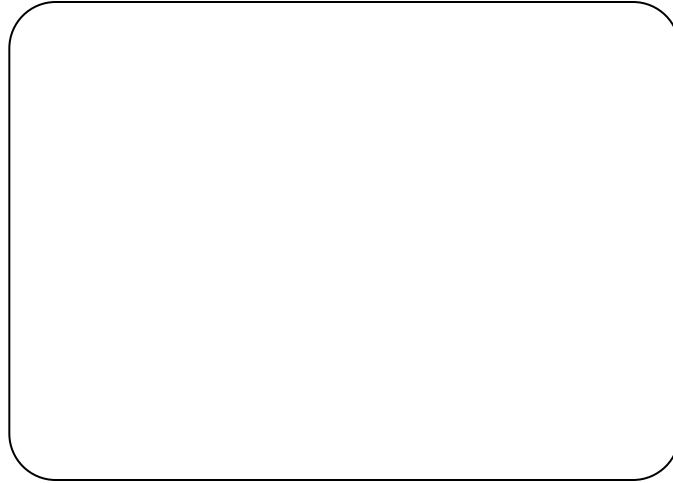
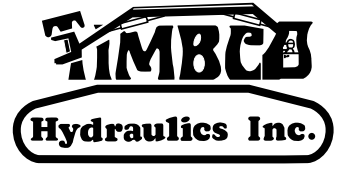
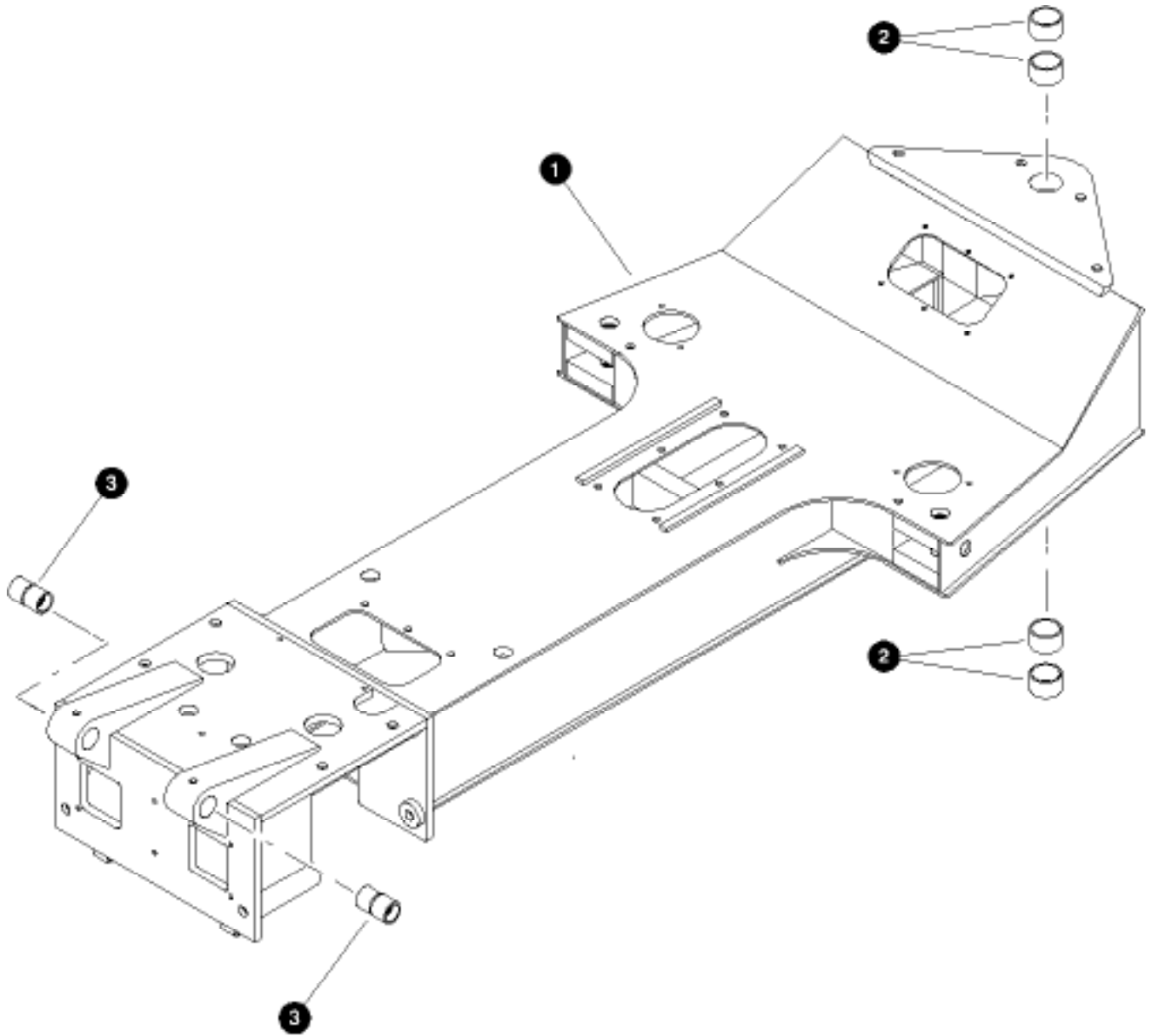


Section FR-1



Flattop Rear Frame - Structural



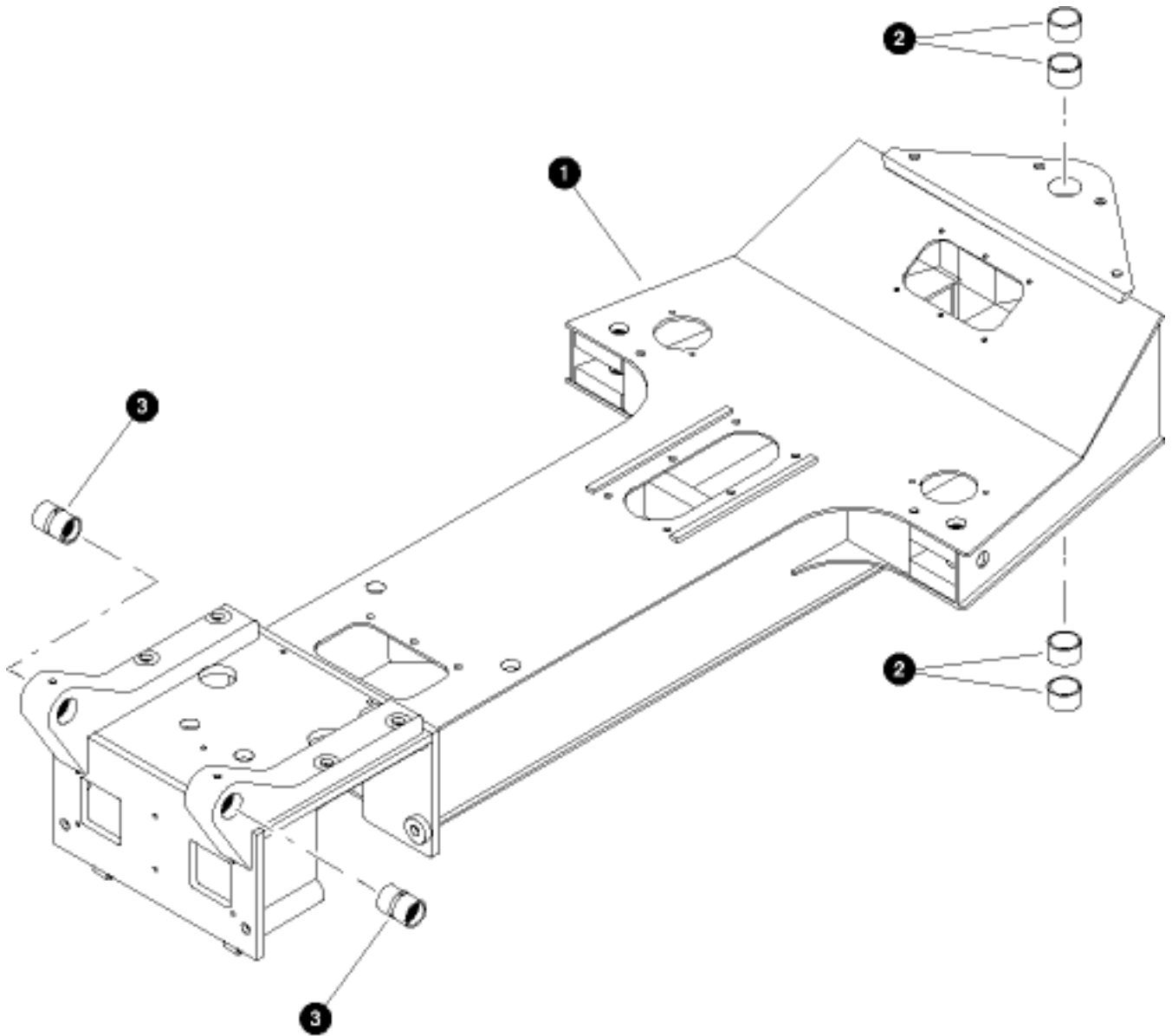
Parts 01261 07/00/99
9.3.75

REAR FRAME COMPONENTS

(Used on machines PDN# 139FWD and below)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	80424-FR	1	<input type="checkbox"/> REAR FRAME WELDMENT	
2	23104-FR	4	BUSHING - 3-1/2" x 1-1/2" (Used on machines PDN# 128FWD and above)	
	19129-FR	4	BUSHING - 3" x 1-1/2" (Used on machines PDN# 127FWD and below)	
3	12149-FR	2	BUSHING - 2" x 4-1/4"	

Kit or Assembly - includes all items indented underneath.



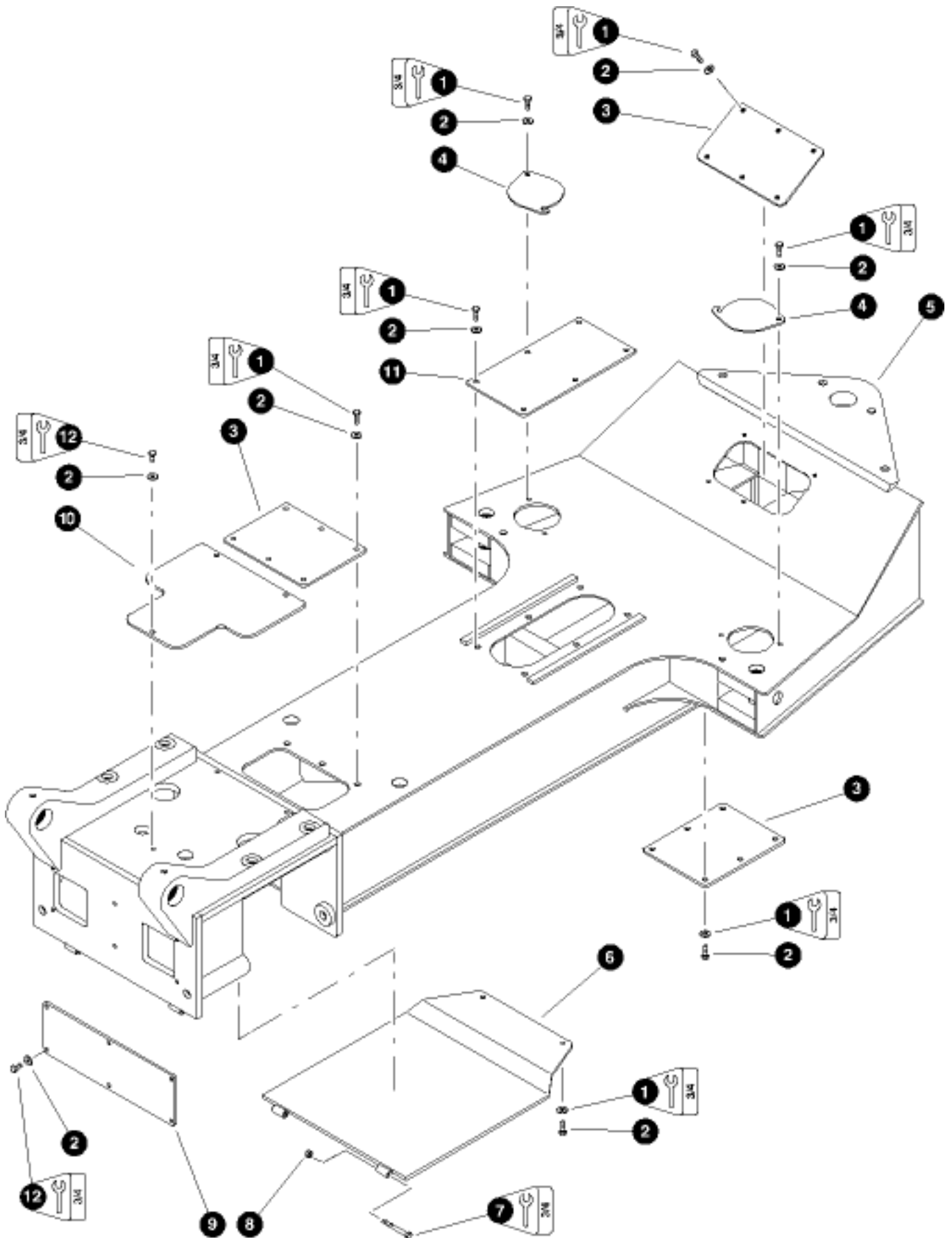
Parts 01903 11123 2000
9.375

REAR FRAME COMPONENTS

(Used on machines PDN# 140FWD and above)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	80530-FR	1	<input type="checkbox"/> REAR FRAME WELDMENT	
2	23104-FR	4	BUSHING - 3-1/2" x 1-1/2"	
3	11704-FR	2	BUSHING - 2-1/2" x 4-1/4"	

Kit or Assembly - includes all items indented underneath.

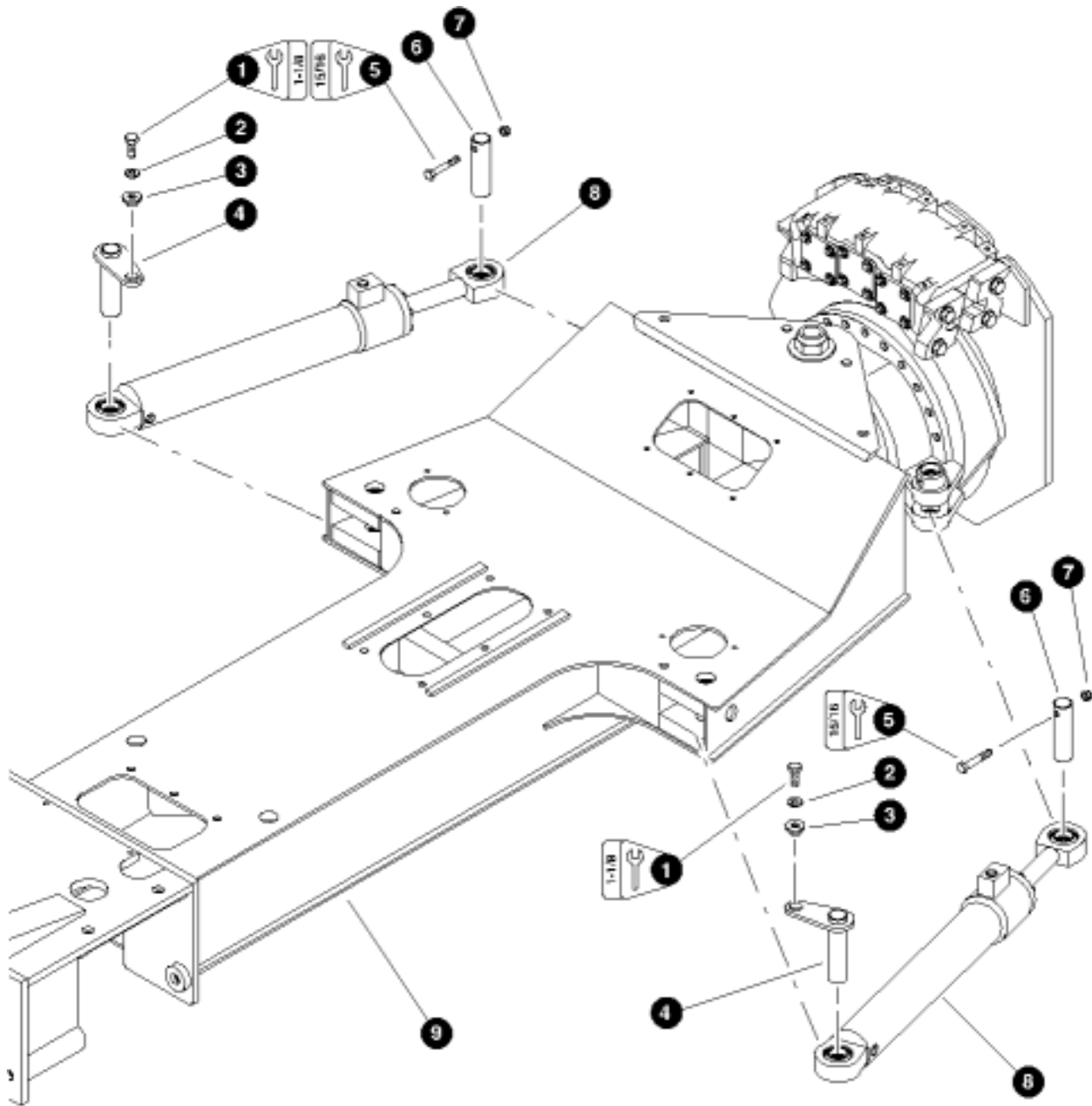


Parts 01904 11232000
B.375

REAR FRAME ACCESS COVERS

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	10783-FR	9	BOLT - 1/2" x 1"	
2	15534-FR	9	WASHER, SAE flat - 1/2"	
3	19395-FR	3	COVER, access - steerbox / axle	
4	12150-FR	2	COVER, access - steer cylinder	
5	REF.	1	✓ REAR FRAME WELDMENT	FR-1-2
6	19781-FR	1	COVER, access - rear frame axle (Lower)	
7	10835-FR	2	BOLT - 1/2" x 4-1/2"	
8	10815-FR	2	NUT, lock - 1/2"	
9	80316-FR	1	COVER, access - axle box end	
10	80544-FR	1	COVER, access - rear frame axle (Upper)(Used on machines PDN# 140FWD and abpve)	
	80331-FR	1	COVER, access - rear frame axle (Upper)(Used on machines PDN# 139FWD and below)	
11	19394-FR	1	COVER, access - driveshaft	
12	10739-FR	30	BOLT - 1/2" x 1-1/2"	

✓ See referenced page for component or assembly breakdown.



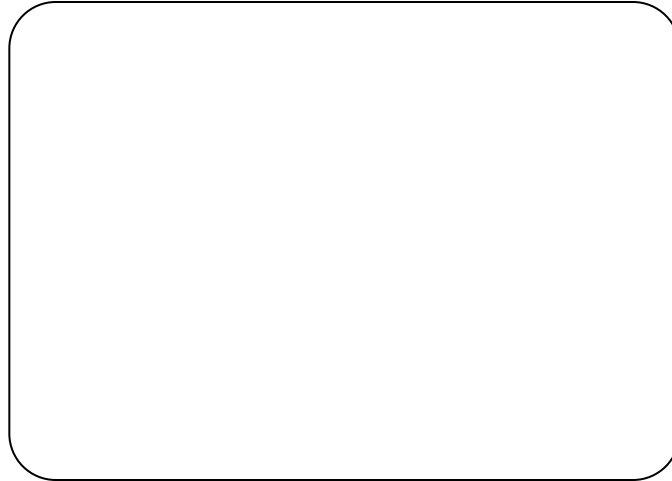
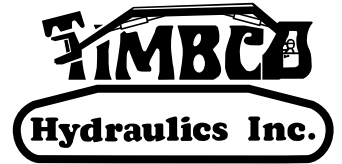
Parts 01 263 07/30/99
9.375

STEER CYLINDER INSTALLATION

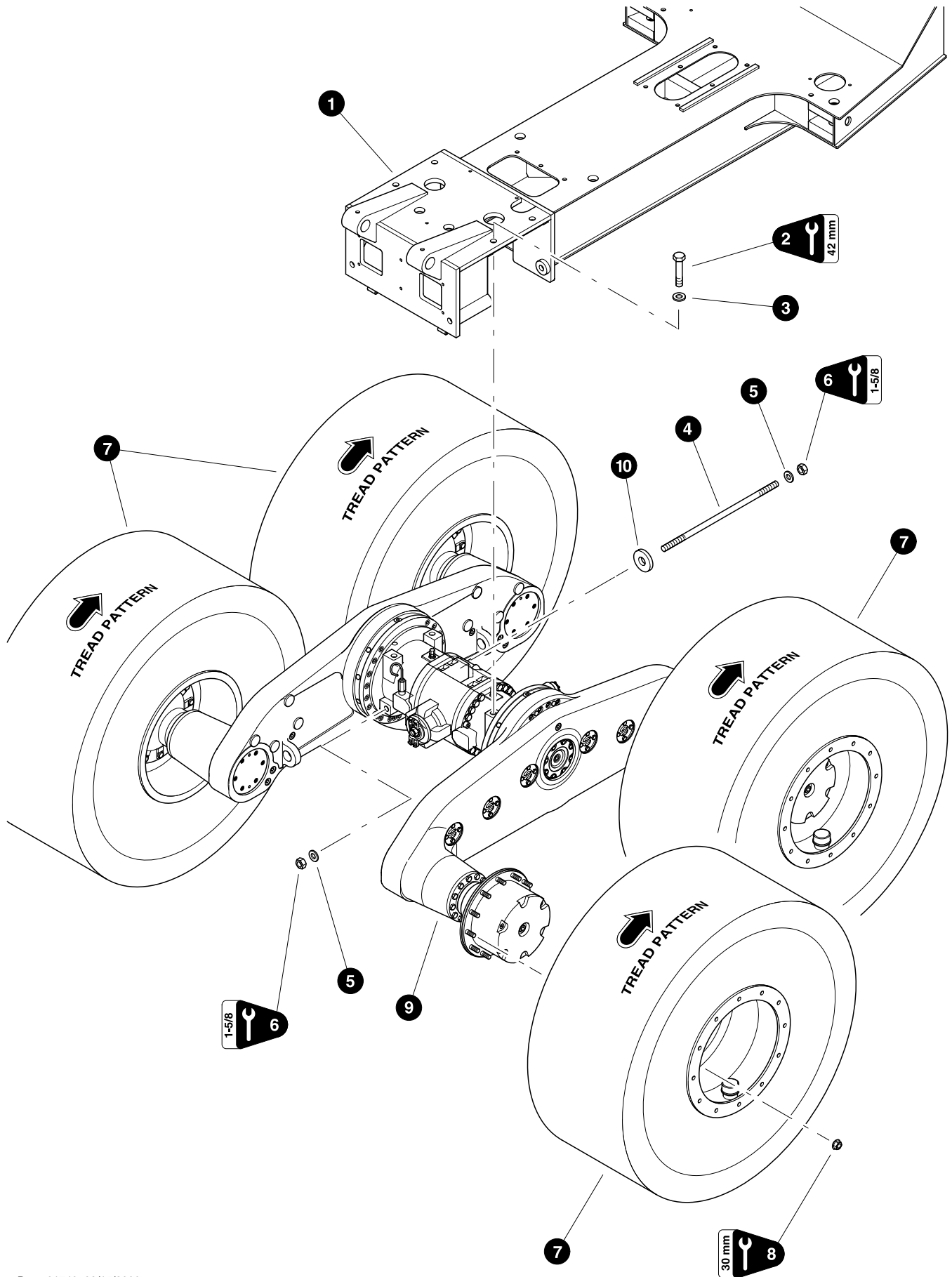
REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	15549-FR	2	BOLT - 3/4" x 2"	
2	15550-FR	2	WASHER, SAE flat - 3/4"	
3	18570-FR	2	WASHER, pin retaining	
4	19210-FR	2	PIN, steer cylinder mounting - base	
5	10719-FR	2	BOLT - 5/8" x 4"	
6	19448-FR	2	PIN, steer cylinder mounting - rod	
7	15563-FR	2	NUT, nylock - 5/8"	
8	REF.	2	✓ STEER CYLINDER	FR-3-4
9	REF.	1	REAR FRAME WELDMENT	FR-1-2

✓ See referenced page for component or assembly breakdown.

Section FR-2



Flattop Rear Frame - Drivetrain Installation



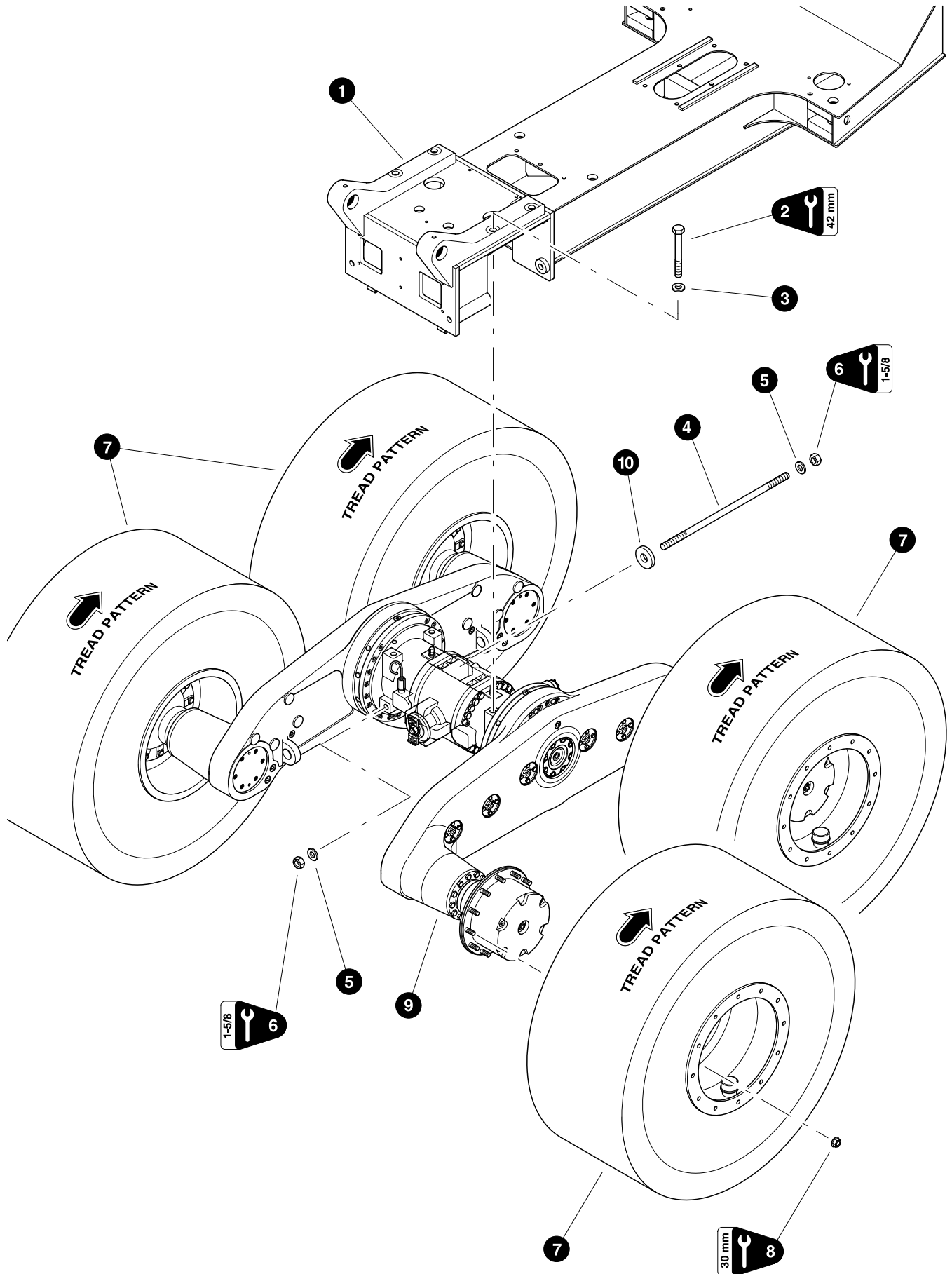
Parts 01743 08/15/2000
6.25

REAR AXLE INSTALLATION

(Used on machines PDN# 146FWD and below)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	✓ REAR FRAME WELDMENT	FR-1-2
2	19898-FR	4	BOLT - 27mm-3.0P x 160mm (Torque to 1000 lbs. (1330 Nm))	
3	19899-FR	4	WASHER, hardened flat - 27mm	
4	23136-FR	2	STUD, axle spreader box - 1-1/8" (Torque to 700 ft.lbs. (935 Nm))	
5	23211-FR	4	WASHER, SAE flat - 1-1/8" <i>(Extra thick)</i>	
6	17248-FR	4	NUT, lock - 1-1/8"	
7	REF.	4	✓ WHEEL ASSEMBLY	AX-3-2
8	19361-FR	48	NUT, lug (Torque to 415 ft.lbs. (550 Nm))	
9	REF.	1	✓ REAR AXLE	AX-1-2
10	24054-FR	2	SPACER, axle spreader box	

✓ See referenced page for component or assembly breakdown.



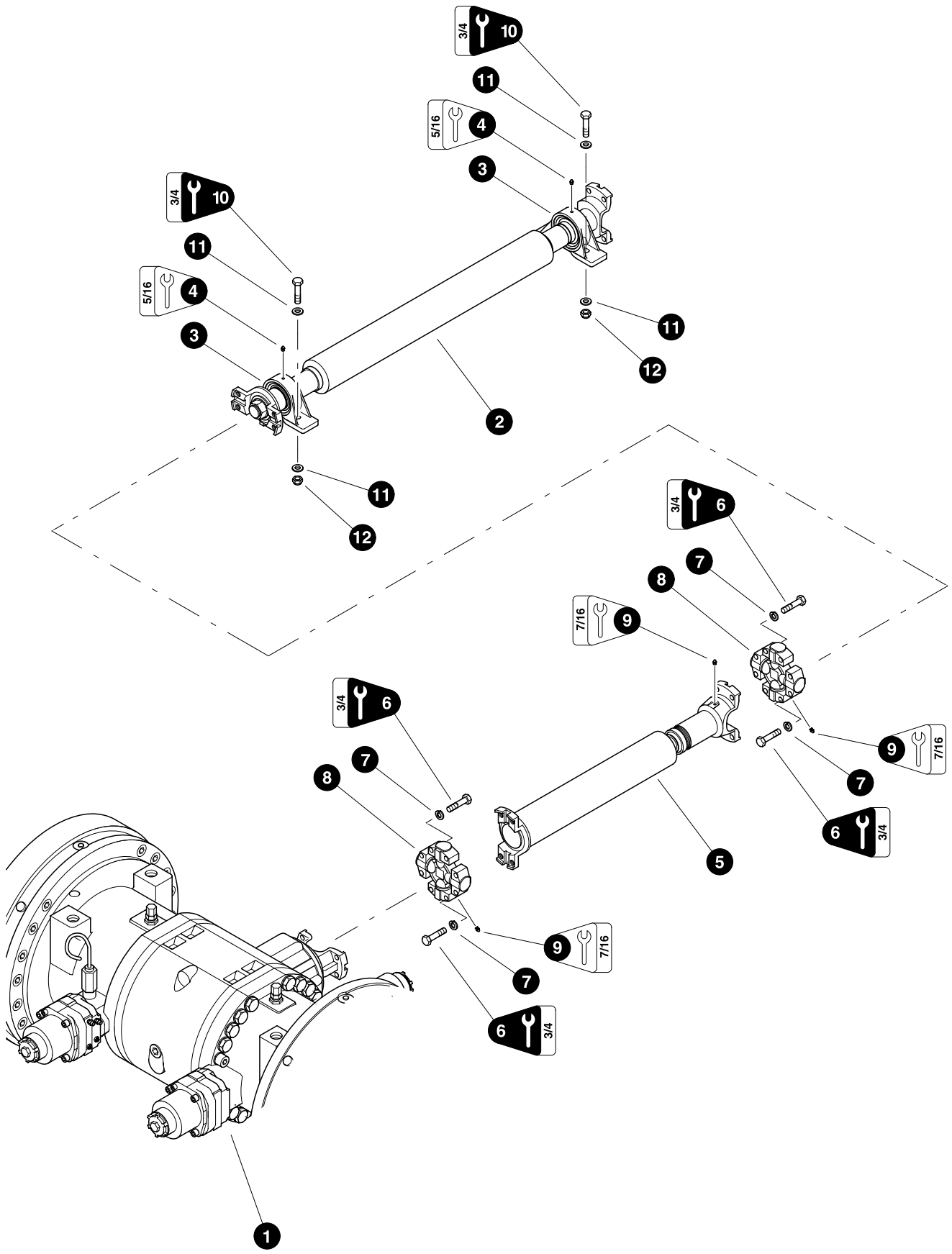
Parts 01907 11/22/2000
6.25

REAR AXLE INSTALLATION

(Used on machines PDN# 147FWD and above)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	✓ REAR FRAME WELDMENT	FR-1-2
2	23567-FR	4	BOLT - 30mm-3.5P x 220mm (Torque to 1100 ft.lbs. (1465 Nm))	
3	23568-FR	4	WASHER, hardened flat - 30mm	
4	23851-FR	2	STUD, axle spreader box - 1-1/4" (Torque to 1200 lft.bs. (1600 Nm))	
5	23990-FR	4	WASHER, SAE flat - 1-1/4" <i>(Extra thick)</i>	
6	23989-FR	4	NUT, lock - 1-1/4"	
7	REF.	4	✓ WHEEL ASSEMBLY	AX-3-2
8	19361-FR	48	NUT, lug (Torque to 415 ft.lbs. (550 Nm))	
9	REF.	1	✓ REAR AXLE	AX-1-2
10	24003-FR	2	SPACER, axle spreader box	

✓ See referenced page for component or assembly breakdown.



Parts 00516 03/18/98
12.50

DRIVE SHAFT INSTALLATION

REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1	✓	REAR AXLE	AX-1-2
2	23466-FR	1	☐	DRIVE SHAFT (<i>Articulation joint to mid-frame</i>)	
3	19383-FR	2		BEARING, pillow block	
4	18420-FR	2		FITTING, grease - 1/4-28"	
5	23467-FR	1	☐	DRIVE SHAFT (<i>Mid-frame to rear axle</i>)	
6	20662-FR	16		BOLT - 1/2" x 2-1/4" NF (<i>See Note #1 Below</i>) (Torque to 115 ft.lbs. (155 Nm))	
7	10710-FR	16		WASHER, lock - 1/2"	
8	20677-FR	2		U-JOINT, driveshaft	
9	10704-FR	3		FITTING, grease - 1/8" pipe thread	
10	10736-FR	4		BOLT - 1/2" x 2" (<i>See Note #2 Below</i>) (Torque to 110 ft.lbs. (135 Nm))	
11	15534-FR	8		WASHER, SAE flat - 1/2"	
12	10815-FR	4		NUT, lock - 1/2"	

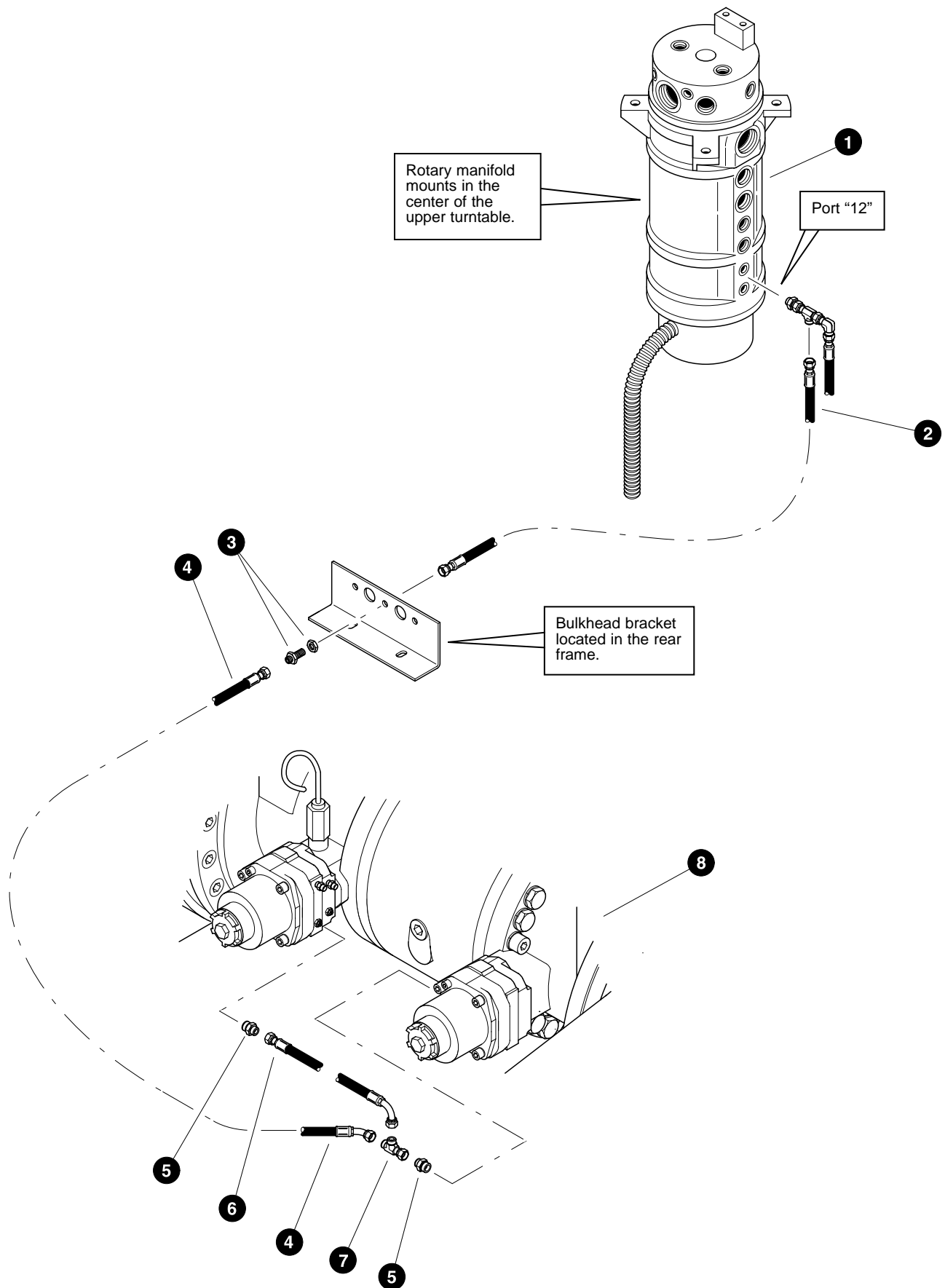
- ✓ See referenced page for component or assembly breakdown.
- ☐ Kit or Assembly - includes all items indented underneath.

Note #1:

Use Loctite 242 (*blue*) during installation.

Note #2:

Use Loctite 271 (*red*) during installation.



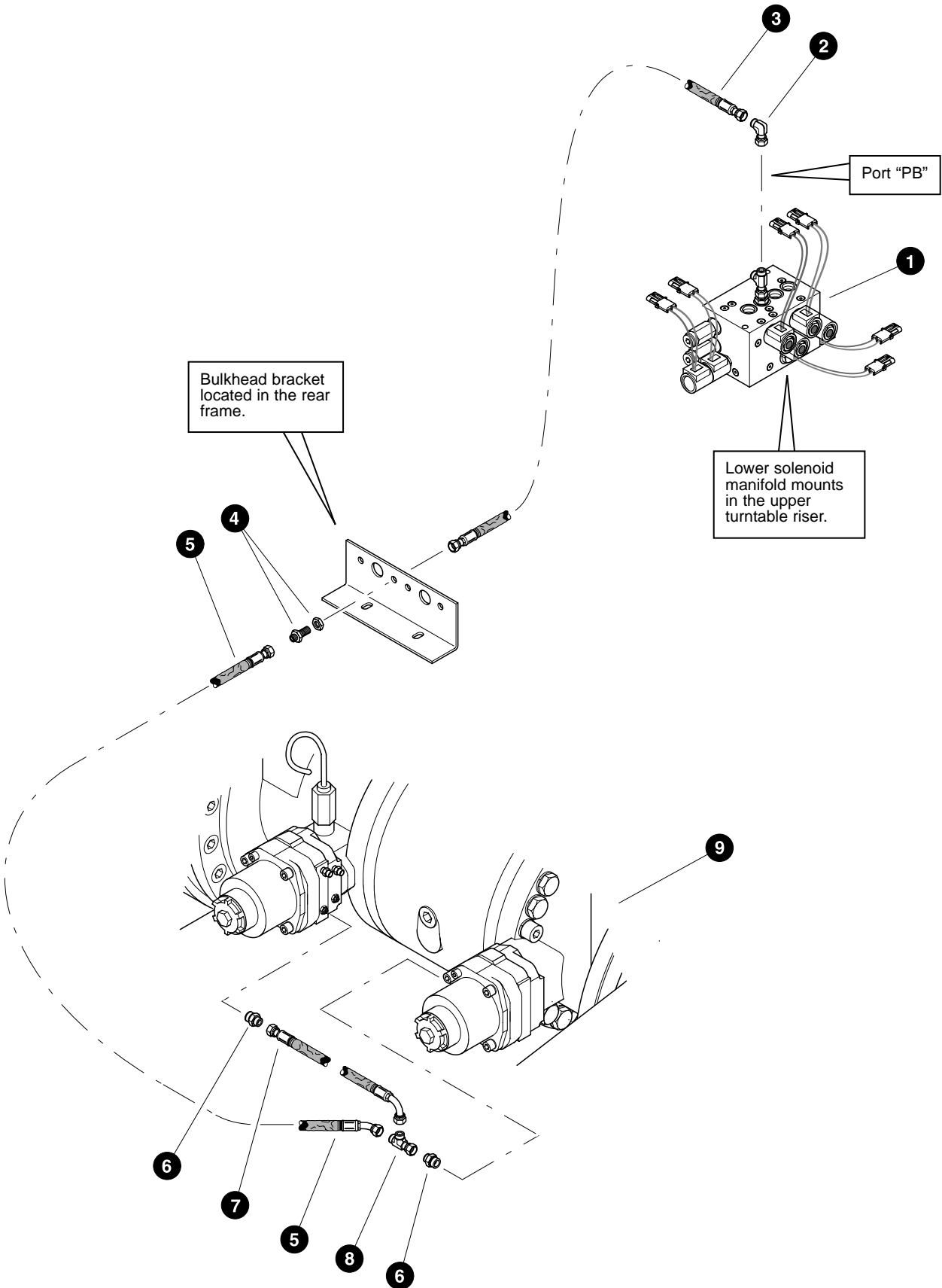
Parts 01744 08/16/2000
18.75

REAR AXLE PARKING BRAKE LINES (From Rotary Manifold)

(Used on machines PDN# 134FWD and below)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	✓ ROTARY MANIFOLD	UP-1-6
2	22980-FR	1	HOSE ASSEMBLY - 2109-04-040S-040S <i>(Rotary manifold lower port "12" tee to bulkhead bracket center)</i>	
3	18582-FR	1	CONNECTOR, straight bulkhead - FF1994T-0404S	
4	22421-FR	1	HOSE ASSEMBLY - 2133.5-04-040S-0404 <i>(Bulkhead bracket center to rear axle parking brake tee)</i>	
5	19470-FR	2	CONNECTOR, straight - 4M14F8OMLO-S	
6	20167-FR	1	HOSE ASSEMBLY - 2009.5-04-040S-0409 <i>(Rear axle parking brake tee to LH brake chamber)</i>	
7	15176-FR	1	TEE - FF2114T-0404S	
8	REF.	1	✓ REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.



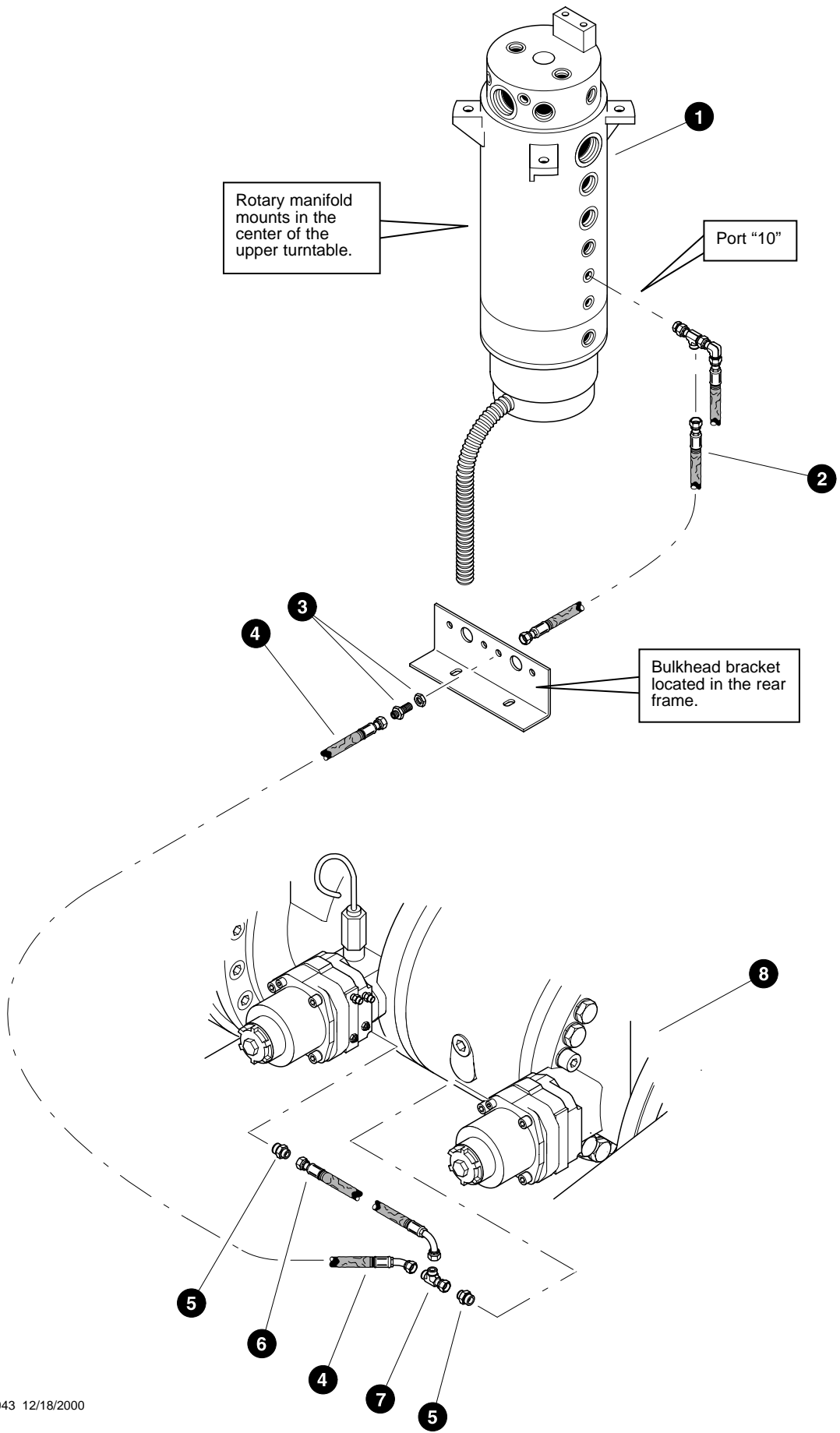
Parts 01942 12/18/2000
18.75

REAR AXLE PARKING BRAKE LINES (From Lower Solenoid Manifold)

(Used on machines PDN# 135FWD and above)

REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1	✓	LOWER SOLENOID MANIFOLD	FF-7-2
2	15145-FR	1		ELBOW, 90° swivel - FF2098T-0404S	
3	22980-FR	1		HOSE ASSEMBLY - 2109-04-040S-040S-W (<i>Lower solenoid manifold port "PB" tee to bulkhead bracket center</i>)	
4	18582-FR	1		CONNECTOR, straight bulkhead - FF1994T-0404S	
5	22421-FR	1		HOSE ASSEMBLY - 2133.5-04-040S-0404-W (<i>Bulkhead bracket center to rear axle parking brake tee</i>)	
6	19470-FR	2		CONNECTOR, straight - 4M14F8OMLO-S	
7	20167-FR	1		HOSE ASSEMBLY - 2009.5-04-040S-0409-W (<i>Rear axle parking brake tee to LH brake chamber</i>)	
8	15176-FR	1		TEE - FF2114T-0404S	
9	REF.	1	✓	REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.

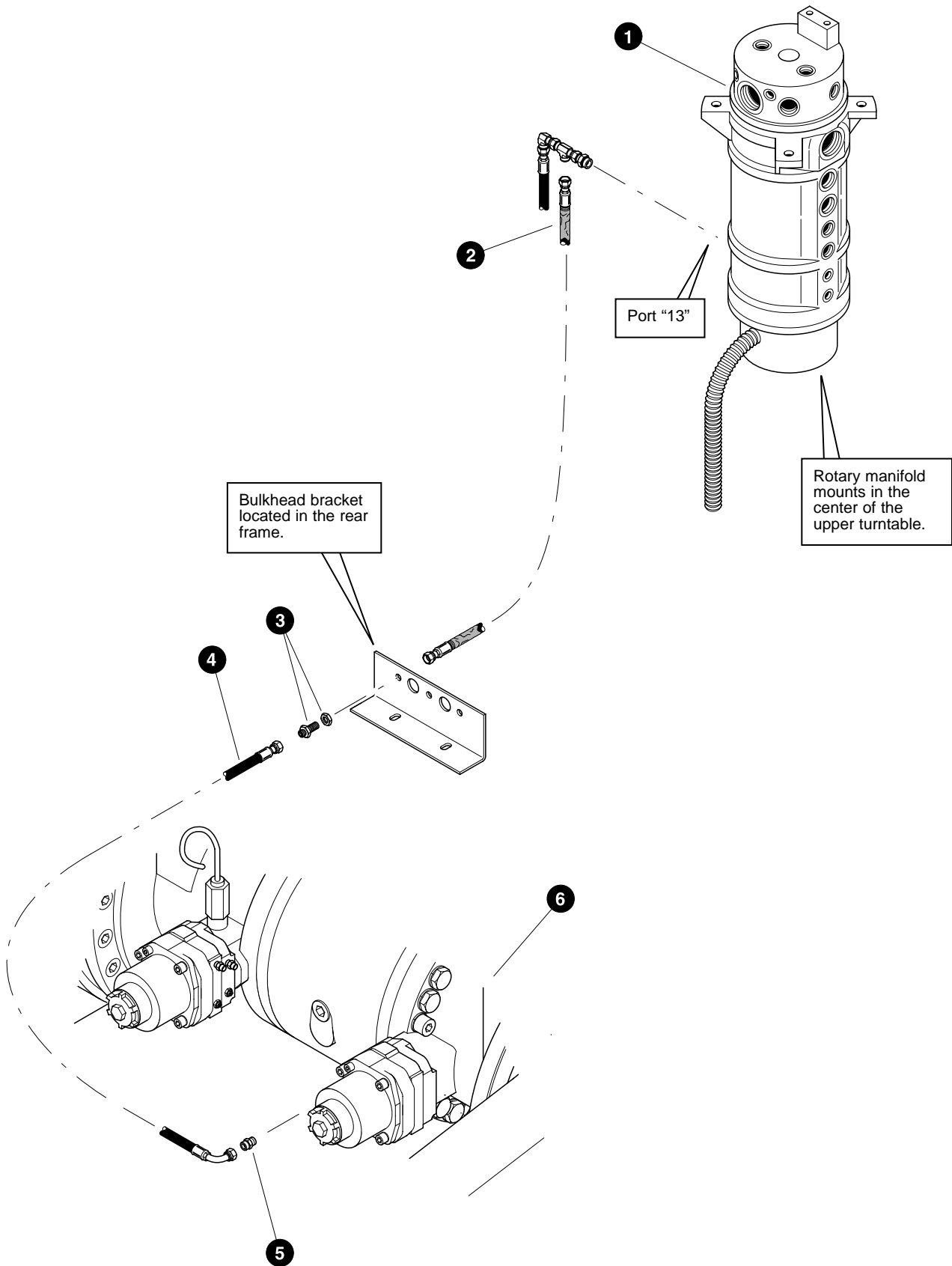


Parts 01943 12/18/2000
18.75

REAR AXLE TRAVEL BRAKE LINES (From Rotary Manifold)

REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1	✓	ROTARY MANIFOLD	UP-1-6
2	22980-FR	1		HOSE ASSEMBLY - 2109-04-040S-040S-W (<i>Rotary manifold lower port "10" tee to bulkhead bracket right</i>)	
3	18582-FR	1		CONNECTOR, straight bulkhead - FF1994T-0404S	
4	22422-FR	1		HOSE ASSEMBLY - 2134.5-04-040S-0404-W (<i>Bulkhead bracket right to rear axle travel brake tee</i>)	
5	19470-FR	2		CONNECTOR, straight - 4M14F8OMLO-S	
6	20167-FR	1		HOSE ASSEMBLY - 2009.5-04-040S-0409-W (<i>Rear axle travel brake tee to LH brake chamber</i>)	
7	15176-FR	1		TEE - FF2114T-0404S	
8	REF.	1	✓	REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.

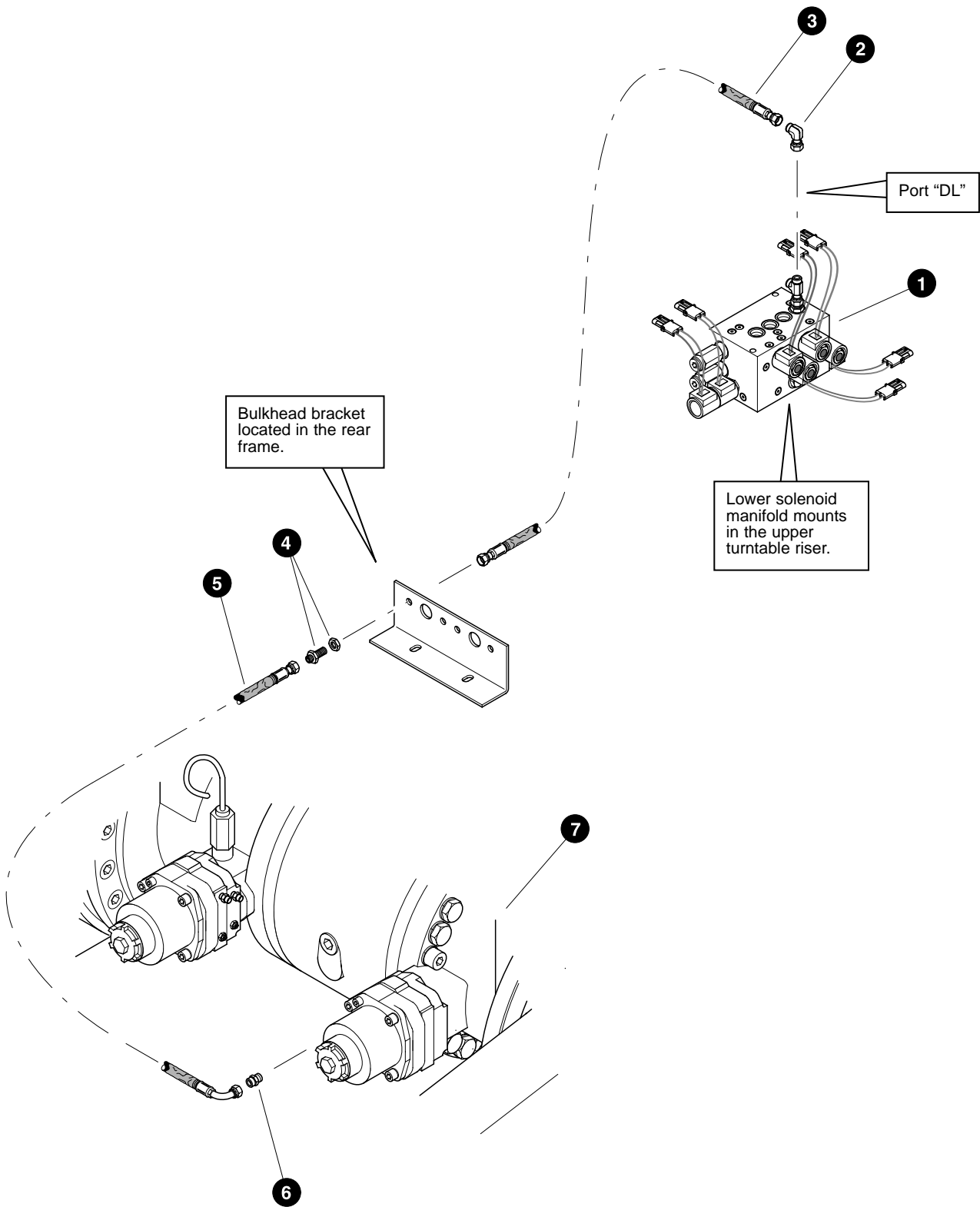


REAR AXLE DIFFERENTIAL LOCK LINES (From Rotary Manifold)

(Used on machines PDN# 134FWD and below)

REF	PART #	QTY	✓	DESCRIPTION	SEE PAGE
1	REF.	1	✓	ROTARY MANIFOLD	UP-1-6
2	22981-FR	1		HOSE ASSEMBLY - 2109-04-040S-040S-W <i>(Rotary manifold lower port "13" tee to bulkhead bracket left)</i>	
3	18582-FR	1		CONNECTOR, straight bulkhead - FF1994T-0404S	
4	22420-FR	1		HOSE ASSEMBLY - 2132.5-04-040S-0409 <i>(Bulkhead bracket left to rear axle differential lock port)</i>	
5	19470-FR	1		CONNECTOR, straight - 4M14F8OMLO-S	
6	REF.	1	✓	REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.

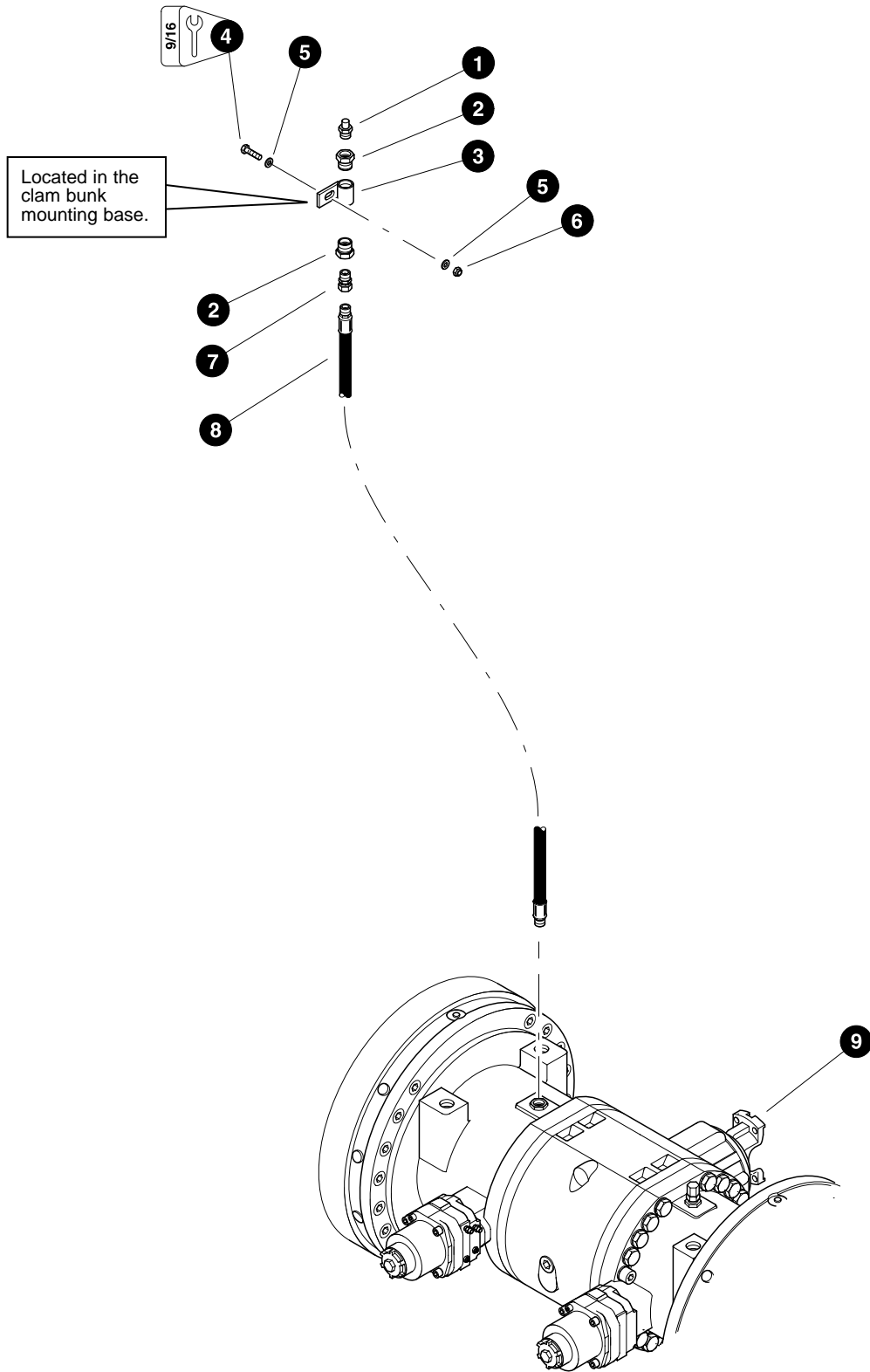


REAR AXLE DIFFERENTIAL LOCK LINES (From Lower Solenoid Manifold)

(Used on machines PDN# 135FWD and above)

REF	PART #	QTY	✓	DESCRIPTION	SEE PAGE
1	REF.	1	✓	LOWER SOLENOID MANIFOLD	FF-7-2
2	15145-FR	1		ELBOW, 90° swivel - FF2098T-0404S	
3	23507-FR	1		HOSE ASSEMBLY - 2113-04-040S-040S-W <i>(Lower solenoid manifold port "DL" tee to bulkhead bracket left)</i>	
4	18582-FR	1		CONNECTOR, straight bulkhead - FF1994T-0404S	
5	22420-FR	1		HOSE ASSEMBLY - 2132.5-04-040S-0409-W <i>(Bulkhead bracket left to rear axle differential lock port)</i>	
6	19470-FR	1		CONNECTOR, straight - 4M14F8OMLO-S	
7	REF.	1	✓	REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.

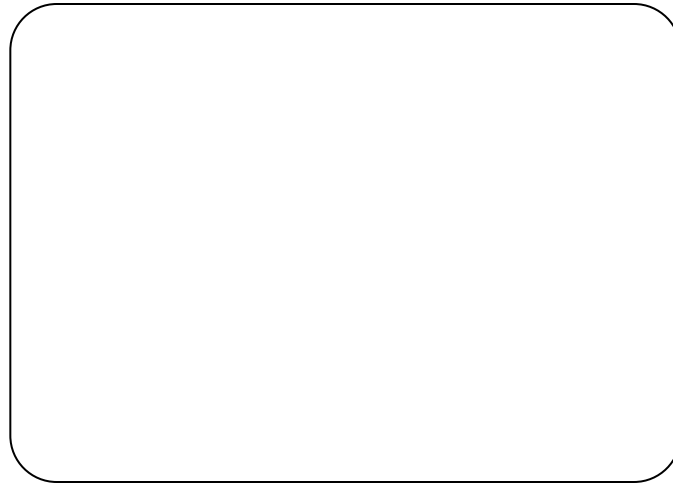
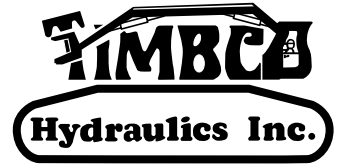


REAR AXLE VENT LINE
(Used Only When Clam Bunk Is Installed)

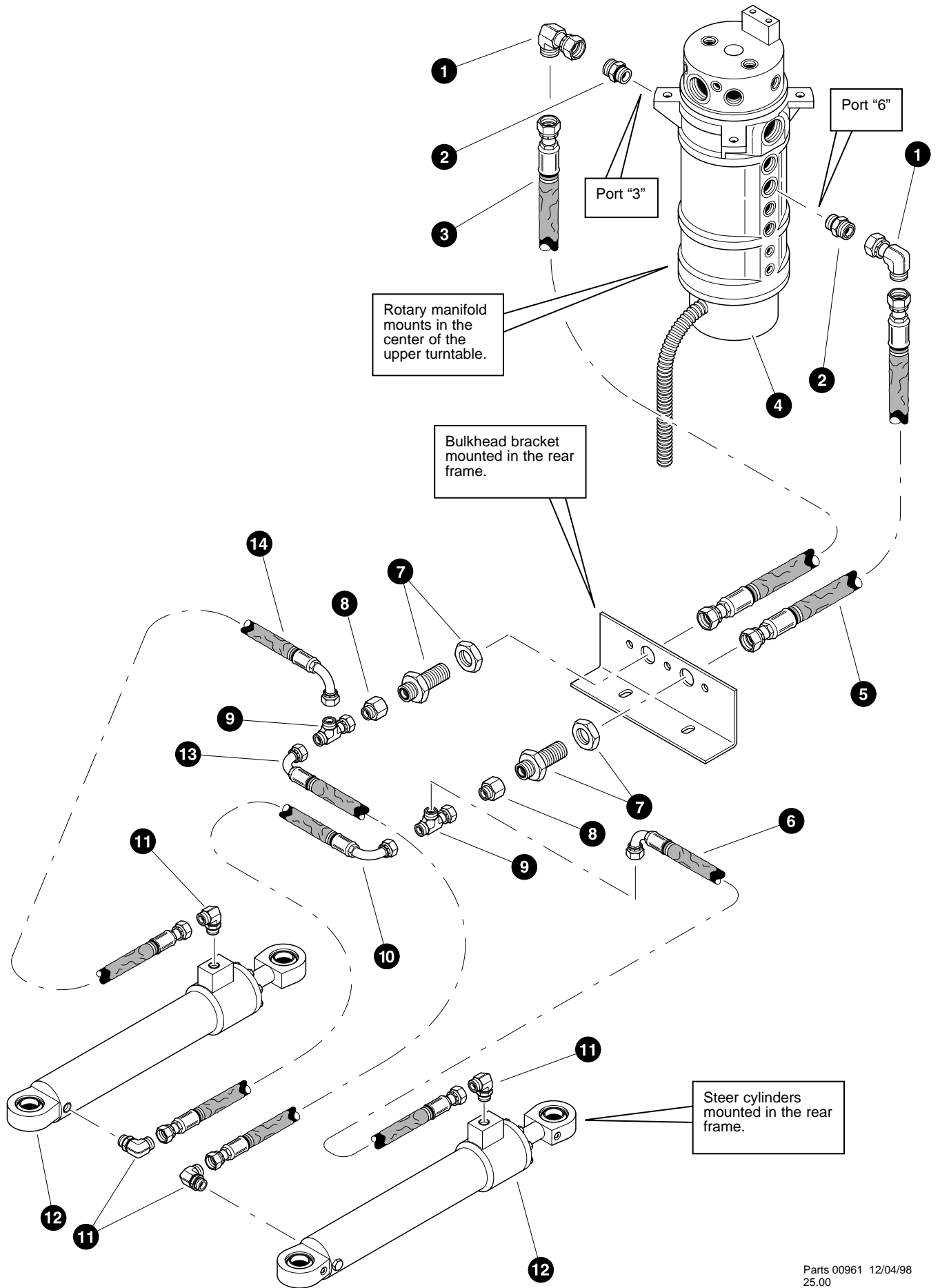
REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	22570-FR	1	BREATHER, axle differential	
2	15513-FR	2	BUSHING, reducer - 5406-12-8	
3	22202-FR	1	BRACKET, breather mount	
4	10731-FR	1	BOLT - 3/8" x 1-1/2"	
5	15528-FR	2	WASHER, SAE flat - 3/8"	
6	10813-FR	1	NUT, lock - 3/8"	
7	10322-FR	1	CONNECTOR, straight swivel - 1404-8-8	
8	22389-FR	1	HOSE ASSEMBLY - 2030-08-08PS-08PS (<i>Rear axle breather port to breather mounting bracket</i>)	
9	REF.	1	✓ REAR AXLE	AX-1-2

✓ See referenced page for component or assembly breakdown.

Section FR-3



Flattop Rear Frame - Steering Hydraulics

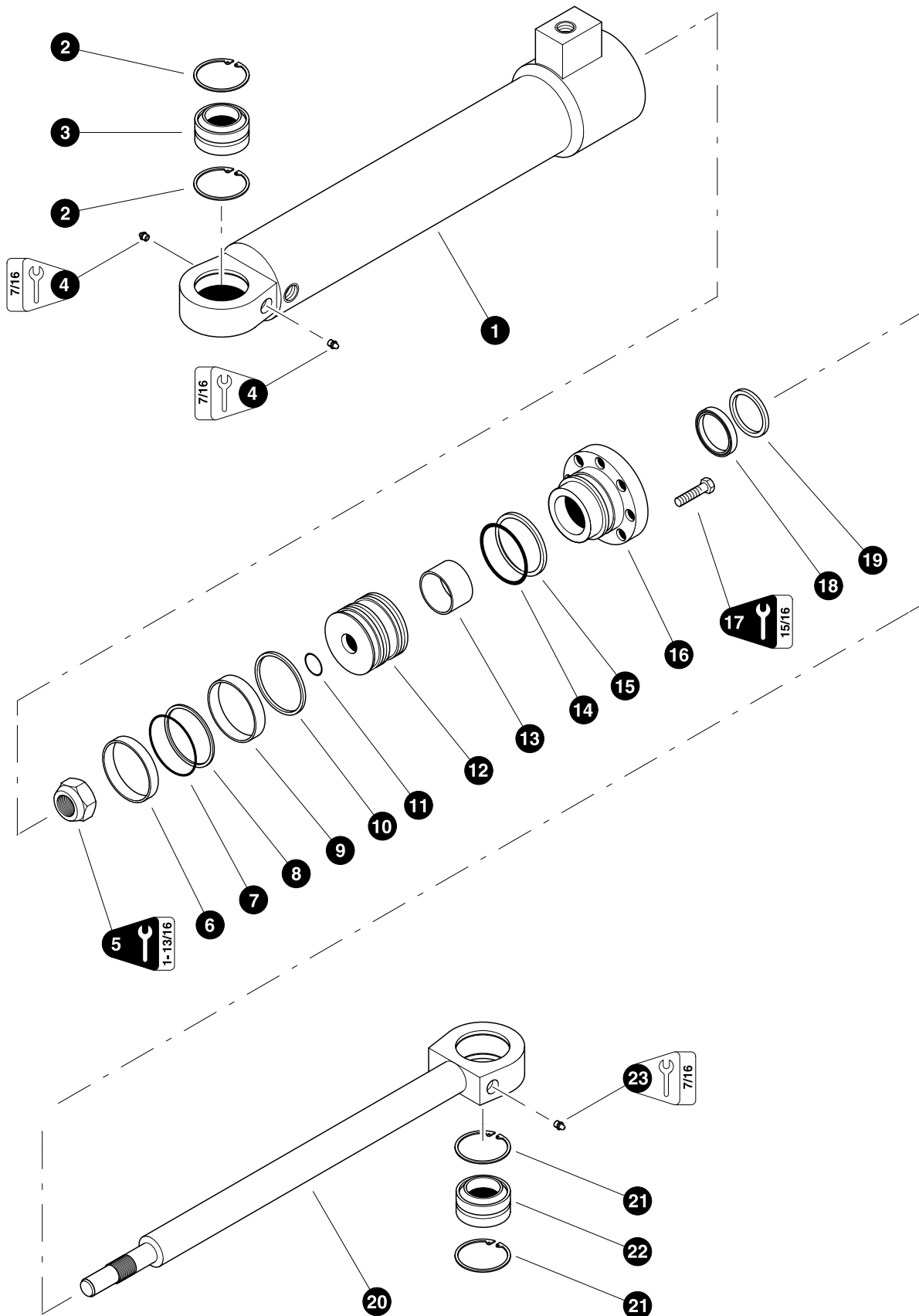


Parts 00961 12/04/98
25.00

STEER FUNCTION HYDRAULICS (Rotary Manifold Ports To Steer Cylinders)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	17670-FR	2	ELBOW, 90° - FF2098T-1212S	
2	15152-FR	2	CONNECTOR, straight - FF1852T-1212S	
3	20477-FR	1	HOSE ASSEMBLY - 4112-12-120S-120S-W (Lower rotary manifold port #3 to left bulkhead fitting)(Used on machines PDN# 062FWD and above)	
	20122-FR	1	HOSE ASSEMBLY - 4105-12-120S-120S (Lower rotary manifold port #3 to left bulkhead fitting)(Used on machines PDN# 061FWD and below)	
4	REF.	1	✓ ROTARY MANIFOLD	UP-1-6
5	22979-FR	1	HOSE ASSEMBLY - 4114-12-120S-120S-W (Lower rotary manifold port #6 to right bulkhead fitting)(Used on machines PDN# 062FWD and above)	
	20123-FR	1	HOSE ASSEMBLY - 4107-12-120S-120S (Lower rotary manifold port #6 to right bulkhead fitting)(Used on machines PDN# 061FWD and below)	
6	20124-FR	1	HOSE ASSEMBLY - 4028-08-080S-0809-W (Right bulkhead tee to right steer cylinder rod port)	
7	19754-FR	2	CONNECTOR, straight bulkhead - 12WL0-WLNL-S	
8	18581-FR	2	CONNECTOR, reducer - FF2281T-0812S	
9	15433-FR	2	TEE - FF2114T-0808S	
10	20125-FR	1	HOSE ASSEMBLY - 4043-08-080S-0809-W (Right bulkhead tee to left steer cylinder base port)	
11	16360-FR	4	ELBOW, 90° - FF1868T-0808S	
12	REF.	2	✓ STEER CYLINDER	FR-3-4
13	20125-FR	1	HOSE ASSEMBLY - 4043-08-080S-0809-W (Left bulkhead tee to right steer cylinder base port)	
14	20124-FR	1	HOSE ASSEMBLY - 4028-08-080S-0809-W (Left bulkhead tee to left steer cylinder rod port)	

✓ See referenced page for component or assembly breakdown.



00194 01/17/97
18.75

STEER CYLINDER

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	19746-FR	2	<input type="checkbox"/> STEER CYLINDER ASSEMBLY	
1	19238-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	19232-FR	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	19743-FR	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	19236-FR	1	BEARING, rod	
17	15681-FR	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	19235-FR	1	<input type="checkbox"/> ROD ASSEMBLY	
21	19916-FR	2	RING, snap	
22	19917-FR	1	BUSHING, spherical - 2"	
23	10704-FR	1	FITTING, straight grease - 1/8" pipe thread	
-	19750-FR	1	KIT, seal repair - steer cylinder	

- Kit or Assembly - includes all items indented underneath.
- ★ Included in seal repair kit Part # 19750-FR.