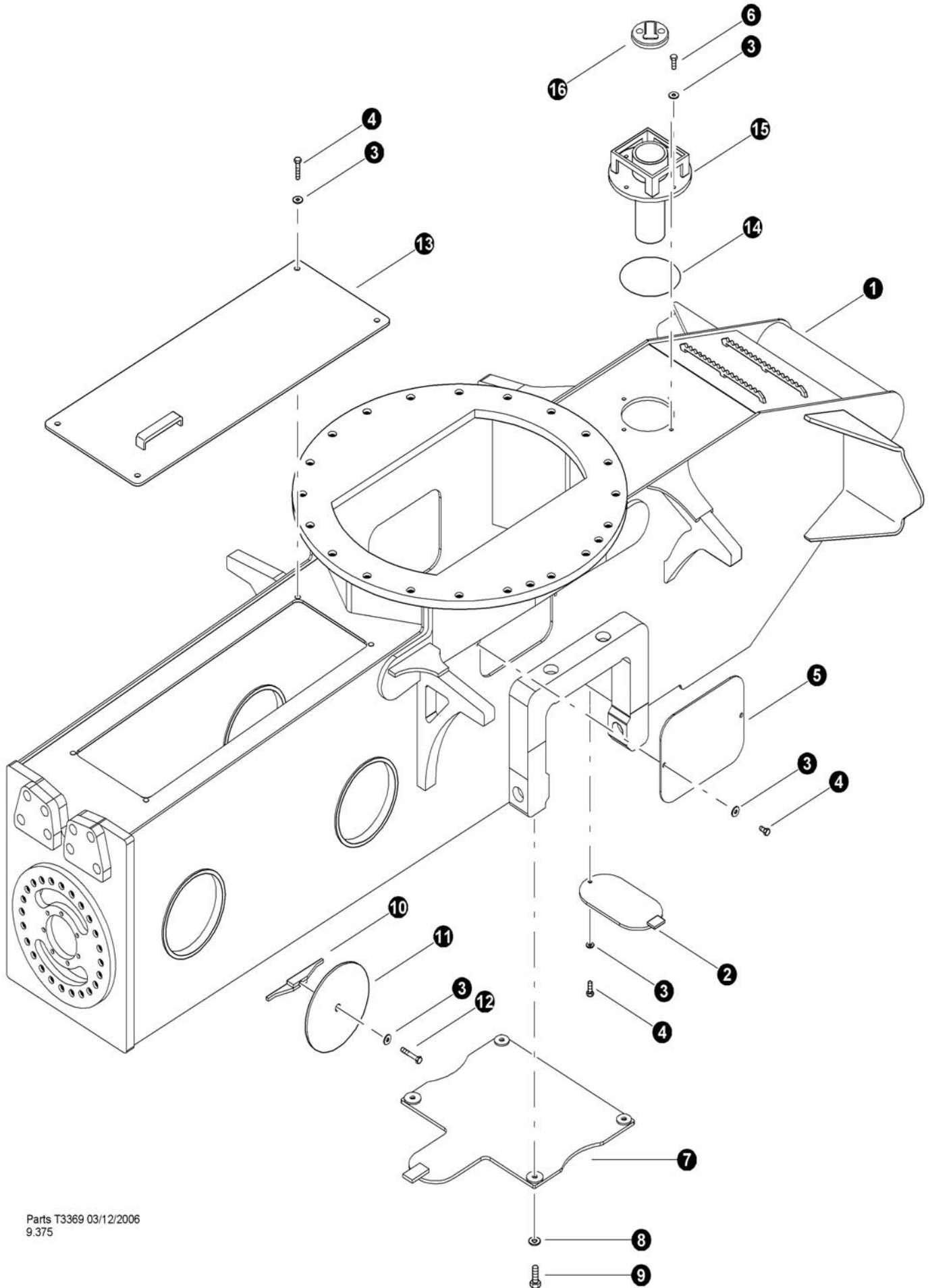



Section 810 FF-1


***TF 810 Front Frame -
Frame / Covers / Brackets / Steps***

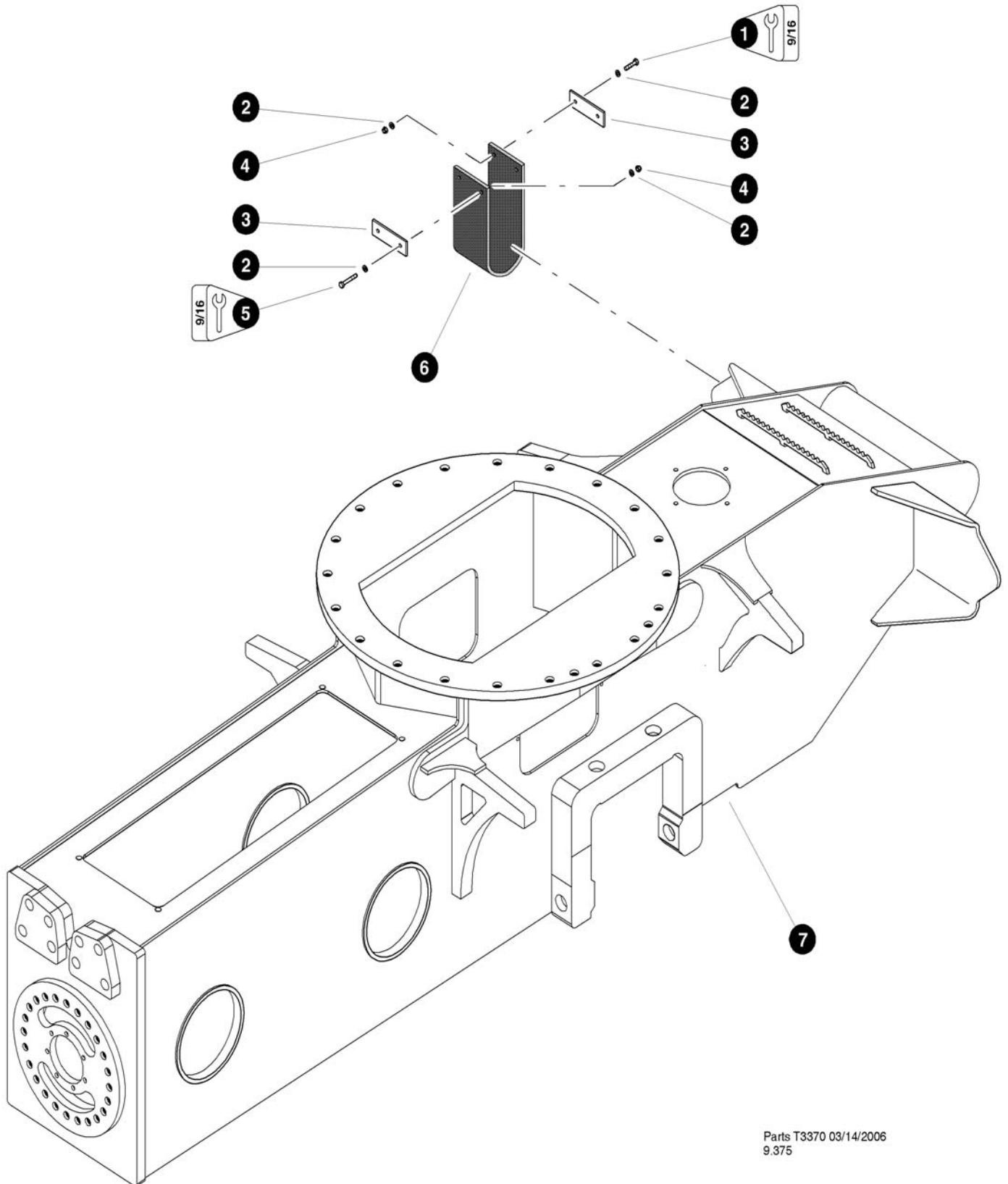


Parts T3369 03/12/2006
9.375

FRONT FRAME AND ACCESS COVERS
(Covers and Brackets)
Machine SN-0152-04/14/06 and After

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	52086-FF	1	FRAME, FRONT 810 NON-LEV	
2	52370-FF	1	COVER, AXLE BOX END (WITH FUEL SENSOR)	
3	15534-FF		WASHER, SAE flat - 1/2"	
4	15528-FF	4	BOLT - 1/2" x 1 1/2"	
5	40894-FF	2	COVER, RISER	
6	10783-FF	7	BOLT - 1/2" x 1"	
7	52120-FF	1	COVER, AXLE BOTTOM TIM-20 AXLE TF810	
8	15550-FF	4	WASHER, SAE flat - 3/4	
9	10839-FF	4	BOLT - 3/4" X 1.5"	
10	52358-FF	4	RETAINER, ROUND COVER	
11	52357-FF	4	COVER, ROUND - FRONT FRAME	
12	15565-FF	2	BOLT - 1/2" X 2.5"	
13	52371-FF	1	COVER, TOP REAR	
14	15600-FF	1	O-RING, fuel tank cover	
15	REF	1	 COVER, FUEL	FF-4
16	16585-FF	1	CAP, FUEL (locking)	


 See referenced page for component or assembly breakdown.




Parts T3370 03/14/2006
9.375

FRAME STEPS INSTALLATION

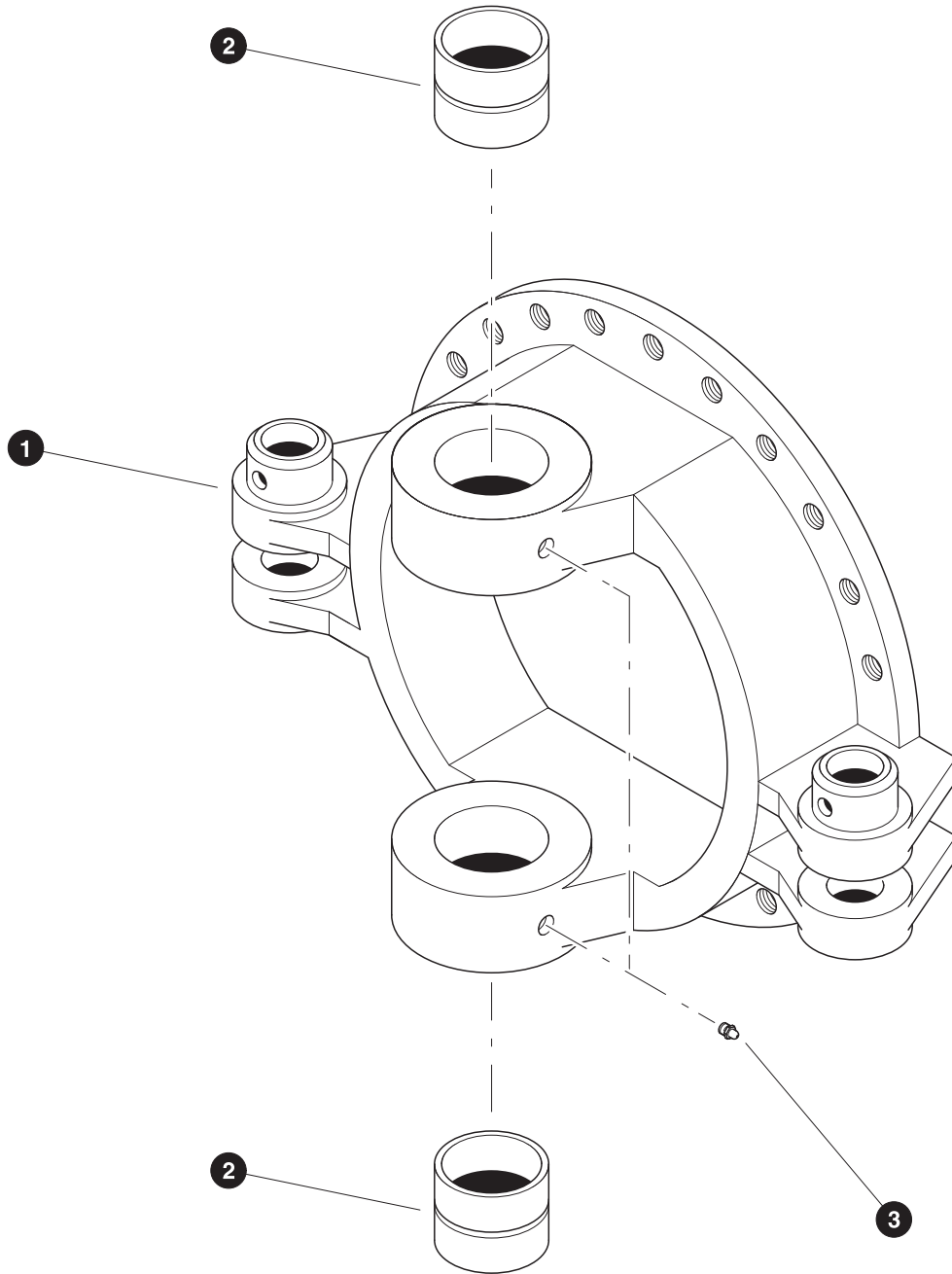
Machine SN-0152-04/14/06 and After

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	20084-FF	2	BOLT - 3/8" x 1-3/4"	
2	15528-FF	8	WASHER, SAE flat - 3/8"	
3	20209-FF	2	RETAINER, rubber step	
4	10813-FF	8	NUT, lock - 3/8"	
5	20084-FF	2	BOLT - 3/8" x 1-3/4"	
6	20210-FF	1	STEP, rubber	
7	REF.	1	 FRONT FRAME WELDMENT.....	FF-1

 See referenced page for component or assembly breakdown.

Section 810 FF-2

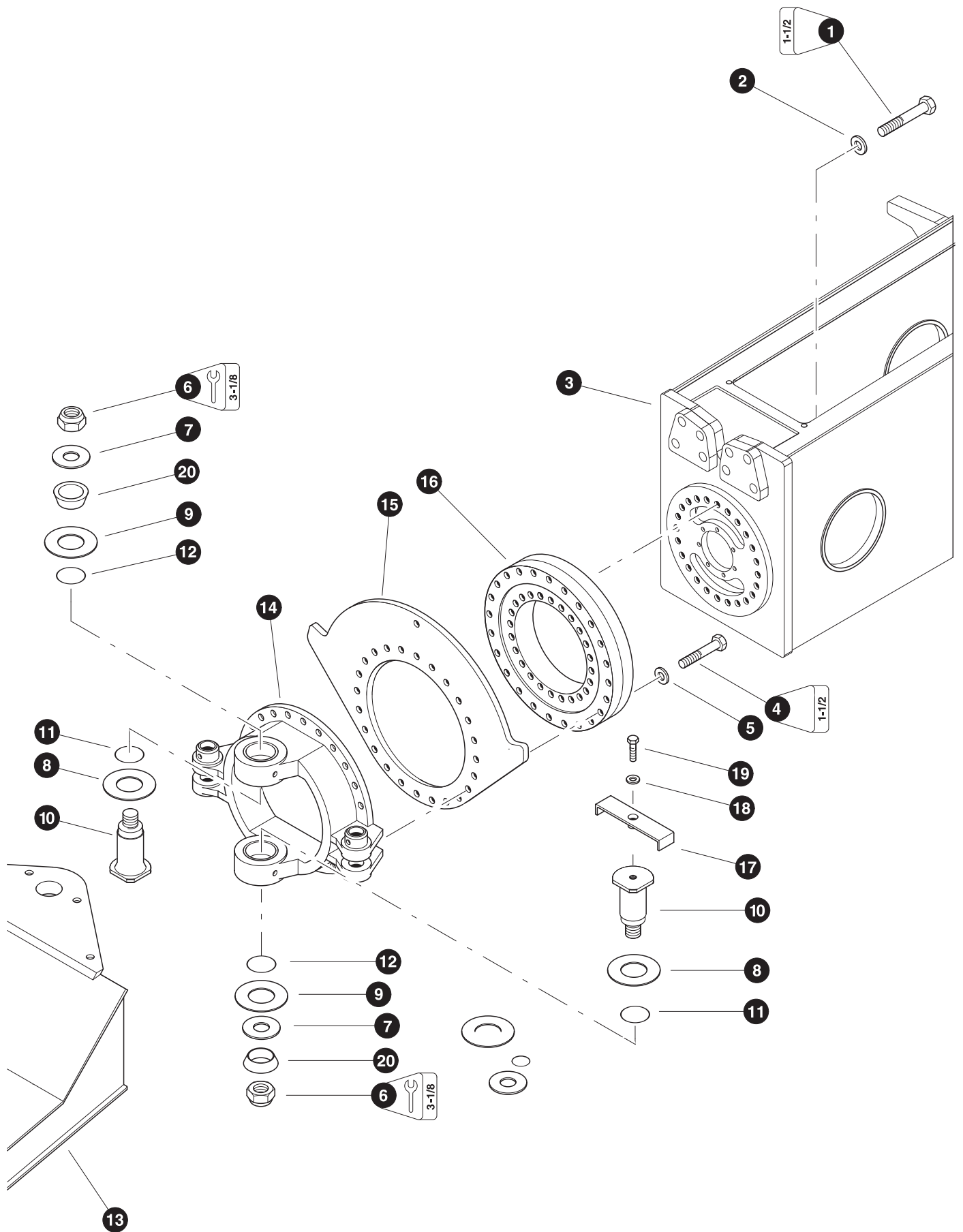
TF 810 Front Frame - Component Installation



FRAME ARTICULATION CASTING




REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	52038-FF	1	<input type="checkbox"/> CASTING, HINGE PLATE - 830 3.5 PIN	
2	52021-FF	2	BUSHING - 3.5" X 3.75"(STRAIGHT GROOVES)	
3	10704-FF	2	FITTING, grease - 1/8" pipe thread	

- Kit or Assembly - includes all items indented underneath.

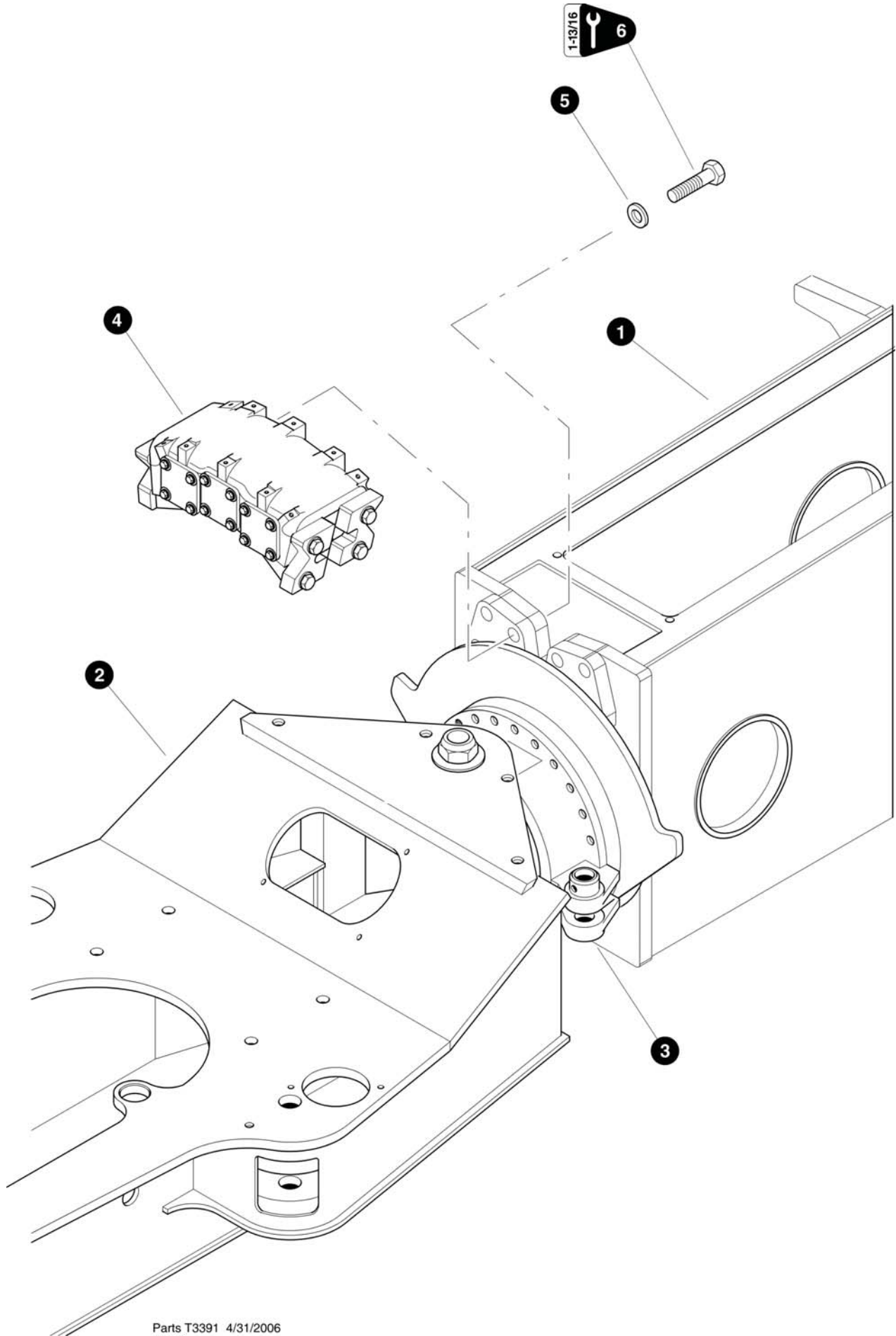


Parts T3642 08/08
9.375

FRAME ARTICULATION INSTALLATION





REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	23387-FF	24	BOLT - 1" x 6-1/2" (Torque to 1000 ft.lbs (1330 Nm) 1.5" Bearing Plate - machine 0273-081508 and before	
1	18672-FF	24	BOLT - 1" X 7-1/2" (Torque to 1000 ft.lbs (1330 Nm) 2" Bearing Plate - machine 0275-082708 and after	
2	18532-FF	24	WASHER, SAE FLAT - 1" (EXTRA THICK)	
3	REF.	1	 FRONT FRAME WELDMENT.	FF-1
4	18672-FF	24	BOLT - 1" x 7-1/2" (Torque to 1000 ft.lbs (1330 Nm))	
5	15579-FF	24	WASHER, SAE flat - 1"	
6	10728-FF	2	NUT, nylock - 2"	
7	51499-FF	2	WASHER, articulation pin (3/8" thick)	
8	23106-FF	2	WASHER, thrust - thin (Brass)	
9	23105-FF	2	WASHER, thrust - thick (Brass)	
10	52023-FF	2	PIN - 3.5 X 10.75" TAPERED	
11	21577-FF	2	O-RING - thin	
12	24546-FF	2	O-RING - thick	
13	REF.	1	 REAR FRAME WELDMENT.	FR-1
14	REF.	1	 FRAME ARTICULATION CASTING	FF-2
15	80830-FF	1	PLATE, braking	
16	24999-FF	1	BEARING, articulation	
17	52490-FF	2	BRACKET, HOSE HOLD DOWN 830W/FRT TRANS	
18	15550-FF	1	WASHER, SAE flat - 3/4"	
19	10839-FF	1	BOLT - .75" X 1.5"-FF	
20	52040-FF	2	HUB, TAPERED 3.5"	


 See referenced page for component or assembly breakdown.

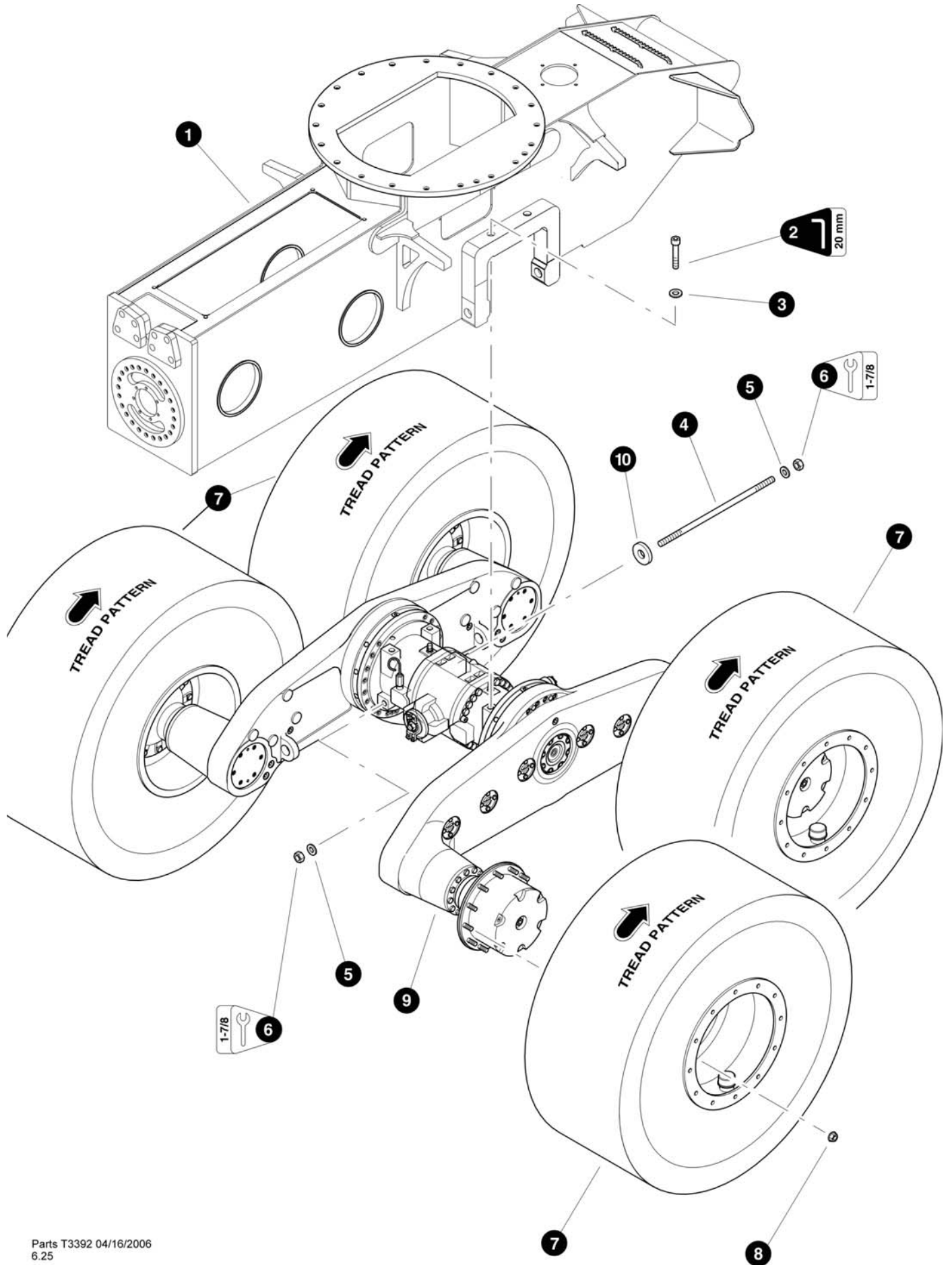


Parts T3391 4/31/2006
12.50

FRAME LOCK BRAKE INSTALLATION




REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 FRONT FRAME WELDMENT	FF-1
2	REF.	1	 REAR FRAME WELDMENT.....	FR-1
3	REF.	1	 FRAME ARTICULATION CASTING	FF-2
4	REF.	1	 FRAME LOCK BRAKE	FF-5
5	22531-FF	8	WASHER - 1-1/4"	
6	23351-FF	8	BOLT - 1-1/4" x 4-1/2" NF	


 See referenced page for component or assembly breakdown.

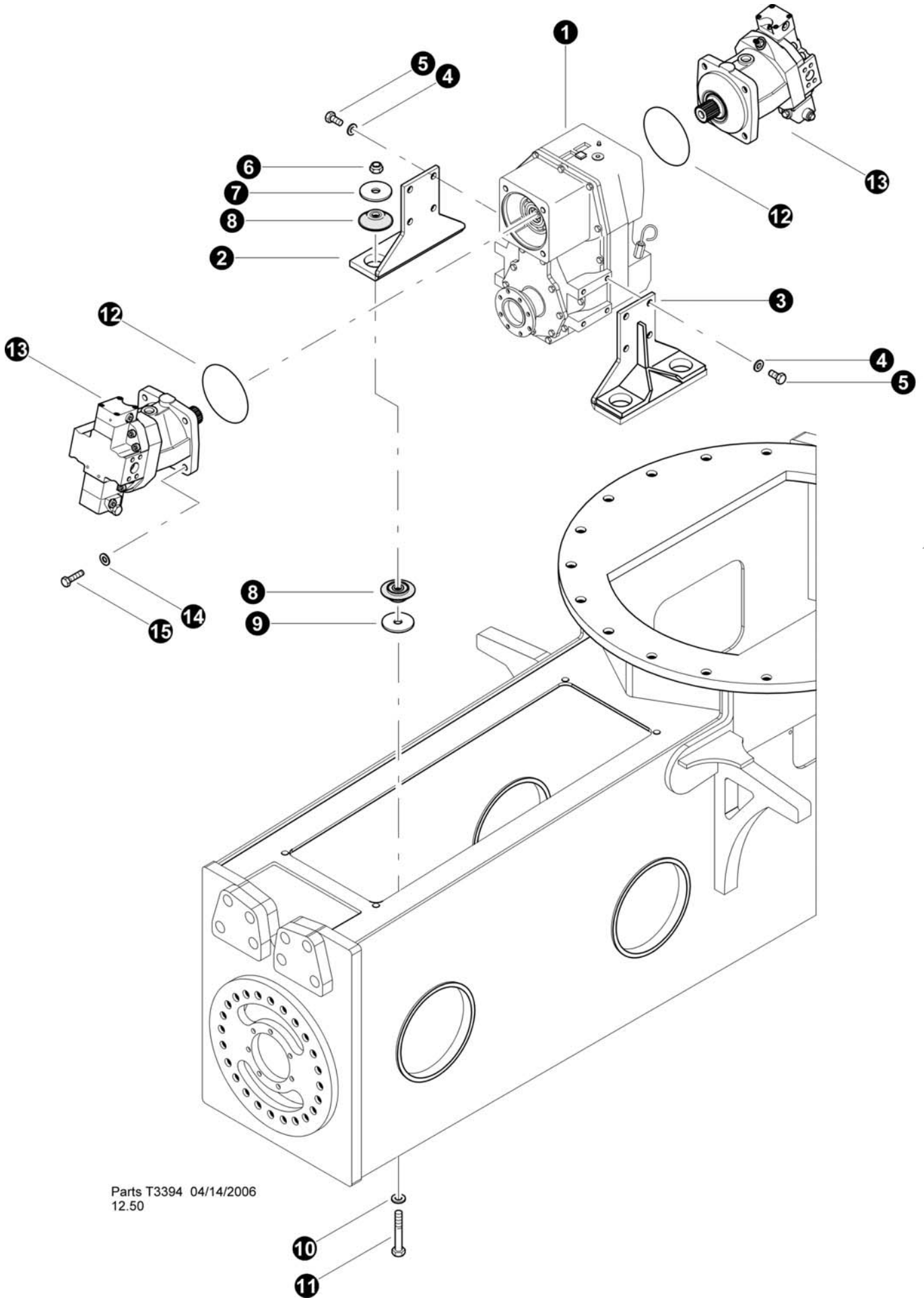


Parts T3392 04/16/2006
6.25

FRONT AXLE INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 810 FRONT FRAME WELDMENT	FF-1
2	52376-FF	4	BOLT, ALLEN HEAD - 24MM X 200 MM (Torque to 721 ft.lbs. (978 Nm))	
3	50226-FF	4	WASHER, SAE FLAT - .875" (EXTRA THICK)	
4	52403-FF	2	STUD - 1.25 - 7 X 26 LONG	
5	22531-FF	4	WASHER, SAE flat - 1-1/4"	
6	23989-FF	4	NUT, lock - 1-1/4" (Torque to 1200 ft.lbs. (1600 Nm))	
7	REF.	4	 WHEEL ASSEMBLY	AX-3
8	19361-FF	48	NUT, lug (Torque to 600 ft.lbs. (800 Nm))	
9	REF.	1	 FRONT AXLE	AX-1
10	24003-FF	2	SPACER, axle spreader stud	


 See referenced page for component or assembly breakdown.



Parts T3394 04/14/2006
12.50

TRANSFER CASE / GEARBOX AND MOTOR INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF	1	Transfer Case NAF	AX-4
2	52119-FF	1	MOUNT, TRANSMISSION TIM-15 TF810-840	
3	52119-FF	1	MOUNT, TRANSMISSION TIM-15 TF810-840	
4	50447-FR	8	WASHER, FLAT - 16MM	
5	50382-FR	8	BOLT - 16mm 2.00 X 40mm (Torque to 180 ft-lbs) (See Note #1 Below)	
6	10817-FR	4	NUT, lock 3/4"	
7	17918-FR	8	WASHER, isolator mount .875"	
8	17904-FR	8	ISOLATOR	
9	17918-FR	8	WASHER, isolator mount .875"	
10	15550-FR	8	WASHER, SAE flat - 3/4"	
11	10844-FR	4	BOLT - 3/4" x 5"	
12	20967-FR	2	O-RING, WHEEL DRIVE MOTOR PILOT (FWD)	
13	REF	1	WHEEL DRIVE MOTOR.	FF-4
14	42110-FR	8	WASHER, FLAT - 20MM	
15	18525-FR	8	BOLT, - 20mm X 50 mm (See Note #1 Below) (Torque to 180 ft-lbs)	

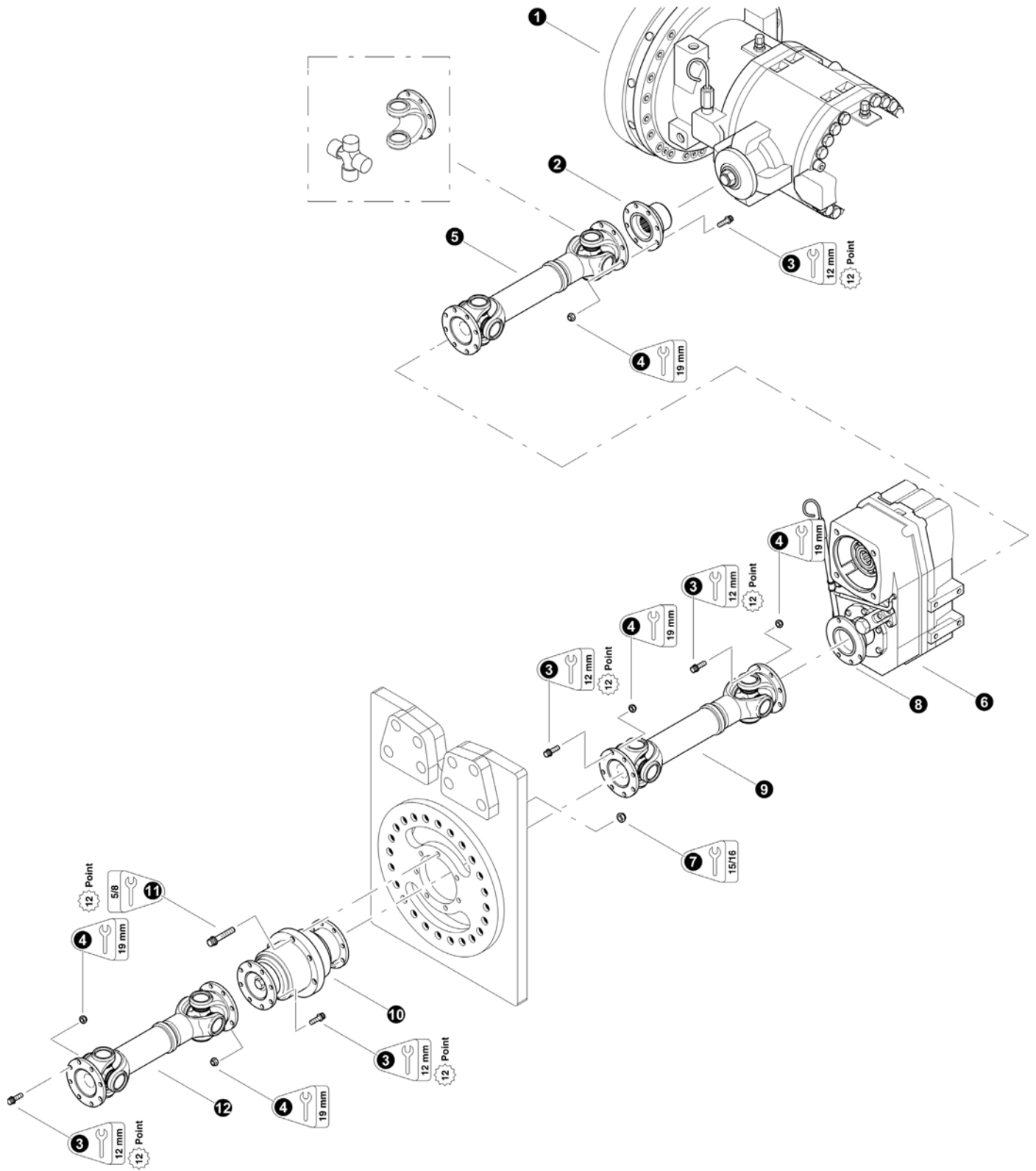
-  See referenced page for component or assembly breakdown.
- Kit or Assembly - includes all items indented underneath.

Note #1:

Use Loctite 243 (blue) on threads during installation.





Note #2:



Use Loctite 271 (red) on threads during installation.



Parts T3394 04/14/2006
12.50

FRONT DRIVE-SHAFT INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 FRONT AXLE	AX-1
2	-FF	1	YOKE, TIM 20 companion flange - axle (Torque nut to 590 ft lbs.(800 Nm) (see note #2))	
3	50261-FF	48	BOLT, 12 point - 12mm-1.75P x 35mm (See Note #1 Below)	
4	50262-FF	48	NUT, lock - 12mm	
5	50283-FF	1	 DRIVE SHAFT, (Transfer Case to front axle)(464295-61)	
	-----	2	FITTING, 90° grease - 10mm	
	50466-FF	2	KIT, CROSS & BEARING	
	50467-FF	2	YOKE, FLANGE (90mm)	
6	REF	1	Transfer Case NAF	AX-4
7	10816-FF	6	NUT, lock - 5/8"	
8	-FF	2	YOKE, HD flange - NAF Transercase (7521.238)	
9	23996-FF	1	 DRIVE SHAFT (Transfer Case to Carrier Bearing) (445731-61)	
	-----	2	FITTING, 90° grease - 10mm	
	50466-FF	2	KIT, CROSS & BEARING	
	50467-FF	2	YOKE, FLANGE (90mm)	
10	25218-FF	1	IDLER, driveshaft (HD)	
11	50050	6	BOLT, 12 point - 5/8" x 3" (See Note #1 Below) (Torque to 130 ft.lbs. (175 Nm))	
12	25968-FF	1	 DRIVE SHAFT (Center joint) (20" (503mm) C/L-C/L) (fits all TF front frames with HD driveshafts) (457176-61)	
	-----	2	FITTING, 90° grease - 10mm	
	50466-FF	2	KIT, CROSS & BEARING	
	50467-FF	2	YOKE, FLANGE (90mm)	

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

Note #1:

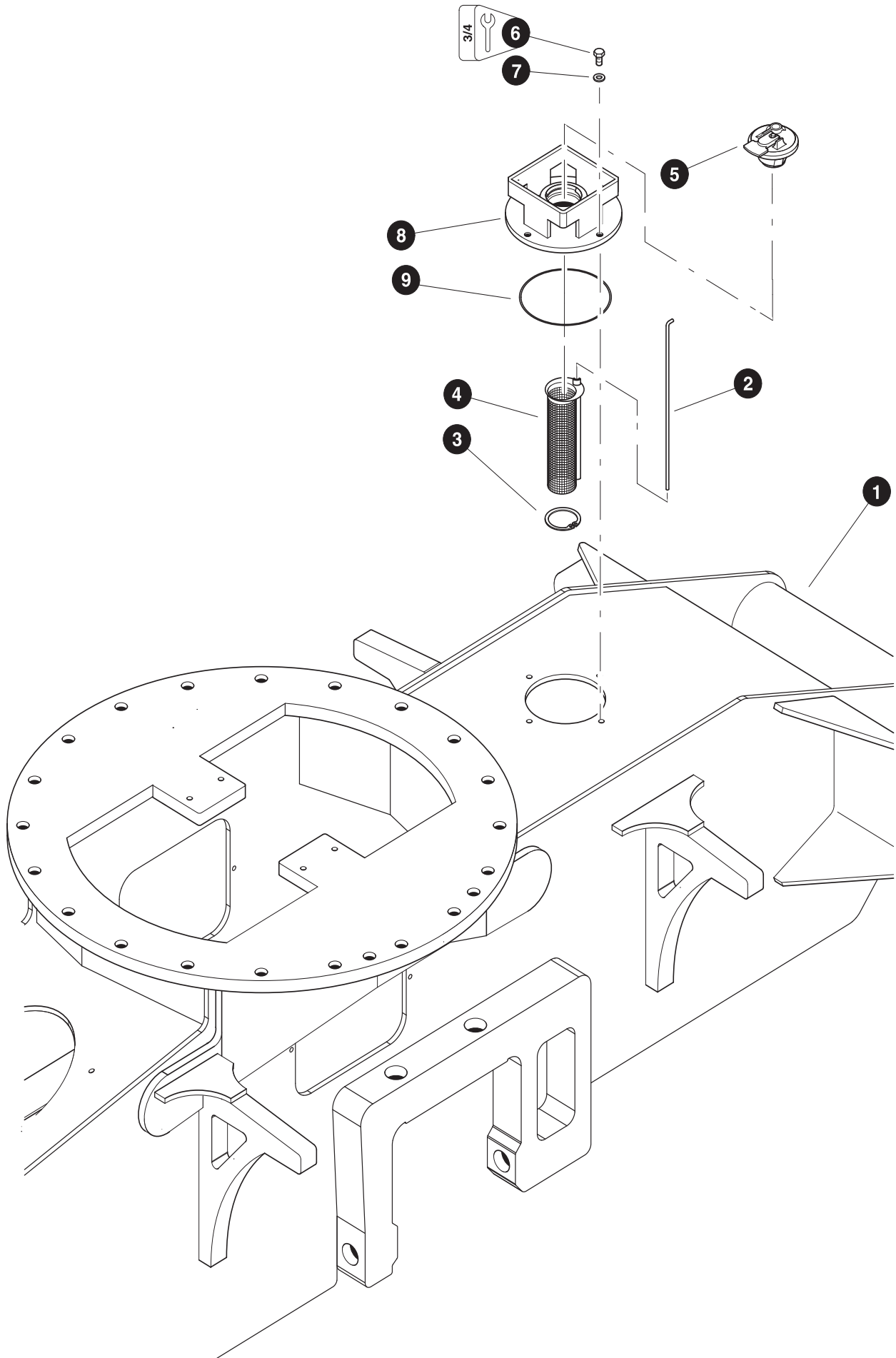
Use Loctite 243 (blue) on threads during installation.

Note #2:


Use Loctite 271 (red) on threads during installation.

Section FF810-3

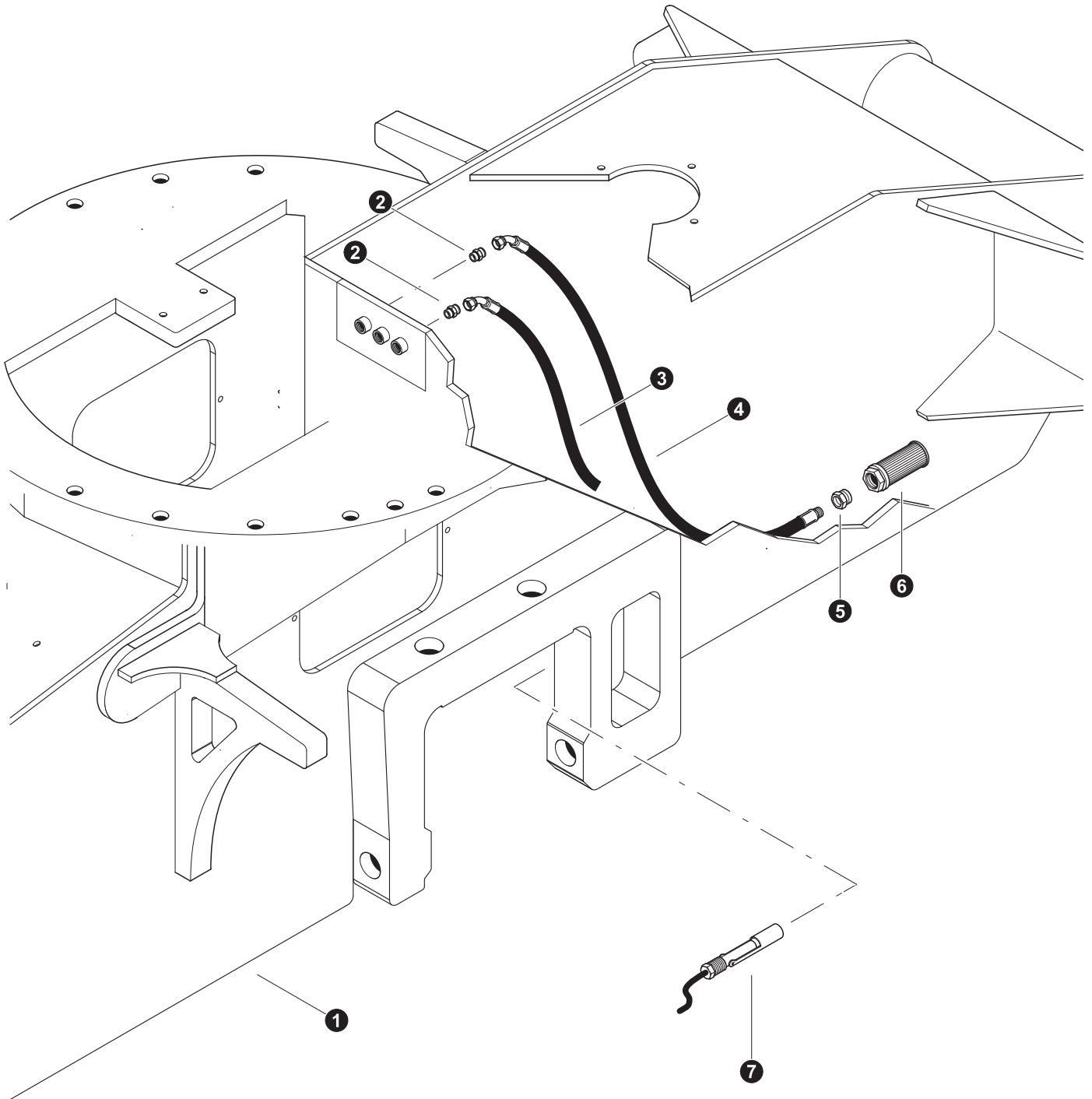
810 Front Frame - Fuel Tank Components



FUEL FILL STRAINER INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT FRAME WELDMENT.	FF-1
2	17492-FF	1	DIPSTICK, fuel level	
3	17115-FF	1	RING, snap - fuel strainer retainer	
4	17114-FF	1	STRAINER, fuel	
5	16585-FF	1	CAP, fuel	
6	10783-FF	4	BOLT - 1/2" x 1"	
7	15534-FF	4	WASHER, SAE flat - 1/2"	
8	16516-FF	1	COVER, fuel tank	
9	15600-FF	1	O-RING - 8"	


 See referenced page for component or assembly breakdown.




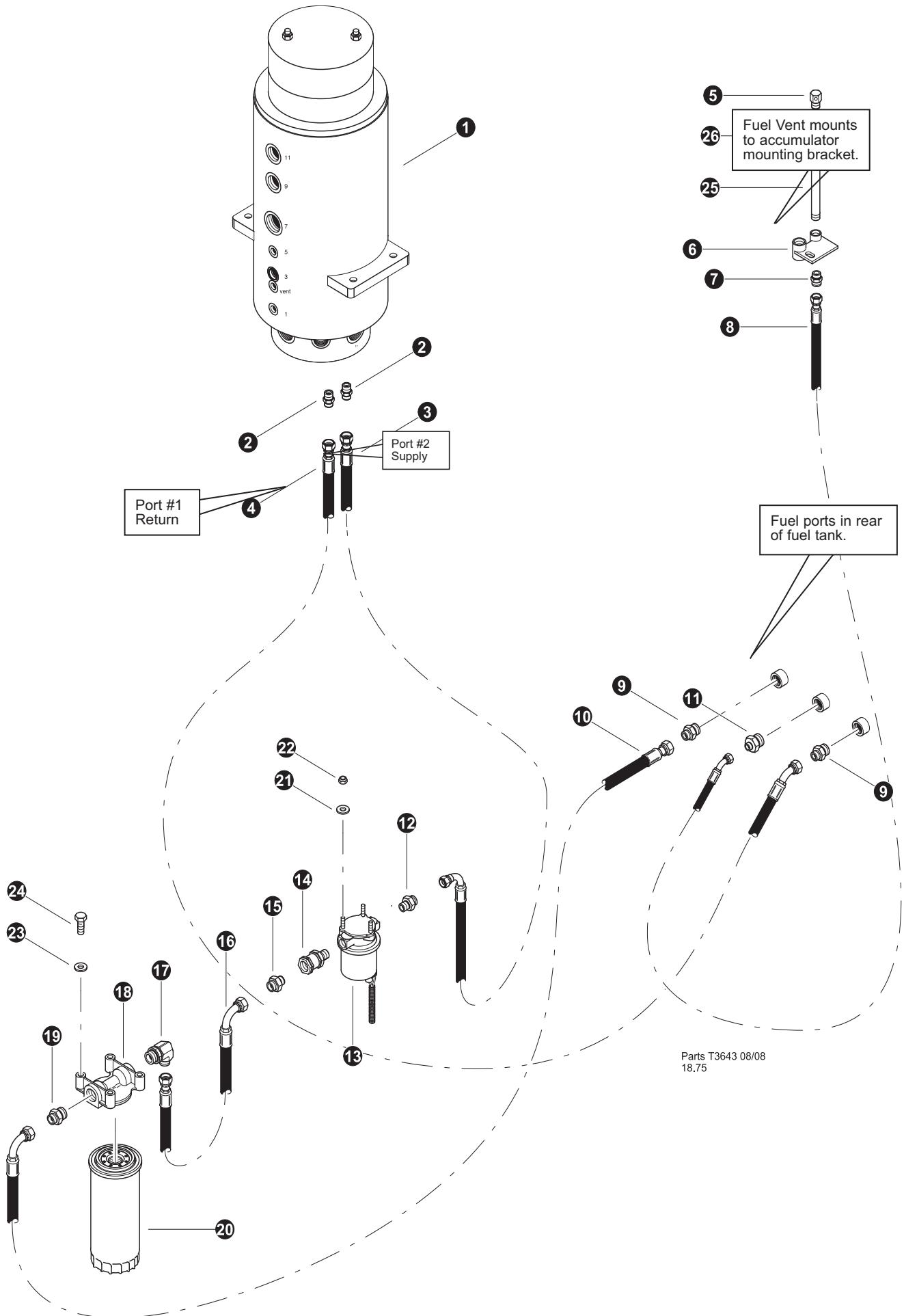
Parts T3059 04/19/2005
12.50

FUEL LINES

(Supply & Return Lines Inside Fuel Tank)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT FRAME WELDMNT.	FF-1
2	15117-FF	2	CONNECTOR, straight - FF1852T-0808S	
3	50576-FF	1	HOSE ASSEMBLY - 2018-08-0809-open (Fuel return)	
4	50577-FF	1	HOSE ASSEMBLY - 2067-08-0809-08MPS (Fuel supply)	
5	15513-FF	1	BUSHING, REDUCER - 5406-12-8	
6	17271-FF	1	FILTER, screen	
7	51379-FF		SWITCH, HYD.or Fuel OIL LEVEL .50 NPT GEMS	


 See referenced page for component or assembly breakdown.




Parts T3643 08/08
18.75

FUEL LINES

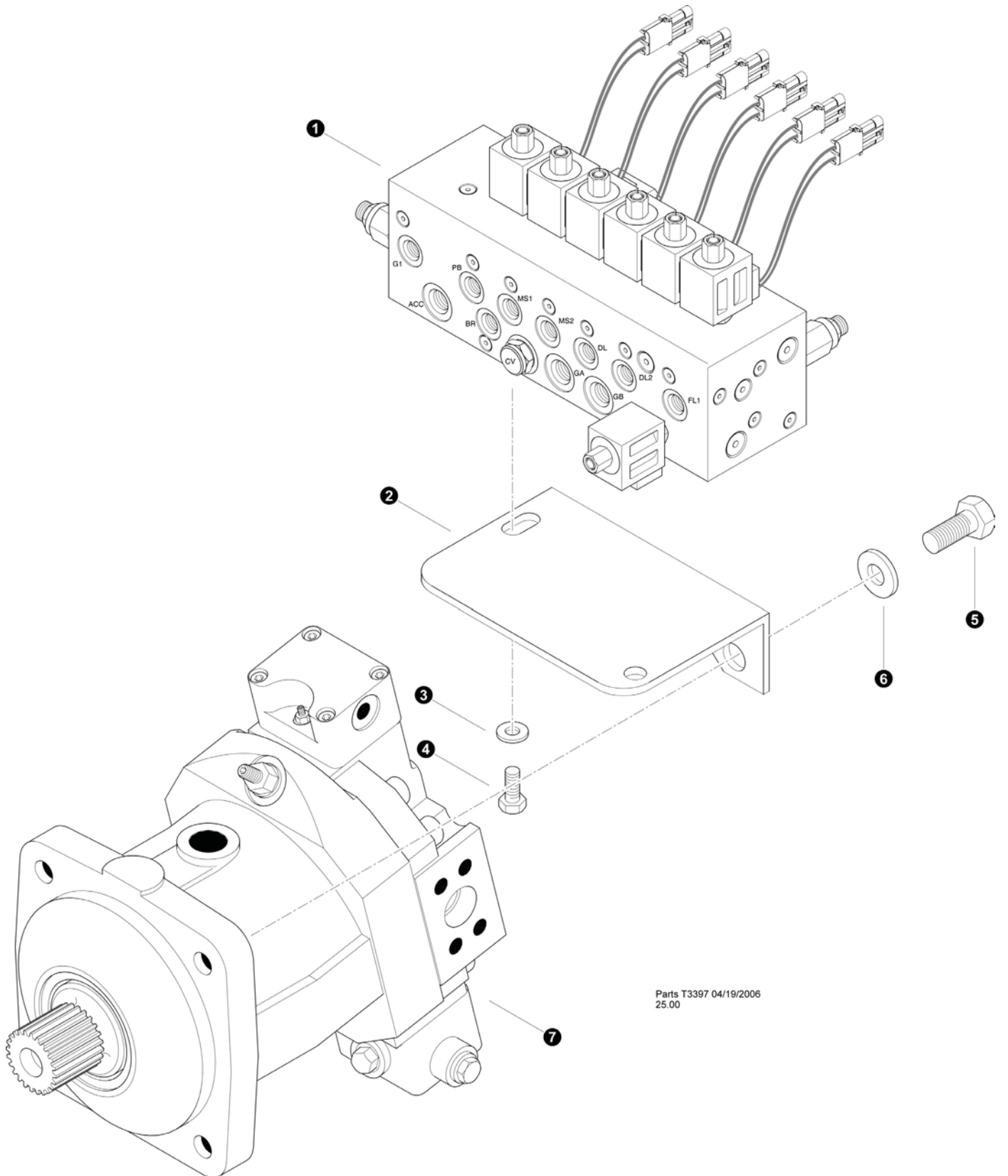
(Supply & Return Lines From Fuel Tank To Rotary Manifold)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
3	-FF	1	HOSE ASSEMBLY - 2041-06-060S-0609 (Fuel supply from rotary manifold port #2 to fuel tank)	
4	-FF	1	HOSE ASSEMBLY - 2031-06-060S-0604 (Fuel return from rotary manifold port #1 to fuel lift pump)	
5	22906-FF	1	BREATHER, fuel vent	
6	52218-FF	1	BRACKET, VENT MOUNT (.50&.25NPT)VERT.	
7	15131-FF	1	CONNECTOR, straight - FF2031T-0404S	
8	-FF	1	HOSE ASSEMBLY - 2022.5-04-040S-0404 (Fuel tank vent port to fuel vent breather)	
9	22902-FF	1	CONNECTOR, STR - 848-TT-08x06	
10	-FF	1	HOSE ASSEMBLY - 2070-06-060S-0609 (Fuel tank supply to lower filter inlet)	
11	15504-FF	1	CONNECTOR, straight - FF2031T-0408S	
12	51878-FF	1	CONNECTOR, STR - MALE PIPE (6-6 FL0-S)	
13	21966-FF	1	PUMP, fuel - 12 volt	
14	15652-FF	1	VALVE, check	
15	51878-FF	1	CONNECTOR, STR - MALE PIPE (6-6 FL0-S)	
16	-FF	1	HOSE ASSEMBLY - 2070-06-060S-0609 (Fuel filter outlet to fuel pump inlet)	
17	23084-FF	1	ELBOW, 90 - 6-10 C5OLO-S	
18	16574-FF	1	MOUNT, filter head	
19	51885-FF	1	CONNECTOR, STR - (6-10 F50L0-S)	
20	16575-FF	1	FILTER, spin-on fuel	
21	10757-FF	3	WASHER, SAE flat - 1/4"	
22	10755-FF	3	NUT, hex - 1/4"	
23	15559-FF	2	WASHER, SAE FLAT - .3125"	
24	15605-FF	2	BOLT - .3125" X .75"	
25	54006-FF	1	NIPPLE, FUEL VENT - 1/4" X 8"	
26	16885-FF	1	COUPLING, PIPE - .25"	


 See referenced page for component or assembly breakdown.


Section FF-4

810 Front Frame - Lower Solenoid Manifold Circuits and Components Breakdown



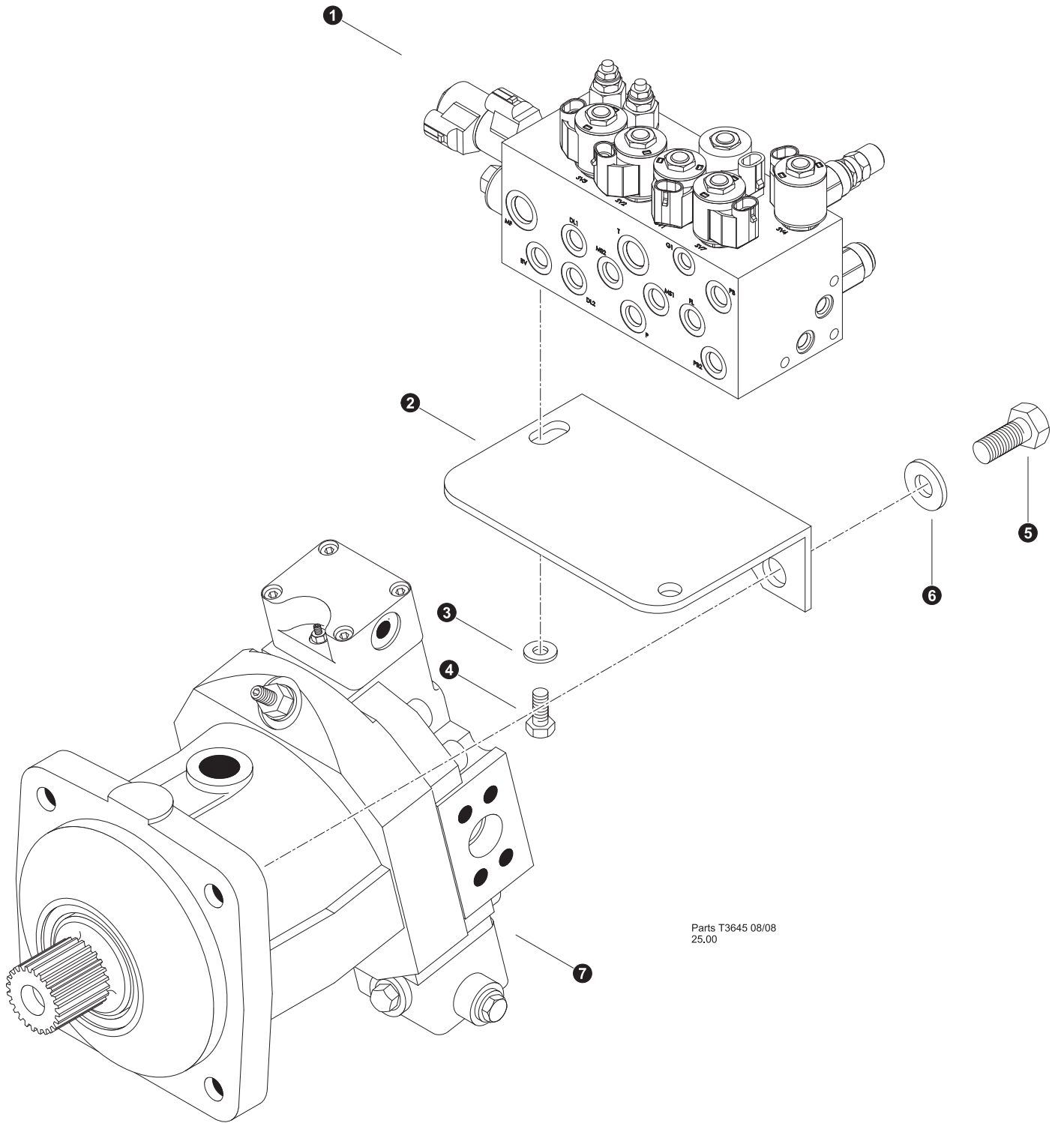
Lower Solenoid Manifold Circuits and Components Breakdown (Lower Solenoid Manifold Mounting) SN - 0251 and before

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	52380-FF	1	BRACKET, MANIFOLD MOUNT FRT FRAME	
3	10802-FF	2	WASHER, flat - 3/8"	
4	15542-FF	2	BOLT - .375" X .75"	
5	18525-FR	8	BOLT, - 20mm X 50 mm (See Note #1 Below) (Torque to 180 ft-lbs)	
6	42110-FR	8	WASHER, FLAT - 20MM	


 See referenced page for component or assembly breakdown.

Note #1:

Use Loctite 242 (*BLUE*) during install.



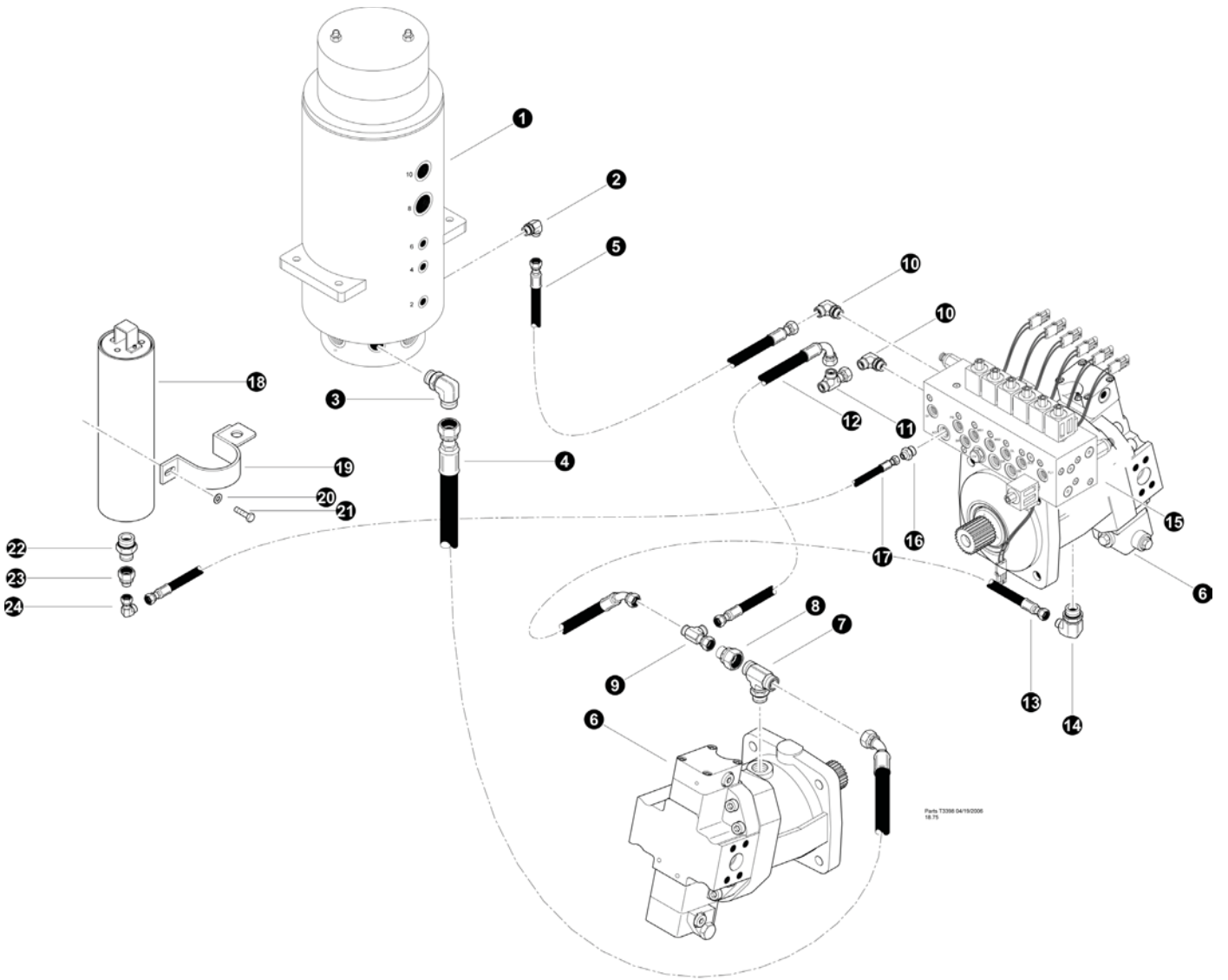
**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Solenoid Manifold Mounting)
SN - 0252 and After**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	52380-FF	1	BRACKET, MANIFOLD MOUNT FRT FRAME	
3	10802-FF	2	WASHER, flat - 3/8"	
4	15542-FF	2	BOLT - .375" X .75"	
5	18525-FR	8	BOLT, - 20mm X 50 mm (See Note #1 Below) (Torque to 180 ft-lbs)	
6	42110-FR	8	WASHER, FLAT - 20MM	





 See referenced page for component or assembly breakdown.


Note #1:

Use Loctite 242 (*BLUE*) during install.

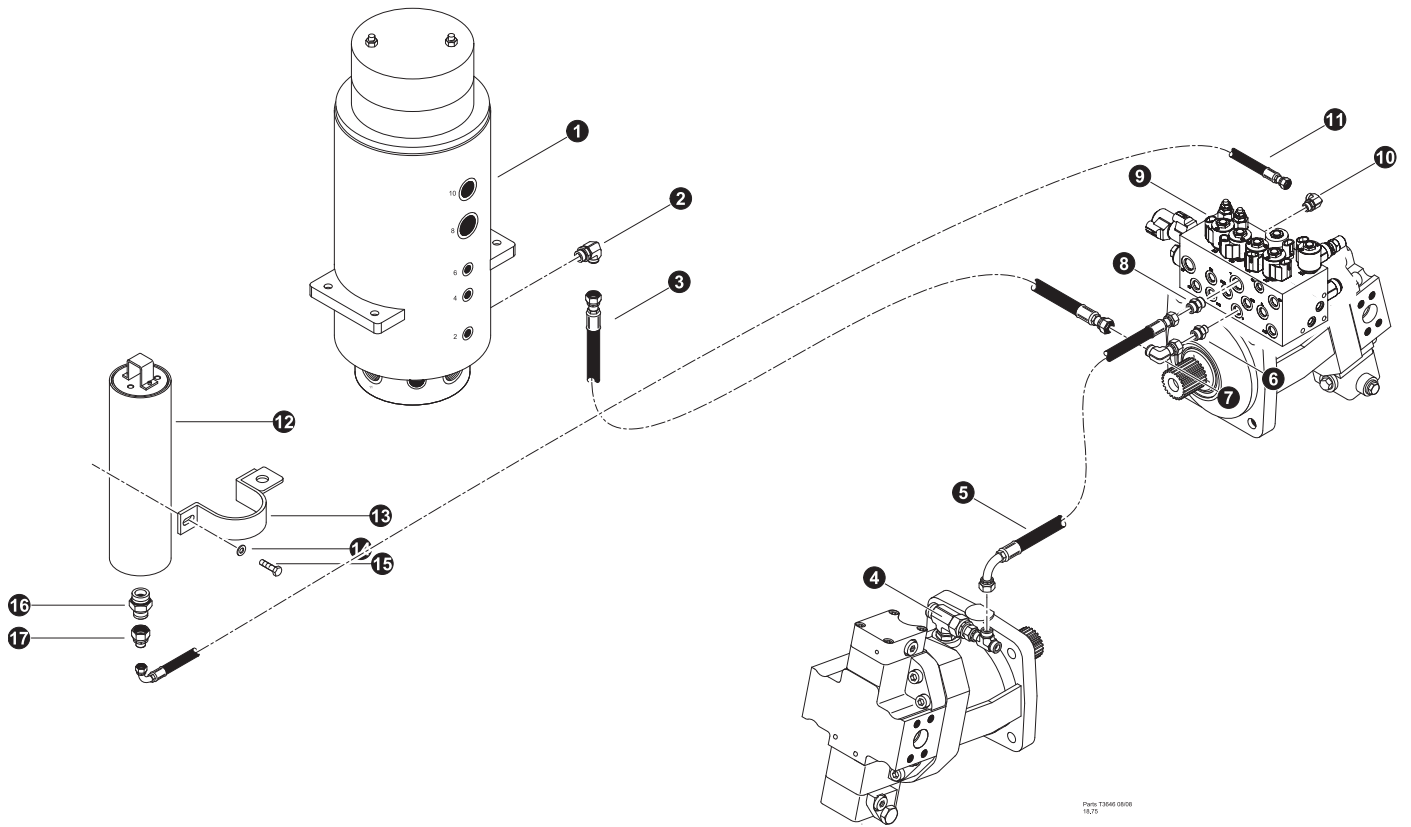


Lower Solenoid Manifold Circuits and Components Breakdown (Lower Manifold - Pressure and Tank Connections) SN - 0251 and before





REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1		ROTARY MANIFOLD	UP-1
2	22405-FF	1		ELBOW, 90 - 8-6 C5OLO-S	
3	17688-FF	1		ELBOW, 90 - FF1868T-1212S	
4	-FF	1		HOSE ASSEMBLY - 2049-12-120S-1204 (Motor Case Drain to port "11")	
5	-FF	1		HOSE ASSEMBLY - 2068-08-08OS-08OS (Rotary Manifold Port "4" to Lower Manifold Pressure)	
6	REF	1		WHEEL DRIVE MOTOR.....	FF-5
7	20029-FF	1		TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S	
8	15117-FF	1		CONNECTOR, REDUCER - ORS FF2281T-0812S	
9	20066-FF	1		TEE - 8 S5OLO-S - BRANCH	
	20029-FF	1		TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S	
10	16360-FF	2		ELBOW, 90 - FF1868T-0808S	
11	20066-FF	1		TEE - 8 S5OLO-S - BRANCH	
12	-FF	1		HOSE ASSEMBLY - 2019-08-080S-0809 (Lower Manifold "T" port to Case Drain Tee)	
13	18034-FF	1		HOSE ASSEMBLY - 2039.5-08-080S-0804 (Wheel Drive Motor Case Jumper)	
14	15372-FF	1		ELBOW, 90 - FF1868T-0812S	
15	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
16	15504-FF	1		CONNECTOR, STR - FF1852T-0408S	
17	-FF	1		HOSE ASSEMBLY - 2062-04-04OS-04OS ("ACC" port to accumulator)	
18	23130-FF	1		ACCUMULATOR, GAS PISTON (FWD)	
-	-FF	1		KIT, SEAL REPAIR - (RK0300-H000)	
19	23223-FF	1		CLAMP, ACCUMULATOR MOUNTING (PISTON)	
20	10802-FF	2		WASHER, FLAT - .375"	
21	10731-FF	2		BOLT - .375" X 1.5"	
22	15238-FF	1		CONNECTOR, STR - FF1852T-0812S	
23	19221-FF	1		CONNECTOR, REDUCER - ORS FF2281T-0408S	
24	15145-FF	1		ELBOW, 90 SWIVEL - FF2098T-0404S	



 See referenced page for component or assembly breakdown.

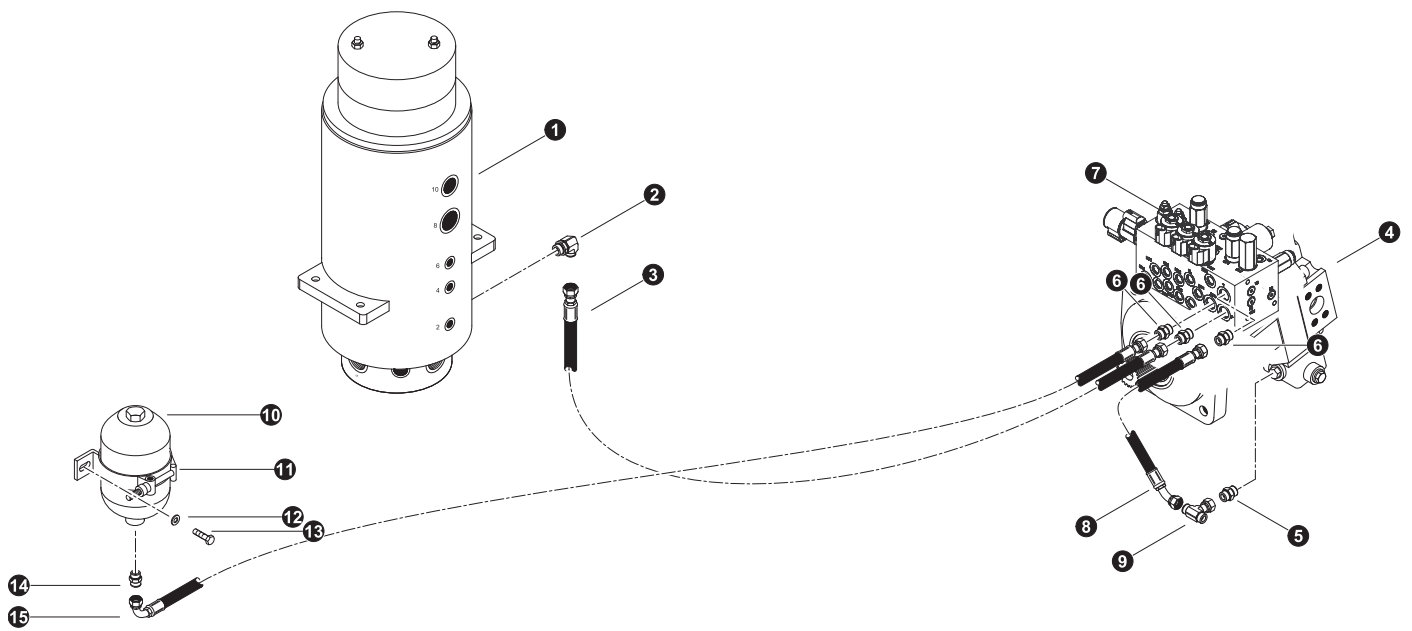
 Kit or Assembly - includes all items indented underneath.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Manifold - Pressure and Tank Connections)
SN - 0252-042208 to 0321-10219
(not including machine 0319)**





REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1		ROTARY MANIFOLD	UP-1
2	22405-FF	1		ELBOW, 90 - 8-6 C5OLO-S	
3	-FF	1		HOSE ASSEMBLY - 2068-08-08OS-08OS (Rotary Manifold Port "4" to Lower Manifold Pressure)	
4	REF	1		WHEEL DRIVE MOTOR CASE DRAIN	FF-5
5	-FF	1		HOSE ASSEMBLY - 2016-08-08OS-08O9 (Motor Case Drain Tee to Lower Manifold Tank)	
6	22901-FF	1		CONNECTOR, STR - 6-8 F5OLO-S	
7	16297-FF	1		ELBOW, 90 SWIVEL - FF2098T-0808S	
8	15117-FF	1		CONNECTOR, STR - FF1852T-0808S	
9	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
10	15133-FF	1		ELBOW, 90 - FF1868T-0406S	
11	-FF	1		HOSE ASSEMBLY - 2073-04-04OS-04O9 ("ACC" port to accumulator)	
12	23130-FF	1		ACCUMULATOR, GAS PISTON (FWD)	
-	-FF	1		KIT, SEAL REPAIR - (RK0300-H000)	
13	23223-FF	1		CLAMP, ACCUMULATOR MOUNTING (PISTON)	
14	10802-FF	2		WASHER, FLAT - .375"	
15	10731-FF	2		BOLT - .375" X 1.5"	
16	15238-FF	1		CONNECTOR, STR - FF1852T-0812S	
17	19221-FF	1		CONNECTOR, REDUCER - ORS FF2281T-0408S	



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

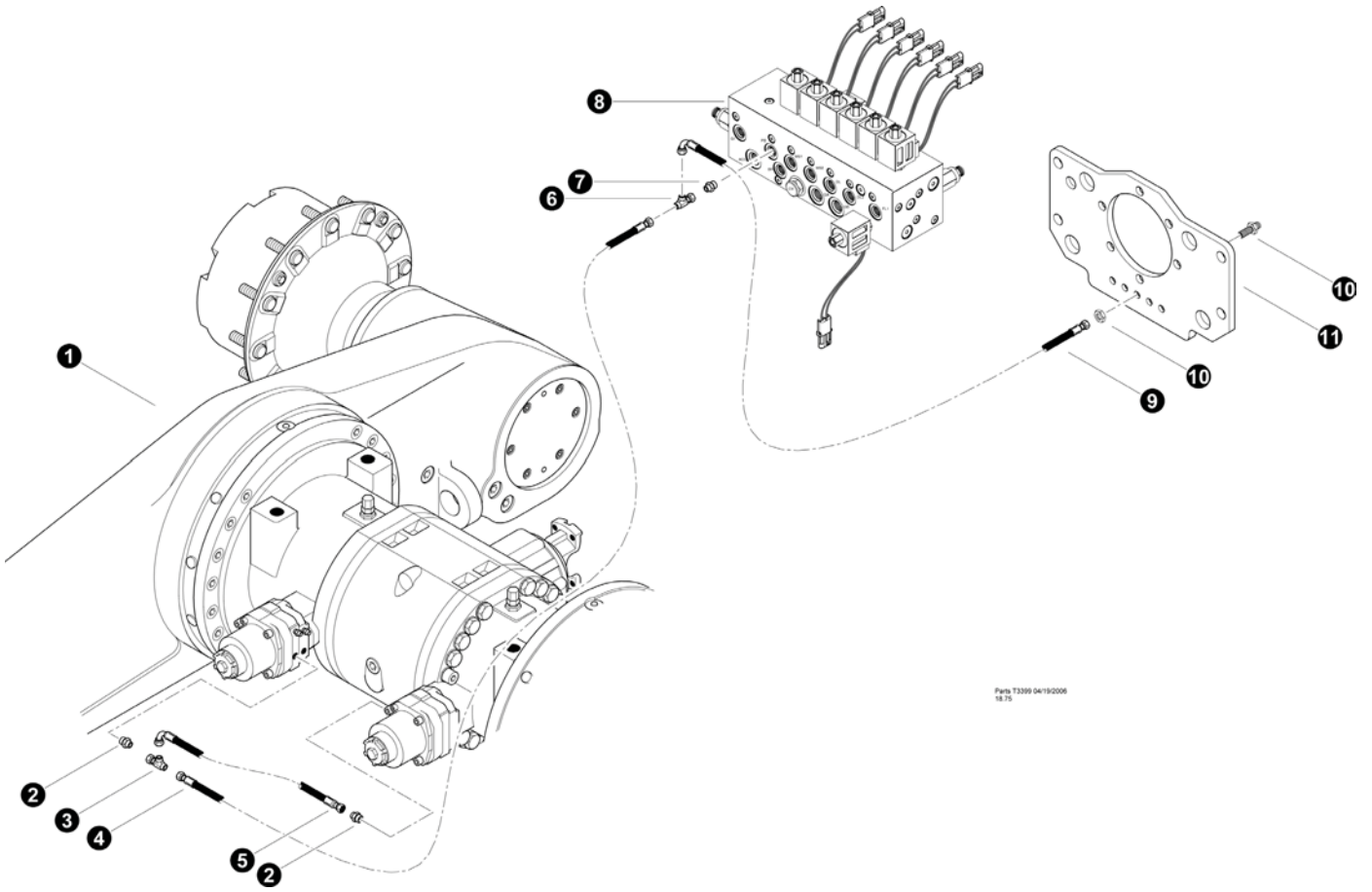


Part: 75000 08/09
1/24



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Manifold - Pressure and Tank Connections)
SN - 0322-112409 and Up
(including machine 0319)**

REF	PART #	QTY		DESCRIPTION	SEE PAGE
1	REF.	1		ROTARY MANIFOLD	UP-1
2	22405-FF	1		ELBOW, 90 - 8-6 C5OLO-S	
3	-FF	1		HOSE ASSEMBLY - 2068-08-08OS-08OS (Rotory Manifold Port "P1" to Lower Manifold Pressure)	
4	REF	1		WHEEL DRIVE MOTOR CASE DRAIN	FF-5
5	22901-FF	1		CONNECTOR, STR - 6-8 F5OLO-S	
6	15117-FF	1		CONNECTOR, STR - FF1852T-0808S	
7	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
8	-FF	1		HOSE ASSEMBLY - 2046-08-08OS-08O4 (Tank to Flushing Return Tee)	
9	51003-FF	1		TEE - 8 R50L0-S RUN	
10	53970-FF	1		ACCUMULATOR, LOWER BRAKE MANIFOLD	
11	-FF	1		BRACKET, accumulator mounting	
12	10802-FF	2		WASHER, FLAT - .375"	
13	10731-FF	2		BOLT - .375" X 1.5"	
14	15117-FF	1		CONNECTOR, STR - FF1852T-0808S	
15	-FF	1		HOSE ASSEMBLY - 2070-08-08OS-08O9 ("ACC" port to accumulator)	

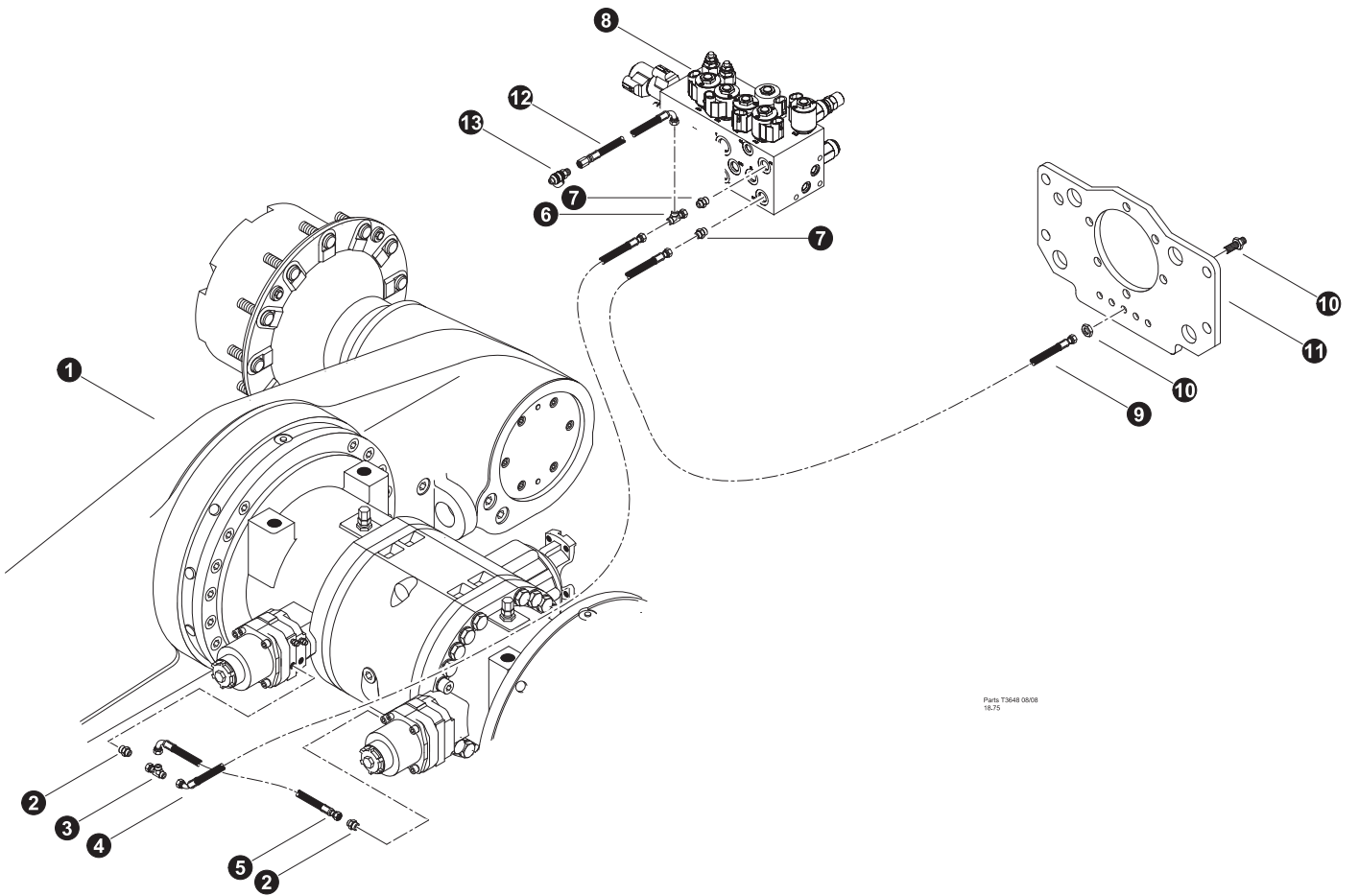
-  See referenced page for component or assembly breakdown.
-  Kit or Assembly - includes all items indented underneath.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Parking Brake Connections)
SN - 0251 and before**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT AXLE	AX
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2088-04-040S-0409 (Front Axle Parking Brake to Lower Manifold "PB" port tee)	
5	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-0409 (Parking Brake Jumper)	
6	15176-FF	1	TEE - FF2114T-0404S	
7	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
8	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
9	-FF	1	HOSE ASSEMBLY - 2103-04-040S-040S (Lower Manifold "PB" tee to Parking Brake Bulkhead)	
10	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
11	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	


 See referenced page for component or assembly breakdown.

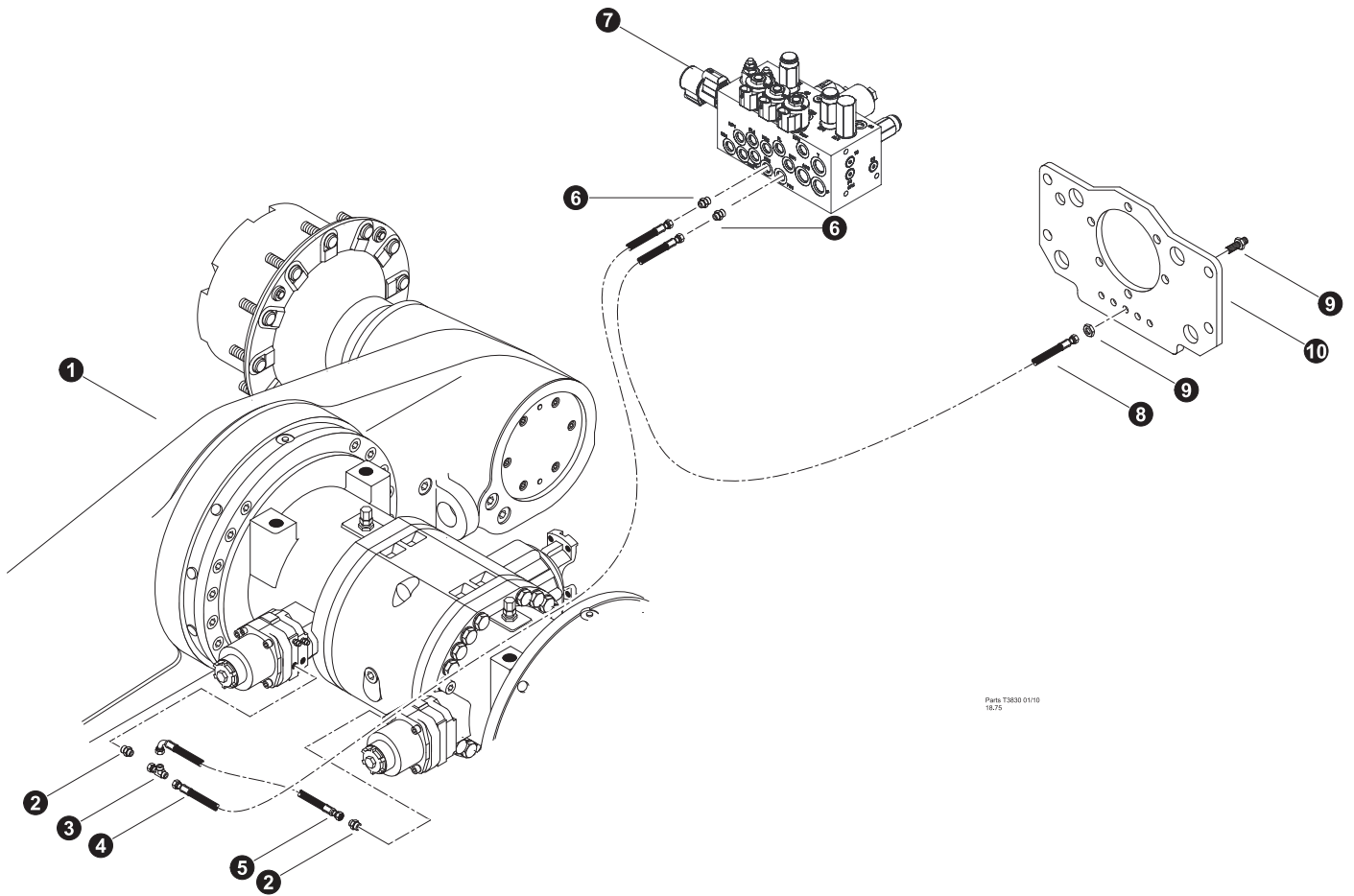


Parts T3648 08/08
18/25



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Parking Brake Connections)
SN - 0252-042208 to 0321-10219**


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT AXLE	AX
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2084-04-040S-040S (Front Axle Parking Brake to Lower Manifold "PB" port tee)	
5	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (Parking Brake Jumper)	
6	15176-FF	1	TEE - FF2114T-0404S	
7	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
8	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
9	-FF	1	HOSE ASSEMBLY - 2102-04-040S-040S (Lower Manifold "PB" tee to Parking Brake Bulkhead)	
10	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
11	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	
12	-FF	1	HOSE ASSEMBLY - 2009-04-04FF-04O9	
13	15118-FF	1	TAP, GAUGE PORT - .25" NPT	

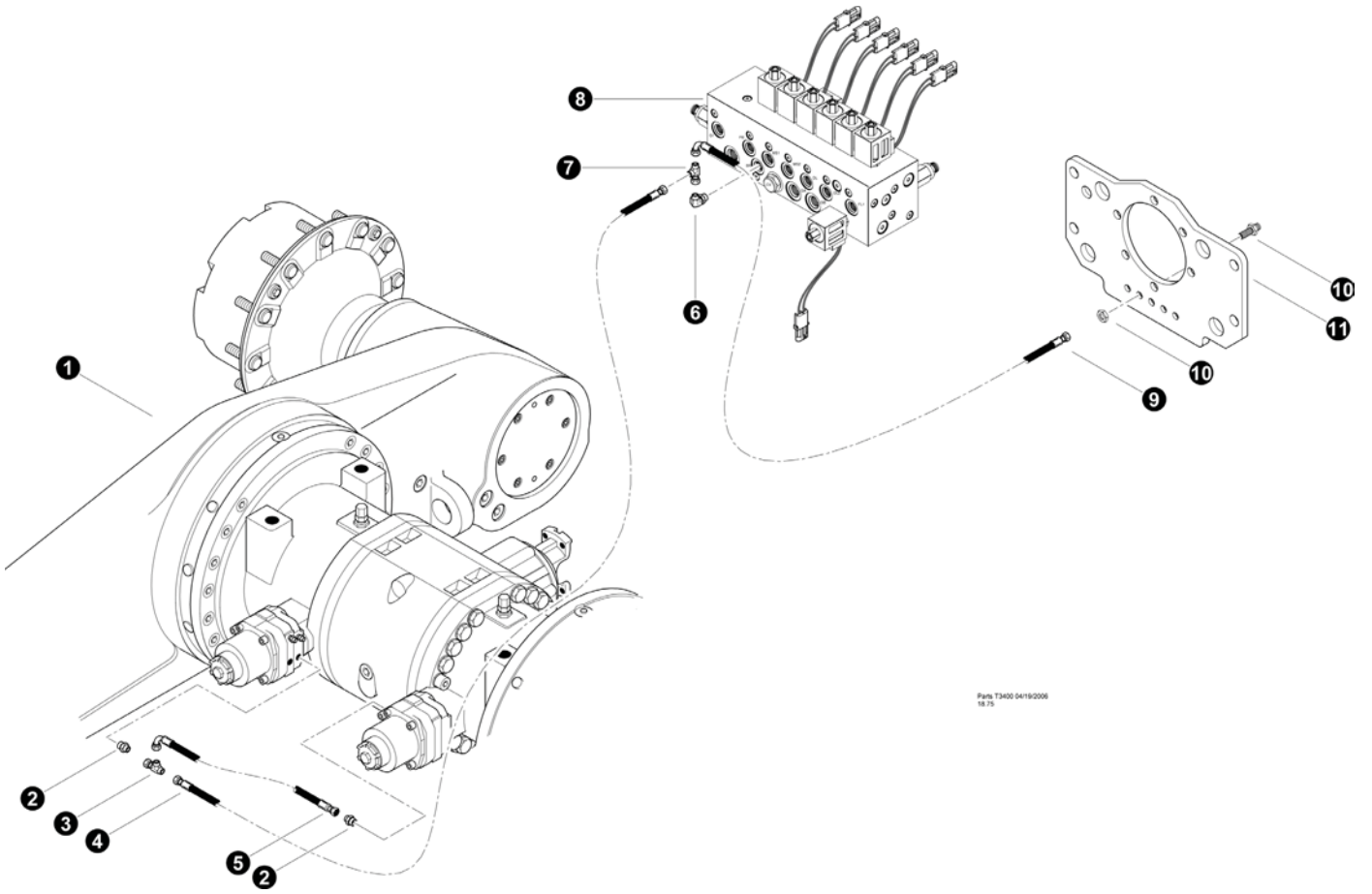
 See referenced page for component or assembly breakdown.





**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Parking Brake Connections)
SN - 0322-112409 and Up
(including machine 0319)**


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT AXLE	AX
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2085.5-04-040S-040S (Front Axle Parking Brake to Lower Manifold "PB" port tee)	
5	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-040S-0409 (Parking Brake Jumper)	
6	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
7	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
8	-FF	1	HOSE ASSEMBLY - 2098-04-040S-040S (Lower Manifold "PB" tee to Parking Brake Bulkhead)	
9	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
10	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	

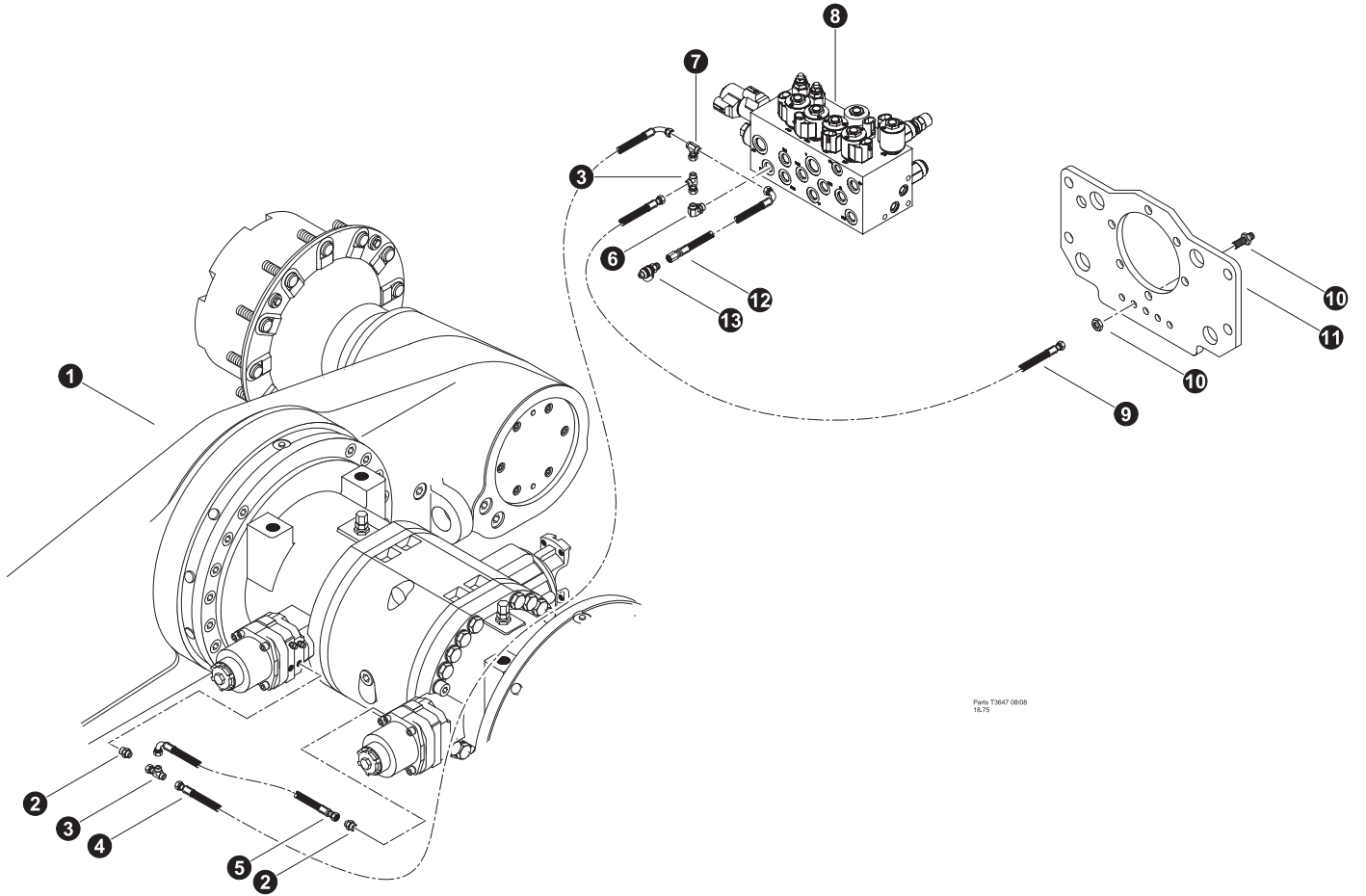
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Travel Brake Connections)
SN - 0251 and before**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT AXLE	AX
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2087-04-040S-0409 (Front Axle Travel Brake to Lower Manifold "TB" port tee)	
5	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-0409 (Travel Brake Jumper)	
6	15133-FF	1	ELBOW, 90 - FF1868T-0406S	
7	15176-FF	1	TEE - FF2114T-0404S	
8	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
9	-FF	1	HOSE ASSEMBLY - 2102-04-040S-0409 (Lower Manifold "TB" tee to Parking Brake Bulkhead)	
10	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
11	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	

 See referenced page for component or assembly breakdown.

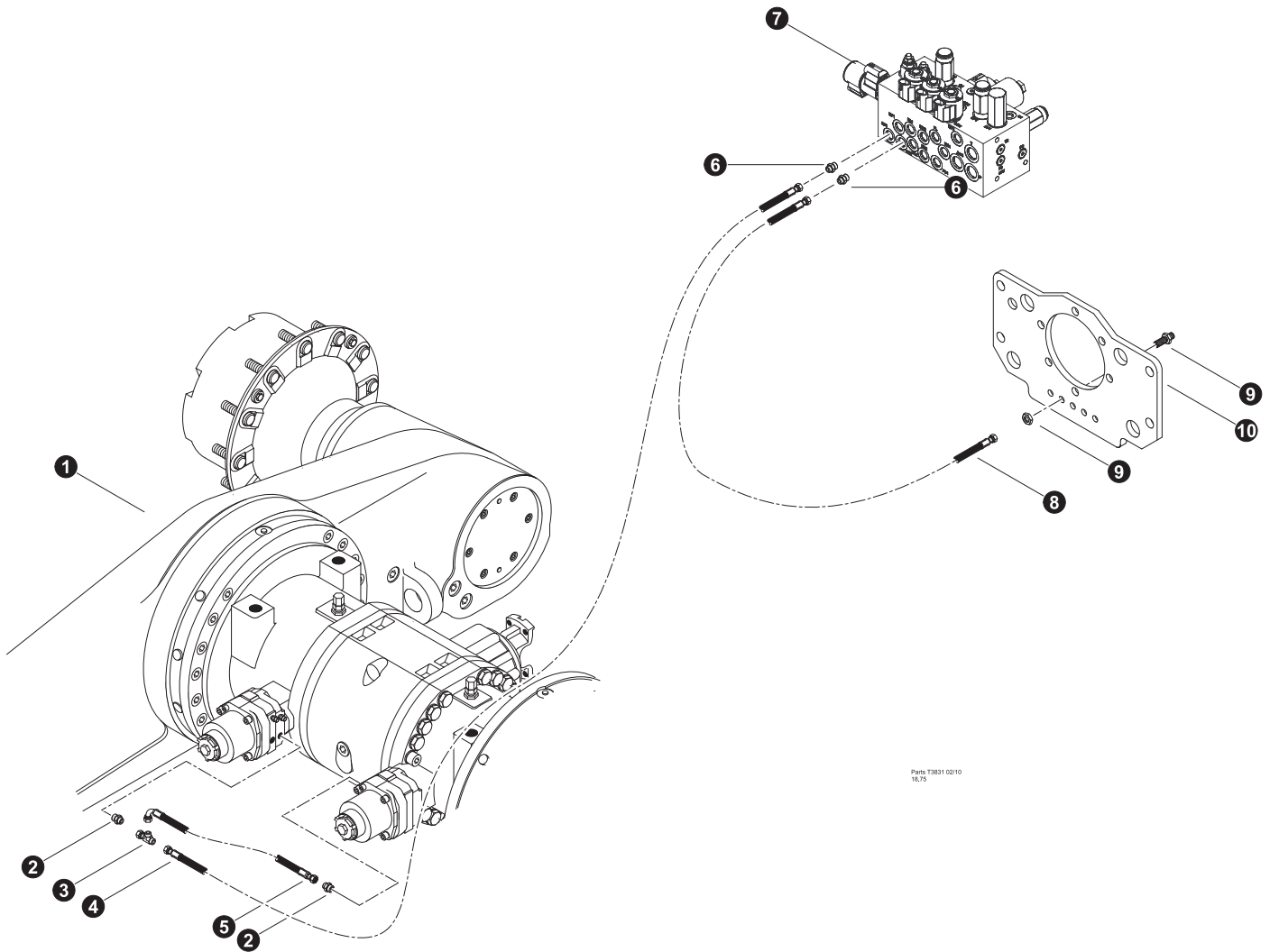


Part# T3647 08/09
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Travel Brake Connections)
SN - 0252-042208 to 0321-10219**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT AXLE	AX
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2087-04-040S-0409 (Front Axle Travel Brake to Lower Manifold "TB" port tee)	
5	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-0409 (Travel Brake Jumper)	
6	15133-FF	1	ELBOW, 90 - FF1868T-0406S	
7	23541-FF	1	TEE - 4 S6LO-S	
8	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
9	-FF	1	HOSE ASSEMBLY - 2103-04-040S-0409 (Lower Manifold "TB" tee to Parking Brake Bulkhead)	
10	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
11	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	
12	-FF	1	HOSE ASSEMBLY - 2009-04-04FF-0409	
13	15118-FF	1	TAP, GAUGE PORT - .25" NPT	


 See referenced page for component or assembly breakdown.

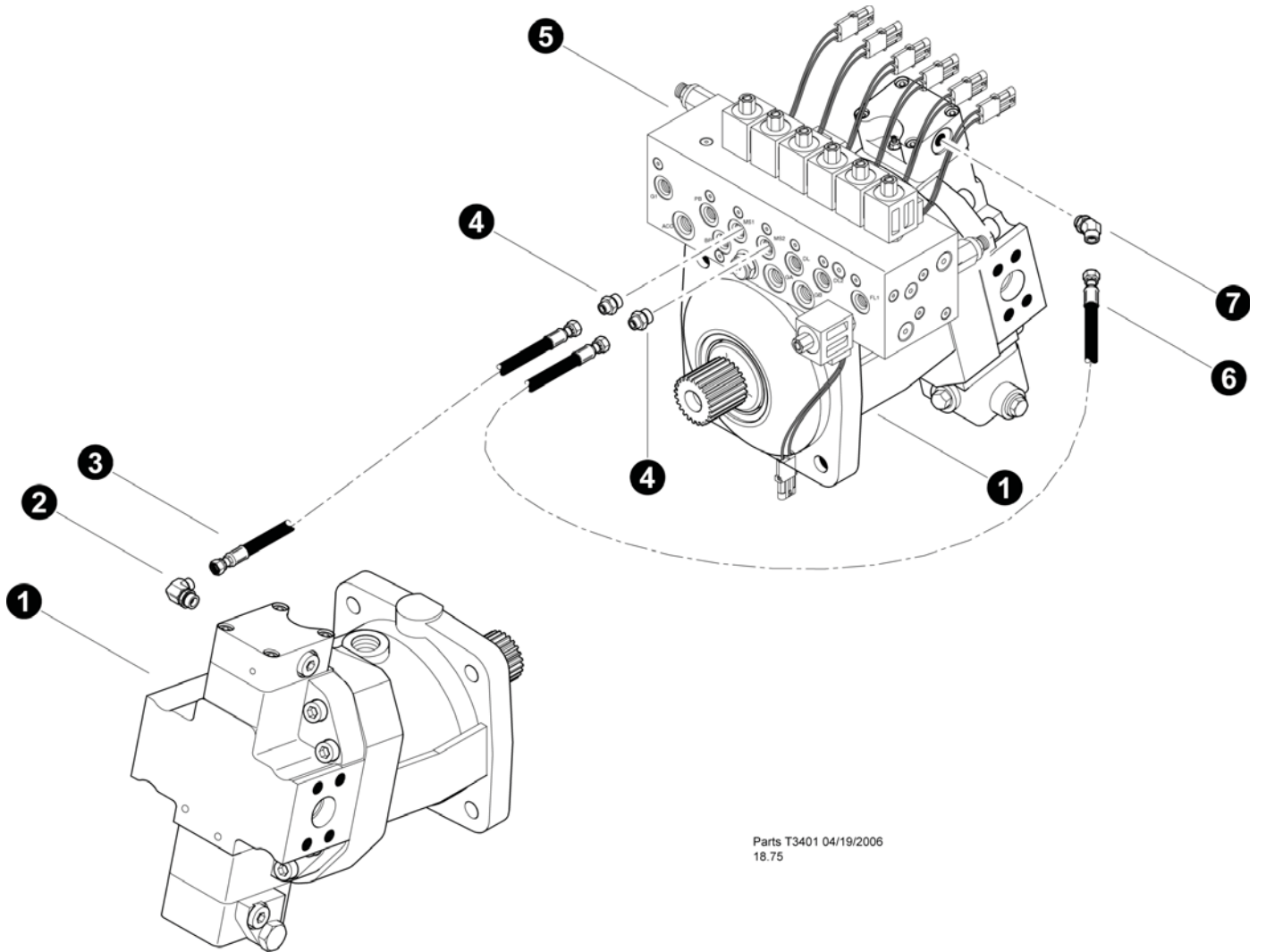


Parts T3831 02/10
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Travel Brake Connections)
SN - 0322-112409 and Up
(including machine 0319)**


REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF.	1		FRONT AXLE	AX
2	19470-FF	2		CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1		TEE - FF2114T-0404S	
4	-FF	1		HOSE ASSEMBLY - 2087-04-040S-040S (Front Axle Travel Brake to Lower Manifold "TB" port tee)	
5	50607-FF	1		HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (Travel Brake Jumper)	
6	15124-FF			CONNECTOR, STR - FF1852T-0406S	
7	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
8	-FF	1		HOSE ASSEMBLY - 2103-04-040S-040S (Lower Manifold "TB" tee to Parking Brake Bulkhead)	
9	18582-FF	1		CONNECTOR, STR BULKHEAD - FF1994T-0404S	
10	52486-FF	1		BRACKET, BRG MOUNT - DRIVELINE 830	

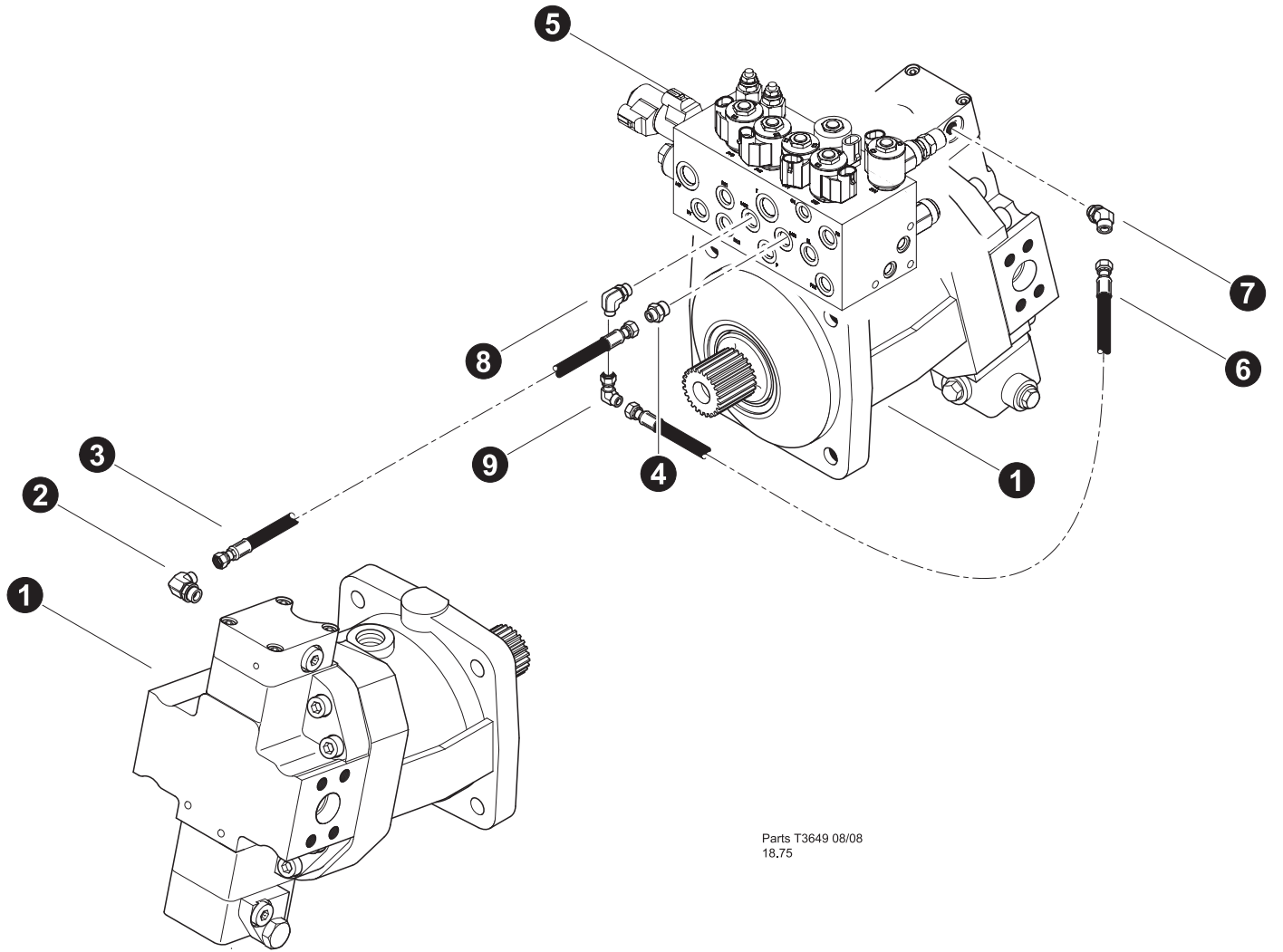
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Shift Connections)
SN - 0251 and before**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 WHEEL DRIVE MOTOR.	FF-5
2	15133-FF		ELBOW, 90 - FF1868T-0406S	
3	-FF	1	HOSE ASSEMBLY - 2022.5-04-040S-040S (Front Motor to Lower Manifold "MS1" port)	
4	15124-FF		CONNECTOR, STR - FF1852T-0406S	
5	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
6	-FF	1	HOSE ASSEMBLY - 2048-04-040S-040S (Rear Motor to Lower Manifold "MS2" port)	
7	23322-FF	2	ELBOW, 45 - 6-4 V5OLO-S	

 See referenced page for component or assembly breakdown.

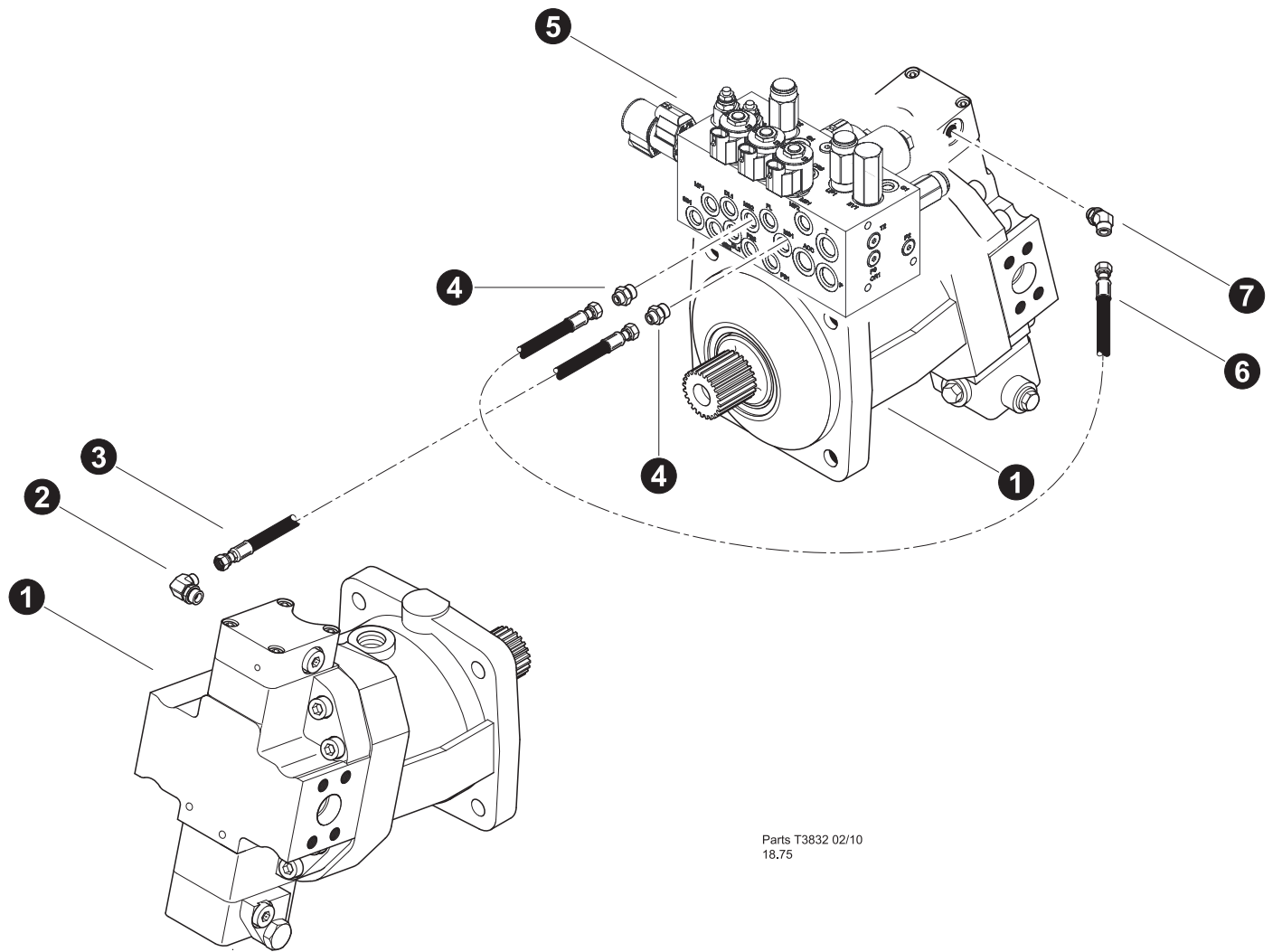


Parts T3649 08/08
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Shift Connections)
SN - 0252-042208 to 0321-10219**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 WHEEL DRIVE MOTOR.	FF-5
2	15133-FF		ELBOW, 90 - FF1868T-0406S	
3	-FF	1	HOSE ASSEMBLY - 2023-04-040S-040S (Front Motor to Lower Manifold "MS1" port)	
4	15124-FF		CONNECTOR, STR - FF1852T-0406S	
5	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
6	-FF	1	HOSE ASSEMBLY - 2034-04-040S-040S (Rear Motor to Lower Manifold "MS2" port)	
7	23322-FF	2	ELBOW, 45 - 6-4 V5OLO-S	
8	15133-FF		ELBOW, 90 - FF1868T-0406S	
9	15145-FF	1	ELBOW, 90 SWIVEL - FF2098T-0404S	

 See referenced page for component or assembly breakdown.

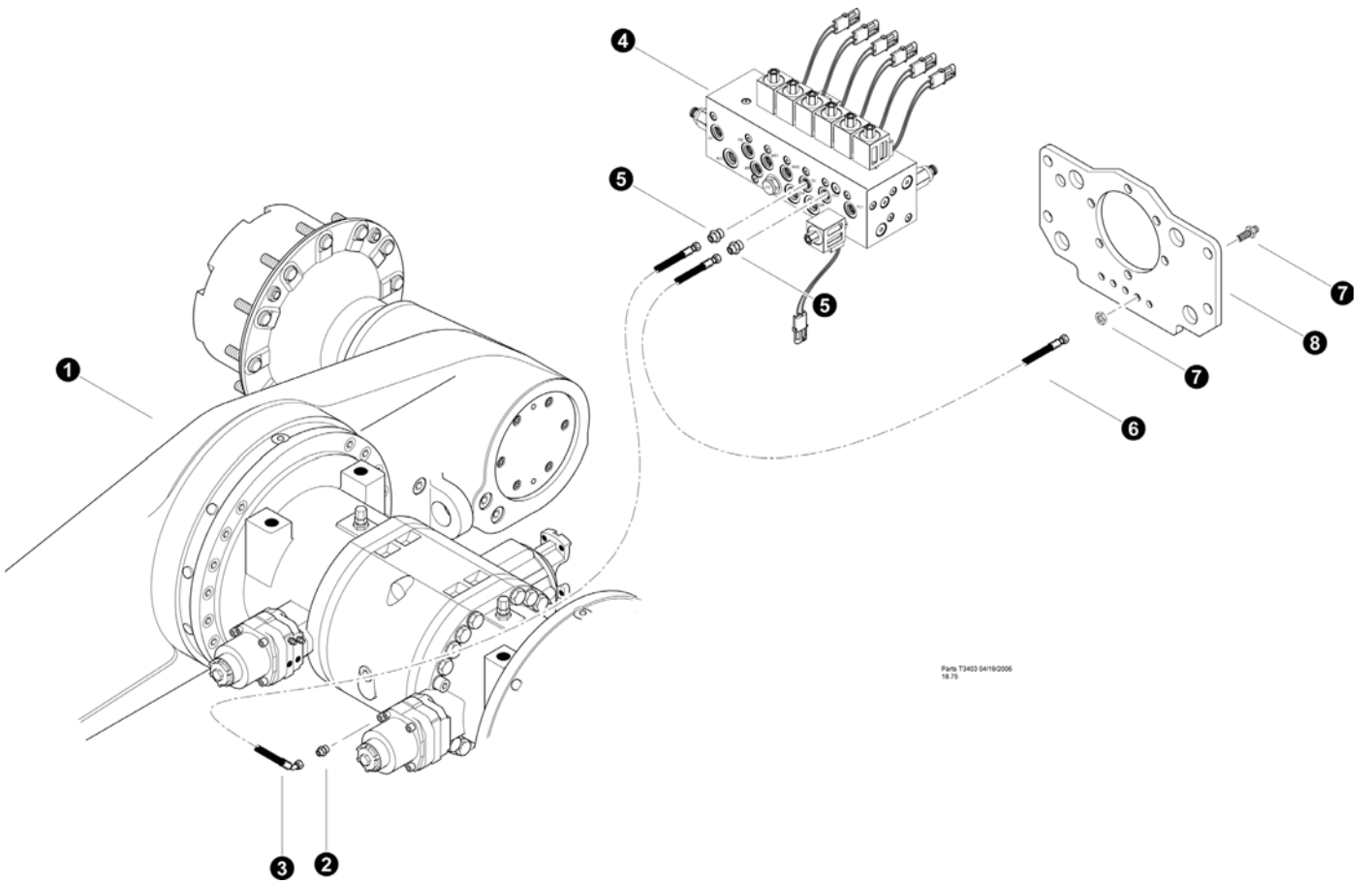


Parts T3832 02/10
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Shift Connections)
SN - 0322-112409 and Up
(including machine 0319)**

REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF	1		WHEEL DRIVE MOTOR.	FF-5
2	15133-FF			ELBOW, 90 - FF1868T-0406S	
3	-FF	1		HOSE ASSEMBLY - 2024-04-040S-040S (Front Motor to Lower Manifold "MS1" port)	
4	15124-FF			CONNECTOR, STR - FF1852T-0406S	
5	REF.	1		LOWER SOLENOID MANIFOLD.	FF-4
6	-FF	1		HOSE ASSEMBLY - 2055.5-04-040S-040S (Rear Motor to Lower Manifold "MS2" port)	
7	23322-FF	2		ELBOW, 45 - 6-4 V5OLO-S	

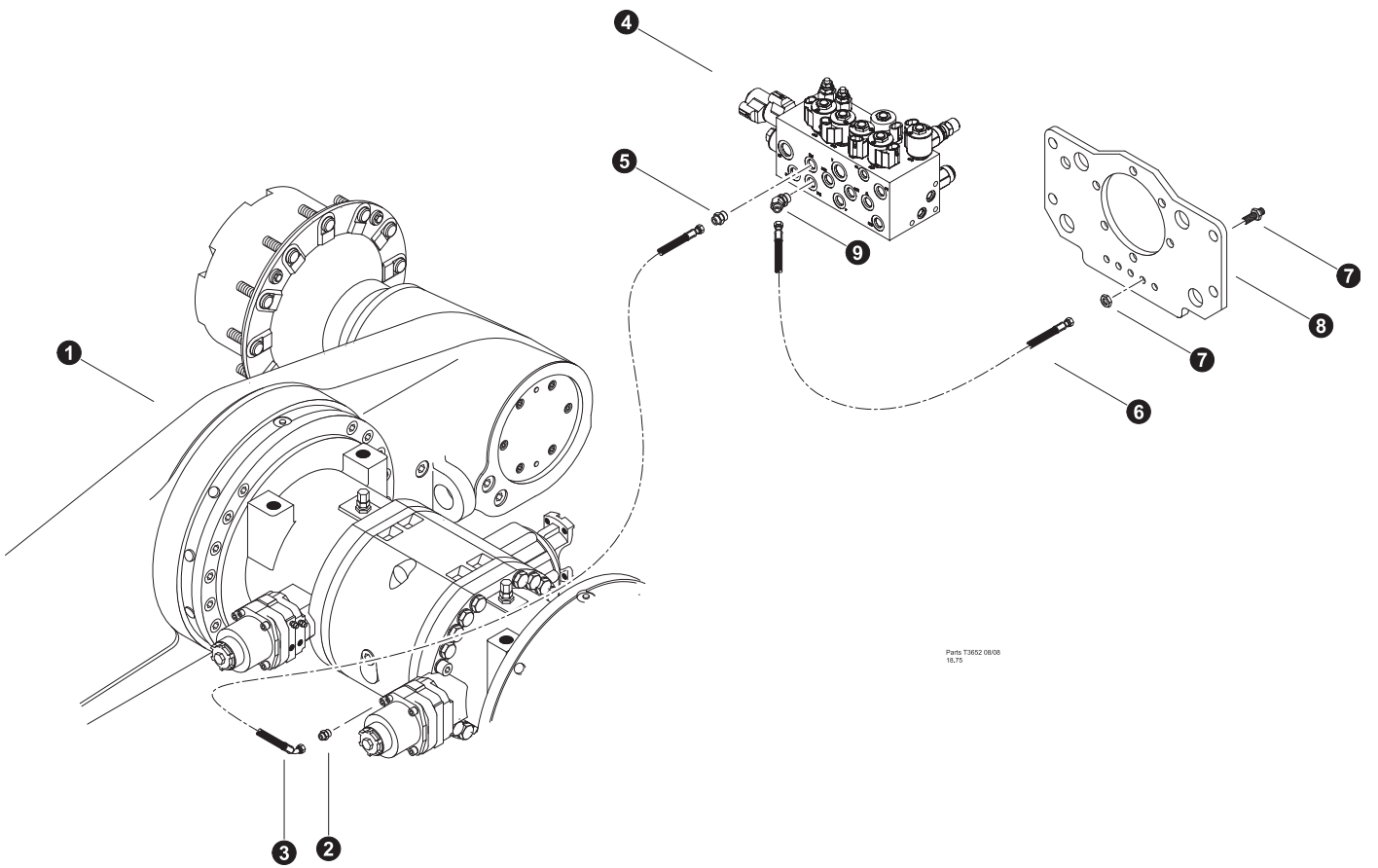
 See referenced page for component or assembly breakdown.





**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Differential Lock Connections)
SN - 0251 and before**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 FRONT AXLE	AX
2	19470-FF	1	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	-FF	1	HOSE ASSEMBLY - 2084-04-04OS-04O4 (Front Axle Differential Lock to Lower Manifold "DL" port)	
4	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
5	15124-FF		CONNECTOR, STR - FF1852T-0406S	
6	-FF	1	HOSE ASSEMBLY - 2098-04-04OS-04OS (Differential Lock Bulkhead to Lower Manifold "DL2" port)	
7	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
8	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	

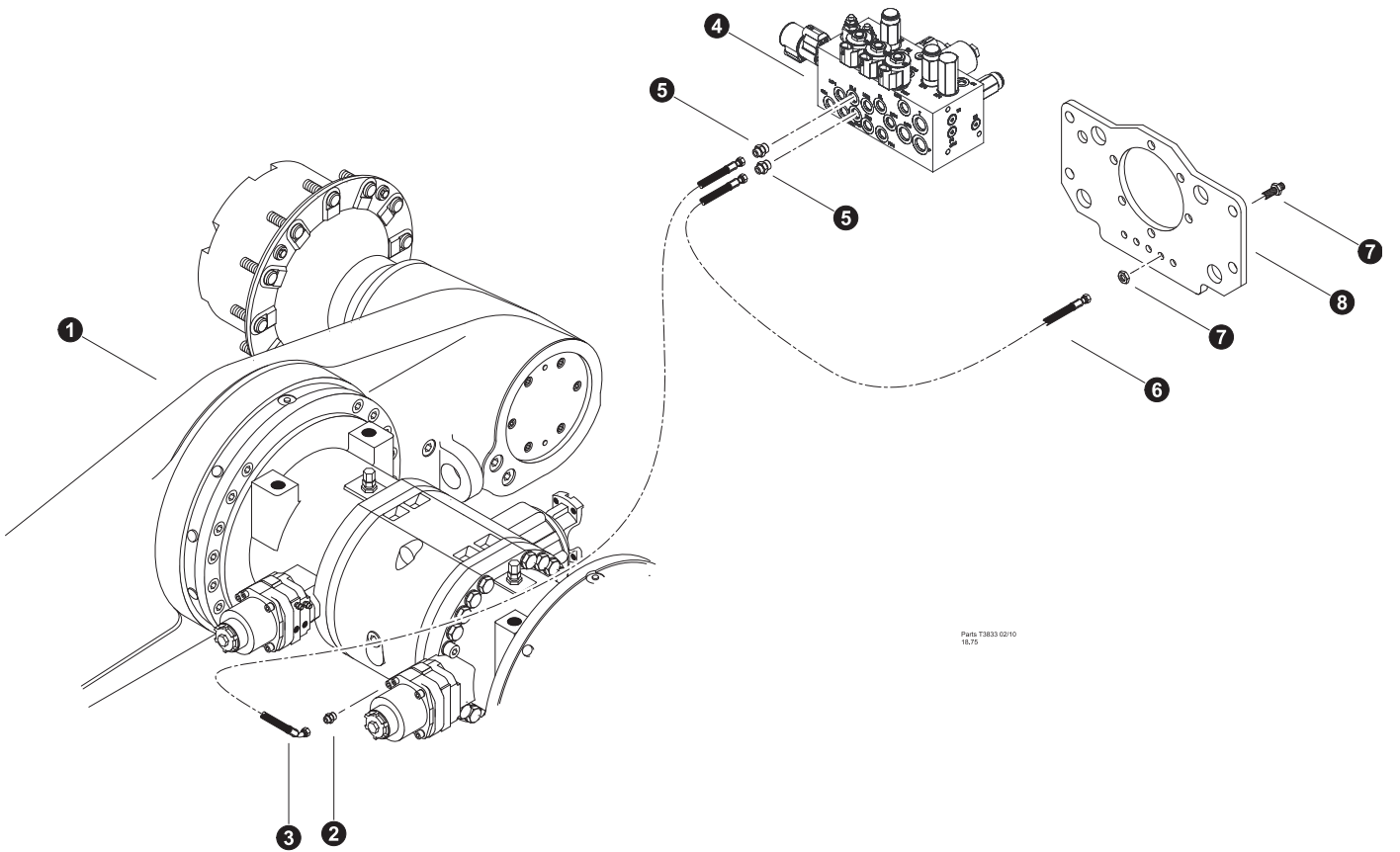
 See referenced page for component or assembly breakdown.





**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Differential Lock Connections)
SN - 0252-042208 to 0321-10219**


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 FRONT AXLE	AX
2	19470-FF	1	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	-FF	1	HOSE ASSEMBLY - 2084-04-04OS-04O4 (Front Axle Differential Lock to Lower Manifold "DL" port)	
4	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
5	15124-FF		CONNECTOR, STR - FF1852T-0406S	
6	-FF	1	HOSE ASSEMBLY - 2102-04-04OS-04OS (Differential Lock Bulkhead to Lower Manifold "DL2" port)	
7	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
8	52486-FF	1	BRACKET, BRG MOUNT - DRIVELINE 830	
9	23322-FF	1	ELBOW, 45 - 6-4 V5OLO-S	

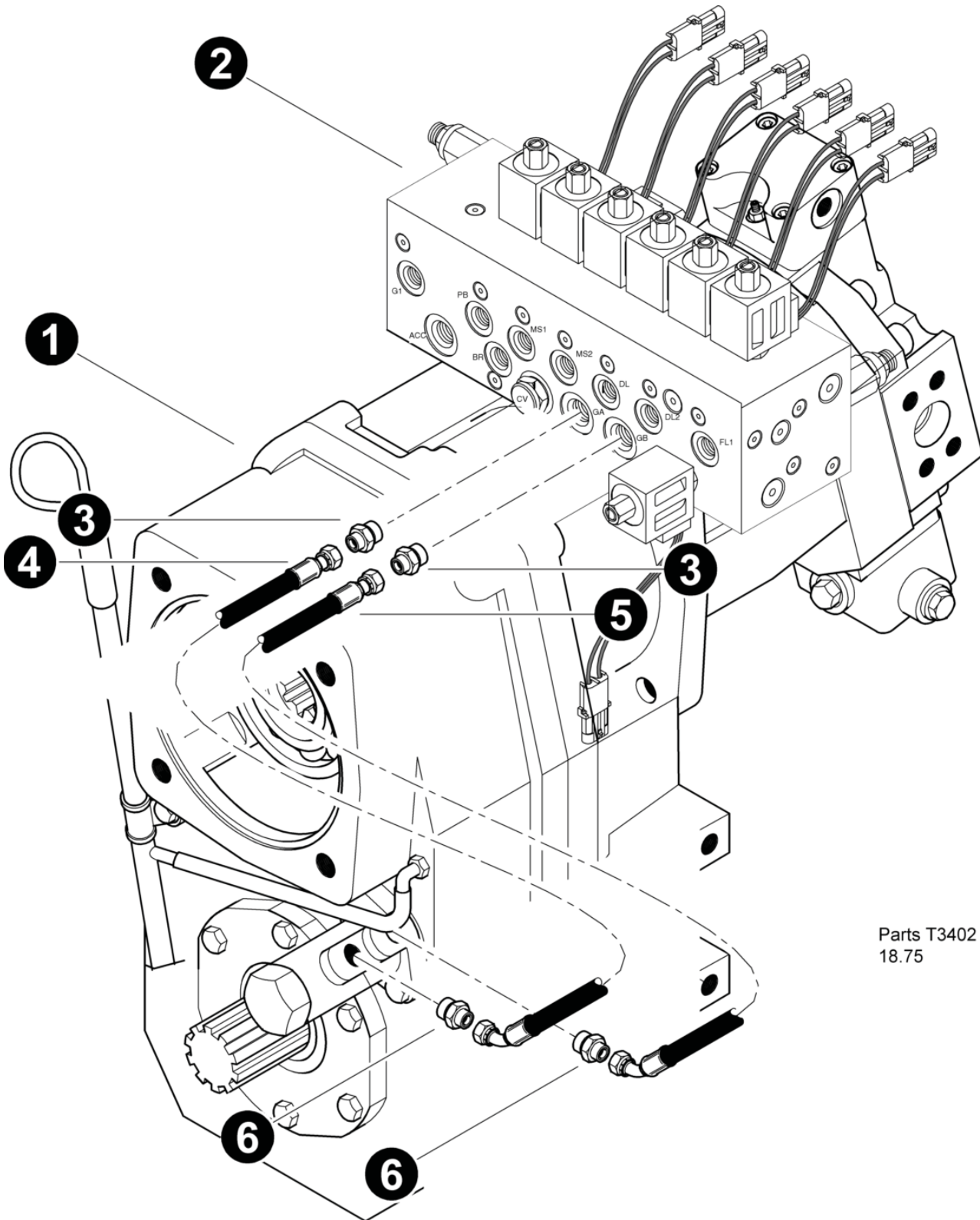
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Differential Lock Connections)
SN - 0322-112409 and Up
(including machine 0319)**



REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF	1		FRONT AXLE	AX
2	19470-FF	1		CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	-FF	1		HOSE ASSEMBLY - 2084-04-04OS-04O4 (Front Axle Differential Lock to Lower Manifold "DL" port)	
4	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
5	15124-FF			CONNECTOR, STR - FF1852T-0406S	
6	-FF	1		HOSE ASSEMBLY - 2102-04-04OS-04OS (Differential Lock Bulkhead to Lower Manifold "DL2" port)	
7	18582-FF	1		CONNECTOR, STR BULKHEAD - FF1994T-0404S	
8	52486-FF	1		BRACKET, BRG MOUNT - DRIVELINE 830	
9	23322-FF	1		ELBOW, 45 - 6-4 V5OLO-S	


 See referenced page for component or assembly breakdown.

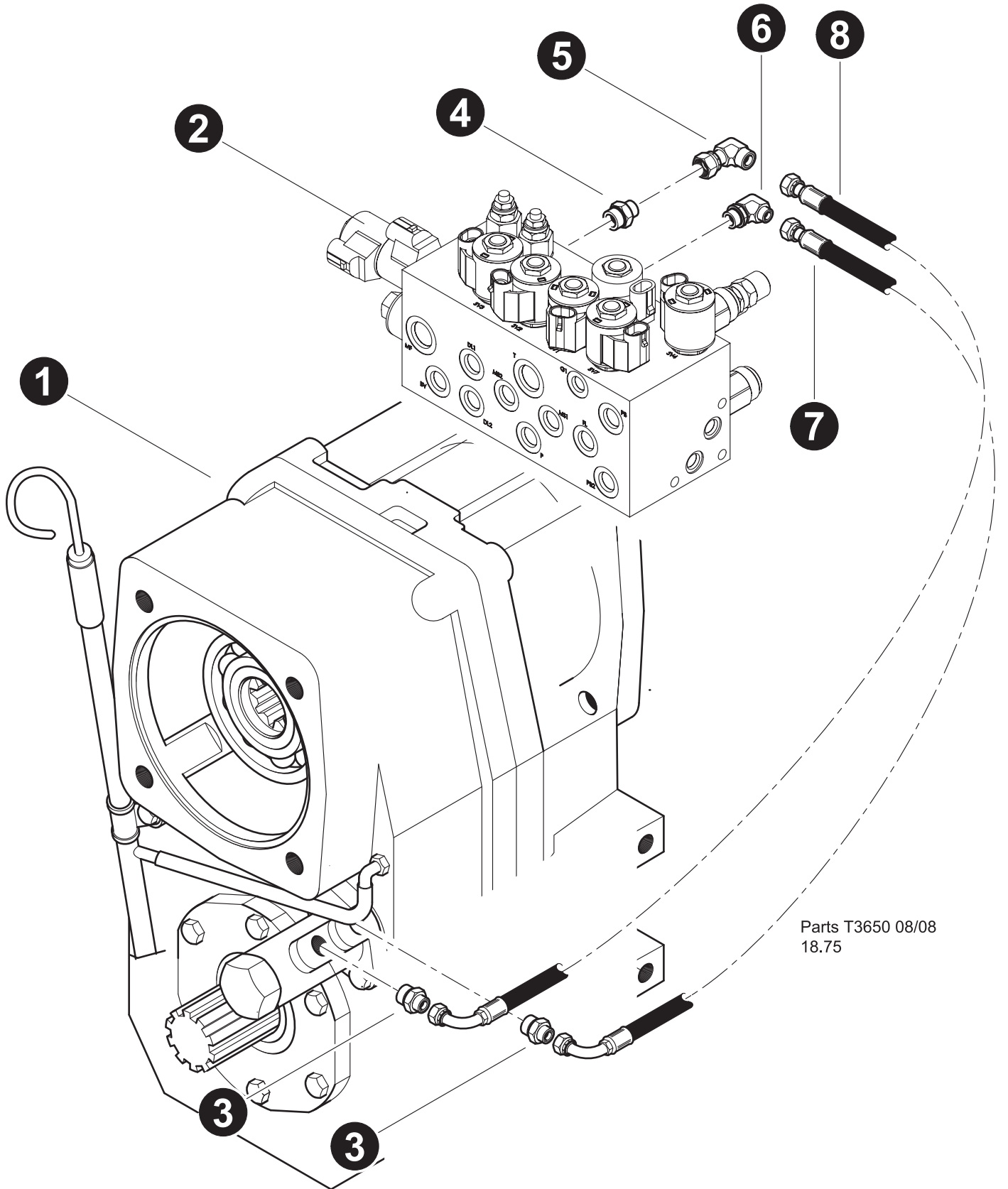


Parts T3402 04/19/2006
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Gear Box Shift Connections)
SN - 0251 and before**



REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF	1		TRANSFER CASE (NAF).....	AX
2	REF.	1		LOWER SOLENOID MANIFOLD.....	FF-4
3	15124-FF			CONNECTOR, STR - FF1852T-0406S	
4	-FF	1		HOSE ASSEMBLY - 2020-04-040S-0404 (GB Bulkhead to Lower Manifold "GA" port)	
5	-FF	1		HOSE ASSEMBLY - 2020-04-040S-0404 (GB Bulkhead to Lower Manifold "GB" port)	
6	19470-FF	2		CONNECTOR, STR METRIC - 4M14F8OMLOS	

 See referenced page for component or assembly breakdown.

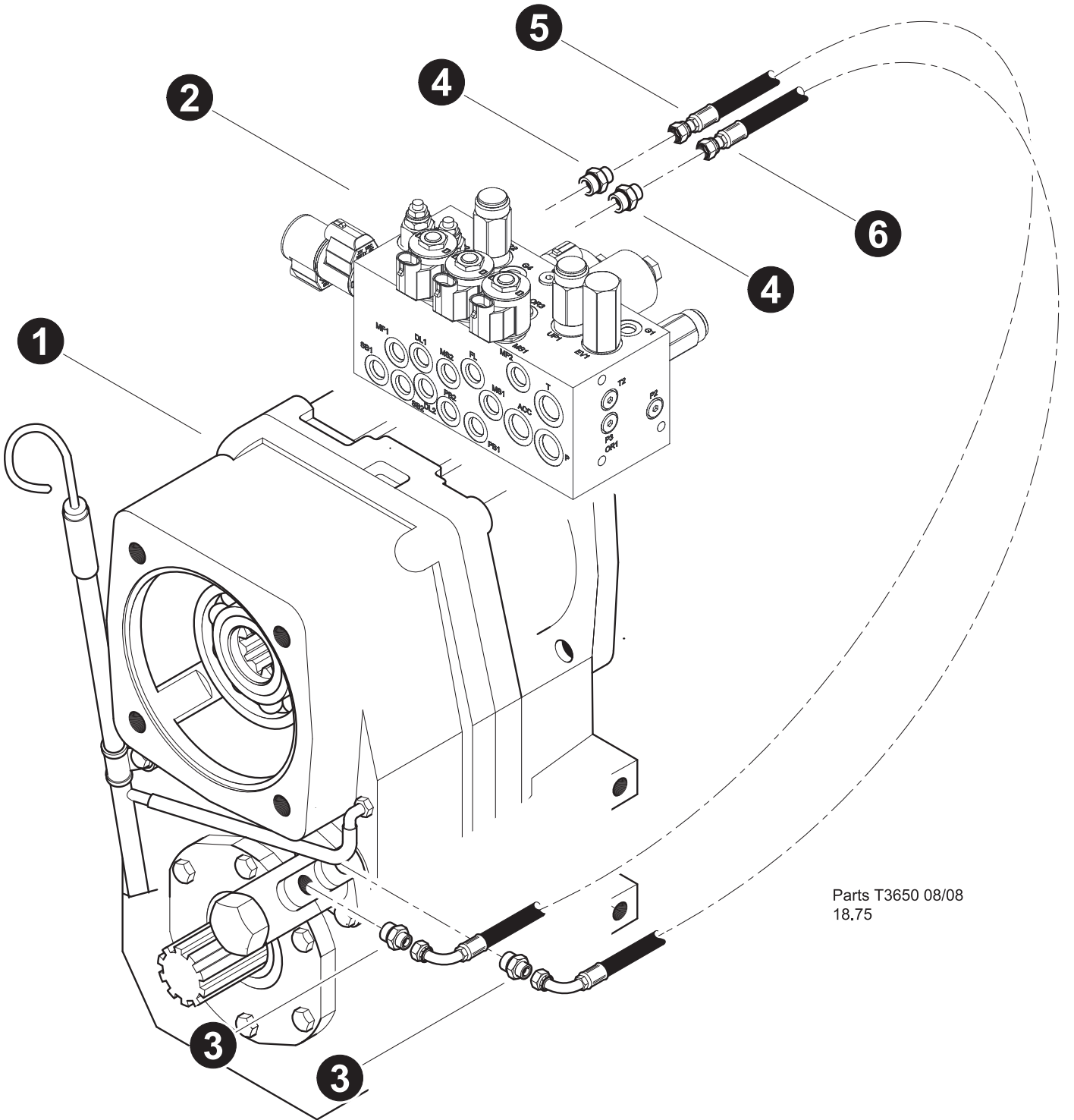


Parts T3650 08/08
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Gear Box Shift Connections)
SN - 0252-042208 to 0321-10219**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF	1	 TRANSFER CASE (NAF).....	AX
2	REF.	1	 LOWER SOLENOID MANIFOLD.....	FF-4
3	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
4	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
5	15133-FF	1	ELBOW, 90 - FF1868T-0406S	
6	15145-FF	1	ELBOW, 90 SWIVEL - FF2098T-0404S	
7	-FF	1	HOSE ASSEMBLY - 2030-04-040S-0409 (Rear Shift Port to Lower Manifold "GB" port)	
8	-FF	1	HOSE ASSEMBLY - 2025.5-04-040S-0409 (Front Shift Port to Lower Manifold "GA" port)	


 See referenced page for component or assembly breakdown.

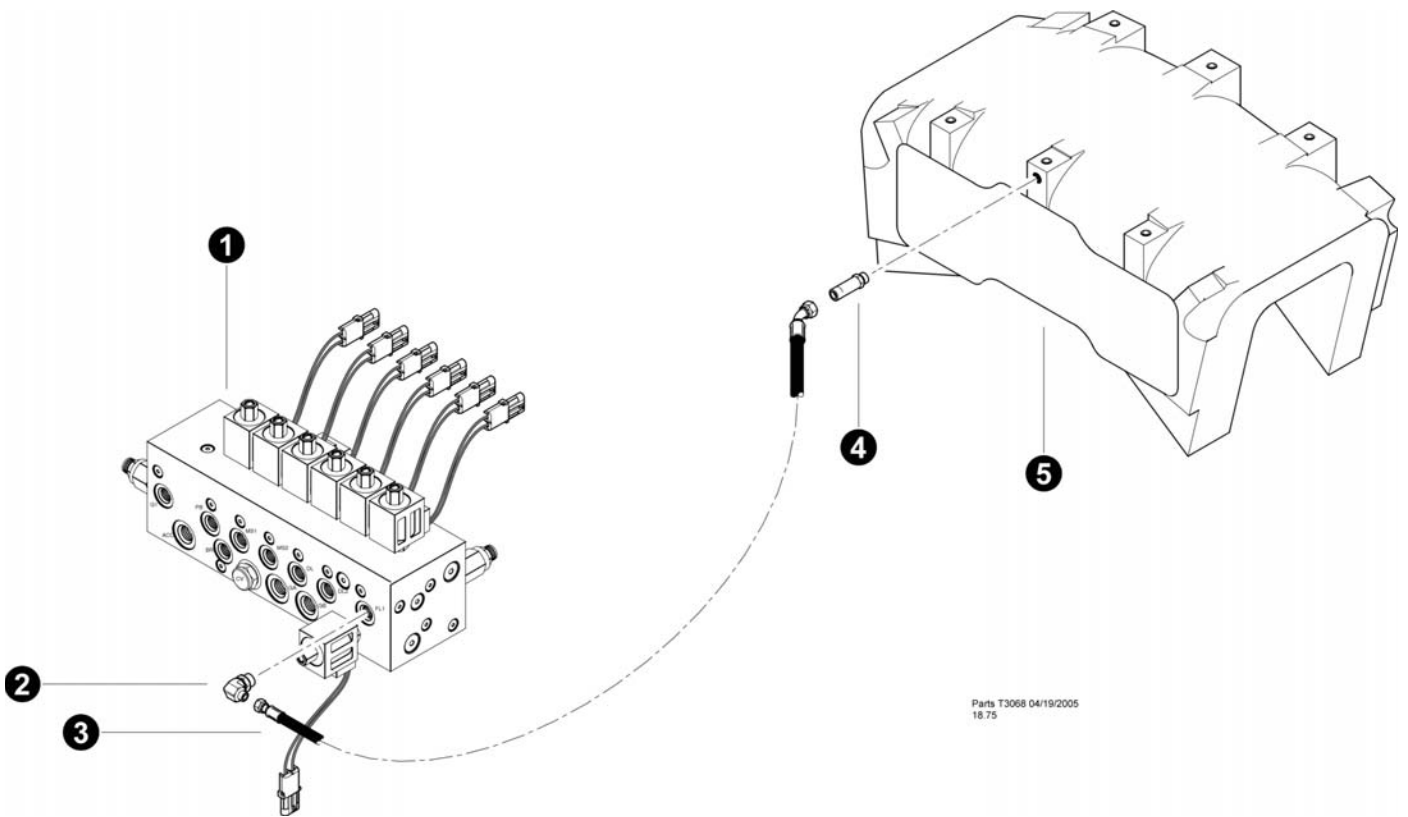


Parts T3650 08/08
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Gear Box Shift Connections)
SN - 0322-112409 and Up
(including machine 0319)**


REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF	1		TRANSFER CASE (NAF).....	AX
2	REF.	1		LOWER SOLENOID MANIFOLD.....	FF-4
3	19470-FF	2		CONNECTOR, STR METRIC - 4M14F8OMLOS	
4	15124-FF	1		CONNECTOR, STR - FF1852T-0406S	
5	-FF	1		HOSE ASSEMBLY - 2043.5-04-040S-0409 (Front Shift Port to Lower Manifold "GA" port)	
6	-FF	1		HOSE ASSEMBLY - 2039.5-04-040S-0409 (Rear Shift Port to Lower Manifold "GB" port)	

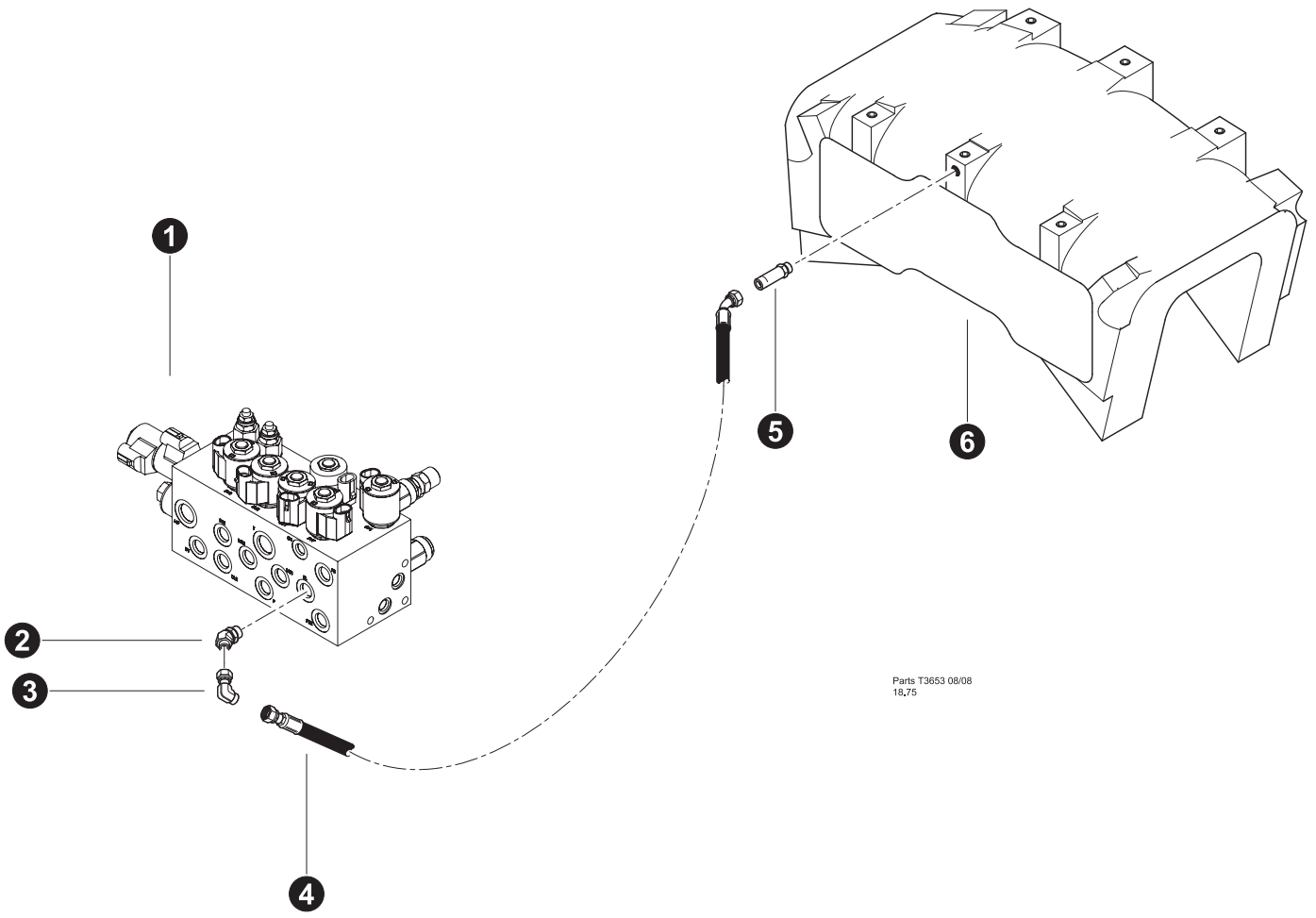
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Frame Lock Connections)
SN - 0251 and before**



REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
2	15133-FF	1		ELBOW, 90 - FF1868T-0406S	
3	-FF	1		HOSE ASSEMBLY - 2046.5-04-040S-0404 (Lower Manifold "FL" port to frame lock caliper)	
4	20991-FF	2		CONNECTOR, STR LONG - 848L-TTO-04X04	
5	REF.	1		FRAME LOCK CALIPER BRAKE.....	FF-4


 See referenced page for component or assembly breakdown.

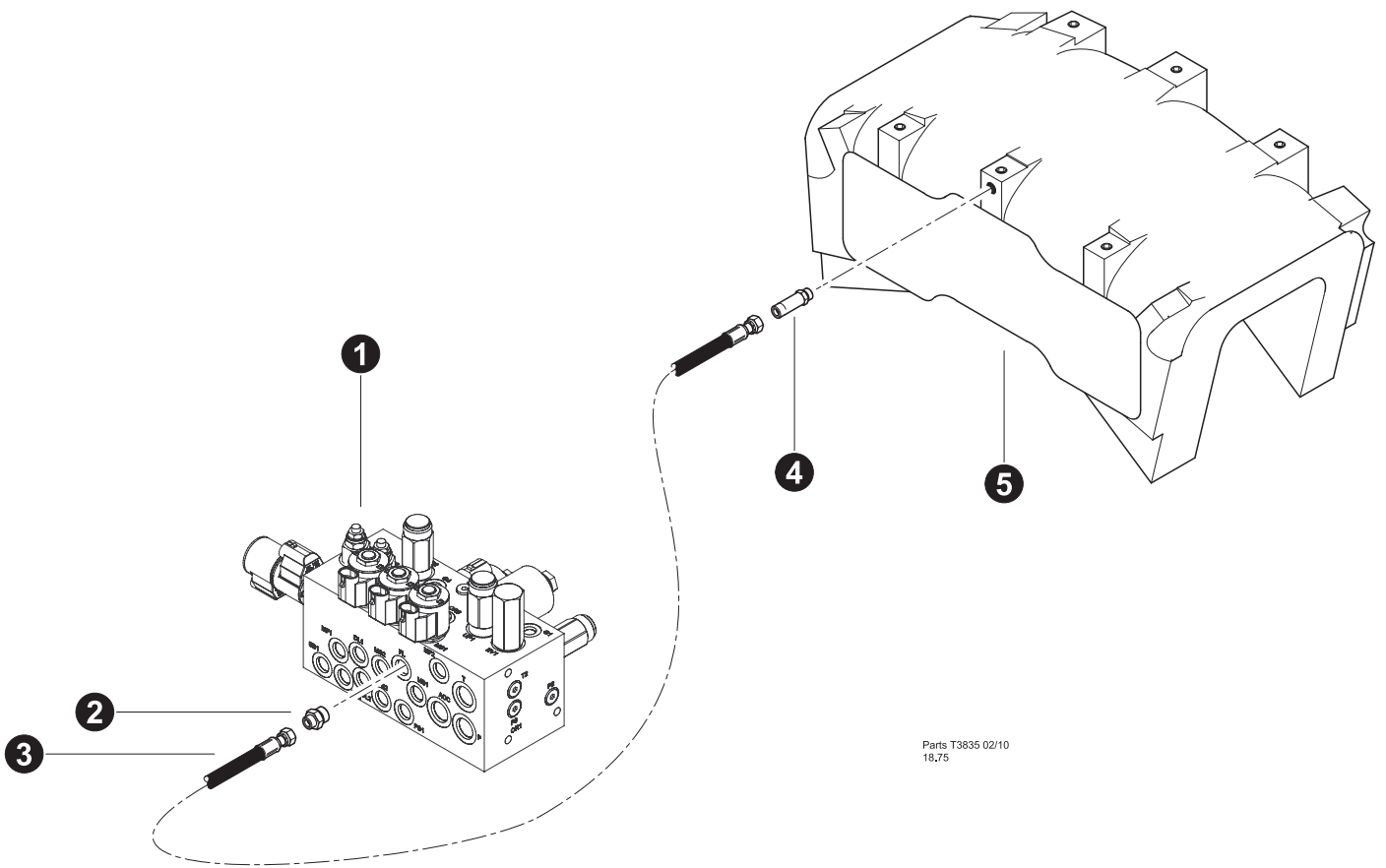


Parts T3653 08/08
18,75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Frame Lock Connections)
SN - 0252-042208 to 0321-10219**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	23322-FF	1	ELBOW, 45 - 6-4 V5OLO-S	
3	15145-FF	1	ELBOW, 90 SWIVEL - FF2098T-0404S	
4	-FF	1	HOSE ASSEMBLY - 2041.5-04-040S-0404 (Lower Manifold "FL" port to frame lock caliper)	
5	20991-FF	2	CONNECTOR, STR LONG - 848L-TTO-04X04	
6	REF.	1	 FRAME LOCK CALIPER BRAKE.	FF-4


 See referenced page for component or assembly breakdown.

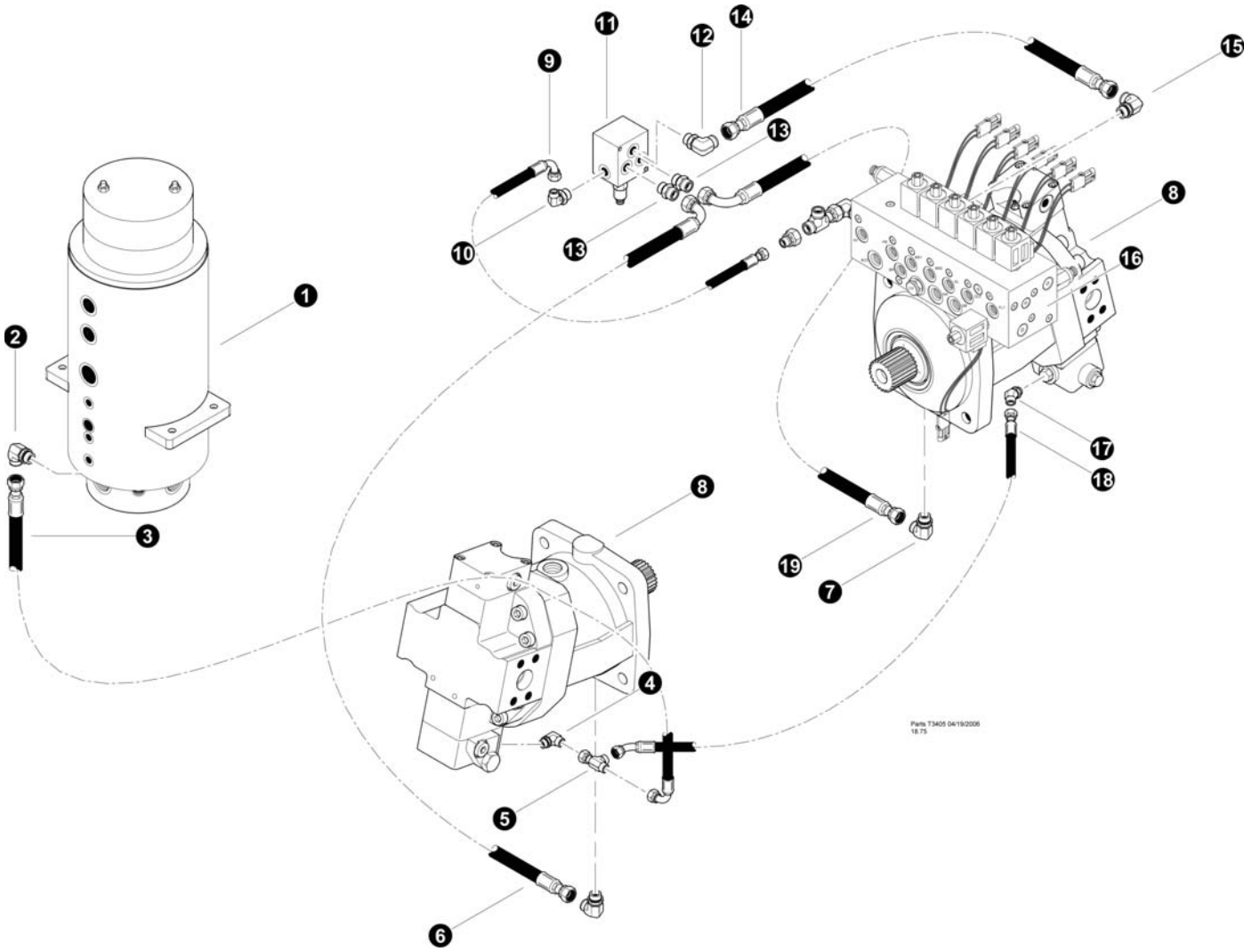


Parts T3635 02/10
18,75





**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Frame Lock Connections)
SN - 0322-112409 and Up
(including machine 0319)**

REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
2	15124-FF	1		CONNECTOR, STR - FF1852T-0406S	
3	-FF	1		HOSE ASSEMBLY - 2074-04-040S-040S (Lower Manifold "FL" port to frame lock caliper)	
4	20991-FF	2		CONNECTOR, STR LONG - 848L-TTO-04X04	
5	REF.	1		FRAME LOCK CALIPER BRAKE.	FF-4

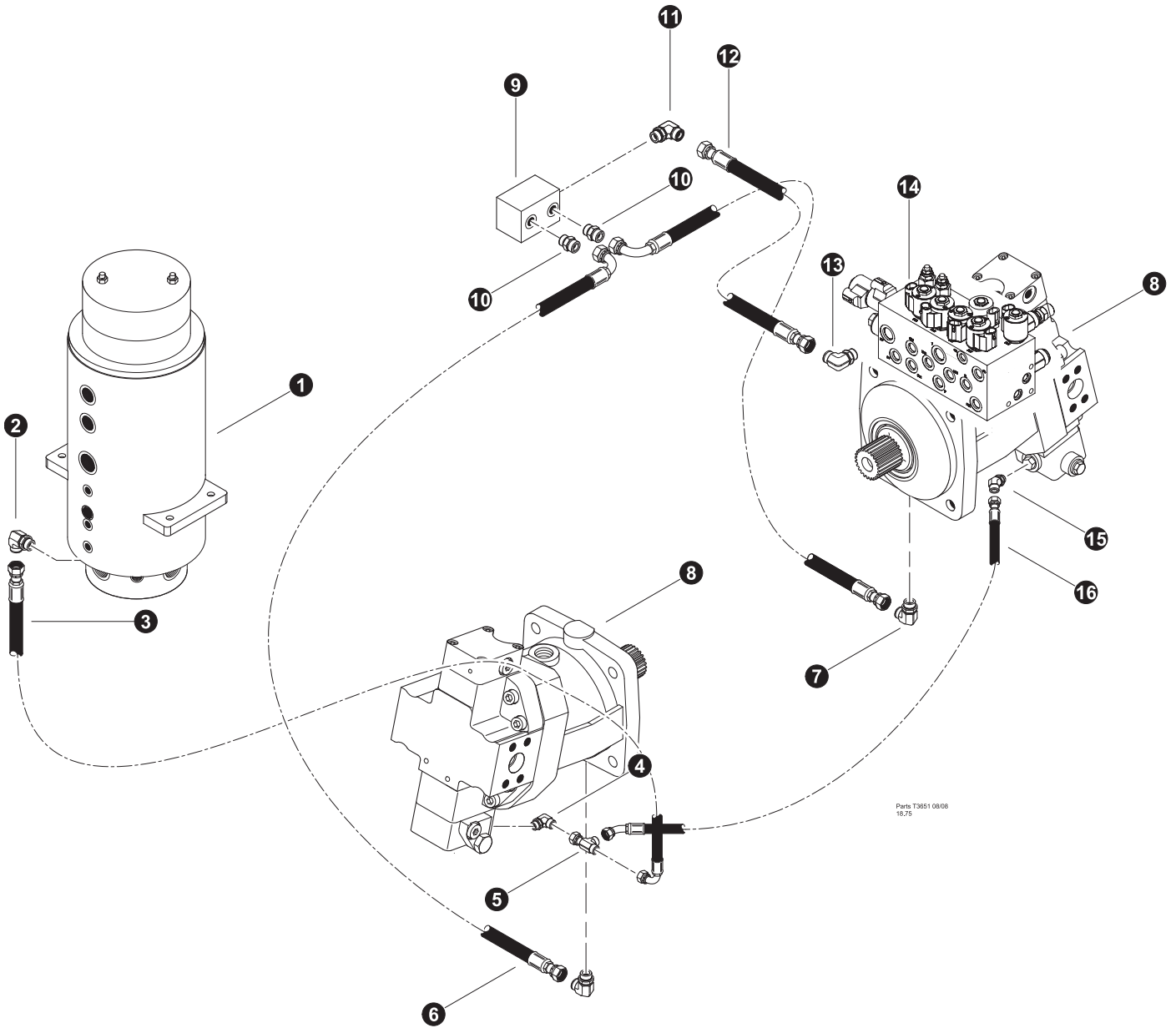
 See referenced page for component or assembly breakdown.



Lower Solenoid Manifold Circuits and Components Breakdown (Front Frame - Motor Flushing Supply and Return Connections) SN - 0251 and before




REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
3	-FF	1	HOSE ASSEMBLY - 2060-06-060S-0604 (Rotory Manifold port "3" to flushing return tee)	
4	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
5	22730-FF	1	TEE - 6 R6LO-S	
6	-FF	1	HOSE ASSEMBLY - 2025-06-06OS-0609 (Flushing manifold to Front Motor)	
7	22405-FF	2	ELBOW, 90 - 8-6 C5OLO-S	
8	REF.	1	 WHEEL DRIVE MOTOR	FR-5
9	-FF	1	HOSE ASSEMBLY - 2019-04-04OS-0409 (Flushing manifold to drain)	
10	15133-FF	1	ELBOW, 90 - FF1868T-0406S	
11	REF.	1	 MANIFOLD, FLUSHING - WHEEL MOTORS	FR-4
12	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
13	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
14	-FF	1	HOSE ASSEMBLY - 2012.5-06-060S-060S (Flush manifold to FL port)	
15	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
16	REF.	1	 LOWER SOLENOID MANIFOLD	FF-5
17	23015-FF	1	ELBOW, 45 - 6 V5OLO-S	
18	-FF	1	HOSE ASSEMBLY - 2042-06-06OS-0604 (Front Motor to Rear Motor)	
19	-FF	1	HOSE ASSEMBLY - 2025-06-06OS-0609 (Flushing manifold to Rear Motor)	

 See referenced page for component or assembly breakdown.

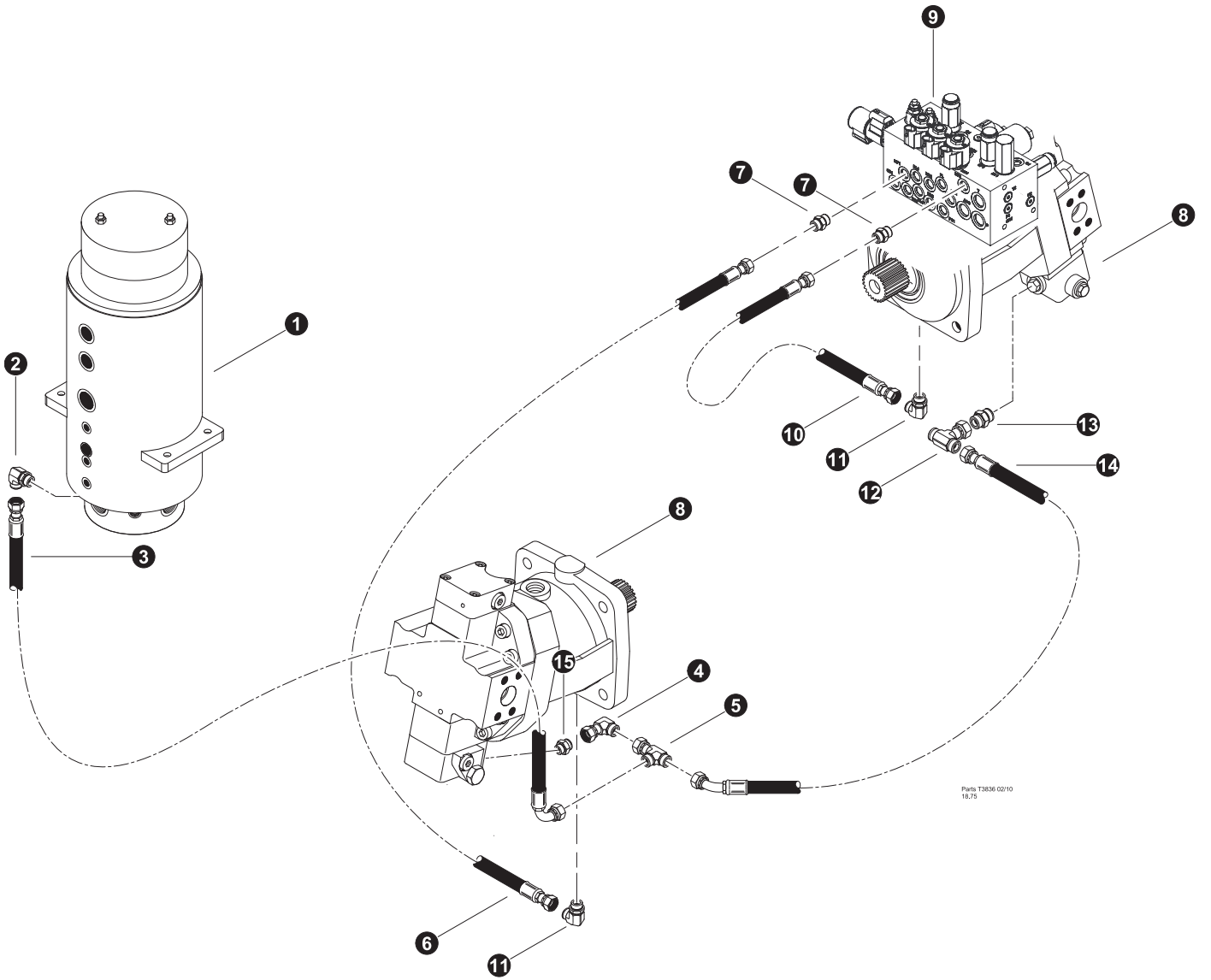


Parts T3651 08/08
16,75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Flushing Supply and Return Connections)
SN - 0252-042208 to 0321-10219**




REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
3	-FF	1	HOSE ASSEMBLY - 2051-06-060S-0604 (Rotory Manifold port "3" to flushing return tee)	
4	16296-FF	1	ELBOW, 90 - FF1868T-0606S	
5	22730-FF	1	TEE - 6 R6LO-S	
6	-FF	1	HOSE ASSEMBLY - 2018.5-06-06OS-0609 (Flushing manifold to Front Motor)	
7	22405-FF	2	ELBOW, 90 - 8-6 C5OLO-S	
8	REF.	1	 WHEEL DRIVE MOTOR	FR-5
9	-FF	1	MANIFOLD, FLUSHING - WHEEL MOTORS	
10	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
11	16360-FF	1	ELBOW, 90 - FF1868T-0808S	
12	-FF	1	HOSE ASSEMBLY - 2022-08-08OS-08OS (Flushing manifold to Lower Manifold "MF" Port)	
13	16360-FF	1	ELBOW, 90 - FF1868T-0808S	
14	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4

 See referenced page for component or assembly breakdown.

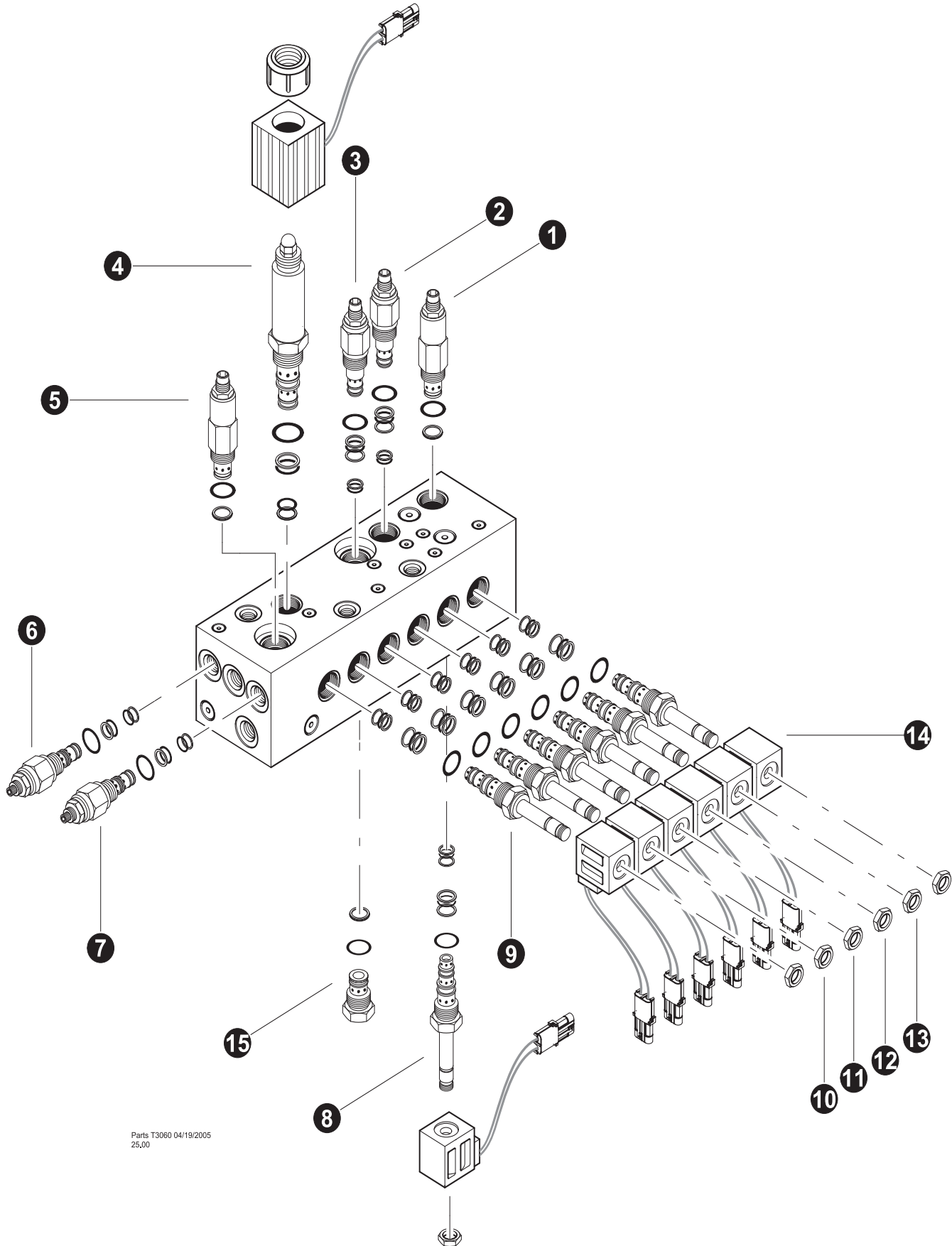


Parts T3836 02/10
15/9

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Flushing Supply and Return Connections)
SN - 0322-112409 and Up
(including machine 0319)**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	22405-FF	1	ELBOW, 90 - 8-6 C5OLO-S	
3	-FF	1	HOSE ASSEMBLY - 2051-08-080S-0809 (Rotory Manifold port "HO" to flushing return tee)	
4	17085-FF		ELBOW, 90 SWIVEL - 6500-8	
5	20066-FF	1	TEE - 8 S5OLO-S - BRANCH	
6	-FF	1	HOSE ASSEMBLY - 2026.5-06-06OS-06OS (MF1 to Front Motor)	
7	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
8	REF.	1	 WHEEL DRIVE MOTOR	FR-5
9	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
10	-FF	1	HOSE ASSEMBLY - 2046-08-08OS-08OS (MF2 to Lower Manifold "MF" Port)	
11	20031-FF	1	ELBOW, 90 - 6-8 C5OLO-S	
12	51003-FF	1	TEE - 8 R50L0-S RUN	
13	22901-FF	1	CONNECTOR, STR - 6-8 F5OLO-S	
14	-FF	1	HOSE ASSEMBLY - 2046-08-08OS-08O4 (Flush Return Jumper)	
15	22901-FF	1	CONNECTOR, STR - 6-8 F5OLO-S	

 See referenced page for component or assembly breakdown.



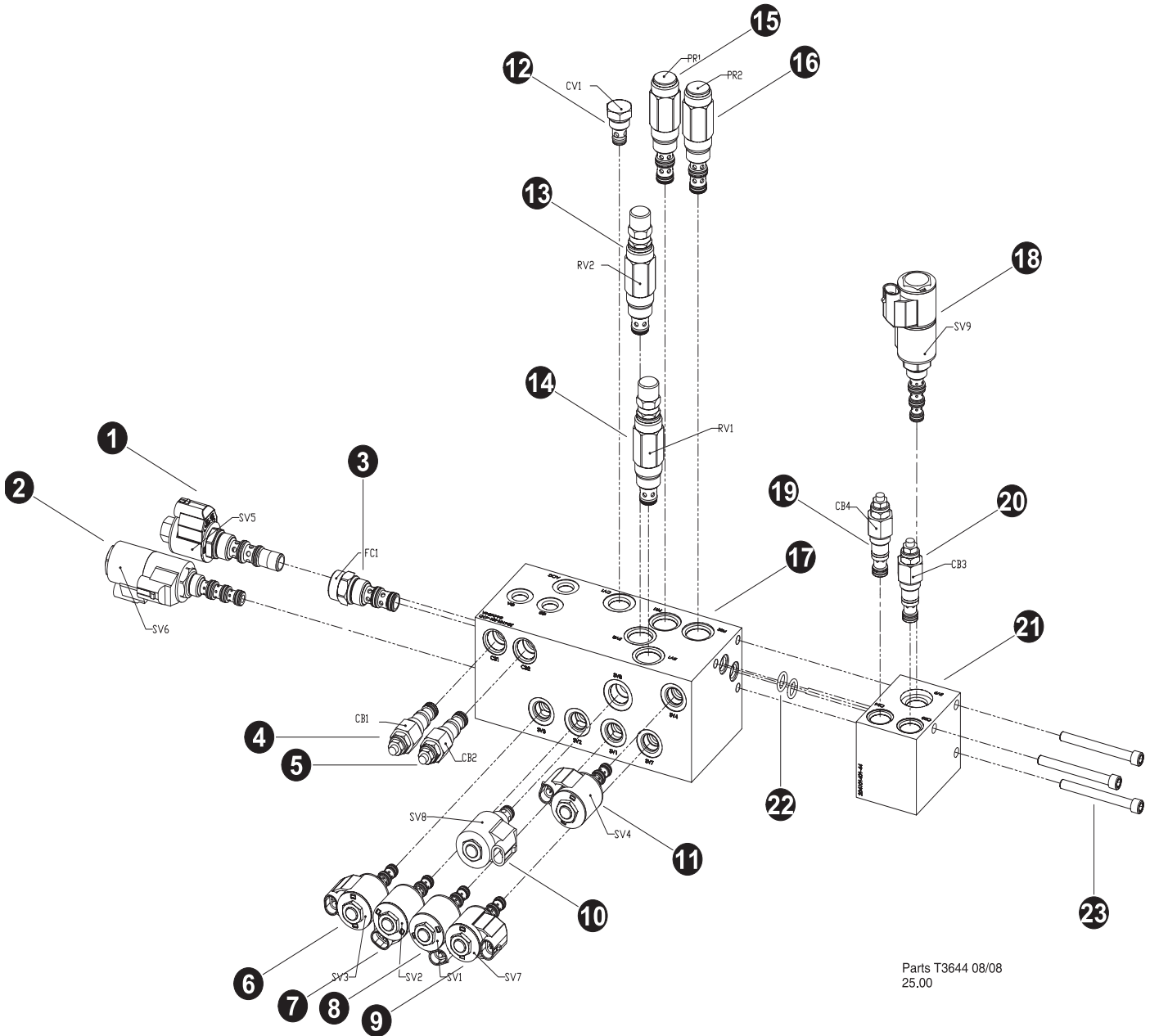
Parts T3060 04/19/2005
25,00

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Solenoid Manifold Breakdown)
SN - 0251 and before**

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	51623-FF	1	<input type="checkbox"/> VALVE, LOWER MANIFOLD - GS Hydraulics	
		1	BLOCK, Lower Manifold (XM04033revC)	
1	52206-FF	1	CARTRIDGE, Secondary relief valve (RDH103S30) 900 psi KIT, Seal Repair (SK10-2N)	
2	52163-FF	1	CARTRIDGE, GB shift counter balance valve (CBPA-080N-S-0-30) KIT, Seal Repair (SKN-0828)	
3	52163-FF	1	CARTRIDGE, GB shift counter balance valve (CBPA-080N-S-0-30) KIT, Seal Repair (SKN-0828)	
4	52212-FF	1	CARTRIDGE, Travel Brake proportional valve (EPRR-10-N-10-0-24DL) KIT, Seal Repair (SK08-2N) Solenoid, 24 volt Proportional	
5	52162-FF	1	CARTRIDGE, Main relief valve (RDH103S30) 2000 psi KIT, Seal Repair (SK10-2N)	
6	52415-FF	1	CARTRIDGE, Park Brake reducing / relief valve (PRH081S10) 900 psi KIT, Seal Repair (SK08-3N)	
7	52207-FF	1	CARTRIDGE, Solenoids reducing / relief valve (PRH081S10) 425 psi KIT, Seal Repair (SK08-3N)	
8	52208-FF	1	CARTRIDGE, Frame Lock directional valve cartridge (DSH081NR) KIT, Seal Repair (SK08-2N)	
	52211-FF		COIL, 24 volt	
9	52209-FF	1	CARTRIDGE, Park Brake solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
10	52209-FF	1	CARTRIDGE, Motor Shift "1" solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
11	52209-FF	1	CARTRIDGE, Motor Shift "2" solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
12	52209-FF	1	CARTRIDGE, Diff Lock solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
13	52209-FF	1	CARTRIDGE, Gear Box Shift "A" solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
14	52209-FF	1	CARTRIDGE, Gear Box Shift "B" solenoid valve 3-way (DSH083) KIT, Seal Repair (SK08-3N)	
	52211-FF		COIL, 24 volt	
15	52210-FF	1	CARTRIDGE, Accumulator check valve cartridge (CVH103P) KIT, Seal Repair (SK10-2N)	

Kit or Assembly - includes all items indented underneath.

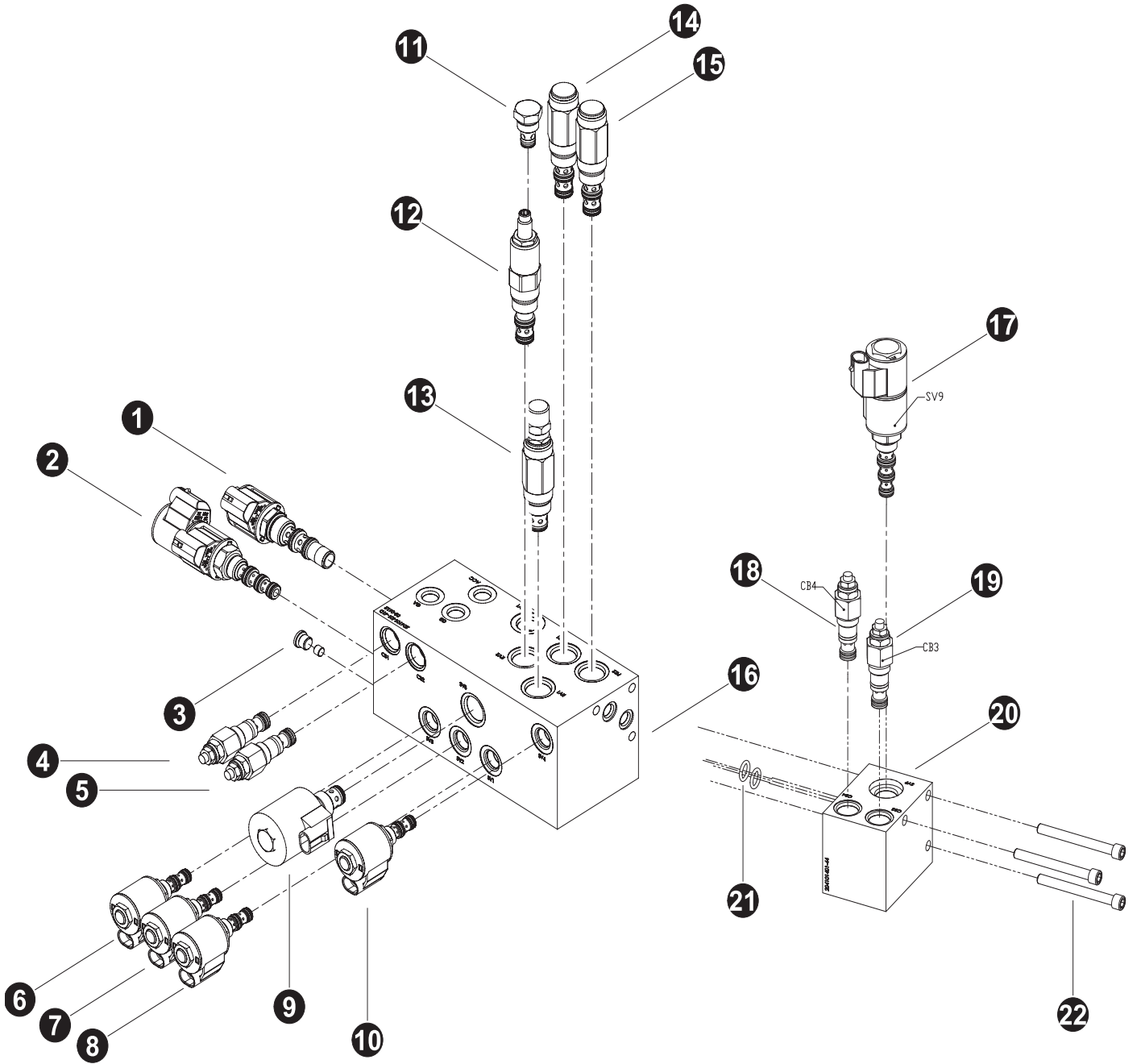
⌘ Included in



Lower Solenoid Manifold Circuits and Components Breakdown (Lower Solenoid Manifold Breakdown) SN - 0252-042208 to 0297-021309

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	53001-FF	1	☐ VALVE, LOWER MANIFOLD - Fluid Systems	
1	53774-FF	1	■ Valve, Proportional Pressure Reducing (TS98-31-0-N-24EY) Travel Brake	
2	-FF	1	◆ Valve, Directional Control (SV08-47D-0-N-24EY) Gear Box Shift	
3	-FF	1	☒ Valve, Flow Regulator/Press Comp (FR10-30F-0-N-3.6)	
4	-FF	1	Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
5	-FF	1	Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
6	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EY) Diff Lock	
7	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EY) Motor Shift 2	
8	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EY) Motor Shift 1	
9	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EY) Frame Lock	
10	-FF	1	○ Valve, Directional Control (SV08-21-0-N-24EY)	
11	-FF	1	⌘ Valve, Directional Control (SV07-34-0-N-24EY) Parking Brake	
12	-FF	1	⊕ Valve, Check (CV08-20-0-N-25)	
13	53882-FF	1	⊙ Valve, Pressure Relief (RV10-26C-0N-15)	
14	-FF	1	⊙ Valve, Pressure Relief (RV10-26C-0N-30) 3000 PSI	
15	-FF	1	● Valve, Pressure Reducing (PR10-36H-0-N-15/4.25) 425 PSI	
16	-FF	1	● Valve, Pressure Reducing (PR10-36H-0-N-15/9) 900 PSI	
17	-FF	1	BLOCK, (204101401-41C)	
-	53178-FF	1	☐ VALVE, GATE VALVE (204101401-54)	
18	-FF	1	Valve, Directional Control (SV08-47D-0-N-24EY) Gate Control	
19	-FF	1	Valve, Counterbalance (5008-3-5-000)	
20	-FF	1	Valve, Counterbalance (5008-3-5-000)	
21	-FF	1	BLOCK, (204101401-44)	
22	-FF	1	O-Rings	
23	-FF	1	Bolts,	

- ☐ Kit or Assembly - includes all items indented underneath.
- ⌘ Seal Repair Kit (SK07-3N-MM) / Coil (4303824) / Nut (7004400)
- Seal Repair Kit (SK10-3N-BM)
- Seal Repair Kit (SK90-3V) / Coil (4303824) / Nut (7004400)
- ◆ Seal Repair Kit (SK08-4N-MMM) / Coil (4303824) / Nut (7004400) / Spacer (4534720)
- ⚡ Seal Repair Kit (SK10-2N-T) / Coil (4303924) / Nut (7004400)
- ⊕ Seal Repair Kit (SK08-2N-T)
- ⊙ Seal Repair Kit (SK10-2N-B)
- ☒ Seal Repair Kit (SK10-3X-TB)
- Seal Repair Kit (SK08-2X-T) / Coil (4303824) / Nut (7004400)

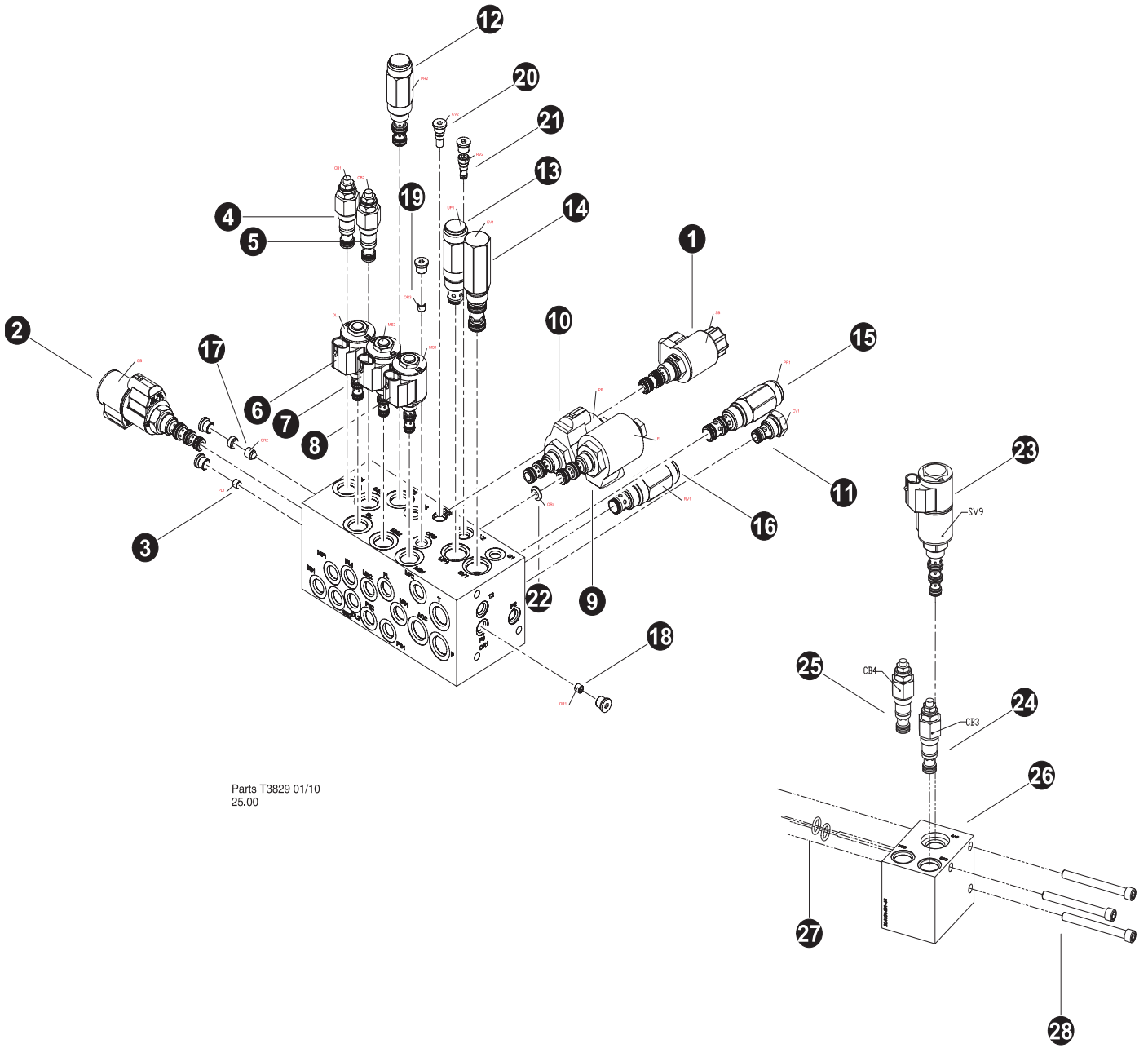


Parts T3807 08/09
25.00

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Solenoid Manifold Breakdown)
SN - 0298-022309 to 0321-10219
(not including machine 0319)**

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	53001-FF	1	☐ VALVE, LOWER MANIFOLD - Fluid Systems	
1	53774-FF	1	■ Valve, Proportional Pressure Reducing (TS98-31-0-N-24EYZ) Travel Brake	
2	-FF	1	◆ Valve, Directional Control (SV08-47D-0-N-24EY) Gear Box Shift	
3	-FF	1	PLUG,	
4	-FF	1	Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
5	-FF	1	Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
6	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EYZ) Diff Lock	
7	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EYZ) Motor Shift 2	
8	-FF	1	⌘ Valve, Directional Control (SV07-31-0-N-24EYZ) Motor Shift 1	
9	-FF	1	❖ Valve, Directional Control (SV10-21-0-N-24EYZ) Frame Lock	
10	-FF	1	⌘ Valve, Directional Control (SV07-34-0-N-24EYZ) Parking Brake	
11	-FF	1	⊕ Valve, Check (CV08-20-0-N-25)	
12	-FF	1	● Valve, Pressure Sequence (PS10-36A-0-N-15) 1000 PSI	
13	-FF	1	⊙ Valve, Pressure Relief (RV10-26C-0-N-30) 3000 PSI	
14	-FF	1	● Valve, Pressure Reducing (PR10-36H-0-N-15/4.25) 425 PSI	
15	-FF	1	● Valve, Pressure Reducing (PR10-36H-0-N-15/9) 900 PSI	
16	-FF	1	BLOCK, (204101401-51D)	
-	53178-FF	1	☐ VALVE, GATE VALVE (204101401-54)	
17	-FF	1	Valve, Directional Control (SV08-47D-0-N-24EY) Gate Control	
18	-FF	1	Valve, Counterbalance (5008-3-5-000)	
19	-FF	1	Valve, Counterbalance (5008-3-5-000)	
20	-FF	1	BLOCK, (204101401-44)	
21	-FF	1	O-Rings	
22	-FF	1	Bolts,	

- ☐ Kit or Assembly - includes all items indented underneath.
- ⌘ Seal Repair Kit (SK07-3N-MM) / Coil (4303824) / Nut (7004400)
- Seal Repair Kit (SK10-3N-BM)
- Seal Repair Kit (SK90-3V) / Coil (4303824) / Nut (7004400)
- ◆ Seal Repair Kit (SK08-4N-MMM) / Coil (4303824) / Nut (7004400) / Spacer (4534720)
- ❖ Seal Repair Kit (SK10-2N-T) / Coil (4303924) / Nut (7004400)
- ⊕ Seal Repair Kit (SK08-2N-T)
- ⊙ Seal Repair Kit (SK10-2N-B)

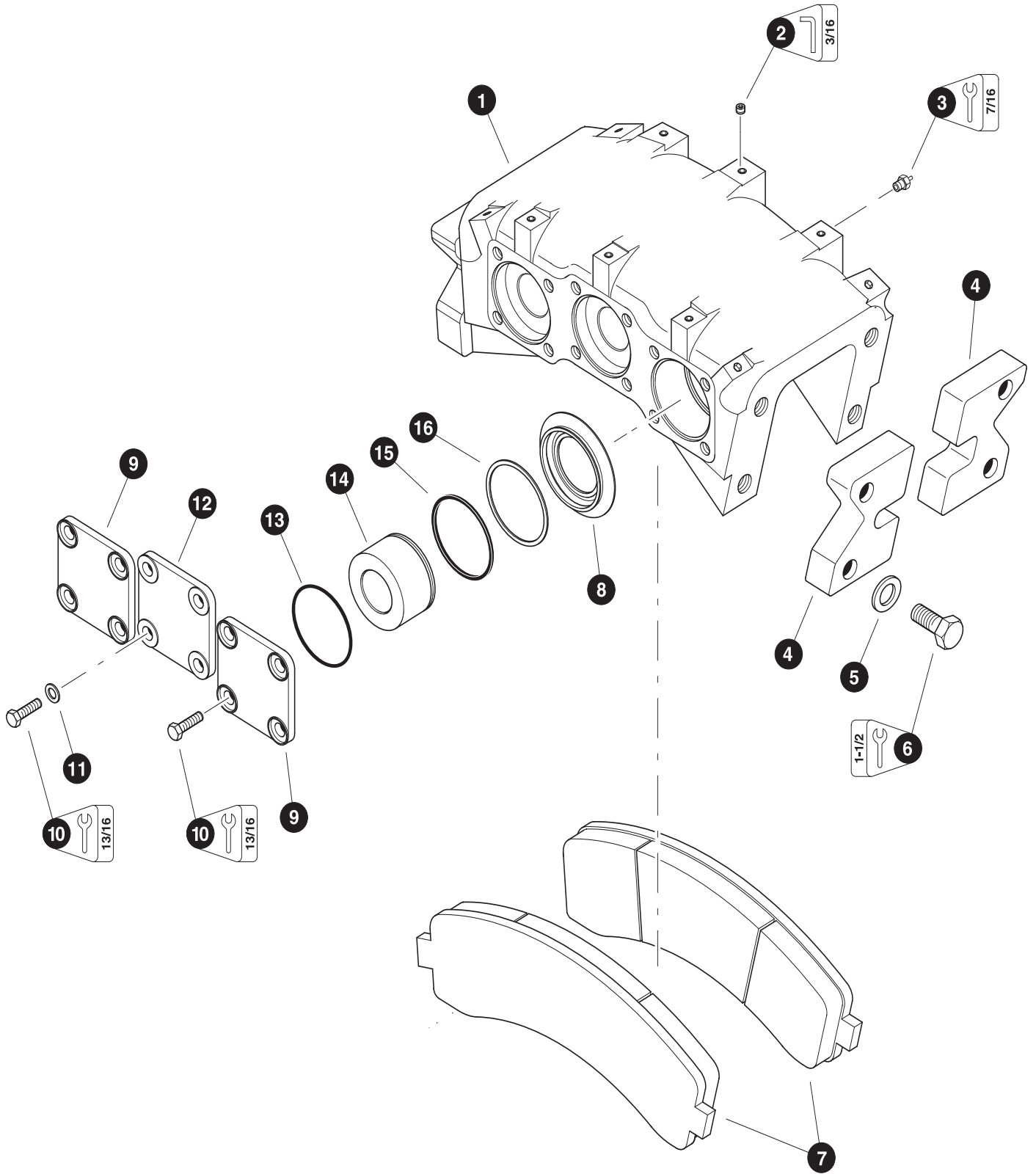


Parts T3829 01/10
25.00






Lower Solenoid Manifold Circuits and Components Breakdown (Lower Solenoid Manifold Breakdown) SN - 0322-112409 and Up (including machine 0319)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	53920-FF	1	☐ VALVE, LOWER MANIFOLD - Fluid Systems	
1	-FF	1	■ Valve, Proportional (PDR08-01-C-N-110-24PN-8.8) Travel Brake	
2	-FF	1	◆ Valve, Directional Control (SV08-47D-0-N-24EY) Gear Box Shift	
3	-FF	1	Plug, Flushing - 1/16-27 NTPF	
4	-FF	1	❖ Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
5	-FF	1	❖ Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve	
6	-FF	1	⌘ Valve, Directional Control (SV08-31-0-N-24EYZ) Diff Lock	
7	-FF	1	⌘ Valve, Directional Control (SV08-31-0-N-24EYZ) Motor Shift 2	
8	-FF	1	⌘ Valve, Directional Control (SV08-31-0-N-24EYZ) Motor Shift 1	
9	-FF	1	⌘ Valve, Directional Control (SV38-38-0-N-24EYZ) Frame Lock	
10	-FF	1	⌘ Valve, Directional Control (SV38-38-0-N-24EYZ) Parking Brake	
11	-FF	1	⊕ Valve, Check (CV08-20-0-N-25)	
12	-FF	1	● Valve, Pressure Reducing (PR58-38H-0-N-20/9.0) 900 PSI	
13	-FF	1	⊙ Valve, Unloading Pilot (UP10-3005F-0-N-90-30/30) 3000 PSI	
14	-FF	1	⊗ Valve, Hydraulic Directional (EV10-S3406-0-N-400) 400 PSI	
15	-FF	1	● Valve, Pressure Reducing (PR50-38H-0-N-05/04.6) 460 PSI	
16	-FF	1	○ Valve, Pressure Relief (RV50-22F-0-P-50/35.0) 3500 PSI	
17	-FF	1	ORIFACE,	
18	-FF	1	ORIFACE, .052" - 1/16-27 NTPF	
19	-FF	1	ORIFACE,	
20	-FF	1	☒ Valve, Check (CV04-20-0-N-5)	
21	-FF	1	☒ Valve, Thermal Relief (TR04-B20-0-N-40) 4000psi	
22	-FF	1	ORIFACE, (7057039)	
-	53921-FF	1	☐ VALVE, GATE VALVE	
23	-FF	1	Valve, Directional Control (SV38-38-0-N-24EYZ) Gate Control	
-	-FF	1	Seal Kit, SK08-3X-MM	
24	-FF	1	❖ Valve, Counterbalance (5008-3-500)	
25	-FF	1	❖ Valve, Counterbalance (5008-3-500)	
26	-FF	1	BLOCK, (204101401-44B)	
27	-FF	1	O-Rings	
28	-FF	1	Bolts,	


- ☐ Kit or Assembly - includes all items indented underneath.
- ⌘ Seal Repair Kit (SK08-3N-MM) / Coil (4303810) / Nut (7004400)
- Seal Repair Kit (SK10-3N-MM)
- Seal Repair Kit () / Coil () / Nut ()
- ◆ Seal Repair Kit (SK08-4N-MMM) / Coil (4303810) / Nut (7004400) / Spacer (4534720)
- ❖ Seal Repair Kit (12106)
- ⊕ Seal Repair Kit (SK08-2N-T)
- ⊙ Seal Repair Kit (SK10-3N-MM)
- Seal Repair Kit (SK10-2P-T)
- ⊗ Seal Repair Kit (SK10-S3N-MM)
- ☒ Seal Repair Kit (SK04-2N-T)
- ☒ Seal Repair Kit (SK04-B2N-B)



Lower Solenoid Manifold Circuits and Components Breakdown (Frame Lock Caliper Breakdown)

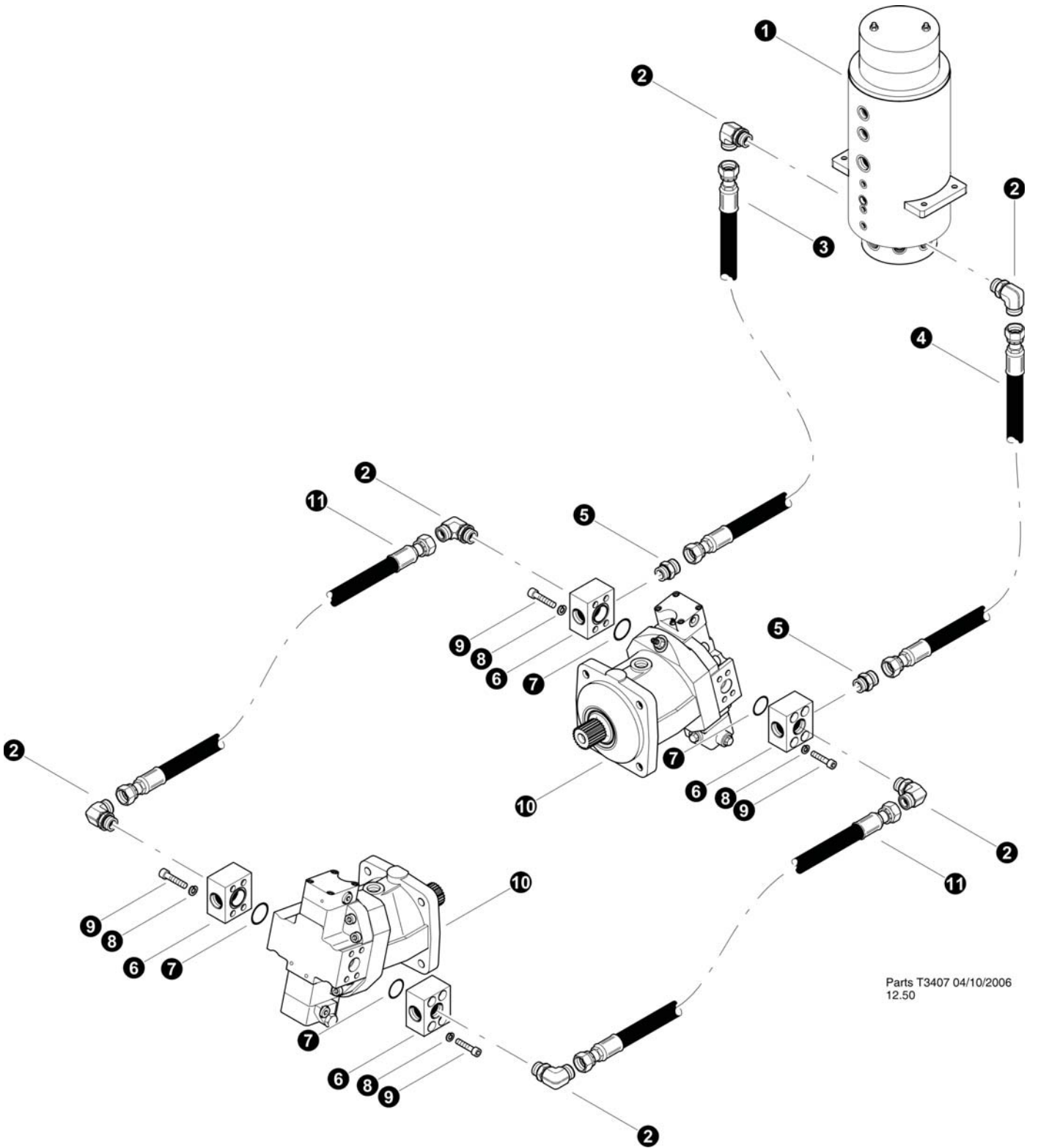
REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	20953-FF	1	 FRAME LOCK BRAKE	
1	NSS	1	HOUSING	
2	-----	13	PLUG	
3	-----	1	SCREW, bleed	
4	-----	4	RETAINER, brake pad	
5	-----	8	WASHER	
6	-----	8	BOLT	
7	24406-FF	1	PAD, brake (pair)	
8	NSS	6	 BOOT, piston	
9	23445-FF	2	COVER, piston (Machined special to countersink bolt heads)	
10	24088-FF	12	BOLT - 9/16" x 1-1/4"	
11	-----	4	WASHER	
12	23444-FF	1	COVER, piston	
13	NSS	6	 O-RING, piston cover	
14	24434-FF	6	PISTON, brake caliper	
15	NSS	6	 SEAL, piston	
16	NSS	6	 RING, back-up	
-	23113-FF	1	KIT, seal repair - frame lock brake	

 Kit or Assembly - includes all items indented underneath.

 Included in seal repair kit PN# 23113.

Section FF810-5


810 Front Frame - Drive Motor Hydraulics




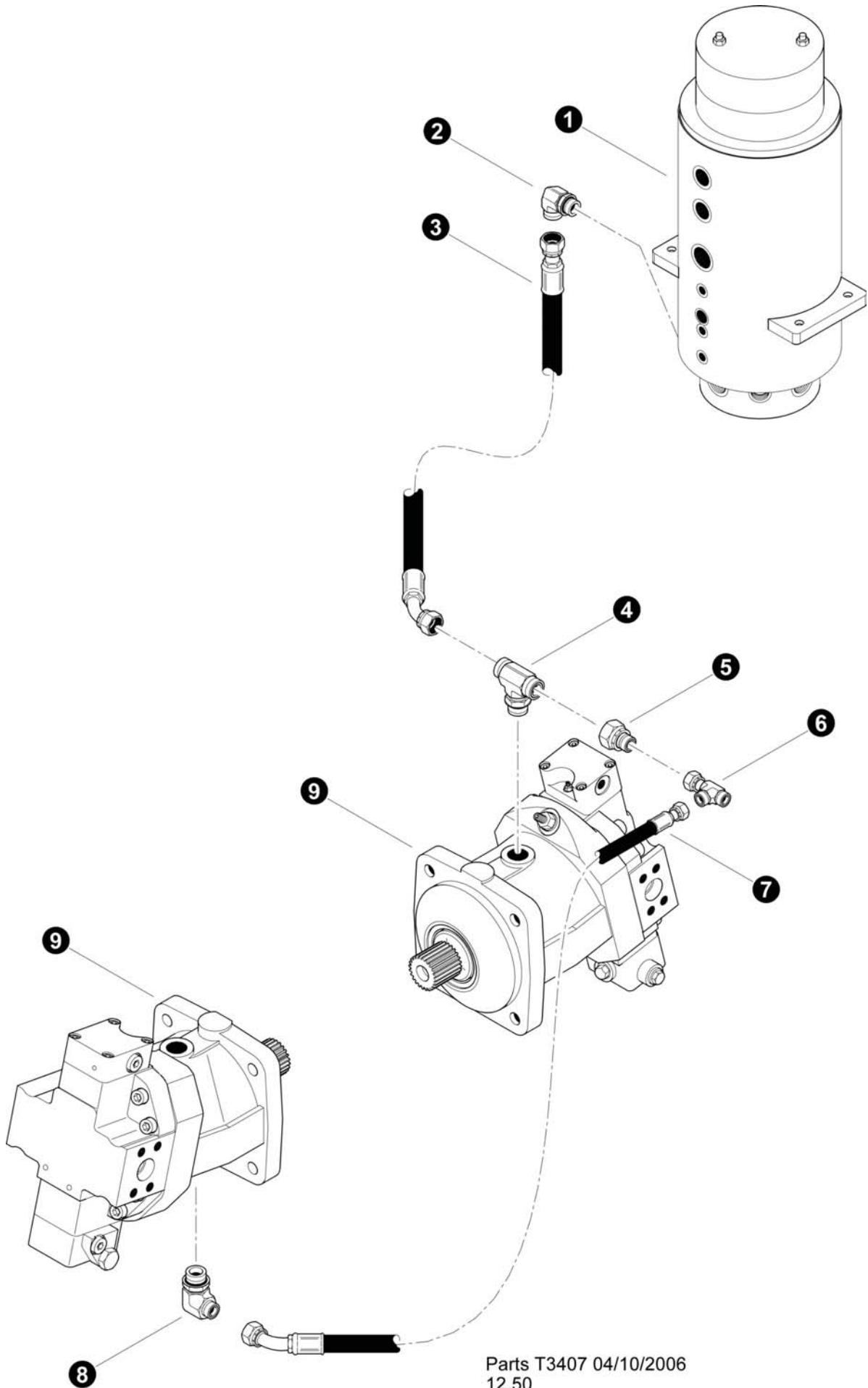
Parts T3407 04/10/2006
12.50

DRIVE MOTOR HYDRAULICS

Front to Rear Hydraulic Motor Connection - Pressure (Standard Front and All Rear Frames)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD.	UP-1
2	15484-FF	2	ELBOW, 90 - 6801-16	
3	-FF	1	HOSE ASSEMBLY - 6029-16-16OS-16OS (Rotary manifold lower port "7" to Drive Motor)	
4	-FF	1	HOSE ASSEMBLY - 6029-16-16OS-16OS (Rotary manifold lower port "8" to Drive Motor)	
5	15497-FF	2	CONNECTOR, straight - 6400-16	
6	26008-FF	4	MANIFOLD, rexroth drive motor	
7	15378-FF	2	O-RING, 1.25"	
8	50075-FF	8	WASHER, LOCK 1/2	
9	50074-FF	8	BOLT, ALLEN 1/2 X 1 1/2"	
10	REF	1	HYDRAULIC WHEEL DRIVE MOTOR	FF-5
11	-FF	1	HOSE ASSEMBLY - 6037-16-16OS-16OS (Front Drive Motor to Rear Drive Motor)	


 See referenced page for component or assembly breakdown.



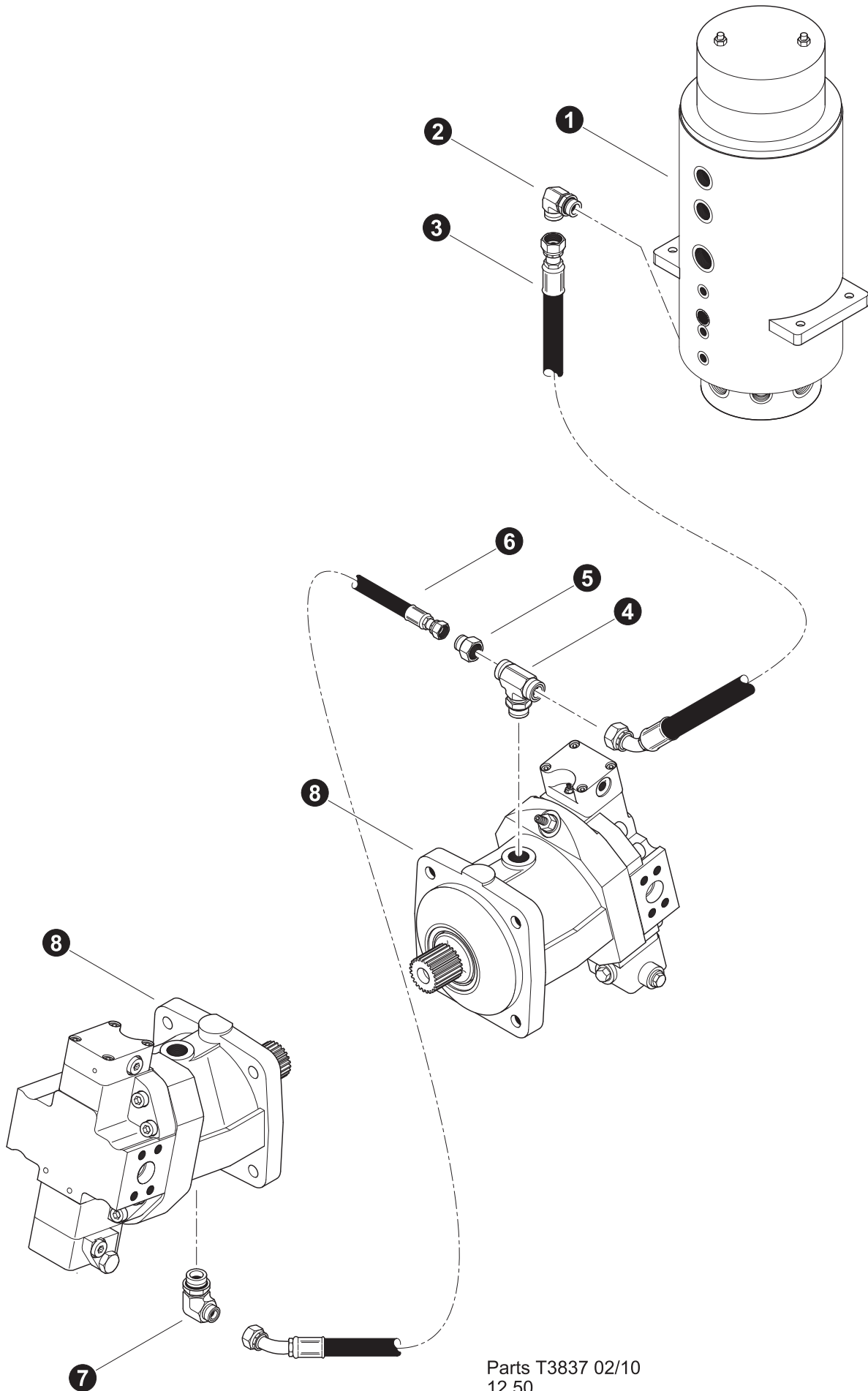
Parts T3407 04/10/2006
12.50

DRIVE MOTOR HYDRAULICS

ROTARY MANIFOLD TO REAR DRIVE MOTOR *SN 0321-10219 and Before*

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD.	UP-1
2	17688-FF	1	ELBOW, 90 - FF1868T-1212S	
3	-FF	1	HOSE ASSEMBLY - 2049-12-120S-1204 (Motor Case Drain to port "11")	
4	20029-FF	1	TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S	
5	15117-FF	1	CONNECTOR, REDUCER - ORS FF2281T-0812S	
6	20066-FF	1	TEE - 8 S5OLO-S - BRANCH	
7	50975-FF	1	HOSE ASSEMBLY - 2039.5-08-080S-0804 (Case Drain Motor Jumper)	
8	15372-FF	1	ELBOW, 90 - FF1868T-0812S	
9	REF	1	HYDRAULIC WHEEL DRIVE MOTOR	FF-5

 See referenced page for component or assembly breakdown.



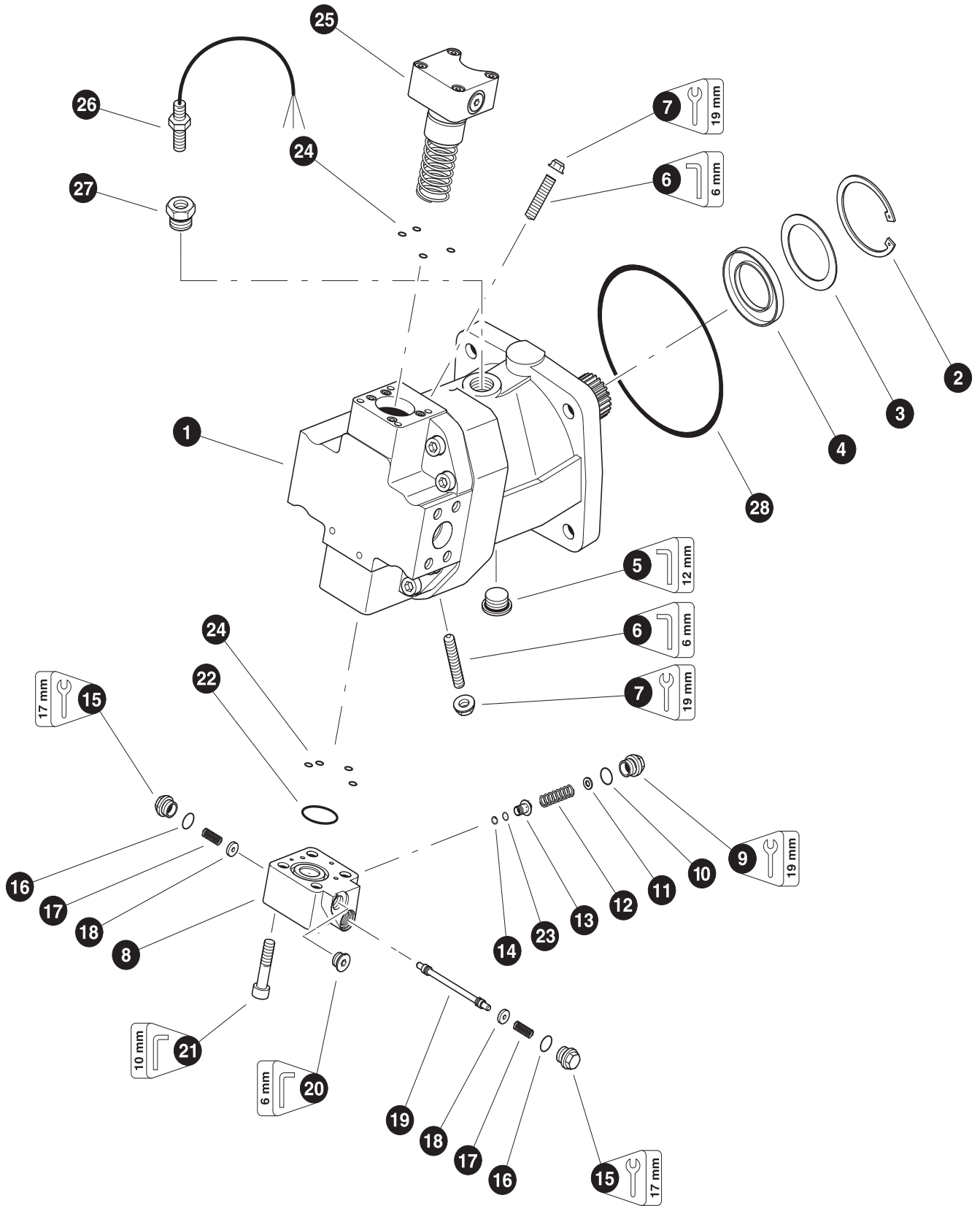
Parts T3837 02/10
12.50

DRIVE MOTOR HYDRAULICS

ROTARY MANIFOLD TO REAR DRIVE MOTOR **SN - 0322-112409 and Up** *(including machine 0319)*

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	ROTARY MANIFOLD.	UP-1
2	17688-FF	1	ELBOW, 90 - FF1868T-1212S	
3	-FF	1	HOSE ASSEMBLY - 2049-12-120S-1204 (Motor Case Drain to port "V1")	
4	20029-FF	1	TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S	
5	15117-FF	1	CONNECTOR, REDUCER - ORS FF2281T-0812S	
6	50975-FF	1	HOSE ASSEMBLY - 2039.5-08-080S-0804 (Case Drain Motor Jumper)	
7	15372-FF	1	ELBOW, 90 - FF1868T-0812S	
8	REF	1	HYDRAULIC WHEEL DRIVE MOTOR	FF-5

See referenced page for component or assembly breakdown.



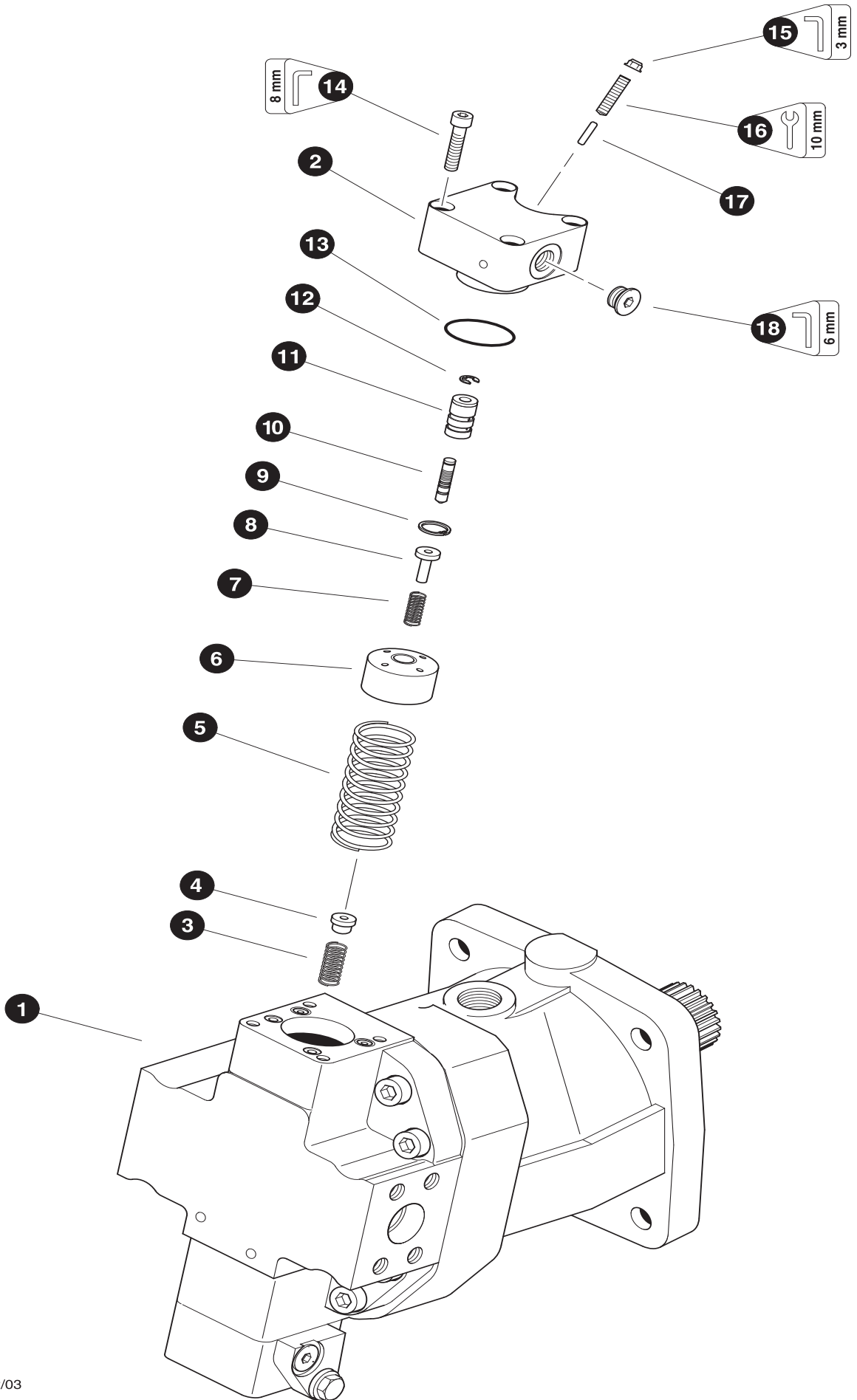
REXROTH 160cc MOTOR (Standard)

REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	51869-0-FF	1	☐	MOTOR, wheel drive - Rexroth AA6VM160 (Front) (w/speed counter ring) (Vg Min = 0 cubic meters) (flushing)	
	51869-70-FF	1	☐	MOTOR, wheel drive - Rexroth AA6VM160 (Rear) (w/speed counter ring) (Vg Min = 70 cubic meters) (flushing)	
2	20685-FF	1		RING, snap	
3	20686-FF	1		SHIM, shaft seal	
4	20687-FF	1	⌘	SEAL, shaft	
5	19692-FF	1		PLUG - 26mm-1.5P (BSPP thread)	
6	51987-FF	1		SCREW, adjusting (0 - Displacement min)(needed for front motor)	
	20688-FF	2		SCREW, adjusting (Displacement min & max)	
7	20689-FF	2	⌘	NUT, seal	
8	20690-FF	1	☐	STROKING PISTON COVER ASSEMBLY	
9	20691-FF	1		PLUG	
10	20713-FF	1	⌘	O-RING	
11	20714-FF	1		SHIM	
12	20715-FF	1		SPRING	
13	20716-FF	1		POPPET	
14	20718-FF	1		RING, snap	
15	20719-FF	2		PLUG	
16	20720-FF	2	⌘	O-RING	
17	20721-FF	2		SPRING	
18	20722-FF	2		RETAINER, spring	
19	NSS	1		SPOOL	
20	20693-FF	1		PLUG - 14mm-1.5P (BSPP thread)	
21	20723-FF	4		BOLT, allen head	
22	20724-FF	1	⌘	O-RING	
23	20717-FF	1		ORIFICE, flushing - 1.2mm	
24	NSS	8		O-RING	
25	REF.	1		STROKING PISTON CONTROL ASSEMBLY	FF-5
26	24656-FF	1		SENSOR, SPEED PICKUP (rexroth hydro motor)	
27	51098-FF	1		FITTING, speed pickup rexroth (sae)	
28	20967-FF	1		O-RING, WHEEL DRIVE MOTOR (gearbox pilot)	
-	20725-FF	1		KIT, seal repair - complete AA6VM160 motor	

- ☐ Kit or Assembly - includes all items indented underneath.
- ⌘ Included in seal repair kit Part # 20725-FF.

Note:

Due to warranty policy restrictions imposed by component suppliers, it is not recommended that the component be disassembled further than is shown in the illustration.



Parts T2811 08/12/03
37.50

REXROTH 160cc MOTOR HA2T Controller Brakedown

(Standard)

REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	51869-0-FF	1	☐	MOTOR, wheel drive - Rexroth AA6VM160 (Front) (w/speed counter ring) (Vg Min = 0 cubic meters) (flushing)	
	51869-70-FF	1	☐	MOTOR, wheel drive - Rexroth AA6VM160 (Rear) (w/speed counter ring) (Vg Min = 70 cubic meters) (flushing)	
2	20726-FF	1	☐	CONTROL, MOTOR STROKE ASSEMBLY (HA2T)	
3	---	1		SPRING, (HU00444549)	
4	---	1		RETAINER, spring (HU00421860)	
5	---	1		SPRING (HU00651116)	
6	---	1		BUSHING, spring (HU00651118)	
7	20729-FF	1		SPRING	
8	---	1		RETAINER, spring (HU00921351)	
9	20731-FF	1		RING, snap	
10	---	1		SPOOL, control (HU00430748)	
11	20732-FF	1		BUSHING, control spool	
12	20734-FF	1		E-CLIP, control spo	
13	---	1	⌘	O-RING (68103-025)	
14	---	4		BOLT, allen head (60118-063)	
15	20737-FF	1	⌘	NUT, seal	
16	20738-FF	1		SCREW, adjusting (Stroke control)	
17	---	1		PIN, stroke adjustment (69116-019)	
18	20693-FF	1		PLUG - 14mm-1.5P (BSPP thread)	
-	20725-FF	1		KIT, seal repair - complete AA6VM160 motor	

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 20725-FF

Note:

Due to warranty policy restrictions imposed by component suppliers, it is not recommended that the component be disassembled further than is shown in the illustration.

