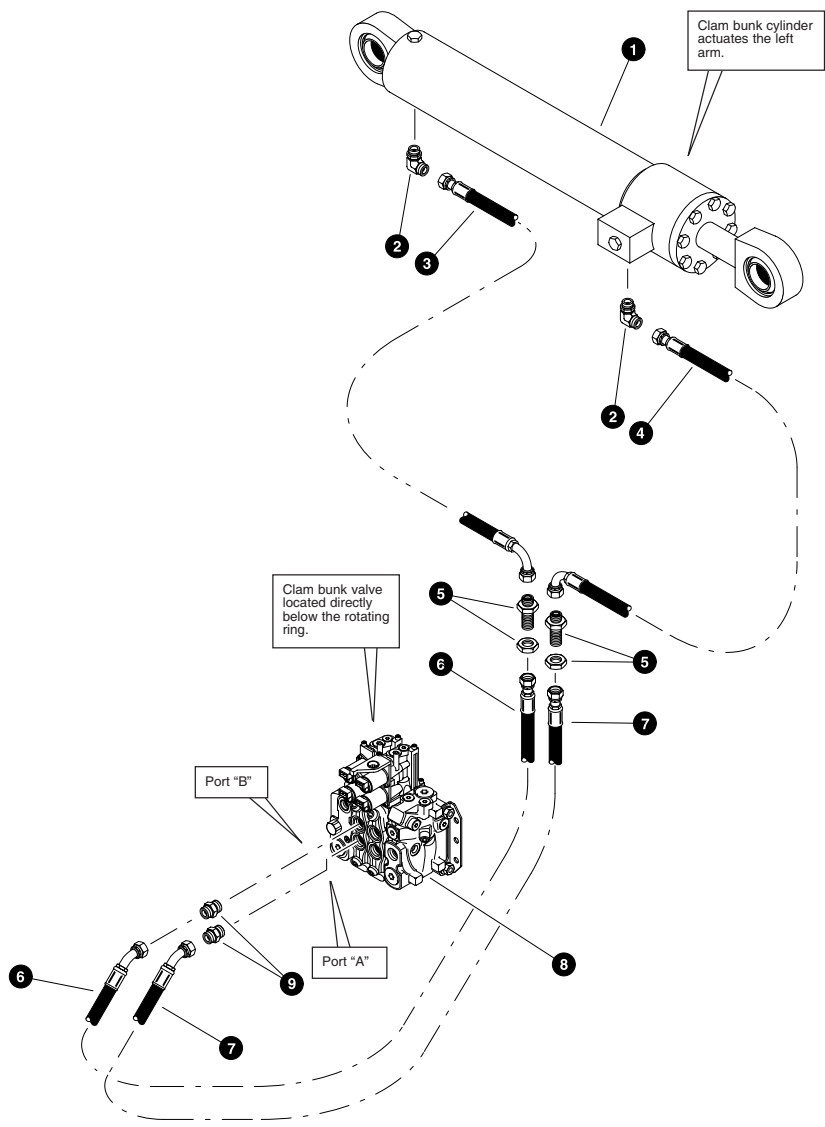
See referenced page for component or assembly breakdown.



CLAM BUNK LOAD SENSE LINES (LS90 Main Control Valve)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	MAIN CONTROL VALVE.	LH-2
2	15124-CB	3	CONNECTOR, straight - FF1852T-0406S	
3	15176-CB	1	TEE - FF2114T-0404S	
4	51386-CB	1	HOSE ASSEMBLY - 2018-04-040S-040S (Main control valve port "PX" to 3-way valve)	
5	23322-CB	1	ELBOW, 45 - 6-4 V5OLO-S	
6	24255-CB	1	VALVE, 3-way	
-	15021-CB	1	HARNES, 3-WAY SOLENOID VALVE	
7	15133-CB	3	ELBOW, 90° - FF1868T-0406S	
8	10757-CB	2	WASHER, SAE flat - 1/4"	
9	15575-CB	2	BOLT - 1/4" x 1-1/2"	
10	51226-CB	1	HOSE ASSEMBLY - 2014-04-040S-040S (Port #2 \ 3-way valve to combined tank manifold)	
11	50690-CB	1	VALVE, shuttle - load sense	
12	51388-CB	1	HOSE ASSEMBLY - 2094-04-040S-040S (Port #1 \ 3-way valve to load sense shuttle)	

See referenced page for component or assembly breakdown.



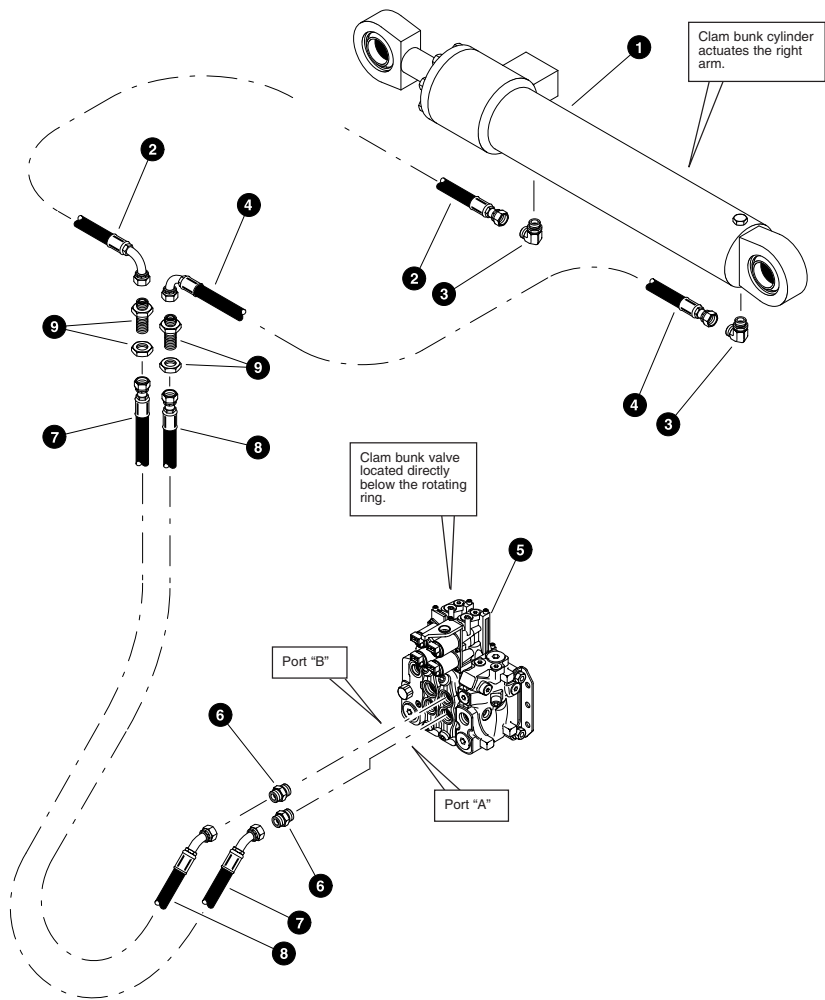
Parts 01991 01/22/200
18.75

CLAM BUNK ARM LINES
(Clam Bunk Valve To Left Clam Bunk Cylinder)

(Used on machines PDN# 151FWD and above)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	CLAM BUNK CYLINDER.	CB-2
2	16360-CB	2	ELBOW, 90° - FF1868T-0808S	
3	17483-CB	1	HOSE ASSEMBLY - 4019-08-080S-0809 (Clam bunk cylinder base port to left front bulkhead fitting)	
4	20195-CB	1	HOSE ASSEMBLY - 4031-08-080S-0809 (Clam bunk cylinder rod port to right front bulkhead fitting)	
5	20196-CB	2	CONNECTOR, straight bulkhead - FF1994T-0808S	
6	20113-CB	1	HOSE ASSEMBLY - 4047-08-080S-0804 (Clam bunk left valve section port "B" to left front bulkhead fitting)	
7	20198-CB	1	HOSE ASSEMBLY - 4045-08-080S-0804 (Clam bunk left valve section port "A" to right front bulkhead fitting)	
8	REF.	1	CLAM BUNK CONTROL VALVE.	CB-3
9	15115-CB	2	CONNECTOR, straight - FF1852T-0810S	

See referenced page for component or assembly breakdown.

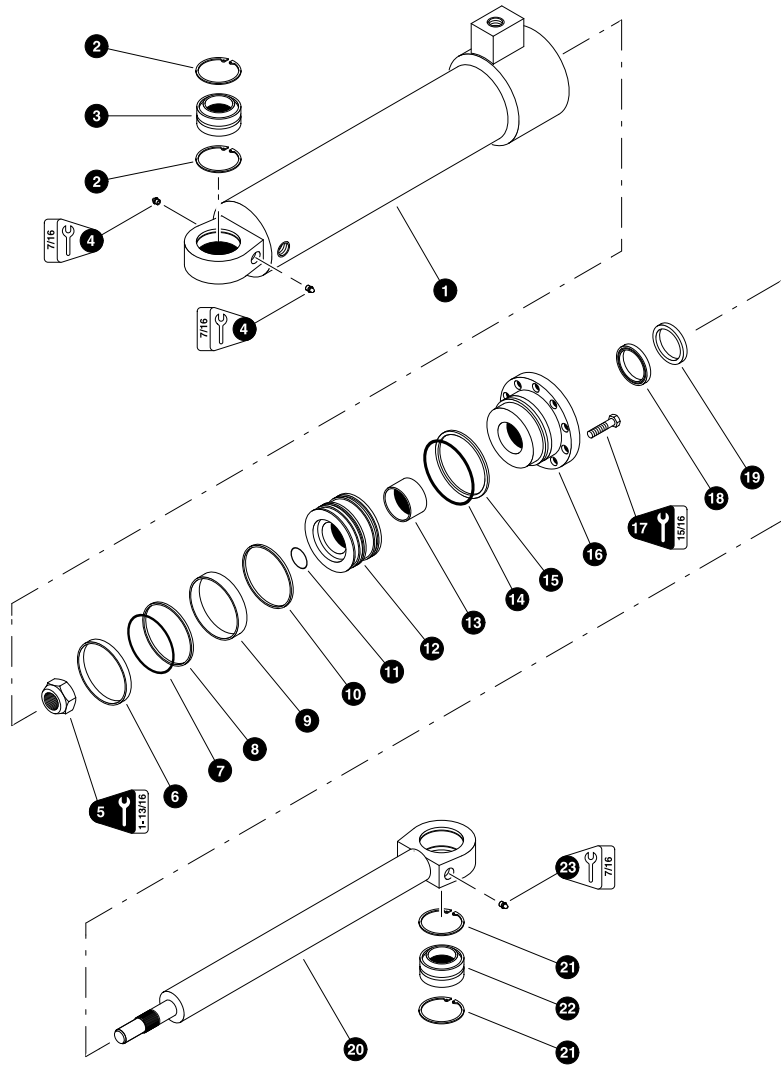


Parts 01992 01/22/2001
18.75

CLAM BUNK ARM LINES
(Clam Bunk Valve To Right Clam Bunk Cylinder)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	CLAM BUNK CYLINDER.	CB-2
2	16360-CB	2	ELBOW, 90° - FF1868T-0808S	
3	20195-CB	1	HOSE ASSEMBLY - 4031-08-080S-0809 (Clam bunk cylinder rod port to left rear bulkhead fitting)	
4	17483-CB	1	HOSE ASSEMBLY - 4019-08-080S-0809 (Clam bunk cylinder base port to right rear bulkhead fitting)	
5	REF.	1	CLAM BUNK CONTROL VALVE.	CB-3
6	15115-CB	2	CONNECTOR, straight - FF1852T-0810S	
7	20199-CB	1	HOSE ASSEMBLY - 4046-08-080S-0804 (Clam bunk right valve section port "A" to left rear bulkhead fitting)	
8	20201-CB	1	HOSE ASSEMBLY - 4048-08-080S-0804 (Clam bunk right valve section port "B" to right rear bulkhead fitting)	
9	20196-CB	2	CONNECTOR, straight bulkhead - FF1994T-0808S	

See referenced page for component or assembly breakdown.

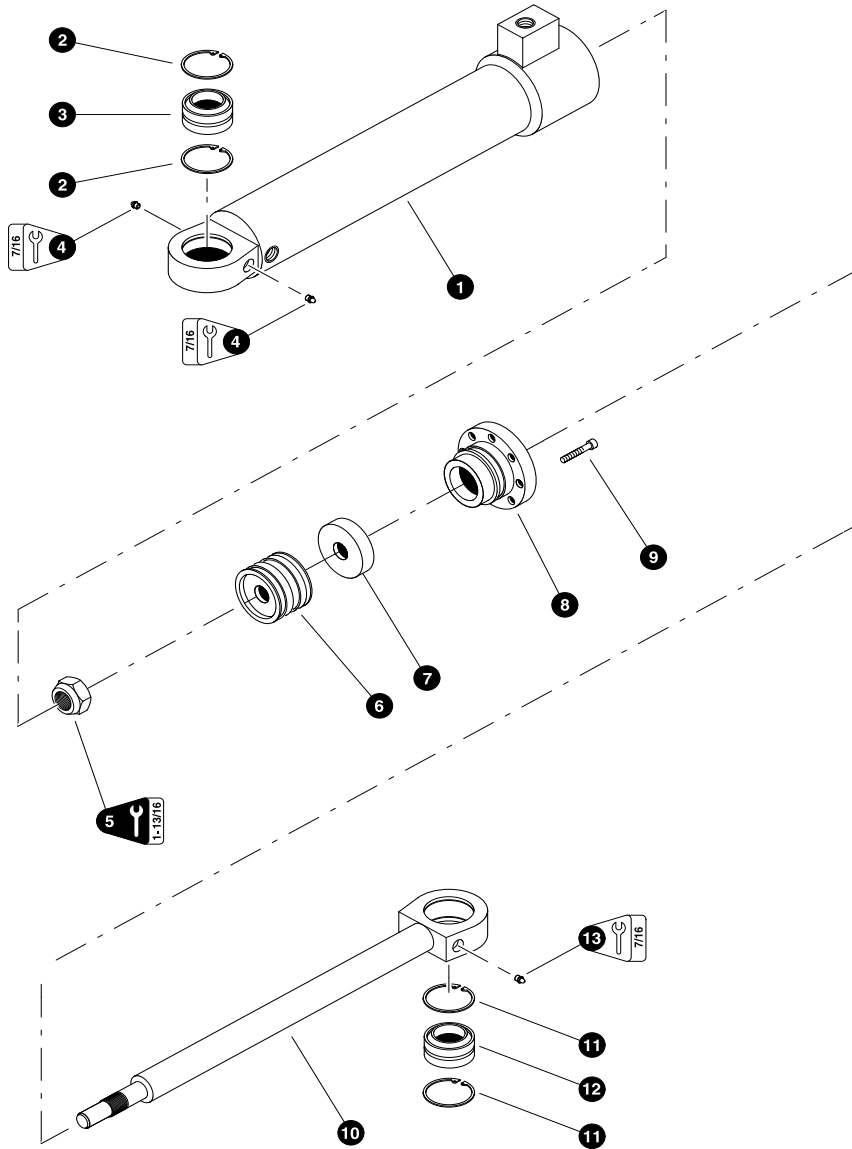


00268 09/08/97
18.75

CLAM ARM CYLINDER (Jarp)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	19738-CB	2	<input type="checkbox"/> CLAM ARM CYLINDER ASSEMBLY	
1	19960-CB	1	<input type="checkbox"/> BARREL ASSEMBLY	
2	19916-CB	2	RING, snap	
3	19917-CB	1	BUSHING, spherical - 2"	
4	10704-CB	1	FITTING, straight grease - 1/8" pipe thread	
5	15914-CB	1	NUT, cylinder rod - 1-3/4" (Torque to 885 +/- 60 ft.lbs. (1175 +/- 80 Nm))	
6	NSS	1	⌘ RING, piston wear	
7	NSS	1	⌘ RING, piston loader	
8	NSS	1	⌘ RING, piston chem-cast	
9	NSS	1	⌘ RING, piston wear	
10	NSS	1	⌘ RING, piston seal	
11	NSS	1	⌘ O-RING, piston	
12	19573-CB	1	PISTON	
13	NSS	1	⌘ RING, rod bearing wear	
14	NSS	1	⌘ O-RING, rod bearing	
15	NSS	1	⌘ RING, rod bearing back-up	
16	19962-CB	1	BEARING, rod	
17	15681-CB	8	BOLT - 5/8" x 2-1/4" (Torque to 175 ft.lbs (233 Nm))	
18	NSS	1	⌘ U-CUP, rod bearing	
19	NSS	1	⌘ WIPER, rod	
20	19963-CB	1	<input type="checkbox"/> ROD ASSEMBLY	
21	19916-CB	2	RING, snap	
22	19917-CB	1	BUSHING, spherical - 2"	
23	10704-CB	1	FITTING, straight grease - 1/8" pipe thread	
-	19964-CB	1	KIT, seal repair - steer/clam arm cylinder - 5"	

- Kit or Assembly - includes all items indented underneath.
- ⌘ Included in seal repair kit Part # 19964-LB.



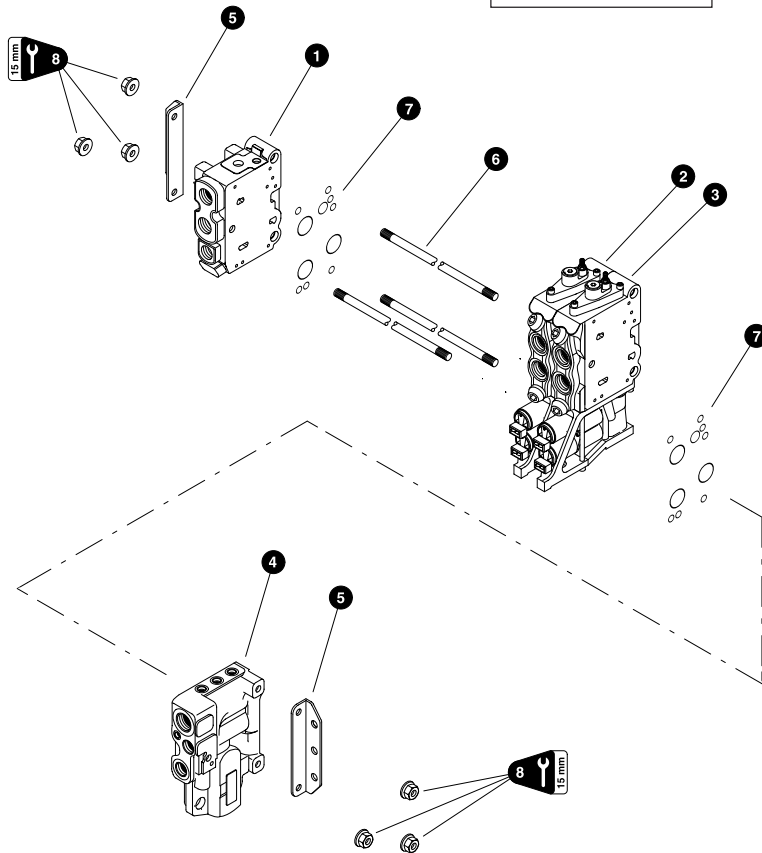
T2810 08/11/03
18,75

CLAM ARM CYLINDER (RAM ROD)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	50005-FR	2	<input type="checkbox"/> CLAM BUNK CYLINDER ASSEMBLY	
1	50242-FR	1	<input type="checkbox"/> BARREL ASSEMBLY	
2	19916-FR	2	RING, snap	
3	19917-FR	1	BUSHING, spherical - 2"	
4	10704-FR	1	FITTING, straight grease - 1/8" pipe thread	
5	- - -	1	NUT, cylinder rod - 1-1/4" (<i>Torque to 770 ft-lbs.</i>) (712005)	
6	50244-FR	1	PISTON	
7	50245-FR	1	PISTON EXTENTION	
8	50246-FR	1	BEARING, rod	
9	- - -	14	BOLT - 3/8 X 1 3/4" (<i>Torque to 20 ft-lbs.</i>) (711073)	
10	50243-FR	1	<input type="checkbox"/> ROD ASSEMBLY	
11	19916-FR	2	RING, snap	
12	19917-FR	1	BUSHING, spherical - 2"	
13	10704-FR	1	FITTING, straight grease - 1/8" pipe thread	
-	50247-FR	1	KIT, seal repair - steer cylinder	

Kit or Assembly - includes all items indented underneath.

The valve assembly shown below is installed with the coils up. The illustration is shown upside down.



Parts 02018 12/12/1001
25.00

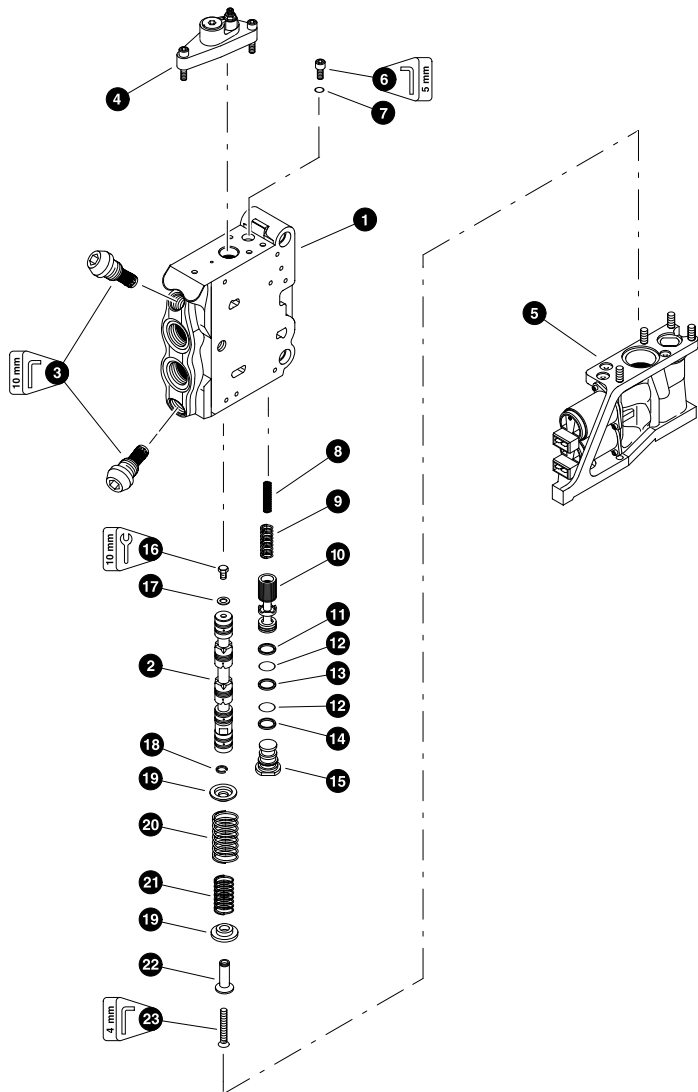
CLAM BUNK CONTROL VALVE (VOAC L90LS)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	25016-CB	1	<input type="checkbox"/> CLAM BUNK CONTROL VALVE ASSEMBLY	
1	REF.	1	<input type="checkbox"/> VALVE SECTION - outlet	CB-2
2	REF.	1	<input type="checkbox"/> VALVE SECTION - clam arm function (Right)	CB-2
3	REF.	1	<input type="checkbox"/> VALVE SECTION - clam arm function (Left)	CB-2
4	REF.	1	<input type="checkbox"/> VALVE SECTION - inlet	CB-2
-	23402-CB	1	<input type="checkbox"/> KIT, mounting brackets	
5	-----	2	BRACKET, valve mounting	
-	-----	1	<input type="checkbox"/> KIT, tie rod (6 section)	
6	-----	3	ROD, tie	
7	23913-CB	6	NUT (Special torque procedure)(See Note #1 Below)	
8	23404-CB	7	KIT, seal repair - L90LS face seals	

- Kit or Assembly - includes all items indented underneath.
- See referenced page for component or assembly breakdown.

Note #1:

Tie rod nuts should be torqued in a clockwise pattern in three steps, 7.5 ft.lbs. (10 Nm), 22.5 ft.lbs. (30 Nm) and 33.5 ft.lbs. (45 Nm).

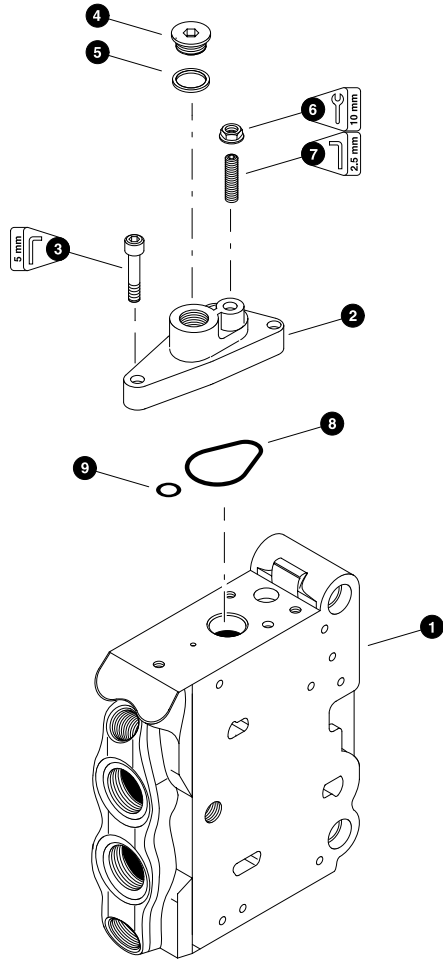


Parts 01318 09/15/99
37.50

**WORK VALVE SECTION
(VOAC L90LS)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	23409-CB	1	<input type="checkbox"/> VALVE SECTION, clam arm	
1	NSS	1	BODY, valve section	
2	NSS	1	SPOOL	
3	23413-CB	2	CARTRIDGE, port relief (250 Bar)	
4	REF.	1	<input type="checkbox"/> SECTION END CAP ASSEMBLY - "A" port side	CB-2
5	REF.	1	<input type="checkbox"/> SECTION END CAP ASSEMBLY - "B" port side	CB-2
-	23419-CB	1	<input type="checkbox"/> KIT, compensator - "KX" (Blue)	
-	23424-CB	1	<input type="checkbox"/> KIT, compensator - "K" (Blue)(Rotate & grapple only)	
6	-----	1	SCREW, throttling - 6mm-1.0P x 10mm	
7	-----	1	RING, seal	
8	-----	1	ORIFICE	
9	-----	1	SPRING, compensator	
10	-----	1	SPRING, compensator	
11	-----	1	SPOOL, compensator	
12	-----	2	RING, back-up	
13	-----	1	O-RING	
14	-----	1	O-RING	
15	-----	1	RING, back-up	
16	-----	1	PLUG, compensator	
17	-----	1	BOLT, spool - 6mm-1.0P x 8mm	
18	-----	1	WASHER	
-	23423-CB	1	<input type="checkbox"/> KIT, spool centering spring	
19	-----	1	RING, lock	
20	-----	2	RETAINER, spring	
21	-----	1	SPRING	
22	-----	1	SPRING	
23	-----	1	SLEEVE	
24	-----	1	SCREW, spring assembly	

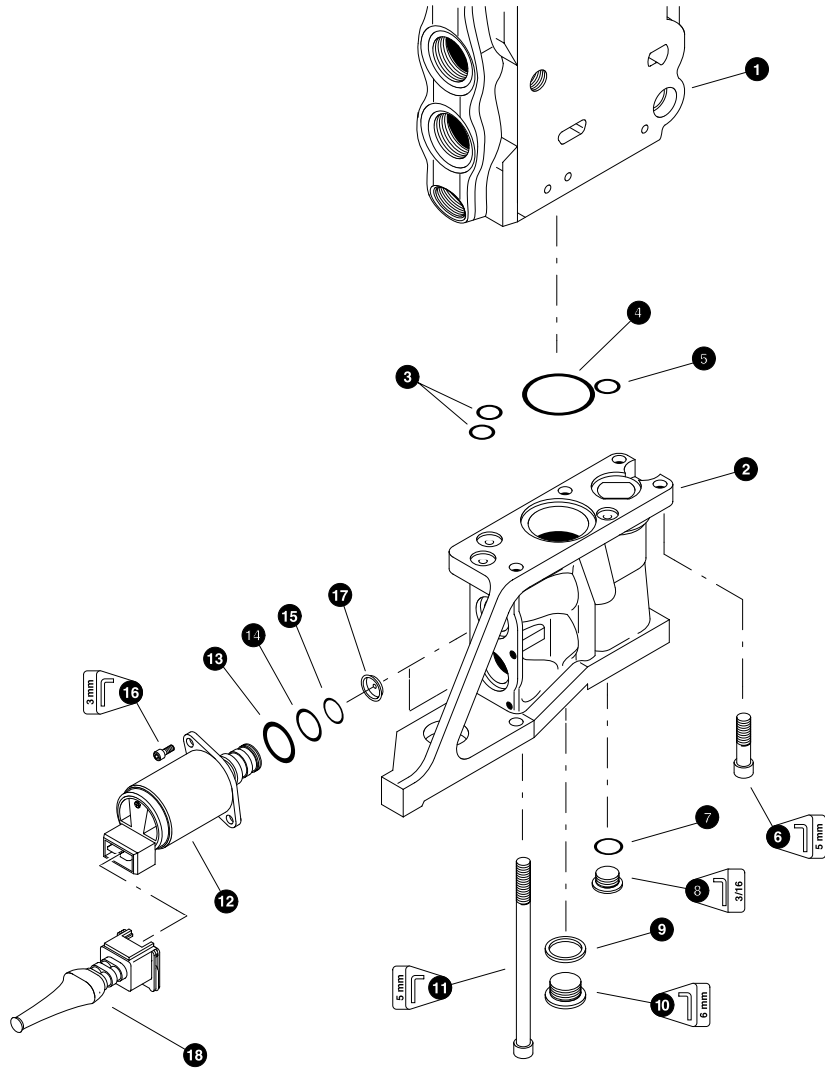
- Kit or Assembly - includes all items indented underneath.
- See referenced page for component or assembly breakdown.



**“A” SECTION END CAP ASSEMBLY
(VOAC L90LS)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	NSS	1	VALVE SECTION BODY.....	CB-2
-	23414-CB	1	KIT, end cap - "A" port side	
2	-----	1	CAP, end	
3	-----	3	BOLT, allen head - 6mm-1.0P x 20mm	
4	15412-CB	1	PLUG - 6408-HHP-6	
5	-----	1	RING, seal	
6	-----	1	NUT, seal - 6mm	
7	-----	1	SCREW, adjustment	
8	-----	1	O-RING (<i>Large</i>)	
9	-----	1	O-RING (<i>Small</i>)	
-	23415-CB	1	KIT, seal repair - "A" port side end cap	

- See referenced page for component or assembly breakdown.
- Kit or Assembly - includes all items indented underneath.
- Included in seal repair kit PN# 23415-CB.

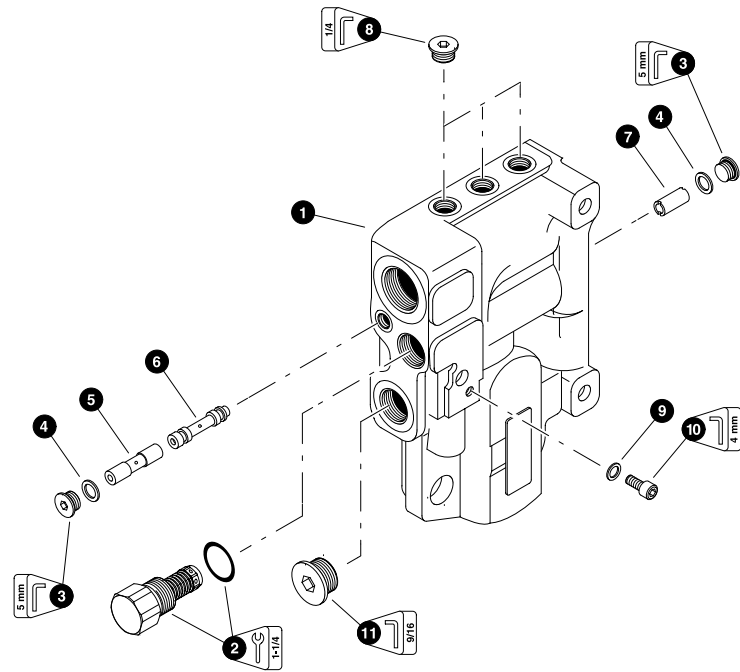


Parts 01735 02/21/2003
75.00

**“B” SECTION END CAP ASSEMBLY
(VOAC L90LS)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	NSS	1	☐ VALVE SECTION BODY	CB-2
-	23416-CB	1	☐ KIT, end cap - “B” port side	
2	-----	1	CAP, end	
3	20976-CB	2	SOLENOID - 24V	
	19436-CB	2	SOLENOID - 12V	
4	-----	2	⊗ O-RING (<i>Large</i>)	
5	-----	2	⊗ O-RING (<i>Medium</i>)	
6	-----	2	⊗ O-RING (<i>Small</i>)	
7	-----	4	SCREW, allen head - 4mm-.75P x 12mm	
8	-----	2	◆ O-RING (<i>Small</i>)	
9	-----	1	◆ O-RING (<i>Large</i>)	
10	-----	1	◆ O-RING (<i>Small</i>)	
11	-----	2	BOLT, allen head - 6mm-1.0P x 20mm	
12	-----	1	◆ O-RING	
13	11383-CB	1	PLUG - 6408-HHP-4	
14	-----	1	◆ RING, seal	
15	-----	1	PLUG	
16	-----	2	SCREW, allen head - 6mm-1.0P x 100mm	
-	23418-CB	1	KIT, seal repair - solenoid	
-	23417-CB	1	KIT, seal repair - “B” port side end cap	

- ☐ See referenced page for component or assembly breakdown.
- ☐ Kit or Assembly - includes all items indented underneath.
- ⊗ Included in seal repair kit PN# 23418-CB.
- ◆ Included in seal repair kit PN# 23417-CB.

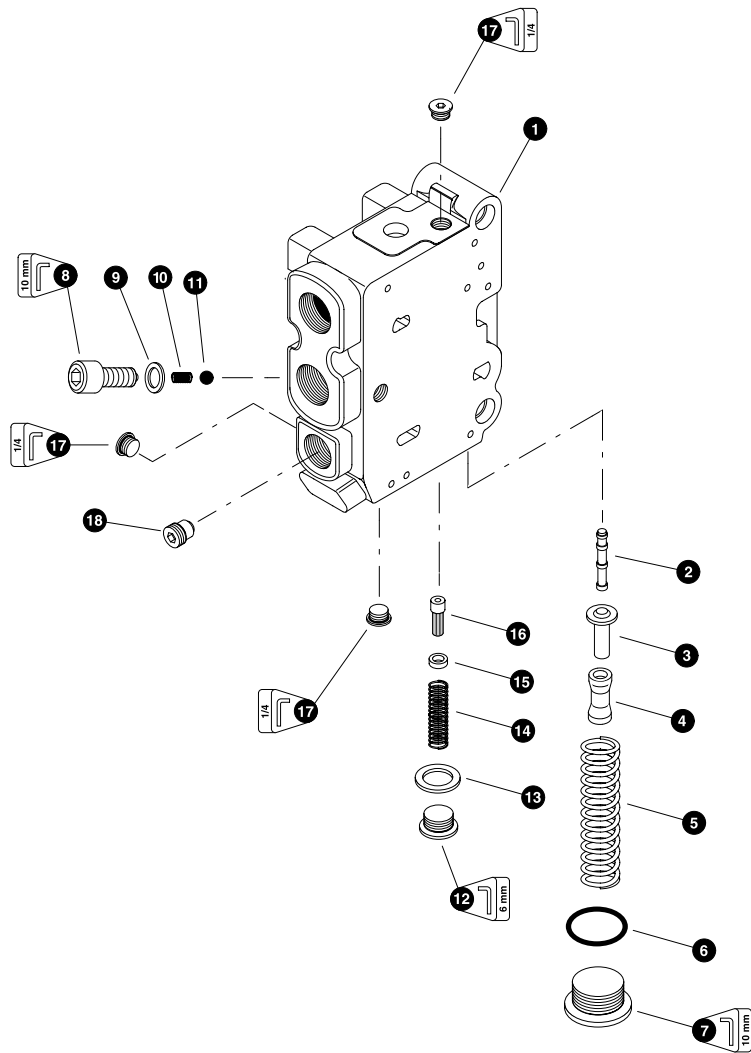


Parts 01316 09/15/99
62.00

**INLET VALVE SECTION
(VOAC L90LS)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	23405-CB	1	<input type="checkbox"/> VALVE SECTION, inlet	
1	NSS	1	BODY, valve section	
2	23428-CB	1	<input type="checkbox"/> RELIEF (250 bar)	
-	23429-CB	1	KIT, load sense copy spool (Green)	
-	23430-CB	1	KIT, load sense copy spool (Red)	
3	-----	2	PLUG	
4	-----	2	RING, seal	
5	-----	1	SPACER	
6	-----	1	SPOOL	
7	-----	1	SPACER	
8	15412-CB	3	PLUG - 6408-HHP-6	
9	-----	1	BOLT, allen head - 6mm-1.0P x 12mm	
10	-----	1	RING, seal	
11	15584-CB	1	PLUG - 6408-HHP-12	

Kit or Assembly - includes all items indented underneath.

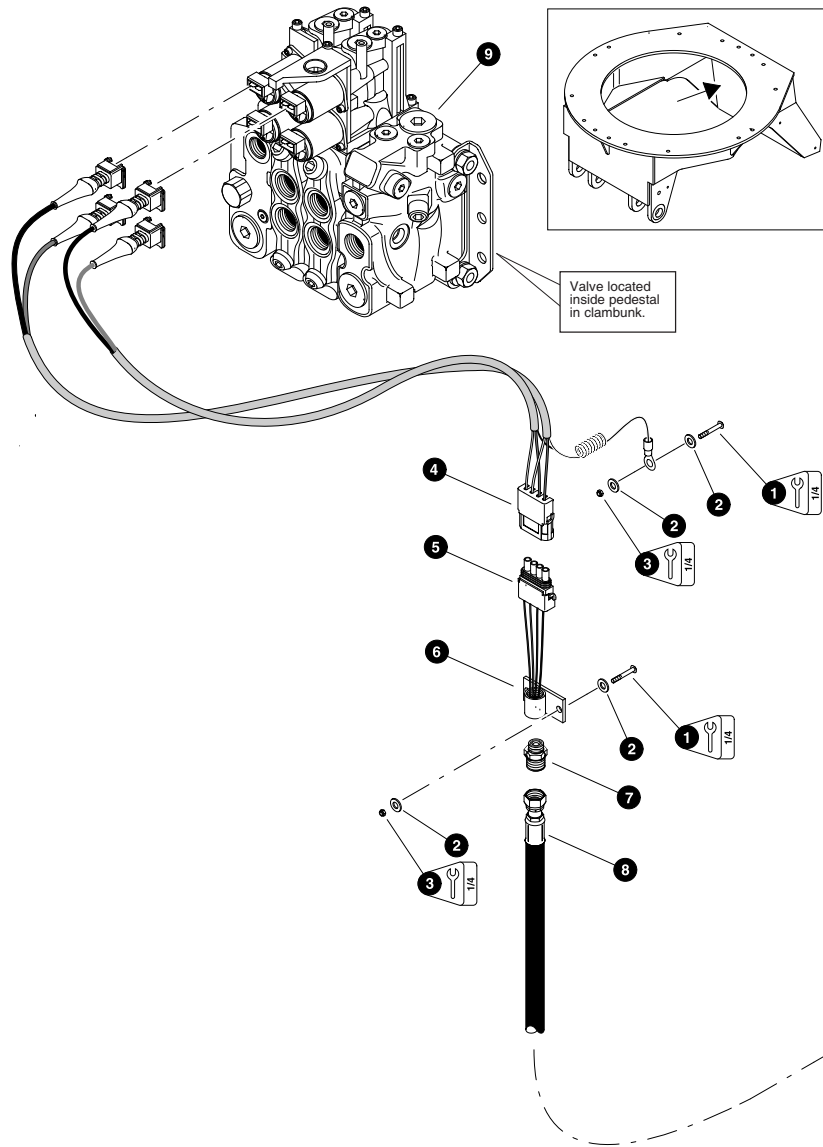


Parts 01319 09/16/99
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**OUTLET VALVE SECTION
(VOAC L90LS)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
-	23412-CB	1	<input type="checkbox"/> VALVE SECTION, outlet	
1	NSS	1	BODY, valve section	
-	23431-CB	1	KIT, pilot supply reducer (Green)(35 bar)	
-	23432-CB	1	KIT, pilot supply reducer (Red)(35 bar)	
2	-----	1	SPOOL	
3	-----	1	SPACER	
4	-----	1	SPACER	
5	-----	1	SPRING	
6	-----	1	O-RING	
7	-----	1	PLUG	
8	-----	1	RING, seal	
9	-----	1	SPRING	
10	-----	1	SPACER	
11	-----	1	STRAINER	
-	23433-CB	1	KIT, pilot supply strainer (393000K074)	
12	-----	1	PLUG	
13	-----	1	RING, seal	
14	-----	1	SPRING	
15	-----	1	SPACER	
16	-----	1	FILTER, PILOT SUPPLY	
17	15412-CB	3	PLUG - 6408-HHP-6	
18	-----	1	PLUG, TP (393000K078)	

Kit or Assembly - includes all items indented underneath.



Valve located inside pedestal in clam-bunk.

8 786 GE-6 4 7 6 BAA86 G-BAF
fb_T 5 ha^6 bagb_l T_i Xfi

E89	C4 EG	DGL	7 8 F 6 E-CG-BA	F88 F86 G-BA
1	16127-CB	2	SCREW, machine #10-24 x 1-1/4"	
2	10800-CB	4	WASHER, FLAT - 1/4"	
3	16131-CB	2	NUT, nylock #10-24	
4	24142-CB	1	HARNES, wire- clam-bunk valve	
5	23132-CB	1	CONNECTOR, weatherpack	
	22226-CB	4	TERMINAL, male	
	22225-CB	4	SEAL, terminal	
	25121-CB	8 ft	WIRE - 20 GA. 5 CONDUCTOR	
6	12222-CB	1	BRACKET, gauge mount	
7	16295-CB	1	CONNECTOR - STR FF2031T - 0604S	
8	50088-CB	1	HOSE ASSEMBLY - 4078-06-060S-060S	
9	REF.	1	CLAM BUNK CONTROL VALVE.	CB-3

- See referenced page for component or assembly breakdown.
- Kit or Assembly - includes all items indented underneath.

