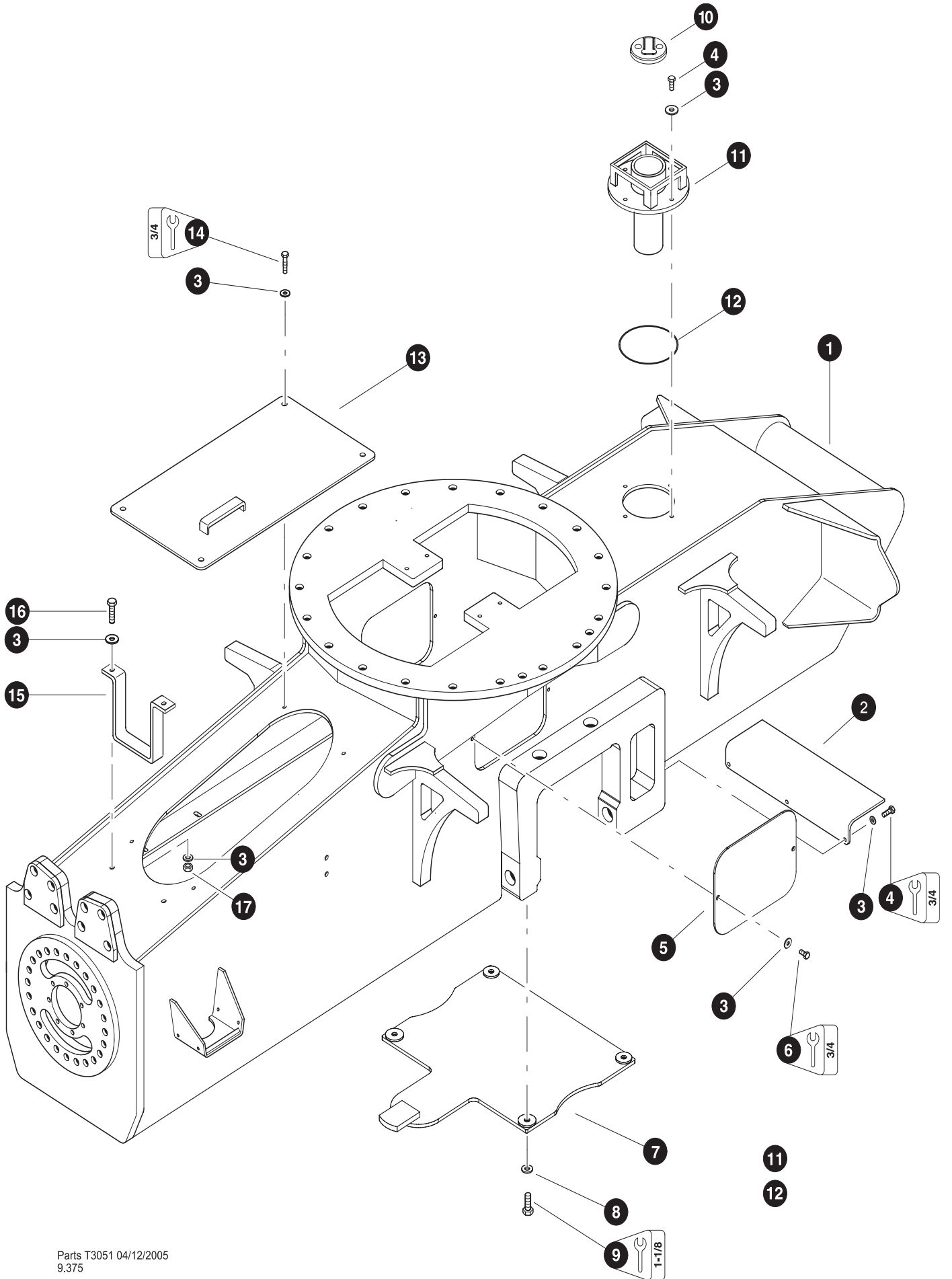



Section FF-1

TF 830 & 840 Front Frame - Frame / Covers / Brackets / Steps

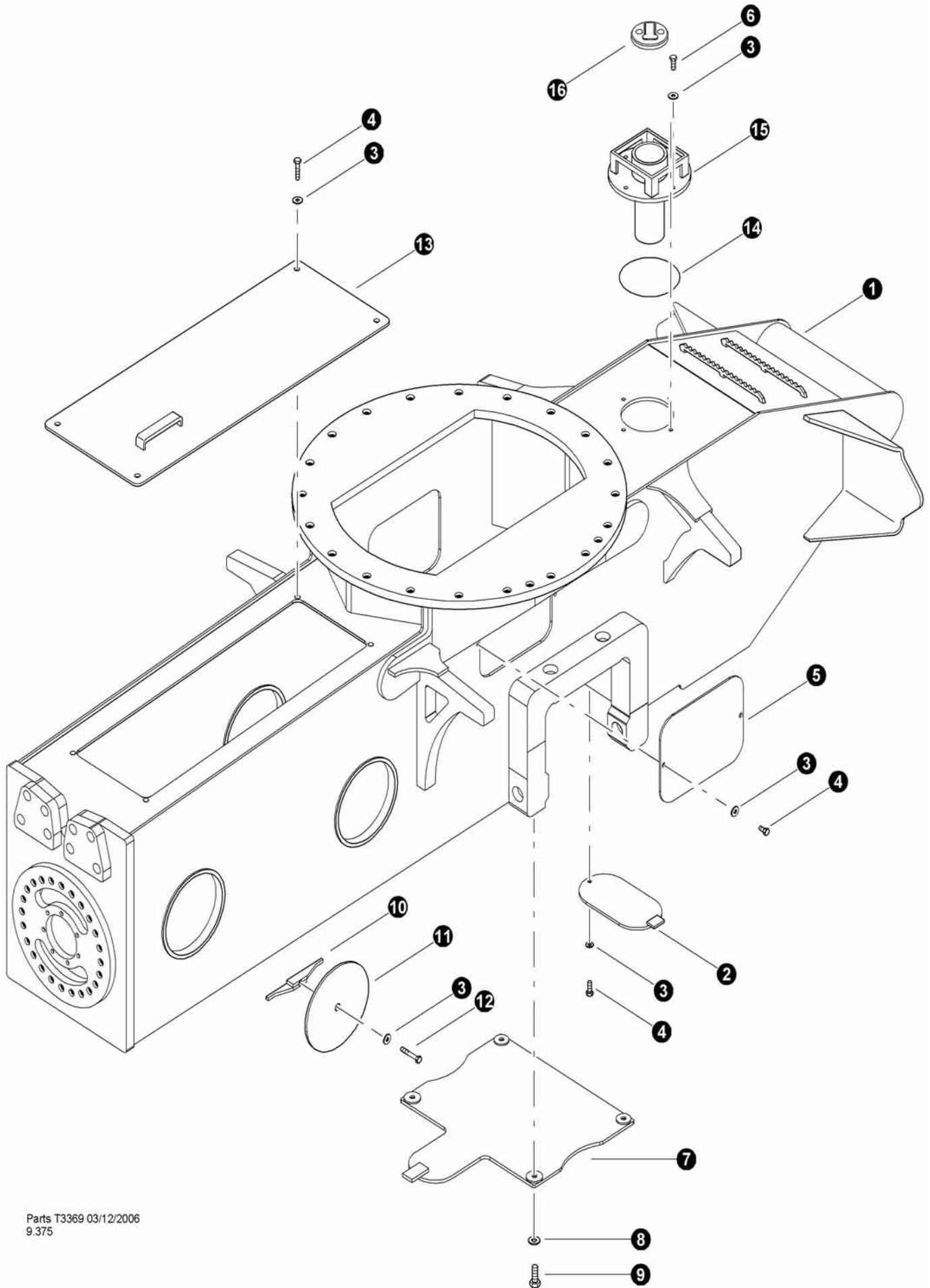


Parts T3051 04/12/2005
9.375

FRONT FRAME AND ACCESS COVERS
(Covers and Brackets)
Machines built before SN-0152-04/14/06


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	50953-FF	1	WELDMENT, front frame	
2	42414-FF	1	COVER, AXLE BOX END (WITH FUEL SENSOR)	
3	15534-FF	19	WASHER, SAE flat - 1/2"	
4	10783-FF	7	BOLT - 1/2" x 1"	
5	40894-FF	2	COVER, RISER	
6	15528-FF	4	BOLT - 1/2" x 1 1/2"	
7	51415-FF	1	COVER, AXLE BOTTOM	
8	15550-FF	4	WASHER, SAE flat - 3/4	
9	10839-FF	4	BOLT - 3/4" X 1.5"	
10	16585-FF	1	CAP, FUEL (locking)	
11	REF	1	 COVER, FUEL	FF-4
12	15600-FF	1	O-RING, fuel tank cover	
13	40962-FF	1	COVER, TOP REAR	
14	10783-FF	4	BOLT - 1/2" x 1"	
15	42398-FF	1	BRACKET, HOSE BASKET	
16	15565-FF	2	BOLT - 1/2" X 2.5"	
17	10815-FF	2	NUT, LOCK - 1/2"	


 See referenced page for component or assembly breakdown.

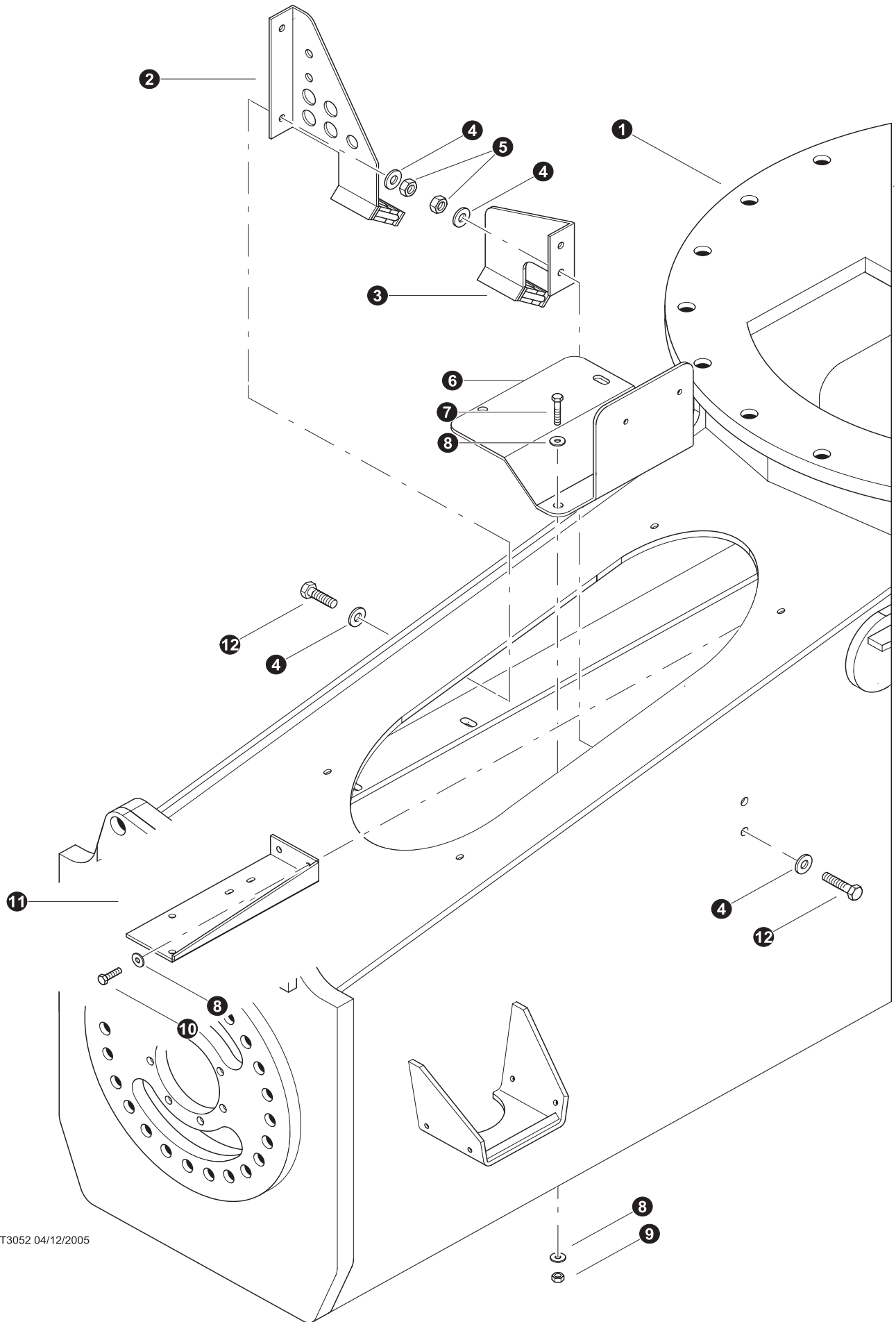


Parts T3369 03/12/2006
9.375

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


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	52408-FF	1	WELDMENT, front frame TF 830 / 840	
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	52215-FF	1	COVER, AXLE BOTTOM	
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.

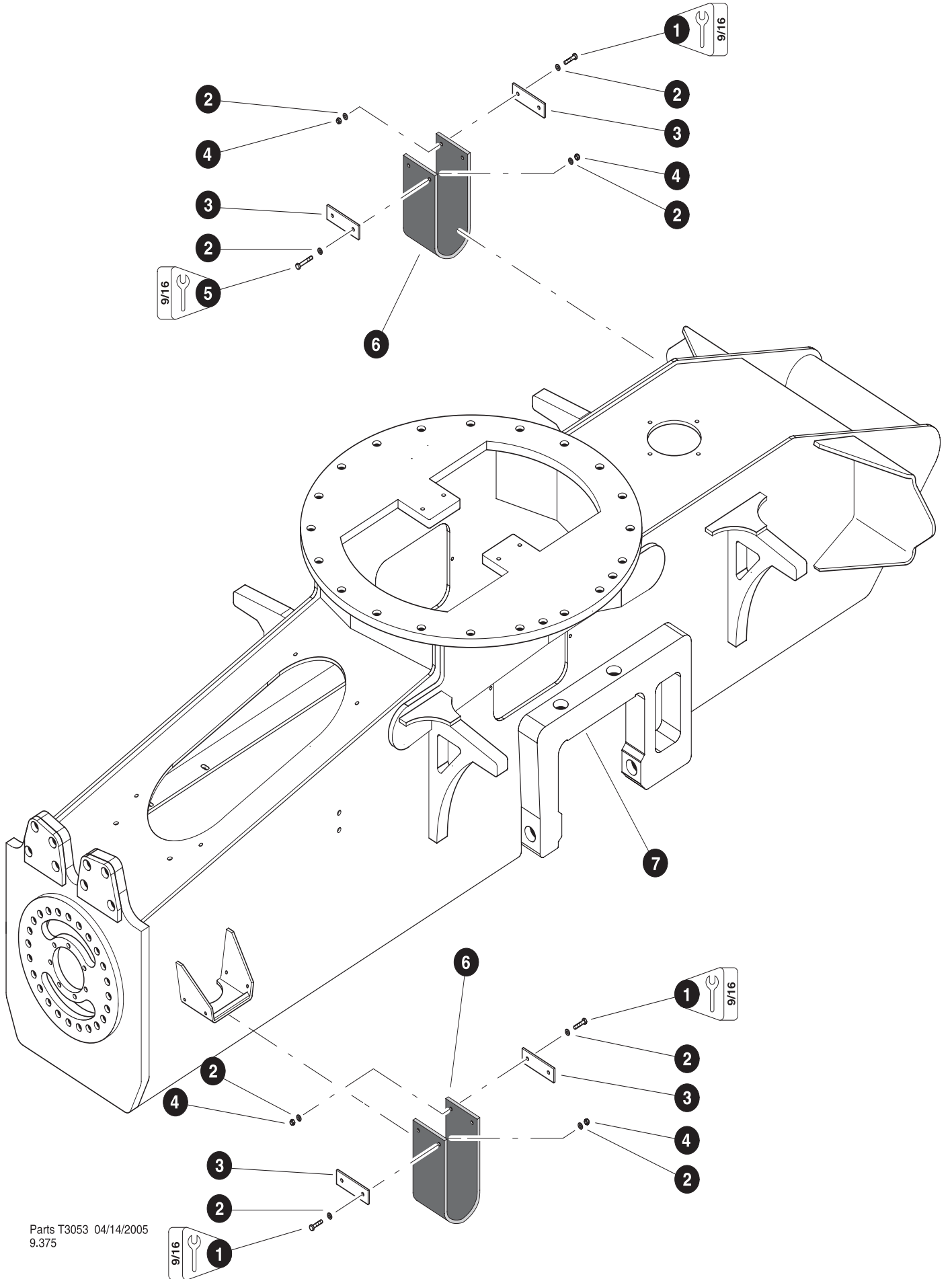


Parts T3052 04/12/2005
18.5

FRONT FRAME MOUNTING BRACKETS
(Mounting Brackets)
Machines built before SN-0152-04/14/06


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 FRONT FRAME WELDMNT	FF-1
2	51867-FF	1	BRACKET, HOSE SUPPORT FT/FRAME (LH)	
3	51866-FF	1	BRACKET, HOSE SUPPORT FT/FRAME (RH)	
4	15534-FF	8	WASHER, SAE flat - 1/2"	
5	10815-FF	4	NUT, LOCK - 1/2"	
6	51868-FF	1	BRACKET, LOWER MANIFOLD SUPPORT	
7	10402-FF	2	BOLT - .375" X 1.25"	
8	15528-FF	6	WASHER, SAE flat - 3/8"	
9	10813-FF	8	NUT, lock - 3/8"	
10	15542-FF	2	BOLT - .375" X .75"	
11	51752-FF	1	MOUNT, FUEL COMPONENTS	
12	10739-FF	4	BOLT - .5" X 1.5"	


 See referenced page for component or assembly breakdown.

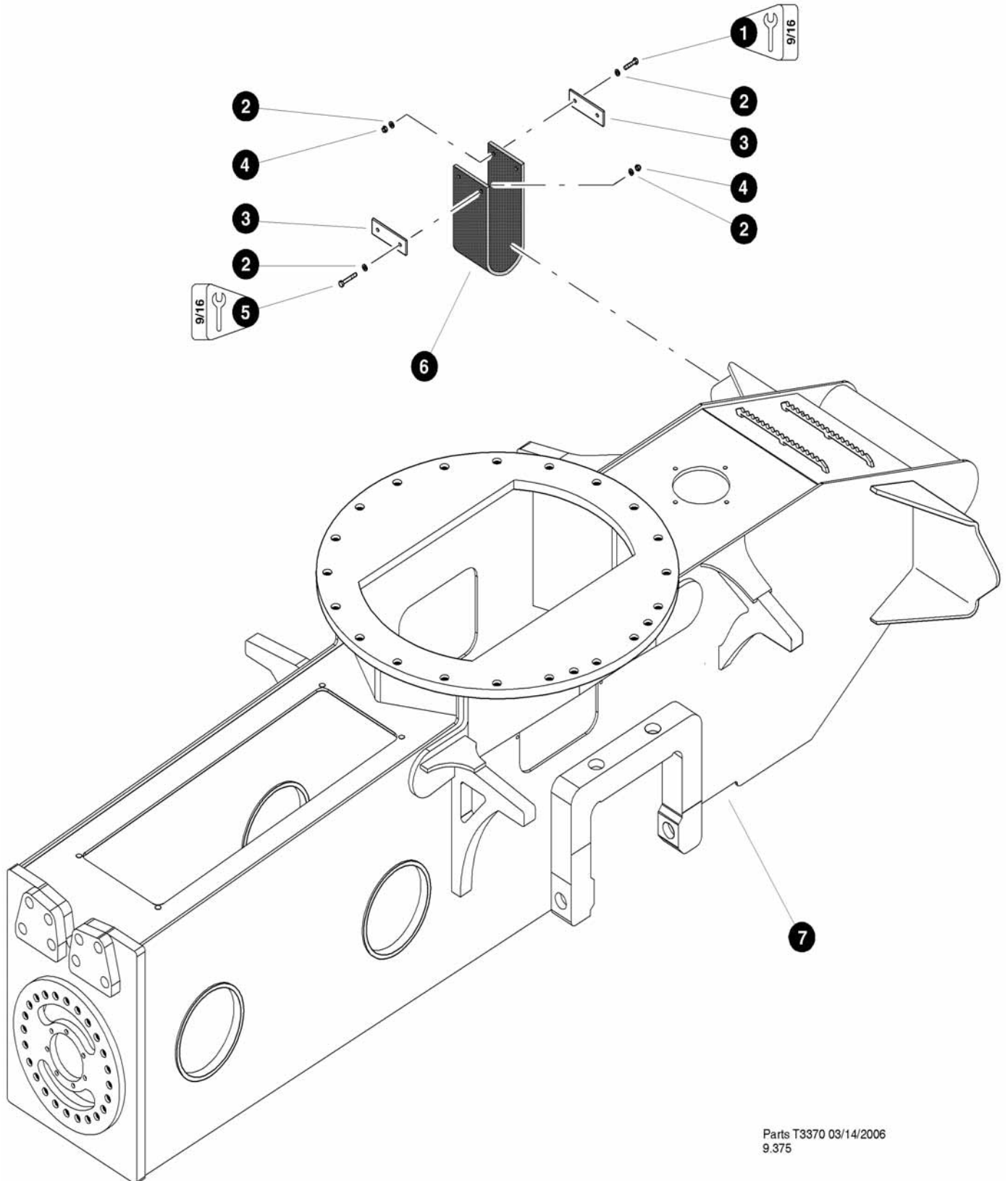


Parts T3053 04/14/2005
9.375

FRAME STEPS INSTALLATION
Machines built before SN-0152-04/14/06

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	20084-FF	6	BOLT - 3/8" x 1-3/4"	
2	15528-FF	16	WASHER, SAE flat - 3/8"	
3	20209-FF	4	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	2	STEP, rubber	
7	REF.	1	 FRONT FRAME WELDMENT	FF-1


 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

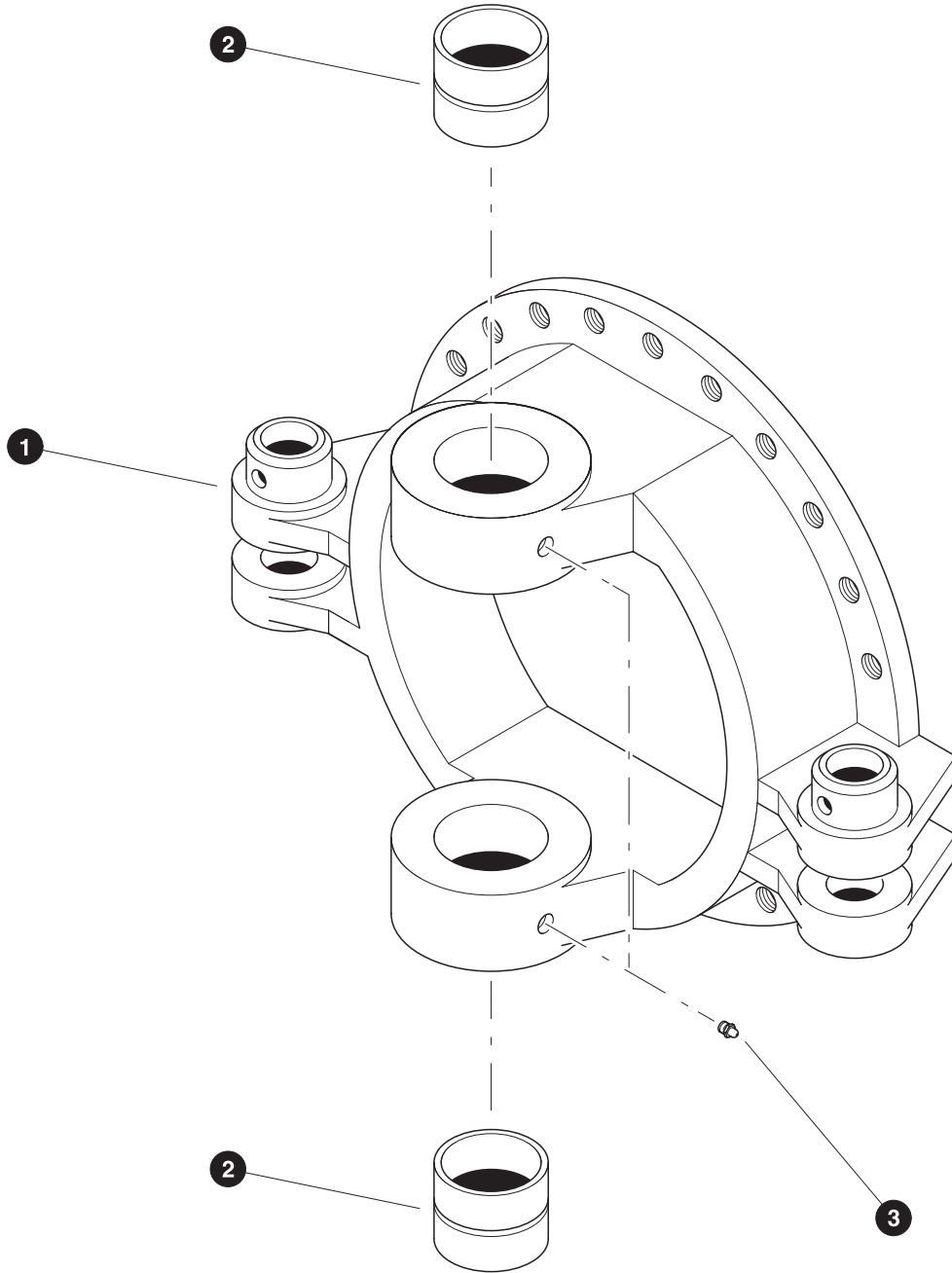
REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	20084-FF	2	BOLT - 3/8" x 1-3/4"	
2	15528-FF	8	WASHER, SAE flat - 3/8"	
3	20209-FF	2	RETAINER, rubber step	
4	10813-FF	8	NUT, lock - 3/8"	
5	20084-FF	2	BOLT - 3/8" x 1-3/4"	
6	20210-FF	1	STEP, rubber	
7	REF.	1	 FRONT FRAME WELDMENT	FF-1

 See referenced page for component or assembly breakdown.

THIS PAGE LEFT BLANK FOR NOTES

Section FF-2

TF 830 Front Frame - Component Installation

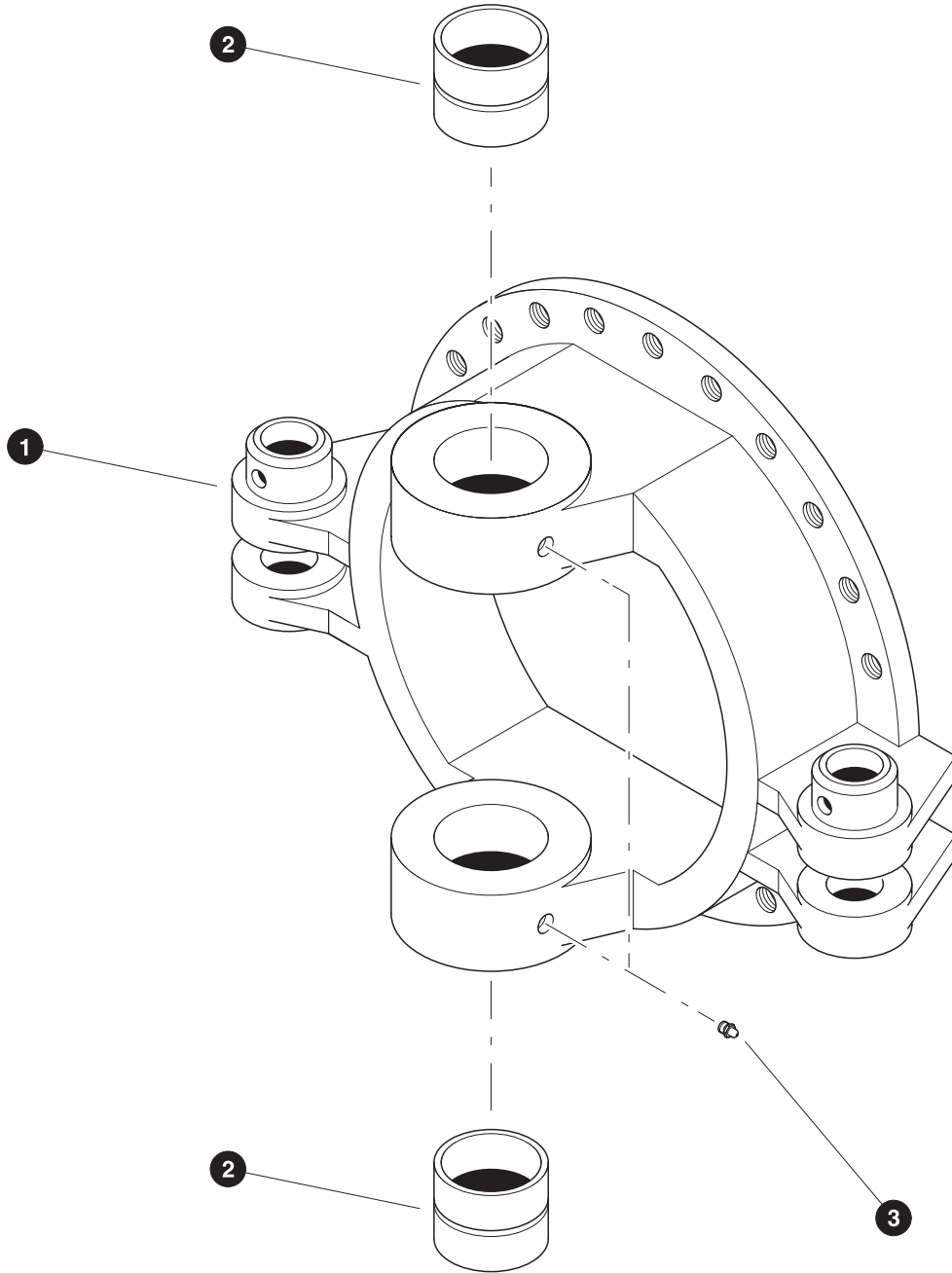


Parts 01720 07/27/2000
25.00

FRAME ARTICULATION CASTING**Machines SN 0098 021505 to 0172 092106**

REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	23099-830-FF	1	<input type="checkbox"/>	CASTING, frame articulation (tapped holes)	
2	23103-FF	2		BUSHING - 3-1/2" x 2-3/4"	
3	10704-FF	2		FITTING, grease - 1/8" pipe thread	

Kit or Assembly - includes all items indented underneath.

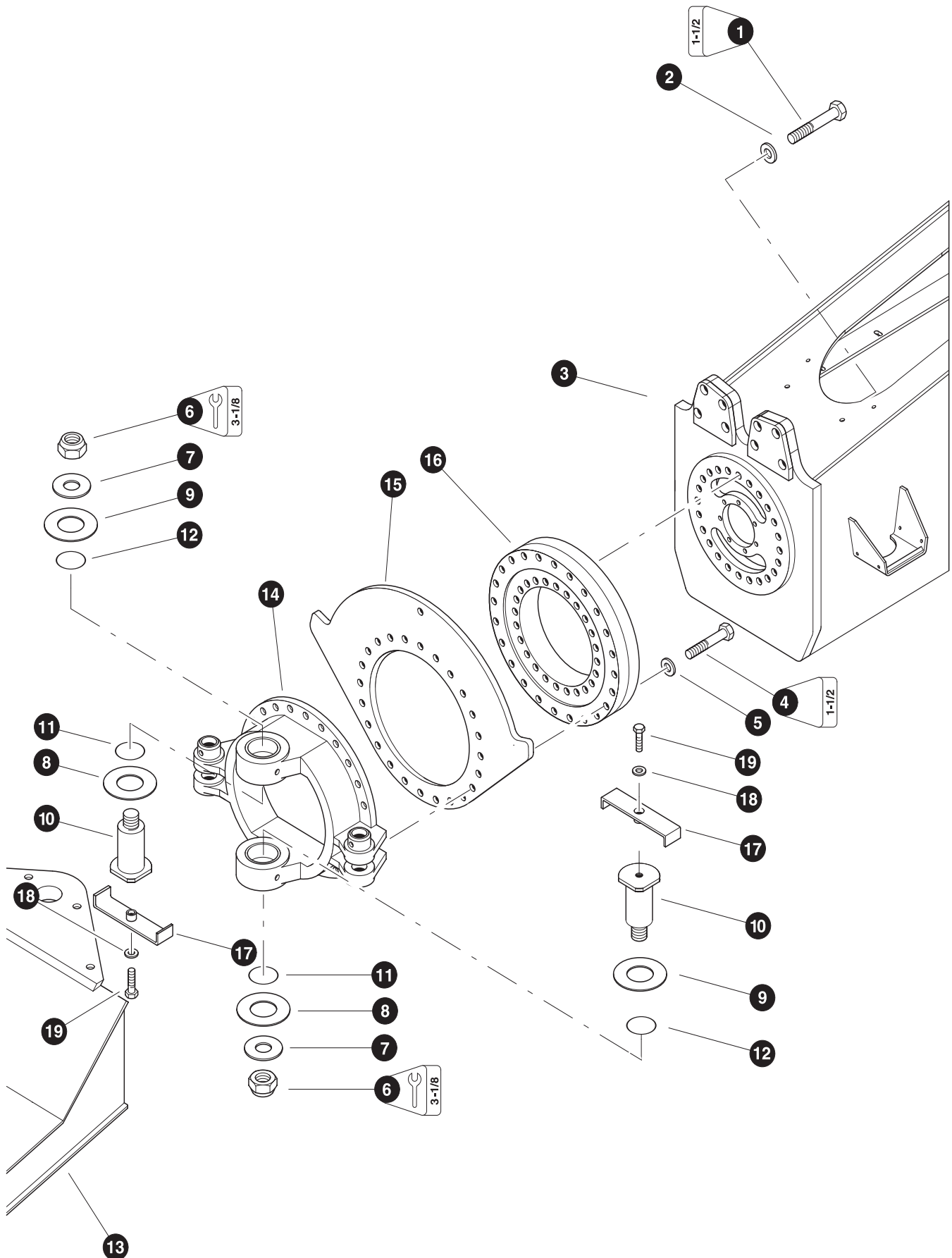


Parts 01720 07/27/2000
25.00

FRAME ARTICULATION CASTING**Machine SN 173 092806 to present**

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.



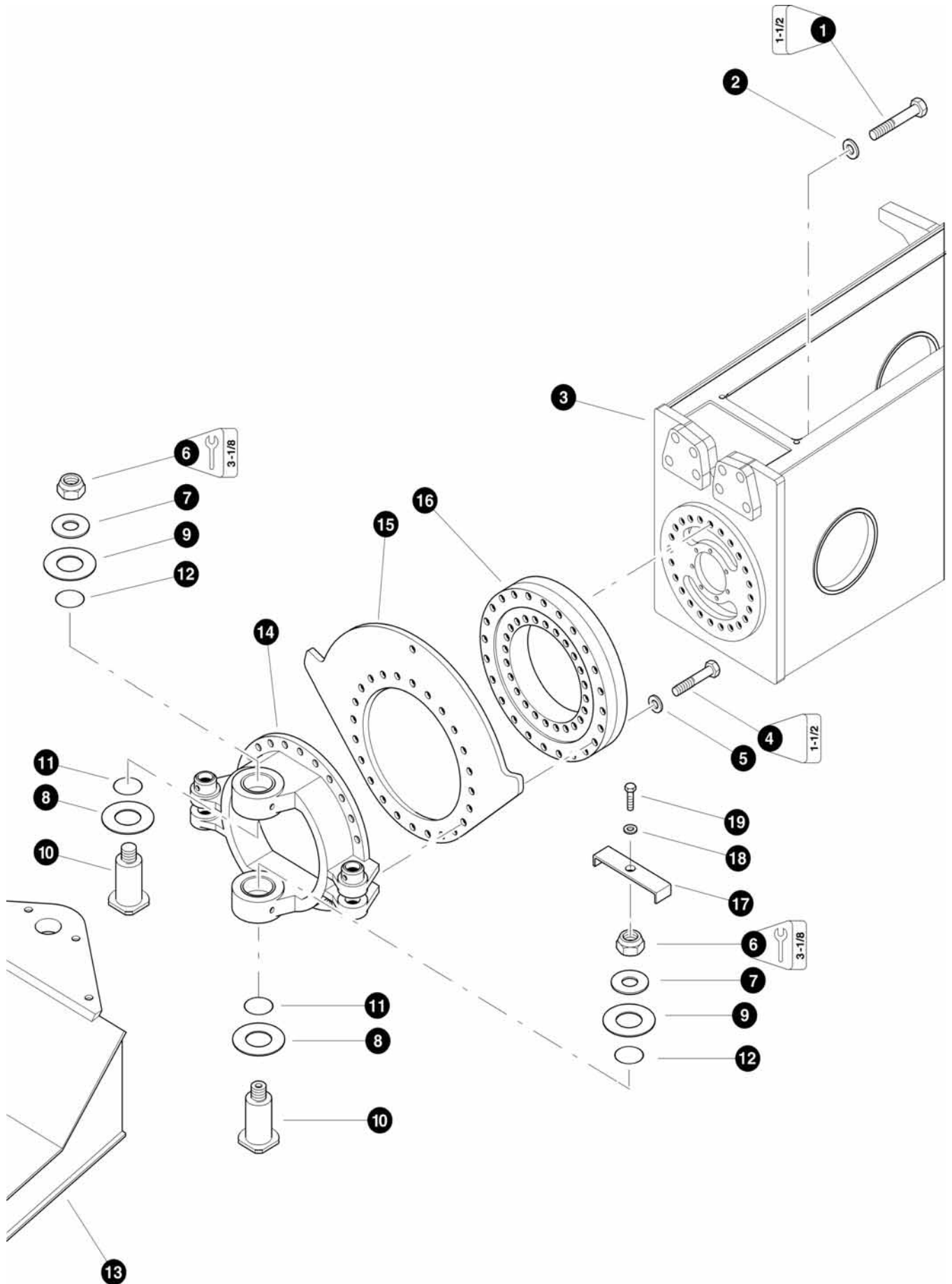
Parts T3054 04/14/2005
9.375

FRAME ARTICULATION INSTALLATION

Machines built before SN-0152-041406

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	23387-FF	24	BOLT - 1" x 6-1/2" (Torque to 1000 ft.lbs (1330 Nm))	
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	51433-FF	2	PIN, articulation vee - 3-1/2" x 9"	
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	40830-FF	2	BRACKET, articulation joint hose	
18	15550-FF	4	WASHER, SAE flat - 3/4"	
19	10775-FF	2	BOLT - .75" X 2.5"	




 See referenced page for component or assembly breakdown.



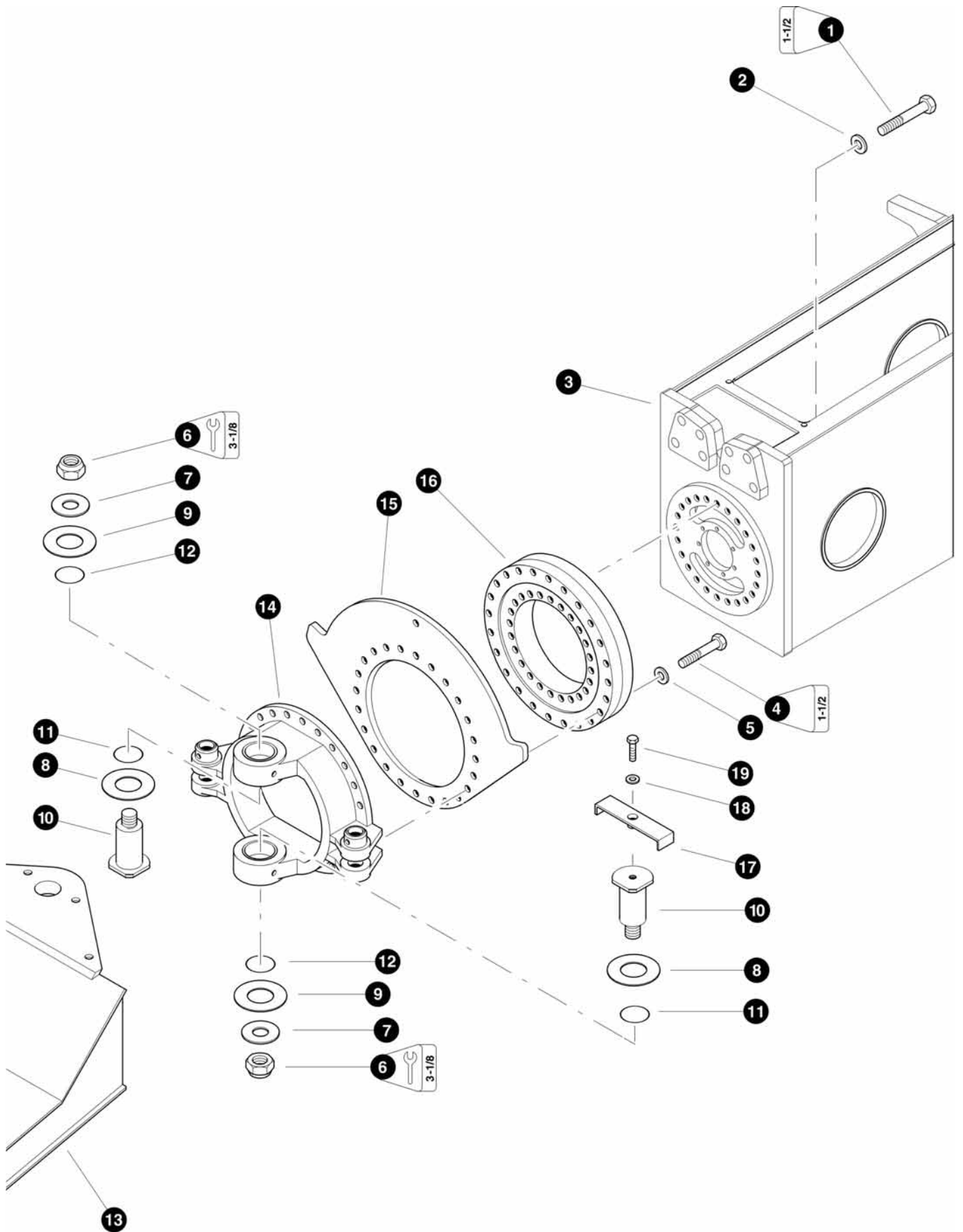
Parts T3390 04/14/2006
9.375

FRAME ARTICULATION INSTALLATION

**Machine SN-0152-041406 to SN-0167-080806 and
SN-0169-082506 to SN-0171-090106**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	23387-FF	24	BOLT - 1" x 6-1/2" (Torque to 1000 ft.lbs (1330 Nm))	
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	51433-FF	2	PIN, articulation vee - 3-1/2" x 9" (Must be drilled and tapped for bracket)	
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	




 See referenced page for component or assembly breakdown.



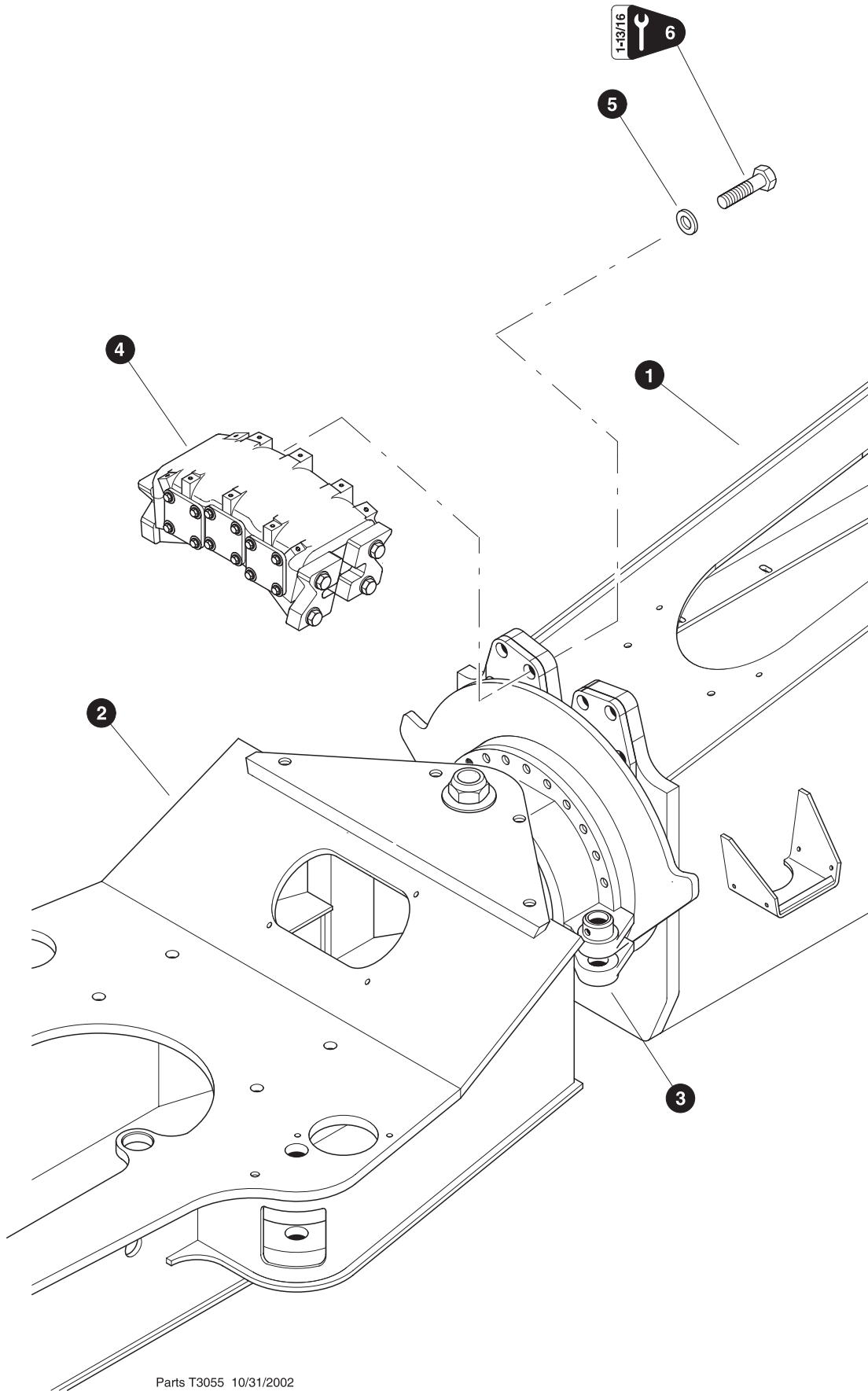
Parts T3499 10/14/2006
9.375

FRAME ARTICULATION INSTALLATION

Machine SN-0173-092806 to present

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	23387-FF	24	BOLT - 1" x 6-1/2" (Torque to 1000 ft.lbs (1330 Nm))	
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	52605-FF	2	PIN - 3.5 X 10.00 ART. - VEE-CHROMED	
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	





 See referenced page for component or assembly breakdown.



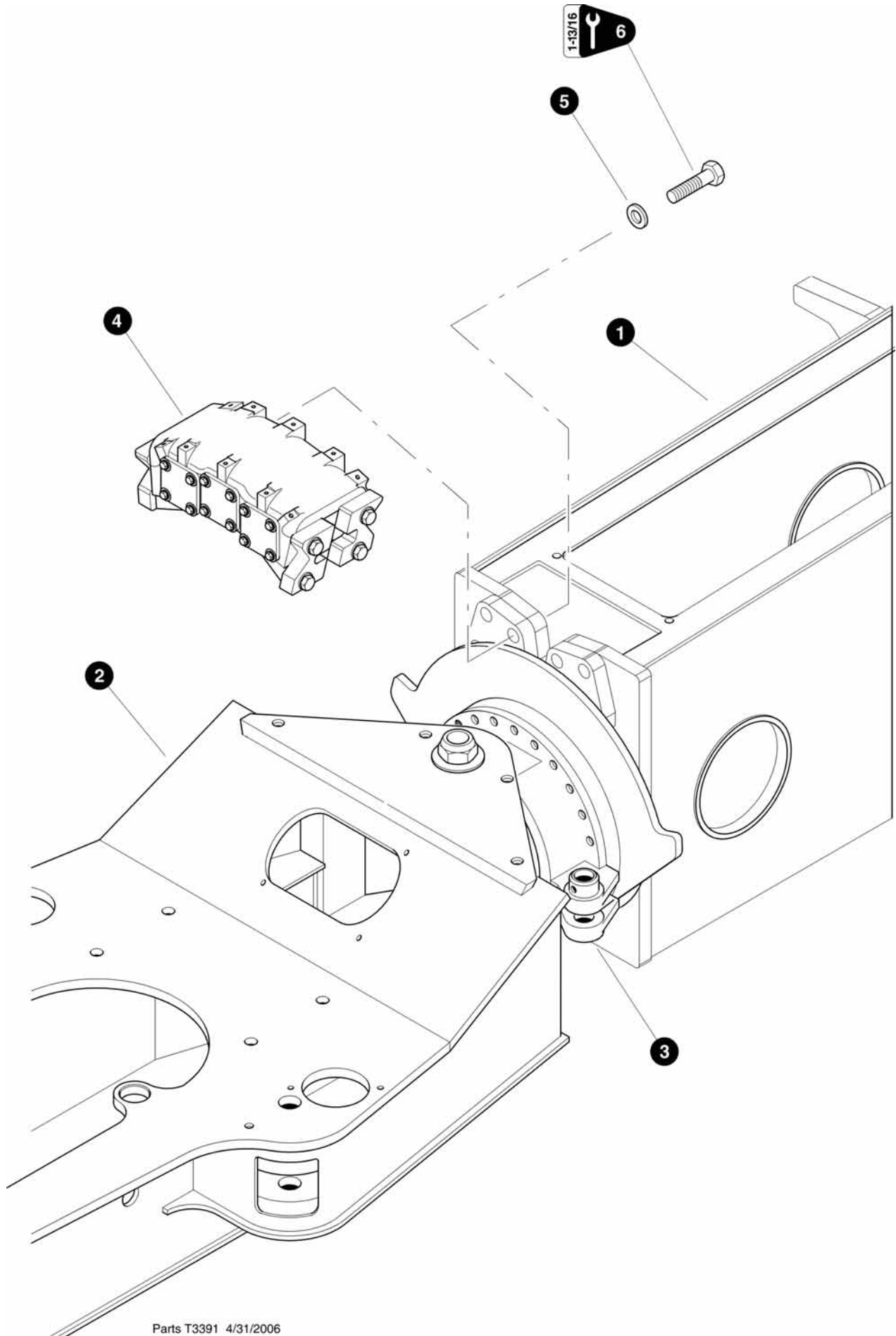
Parts T3055 10/31/2002
12.50

FRAME LOCK BRAKE INSTALLATION

Machines built before SN-0152-04/14/06

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.



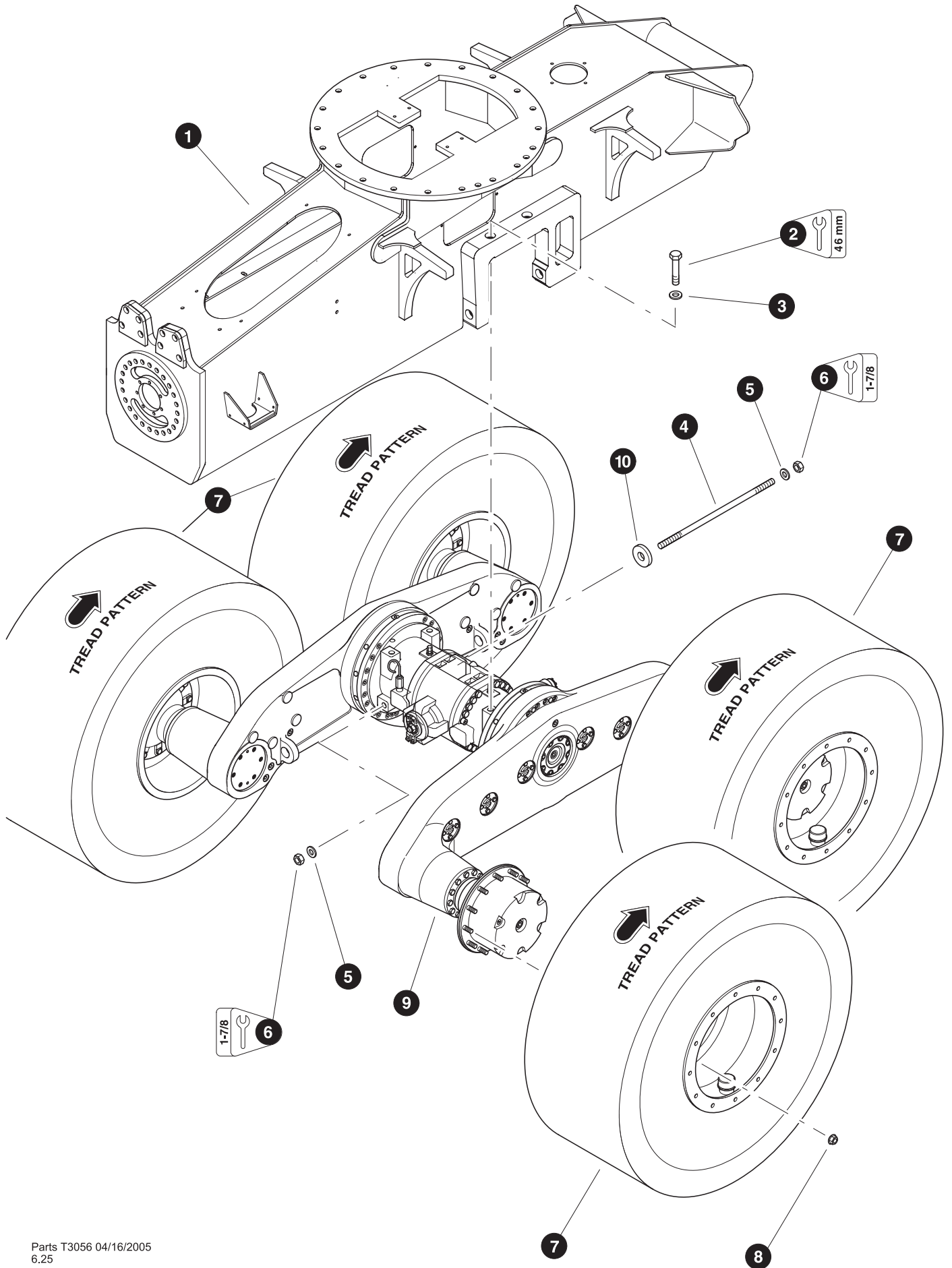
Parts T3391 4/31/2006
12.50

FRAME LOCK BRAKE INSTALLATION

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

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.



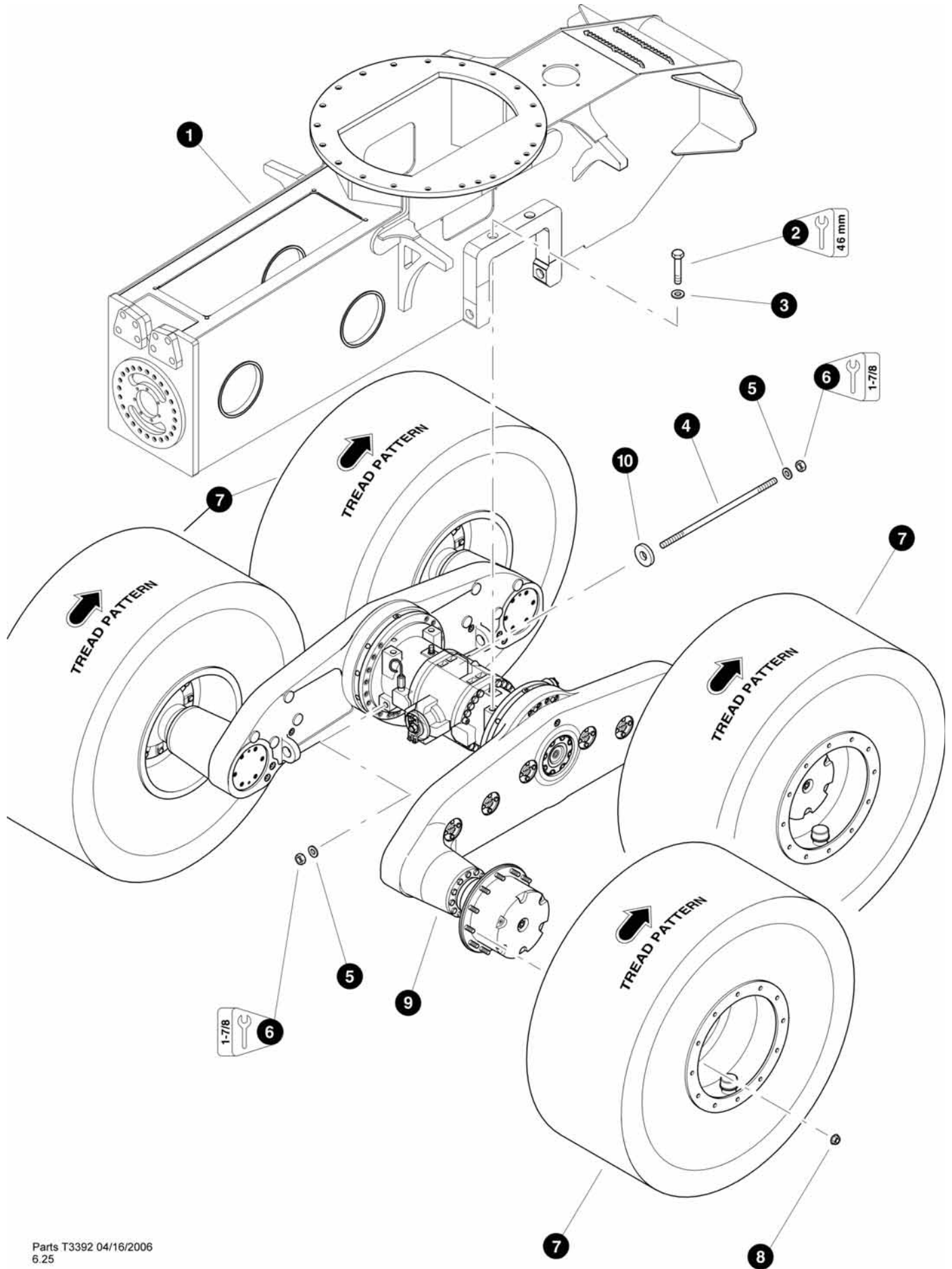
Parts T3056 04/16/2005
6.25

FRONT AXLE INSTALLATION

Machines built before SN-0152-04/14/06

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 FRONT FRAME WELDMENT	FF-1
2	23567-FF	4	BOLT - 30mm-3.5P x 220mm (Torque to 1100 ft.lbs. (1465 Nm))	
3	23568-FF	4	WASHER, hardened flat - 30mm	
4	23851-FF	2	STUD, axle spreader box - 1-1/4"	
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.



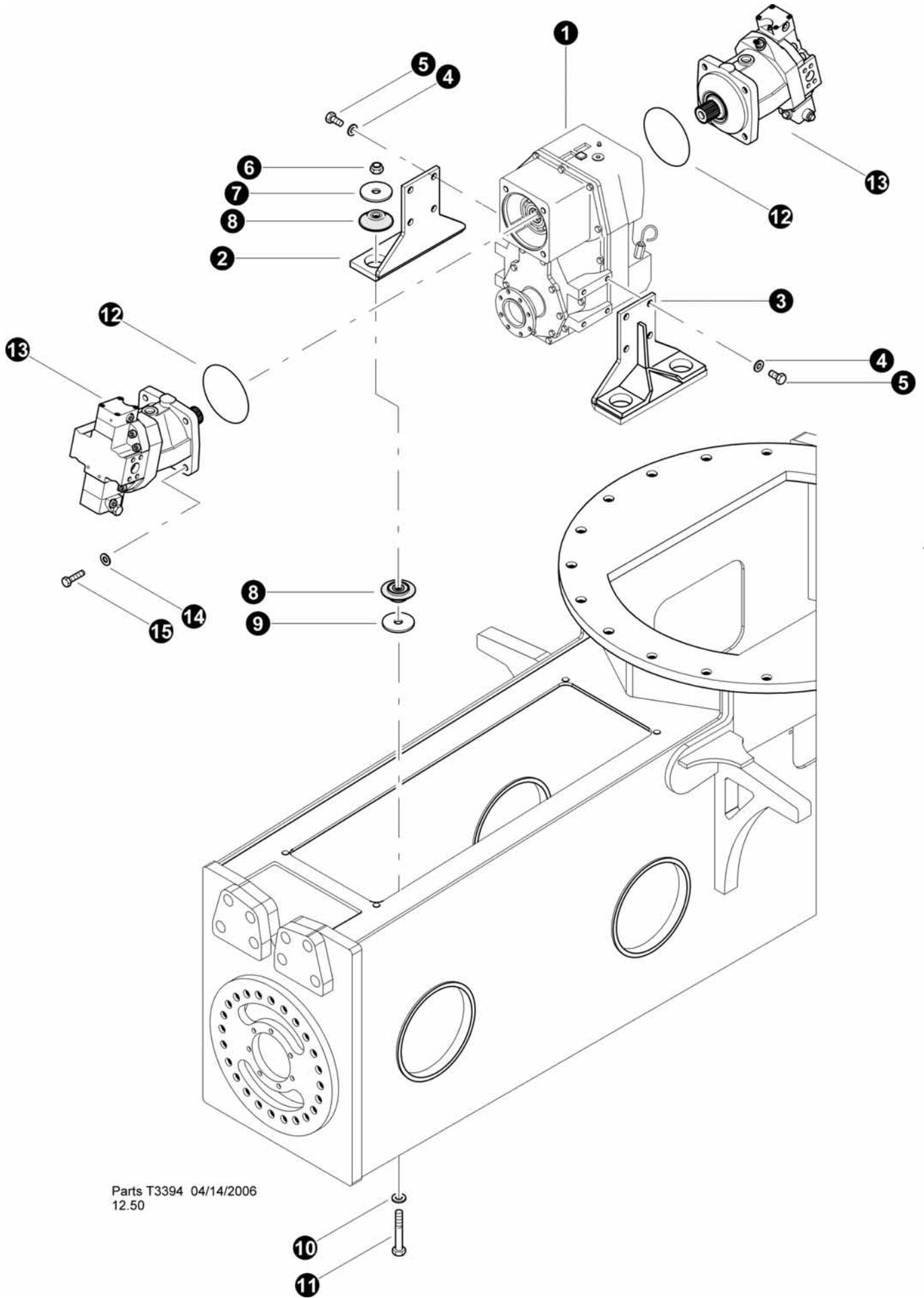
Parts T3392 04/16/2006
6.25

FRONT AXLE INSTALLATION

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

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 FRONT FRAME WELDMENT	FF-1
2	23567-FF	4	BOLT - 30mm-3.5P x 220mm (Torque to 1100 ft.lbs. (1465 Nm))	
3	23990	4	WASHER, SAE FLAT - 1.25" (EXTRA THICK)	
4	52485-FF	2	STUD - 1.25" - 7 X 27.50"	
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

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

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)	

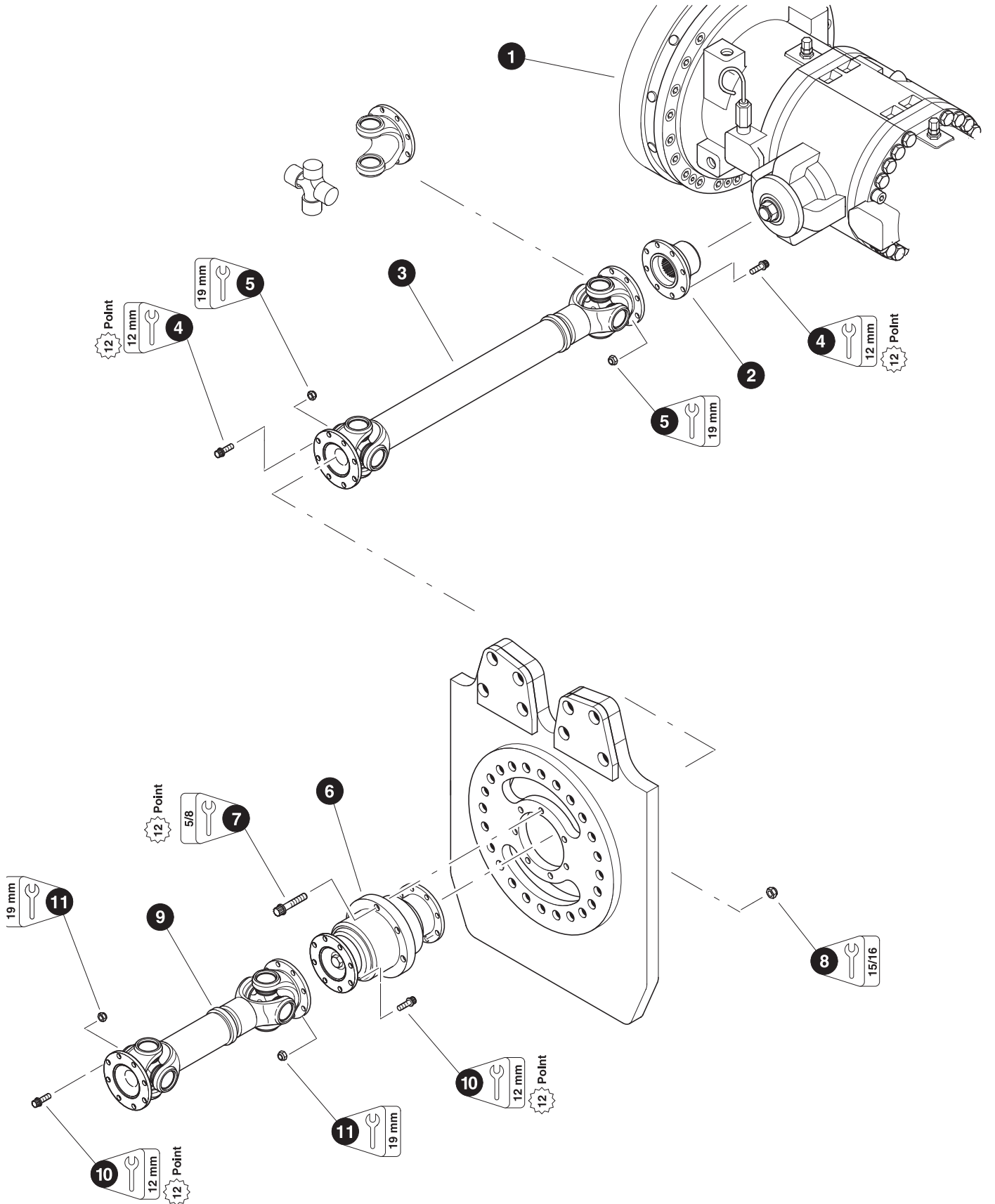
- See referenced page for component or assembly breakdown.
- Kit or Assembly - includes all items indented underneath.

Note #1:

Use Loctite 243 (blue) on threads during installation.




Note #2:



Use Loctite 271 (red) on threads during installation.



FRONT DRIVE-SHAFT INSTALLATION

Machines built before SN-0152-04/14/06

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 FRONT AXLE	AX-1
2	23997-FF	1	YOKE, companion flange - axle (Torque nut to 590 ft lbs.(800 Nm) (see note #2))	
3	51384-FF	1	 DRIVE SHAFT, heavy duty (Center joint to front axle)(475677-61)	
	-----	2	FITTING, 90° grease - 10mm	
	50466-FF	2	KIT, CROSS & BEARING	
	50467-FF	2	YOKE, FLANGE (90mm)	
4	50261-FF	16	BOLT, 12 point - 12mm-1.75P x 35mm (See Note #1 Below)	
5	50262-FF	16	NUT, lock - 12mm	
6	25218-FF	1	IDLER, driveshaft (HD)	
7	50050	6	BOLT, 12 point - 5/8" x 3" (See Note #1 Below) (Torque to 130 ft.lbs. (175 Nm))	
8	10816	6	NUT, lock - 5/8"	
9	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)	
10	50261-FF	16	BOLT, 12 point - 12mm-1.75P x 35mm (See Note #1 Below)	
11	50262-FF	16	NUT, lock - 12mm	

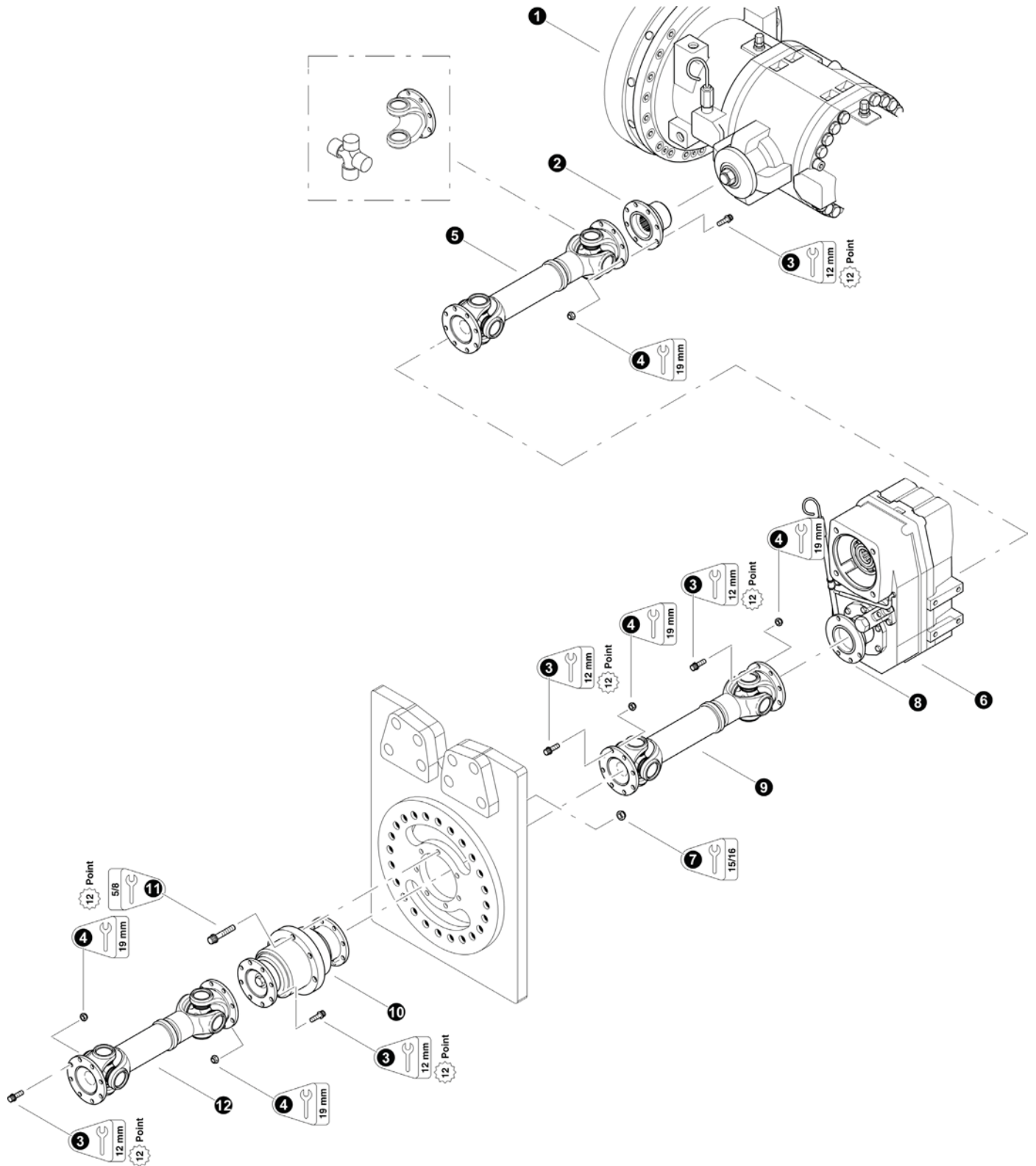
-  See referenced page for component or assembly breakdown.
-  Kit or Assembly - includes all items indented underneath.

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

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

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 FRONT AXLE	AX-1
2	23997-FF	1	YOKE, 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.

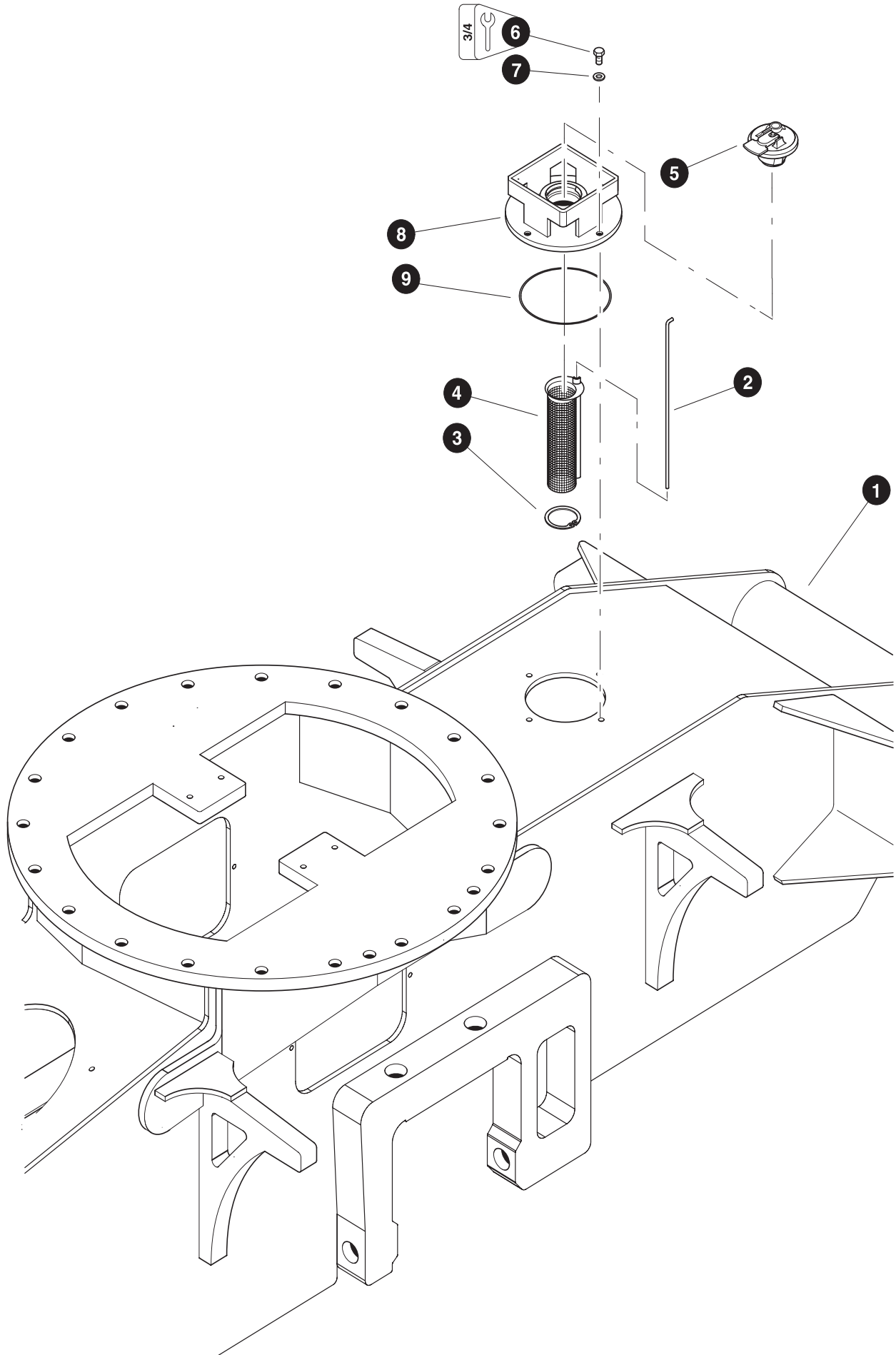
Note #2:

Use Loctite 271 (red) on threads during installation.


THIS PAGE LEFT BLANK FOR NOTES

Section FF-3

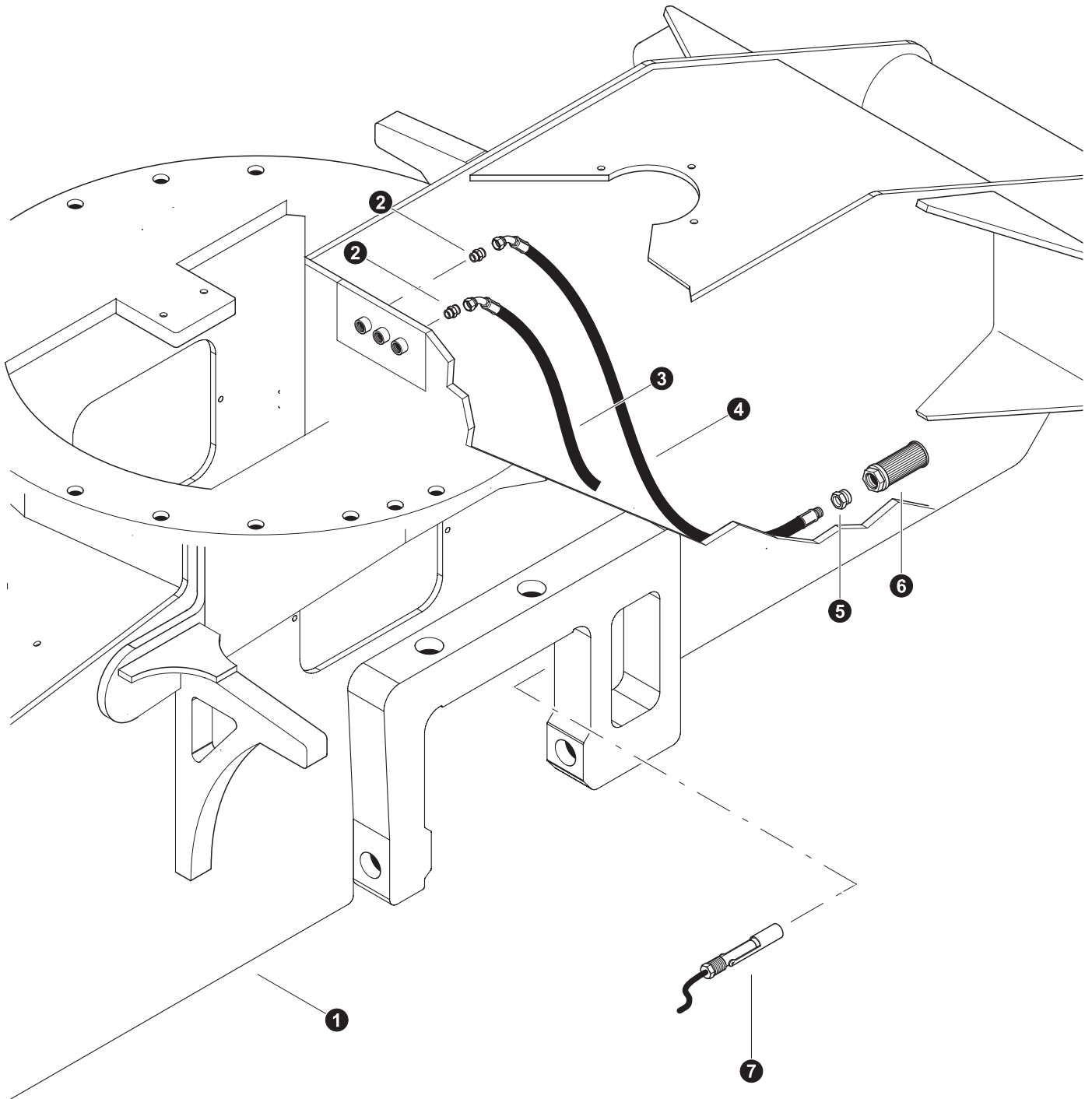
TF 830 Front Frame - Fuel Tank Components



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.




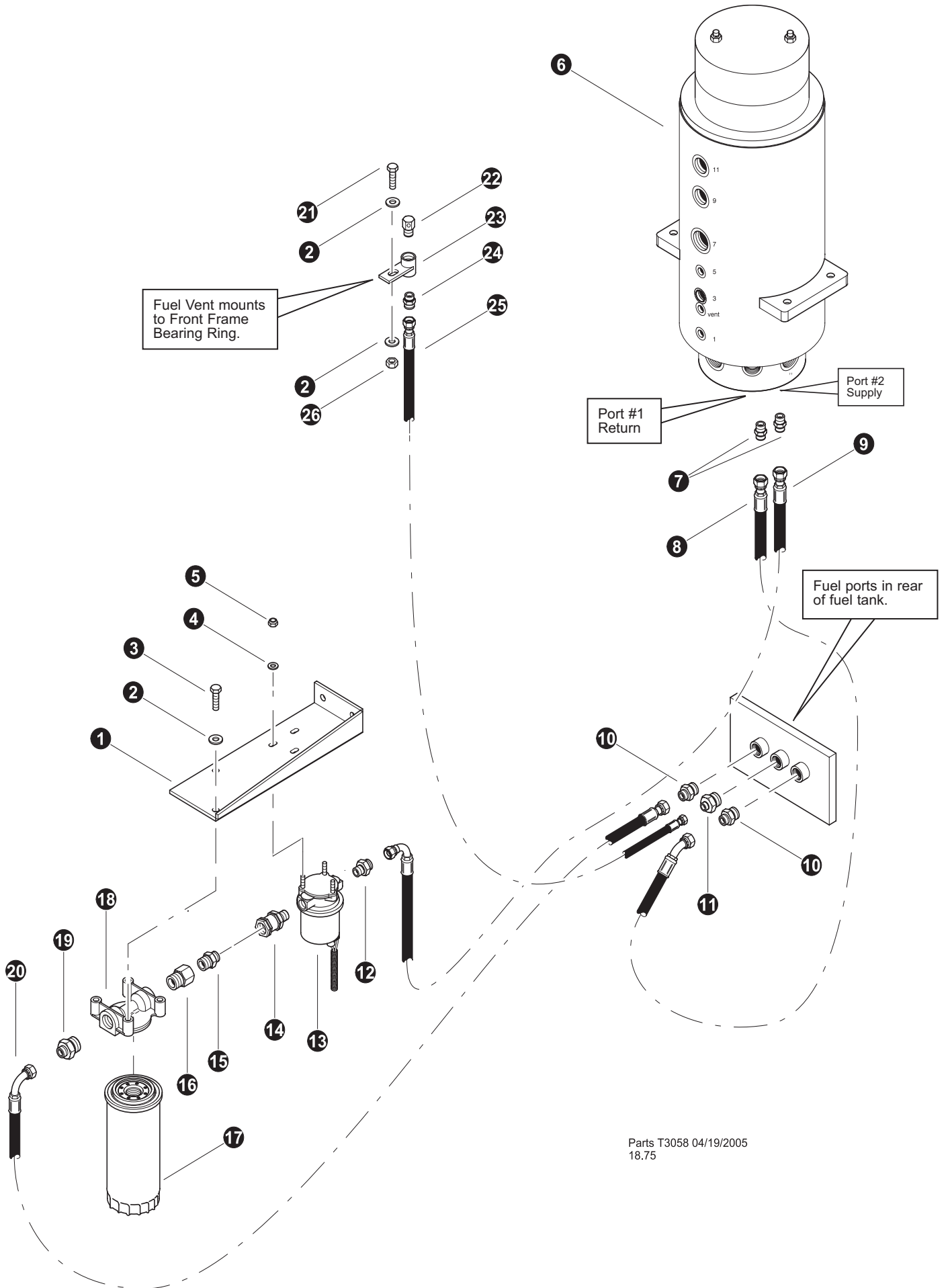
Parts T3059 04/19/2005
12.50

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.



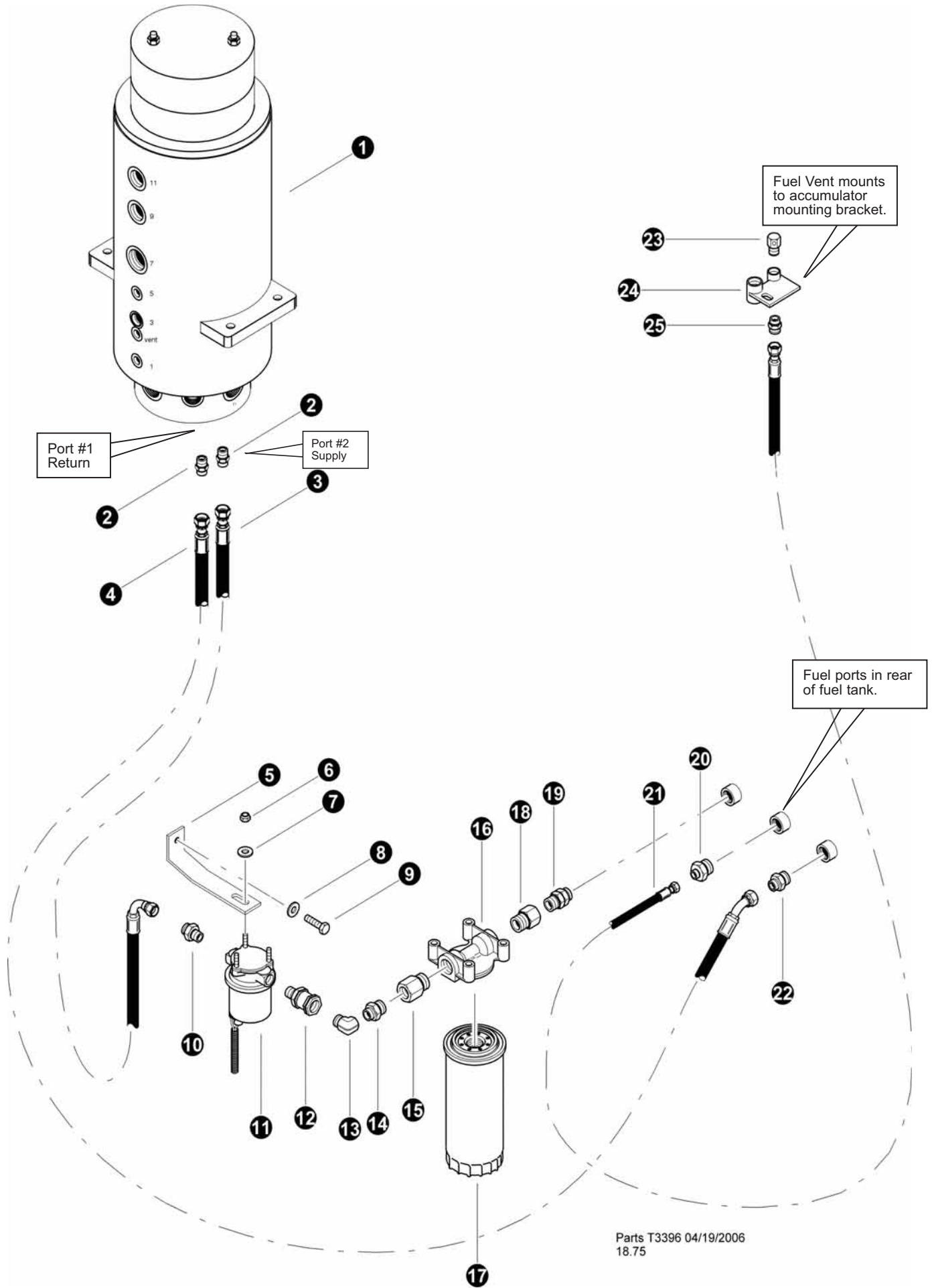
FUEL LINES

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

Machine built before SN-0152-04/14/06

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	51752-FF	1	MOUNT, FUEL COMPONENTS	
2	15528-FF	4	WASHER, SAE flat - 3/8"	
3	11707-FF	2	BOLT - .375" X 1"	
4	10757-FF	3	WASHER, SAE flat - 1/4"	
5	10755-FF	3	NUT, hex - 1/4"	
6	REF.	1	 ROTARY MANIFOLD	UP-1
7	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
8	-FF	1	HOSE ASSEMBLY - 2029-06-060S-0604 (Fuel return from rotary manifold port #2 to fuel tank)	
9	-FF	1	HOSE ASSEMBLY - 2039.5-06-060S-0609 (Fuel supply from rotary manifold port #1 to fuel lift pump)	
10	22902-FF	2	CONNECTOR, STR - 848-TT-08x06	
11	15504-FF	1	CONNECTOR, straight - FF2031T-0408S	
12	51878-FF	1	CONNECTOR, STR - MALE PIPE (6-6 FLO-S)	
13	21966-FF	1	PUMP, fuel - 12 volt	
14	15652-FF	1	VALVE, check	
-	21966-FF	1	PUMP, fuel - 12 volt (machine built after 02/01/04)	
15	51982-FF	1	CONNECTOR, STR - (8-3/8 F50F-S)	
16	19290-FF	1	BUSHING, REDUCER - 6410-10-8	
17	16575-FF	1	FILTER, spin-on fuel	
18	16574-FF	1	MOUNT, filter head	
19	15115-FF	1	CONNECTOR, straight - FF1852T-0810S	
20	-FF	1	HOSE ASSEMBLY - 2063.5-06-060S-0609 (Fuel supply from fuel tank to fuel pre-filter)	
21	20084-FF	1	BOLT - .375" X 1.75"	
22	22906-FF	1	BREATHER, fuel vent	
23	23393-FF	1	BRACKET, 800 Fuel tank vent	
24	15131-FF	1	CONNECTOR, straight - FF2031T-0404S	
25	-FF	1	HOSE ASSEMBLY - 2032-04-040S-040S (Fuel tank vent port to fuel vent breather)	
26	10813-FF	1	NUT, LOCK - .375"	


 See referenced page for component or assembly breakdown.



FUEL LINES

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

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

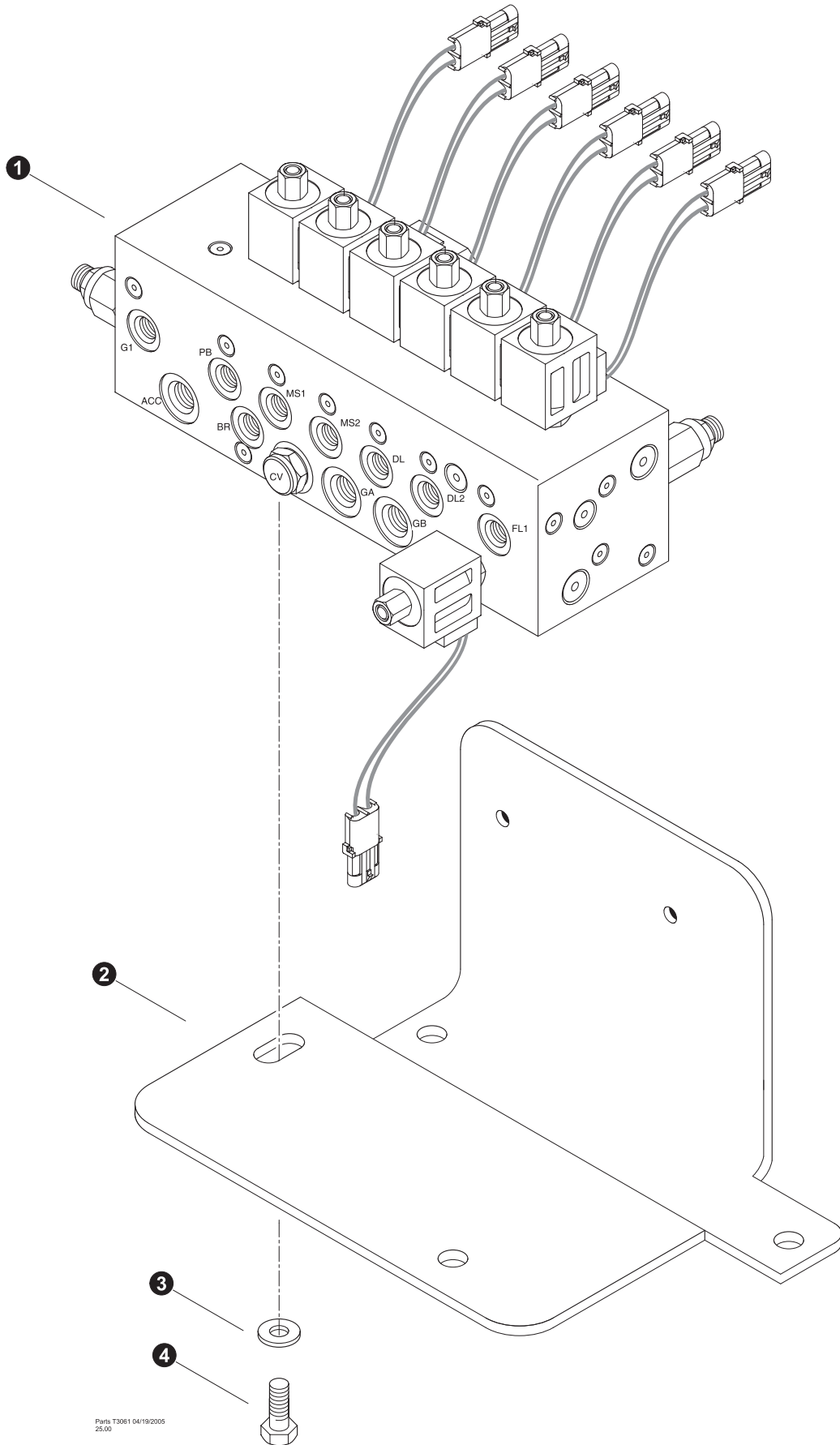
REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	18034-FF	2	CONNECTOR, STR - FF1852T-0606S	
3	-FF	1	HOSE ASSEMBLY - 2031-06-060S-0609 (Fuel supply from rotary manifold port #2 to fuel tank)	
4	-FF	1	HOSE ASSEMBLY - 2031-06-060S-0604 (Fuel return from rotary manifold port #1 to fuel lift pump)	
5	52382-FF	1	BRACKET, FUEL PUMP MOUNT	
6	10755-FF	3	NUT, hex - 1/4"	
7	10757-FF	3	WASHER, SAE flat - 1/4"	
8	15559-FF	1	WASHER, SAE FLAT - .3125"	
9	15605-FF	1	BOLT - .3125" X .75"	
10	51878-FF	1	CONNECTOR, STR - MALE PIPE (6-6 FL0-S)	
11	21966-FF	1	PUMP, fuel - 12 volt (machine built after 02/01/04)	
12	15652-FF	1	VALVE, check	
13	24287-FF	1	ELBOW, 90 STREET .375" NPT - BRASS	
14	51982-FF	1	CONNECTOR, STR - (8-3/8 F50F-S)	
15	19290-FF	1	BUSHING, REDUCER - 6410-10-8	
16	16574-FF	1	MOUNT, filter head	
17	16575-FF	1	FILTER, spin-on fuel	
18	19290-FF	1	BUSHING, REDUCER - 6410-10-8	
19	51932-FF	1	CONNECTOR, STR - 6403-08	
20	15504-FF	1	CONNECTOR, straight - FF2031T-0408S	
21	-FF	1	HOSE ASSEMBLY - 2022.5-04-040S-0404 (Fuel tank vent port to fuel vent breather)	
22	22902-FF	1	CONNECTOR, STR - 848-TT-08x06	
23	22906-FF	1	BREATHER, fuel vent	
24	52218-FF	1	BRACKET, VENT MOUNT (.50&.25NPT)VERT.	
25	15131-FF	1	CONNECTOR, straight - FF2031T-0404S	

 See referenced page for component or assembly breakdown.


THIS PAGE LEFT BLANK FOR NOTES


Section FF-4

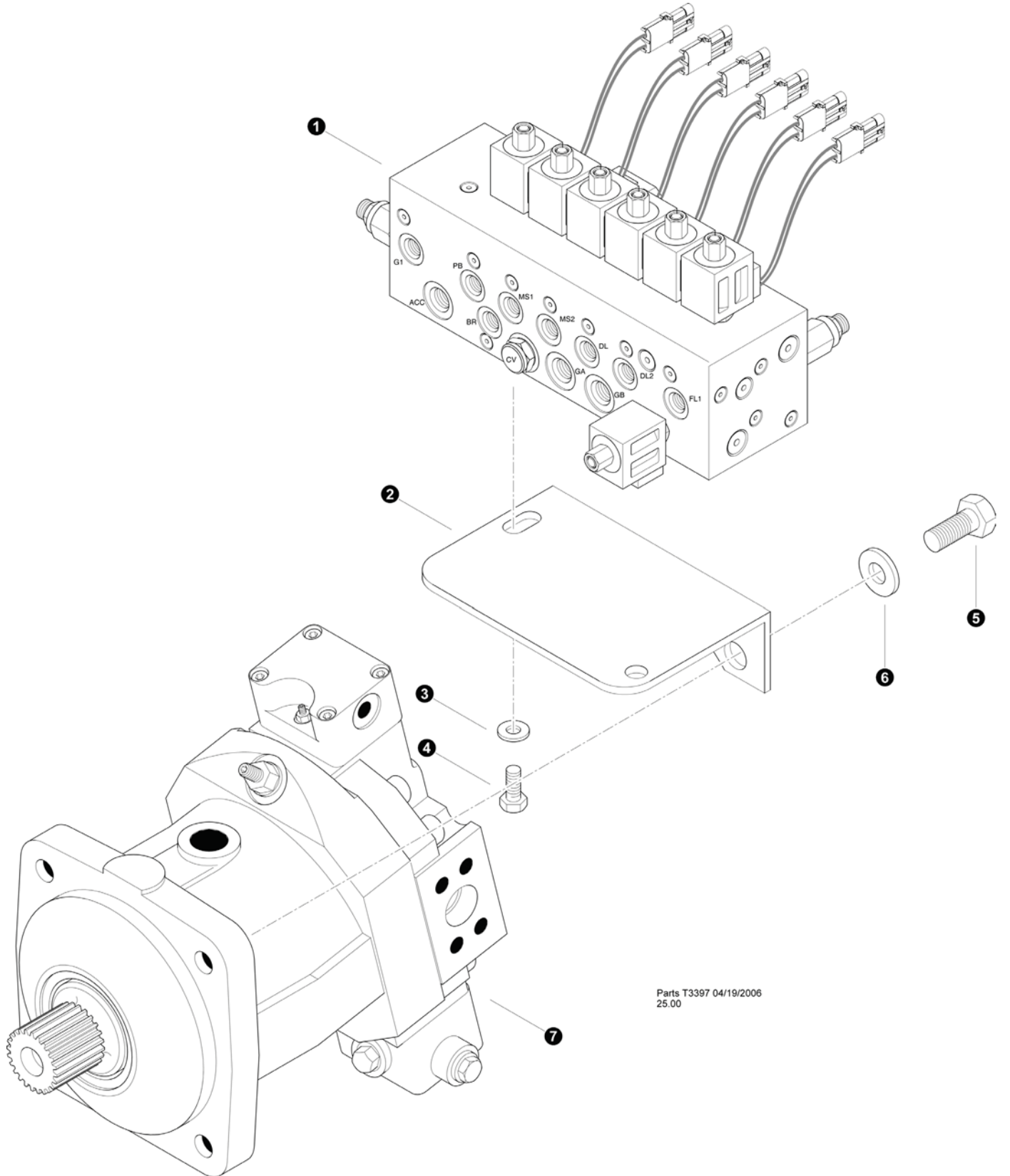
TF 830 / 840 Front Frame - Lower Solenoid Manifold Circuits and Components Breakdown




**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Solenoid Manifold Mounting)
Machines built before SN-0152-04/14/06**


REF	PART #	QTY		DESCRIPTION	SEE SECTION
1	REF.	1		LOWER SOLENOID MANIFOLD	FF-4
2	51868-FF	1		BRACKET, LOWER MANIFOLD SUPPORT	
3	10802-FF	2		WASHER, flat - 3/8"	
4	15542-FF	2		BOLT - .375" X .75"	

 See referenced page for component or assembly breakdown.



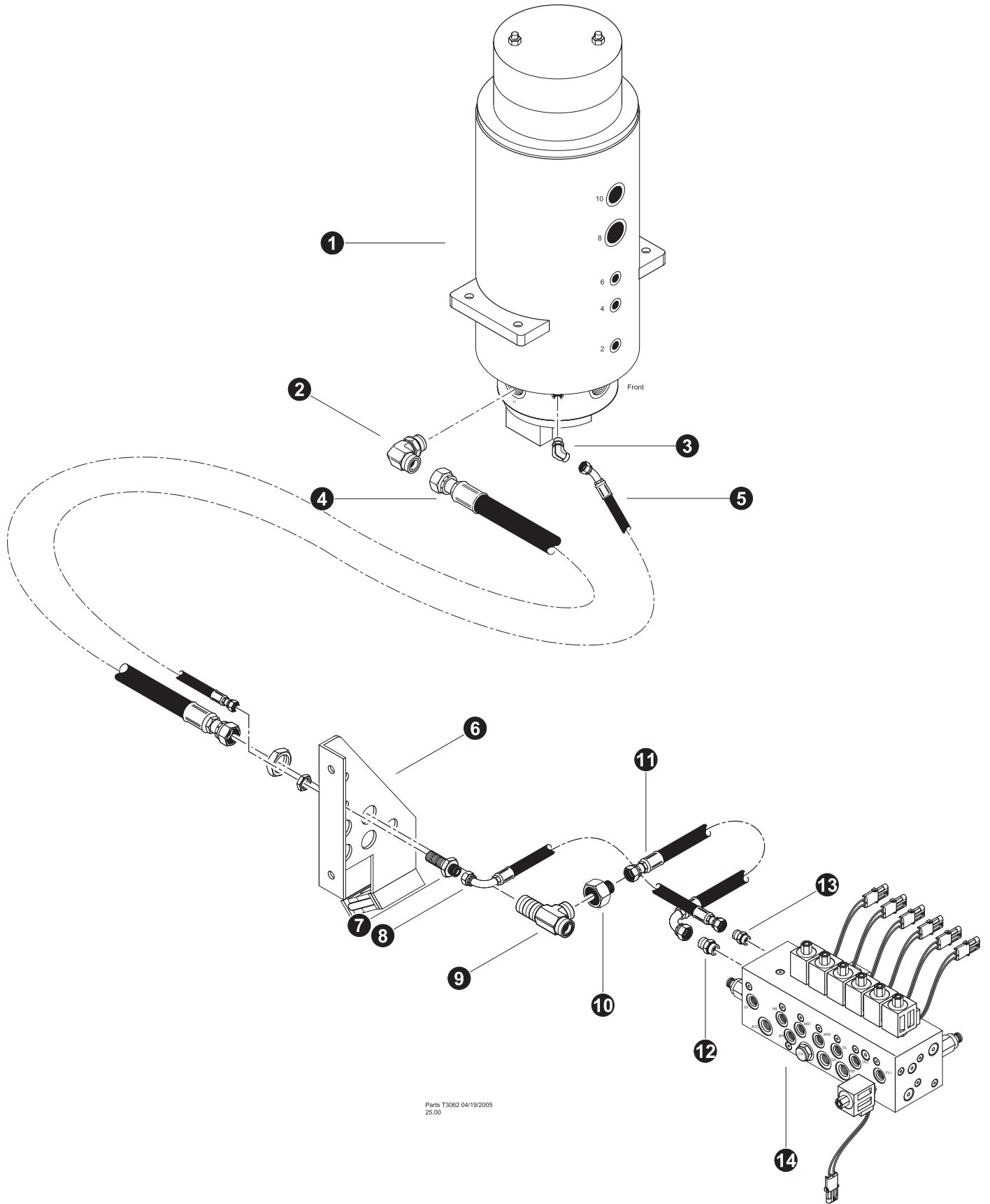
**Lower Solenoid Manifold Circuits
and Components Breakdown
(Lower Solenoid Manifold Mounting)
Machines SN-0152-04/14/06 and after**

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.

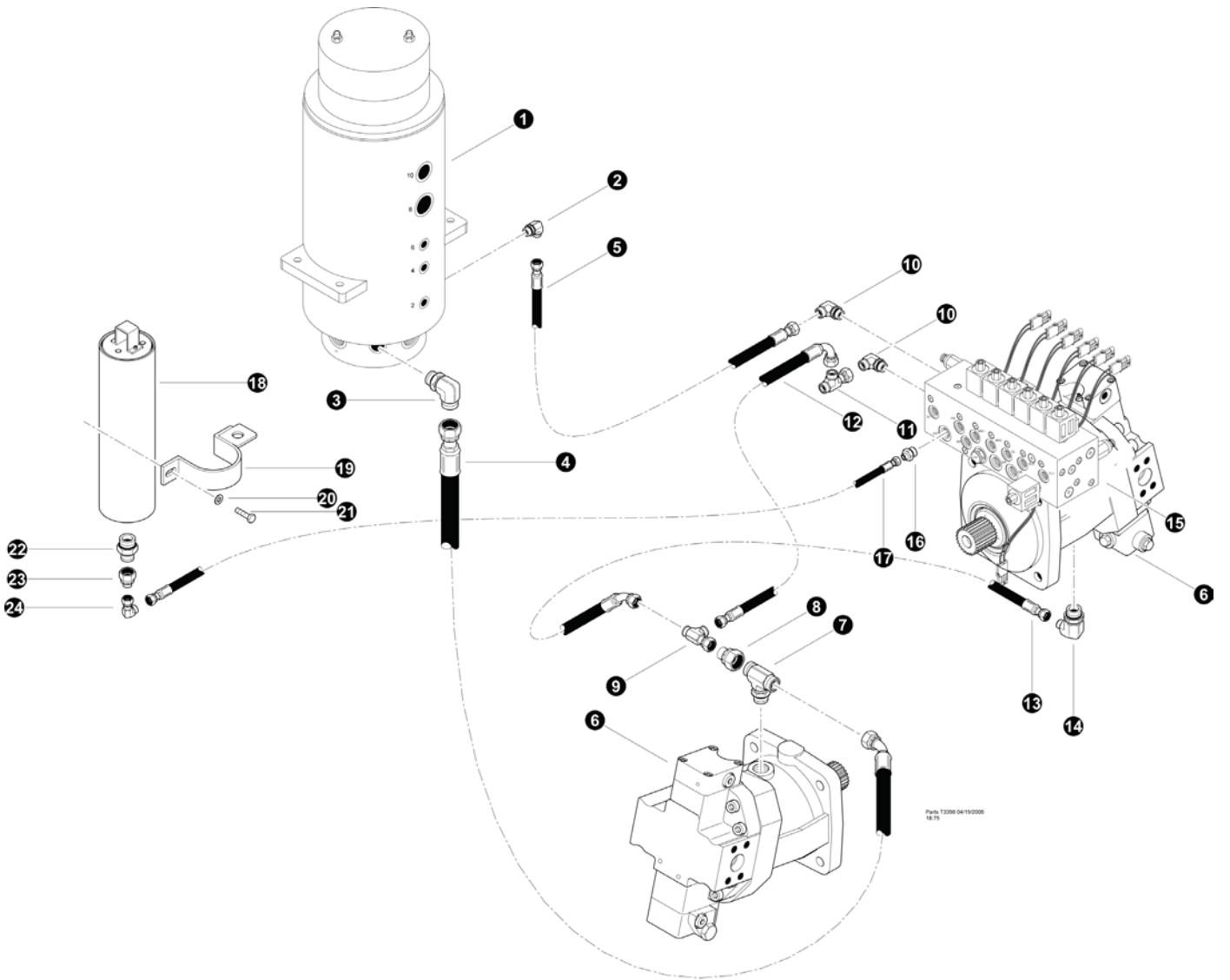


Parts T3062 04/19/2005
25.00





Lower Solenoid Manifold Circuits and Components Breakdown (Lower Manifold - Pressure and Tank Connections) Machines built before SN-0152-04/14/06

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	REF.	1	 ROTARY MANIFOLD	UP-1
2	17688-FF	1	ELBOW, 90 - FF1868T-1212S	
3	16296-FF	1	ELBOW, 90° - FF1868T-0606S	
4	-FF	1	HOSE ASSEMBLY - 4040.5-12-120S-120S (Case Drain Bulkhead to port "11")	
5	-FF	1	HOSE ASSEMBLY - 2042-06-060S-0604 (Rotory Manifold Port "4" to Lower Manifold Pressure Bulkhead)	
6	51867-FF	1	BRACKET, HOSE SUPPORT FT/FRAME (LH)	
7	50420-FF	1	CONNECTOR, STR BULKHEAD - 832-TT-06	
8	-FF	1	HOSE ASSEMBLY - 2042-06-060S-0604 (Rotory Manifold Port "4" to Lower Manifold Pressure Bulkhead)	
9	20029-FF	1	TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S	
10	18581-FF	1	CONNECTOR, REDUCER - ORS FF2281T-0812S	
11	50975-FF	1	HOSE ASSEMBLY - 2022-08-080S-0809 (Lower Manifold "T" port to Case Drain Bulkhead)	
12	15117-FF	1	CONNECTOR, REDUCER - ORS FF2281T-0812S	
13	18034-FF	1	CONNECTOR, STR - ORS FF2281T-0606S	
14	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4

 See referenced page for component or assembly breakdown.

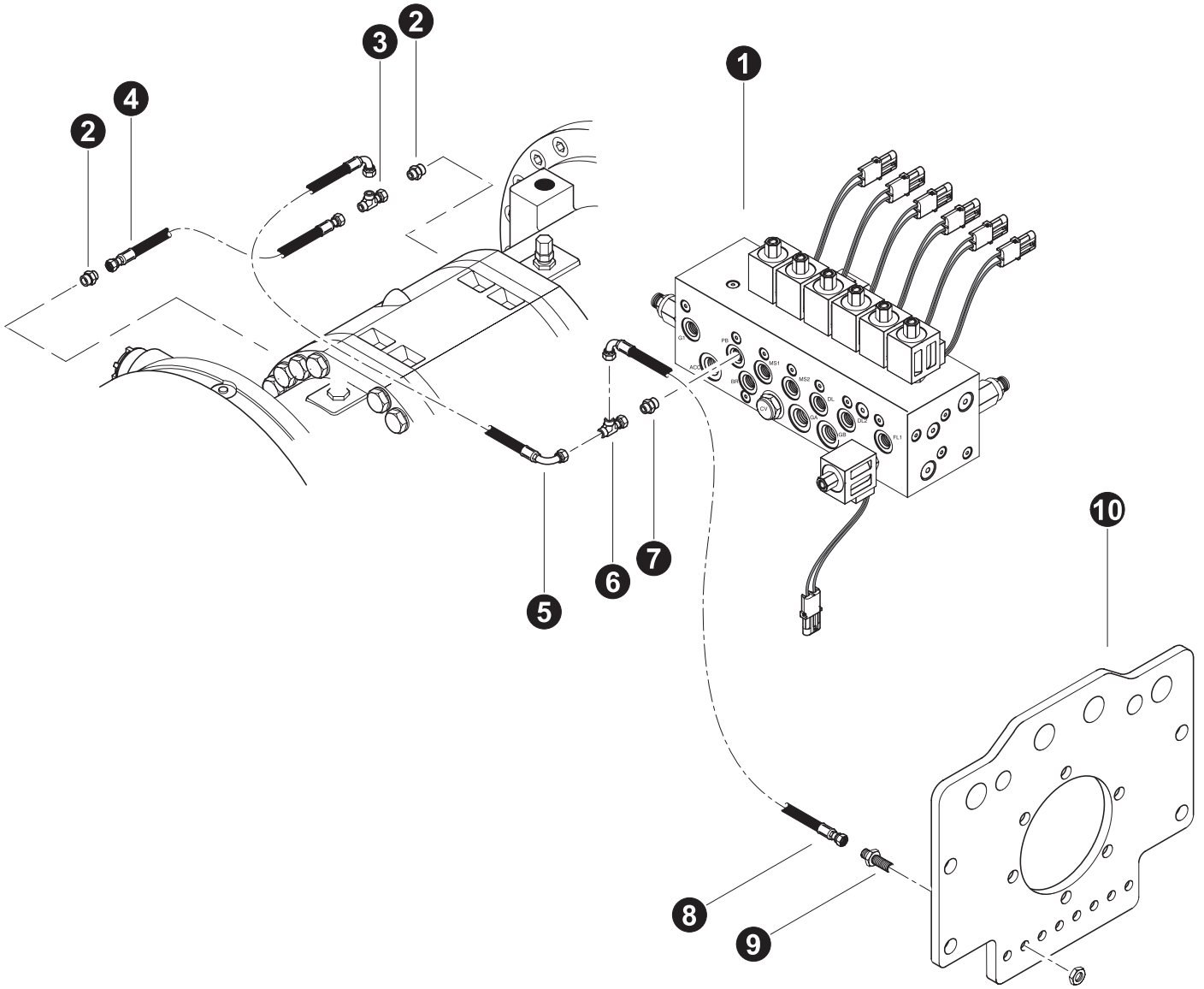


Lower Solenoid Manifold Circuits and Components Breakdown (Lower Manifold - Pressure and Tank Connections) Machines SN-0152-04/14/06 and after

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.

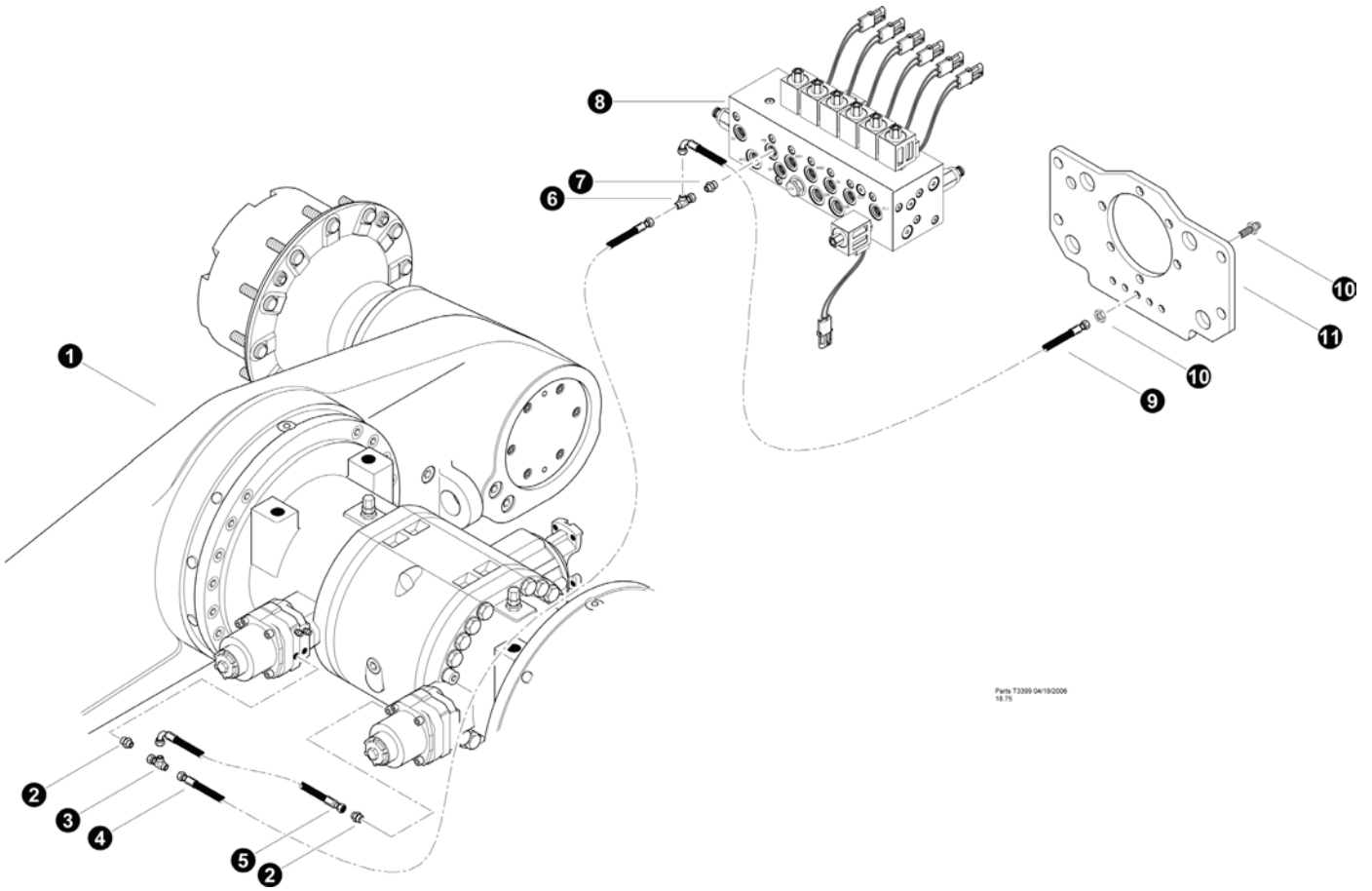


Parts T3063 04/19/2005
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Parking Brake Connections)
Machines built before SN-0152-04/14/06**


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-0409 (Parking Brake Jumper)	
5	-FF	1	HOSE ASSEMBLY - 2085-04-040S-0409 (Front Axle Parking Brake to Lower Manifold "PB" port tee)	
6	15176-FF	1	TEE - FF2114T-0404S	
7	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
8	50638-FF	1	HOSE ASSEMBLY - 2082-04-040S-0409 (Lower Manifold "PB" tee to Parking Brake Bulkhead)	
9	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
10	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	

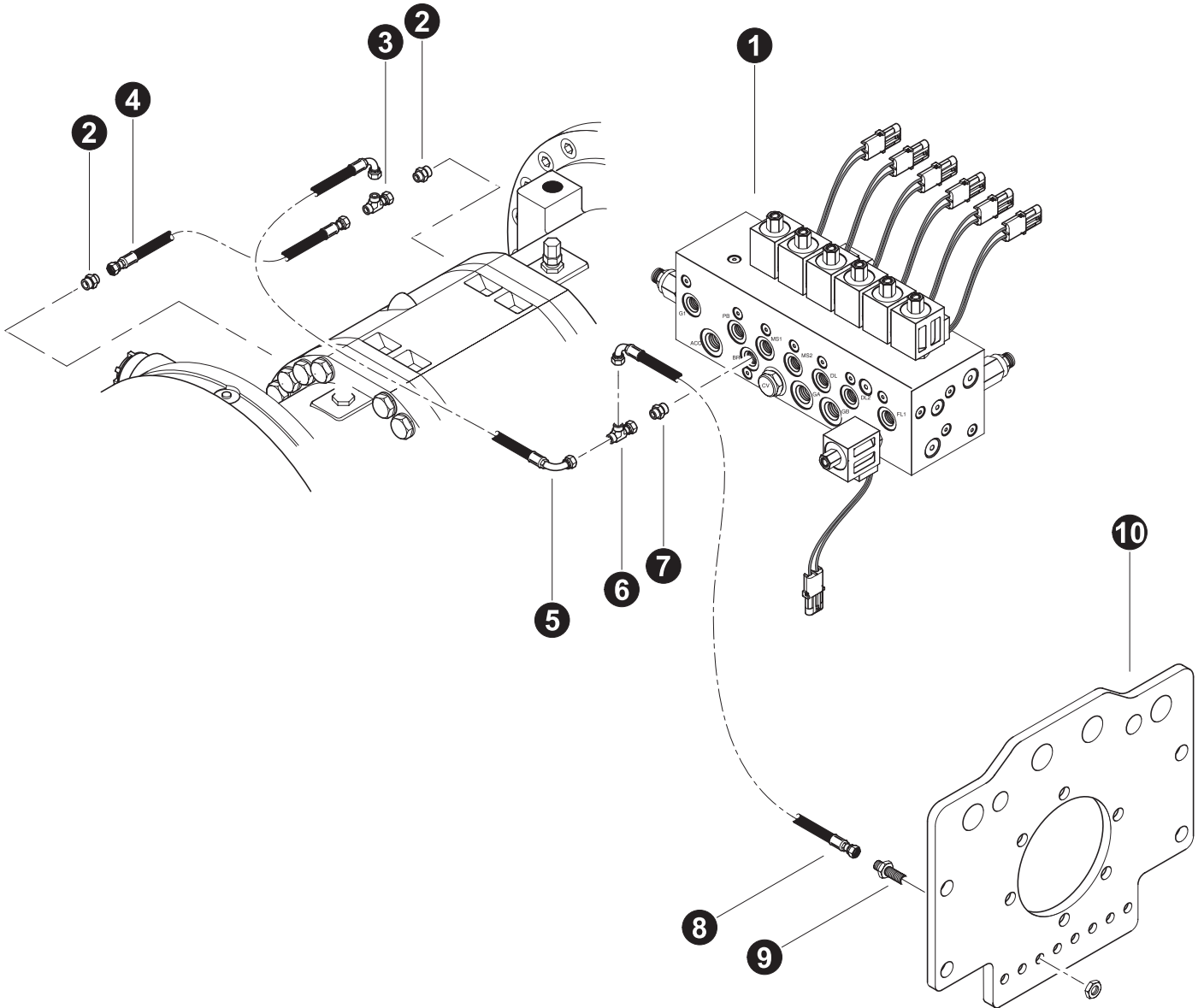
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Parking Brake Connections)
Machines SN-0152-04/14/06 and after**


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.

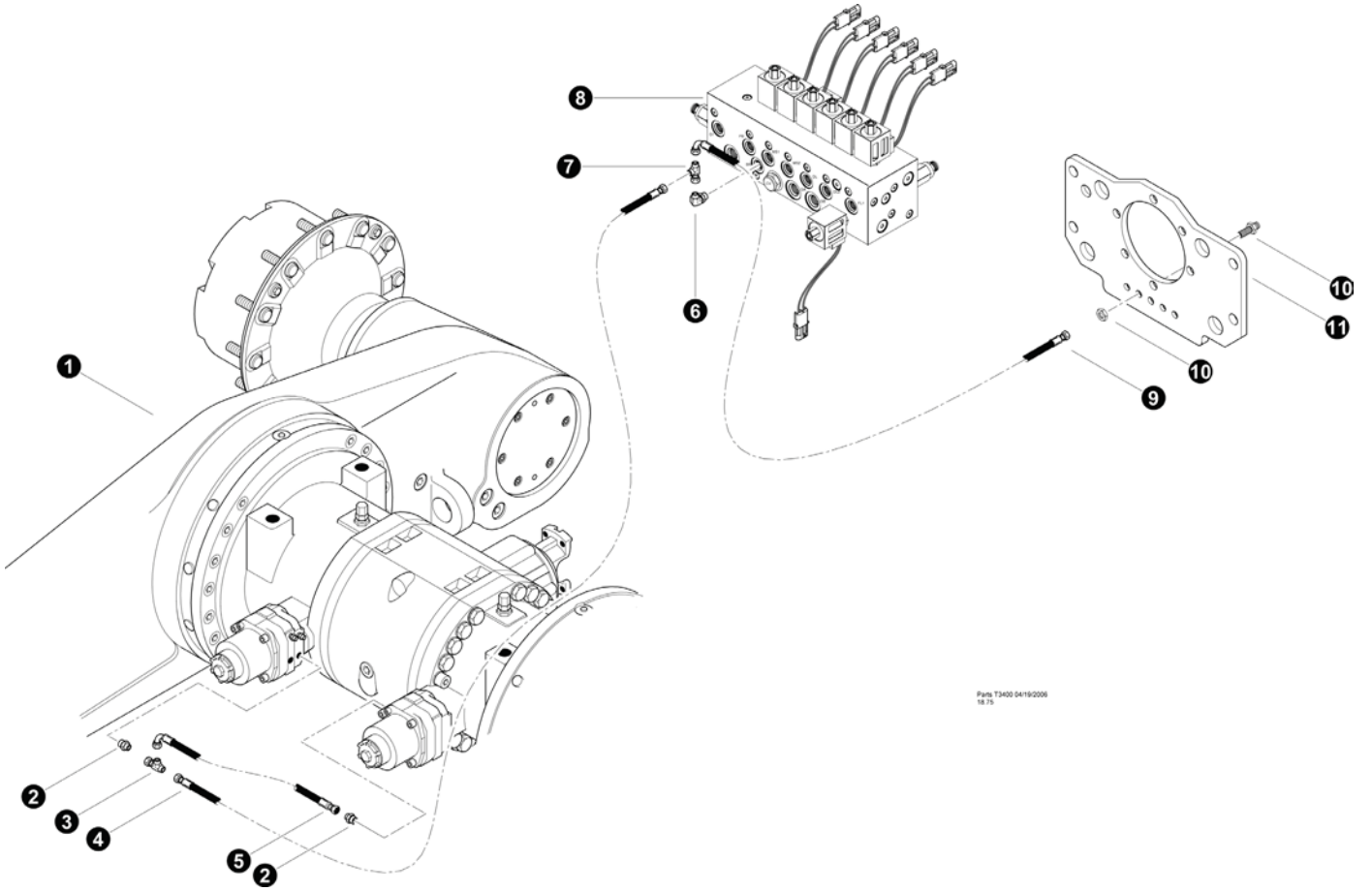


Parts T3064 04/19/2005
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Travel Brake Connections)
Machines built before SN-0152-04/14/06**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	19470-FF	2	CONNECTOR, STR METRIC - 4M14F8OMLOS	
3	15176-FF	1	TEE - FF2114T-0404S	
4	50607-FF	1	HOSE ASSEMBLY - 2009.5-04-04OS-0409 (Parking Brake Jumper)	
5	-FF	1	HOSE ASSEMBLY - 2085-04-040S-0409 (Front Axle Travel Brake to Lower Manifold "TB" port tee)	
6	15176-FF	1	TEE - FF2114T-0404S	
7	15124-FF	1	CONNECTOR, STR - FF1852T-0406S	
8	50638-FF	1	HOSE ASSEMBLY - 2082-04-040S-0409 (Lower Manifold "TB" tee to Travel Brake Bulkhead)	
9	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
10	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	

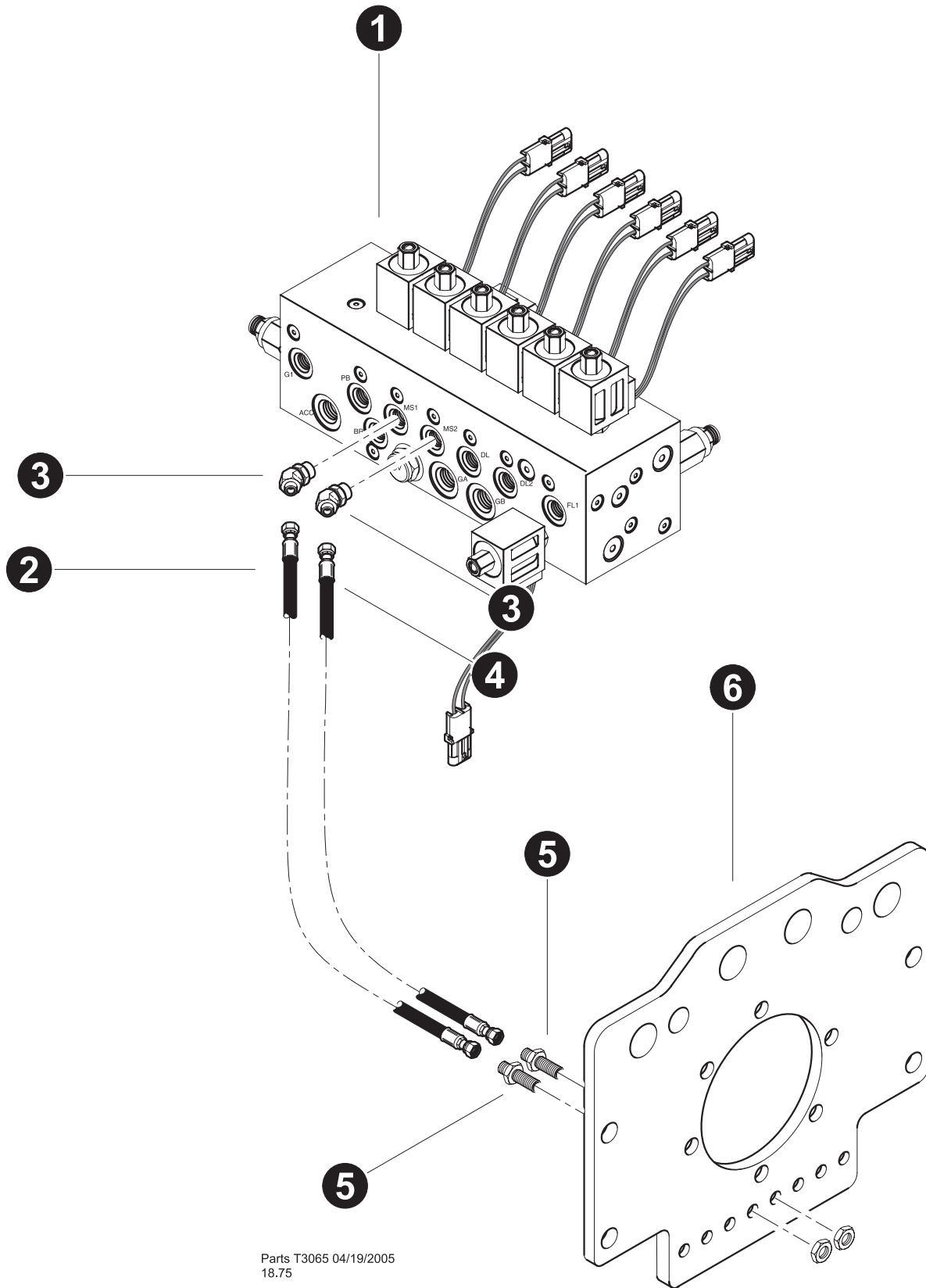
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Travel Brake Connections)
Machines SN-0152-04/14/06 and after**


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		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.

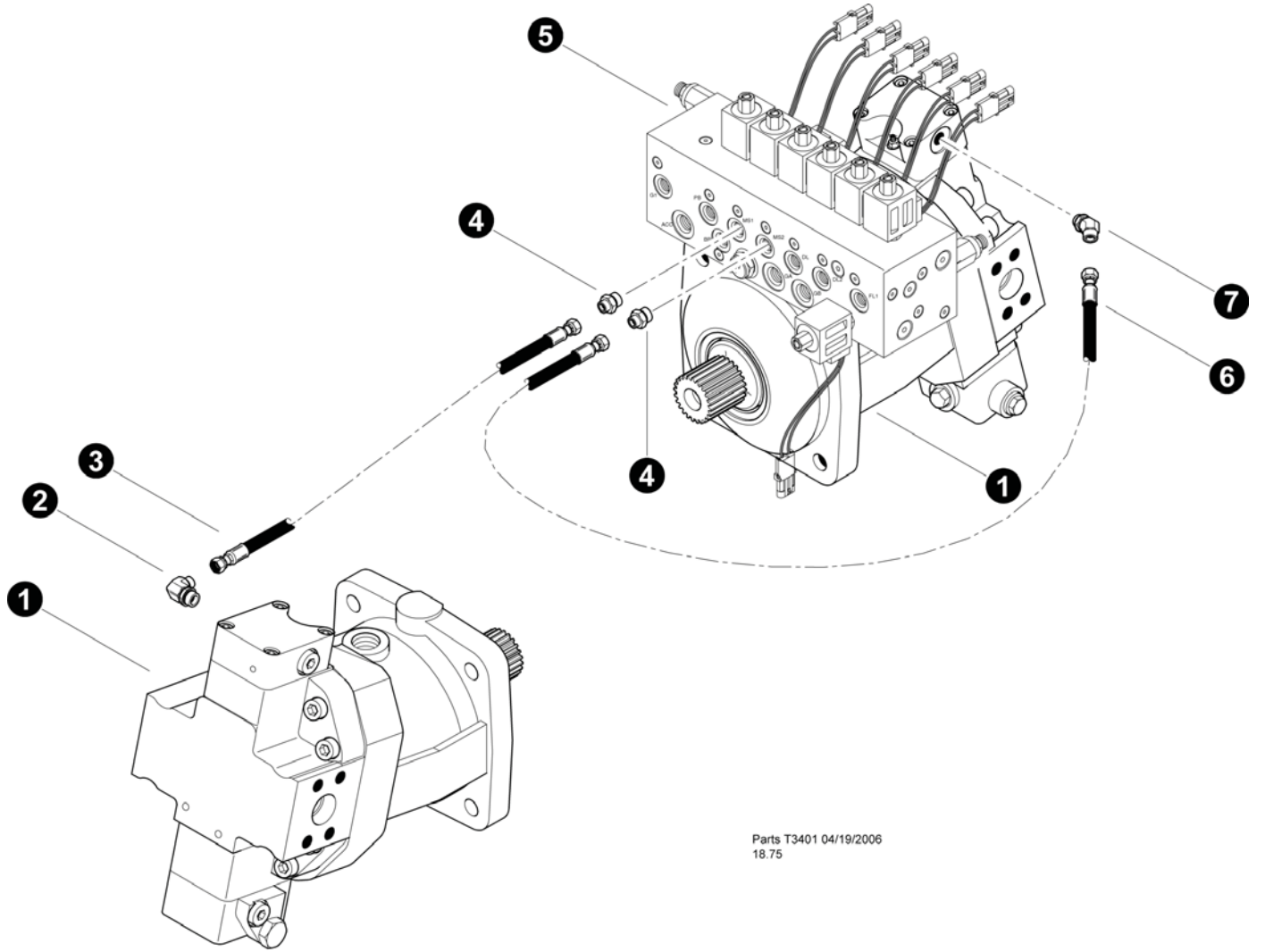


Parts T3065 04/19/2005
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Shift Connections)
Machines built before SN-0152-04/14/06**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	-FF	1	HOSE ASSEMBLY - 2081-04-040S-040S (MS Bulkhead to Lower Manifold "MS" port)	
3	23322-FF	2	ELBOW, 45 - 6-4 V5OLO-S	
4	-FF	1	HOSE ASSEMBLY - 2080-04-040S-040S (MS1 Bulkhead to Lower Manifold "MS1" port)	
5	18582-FF	2	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
6	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	

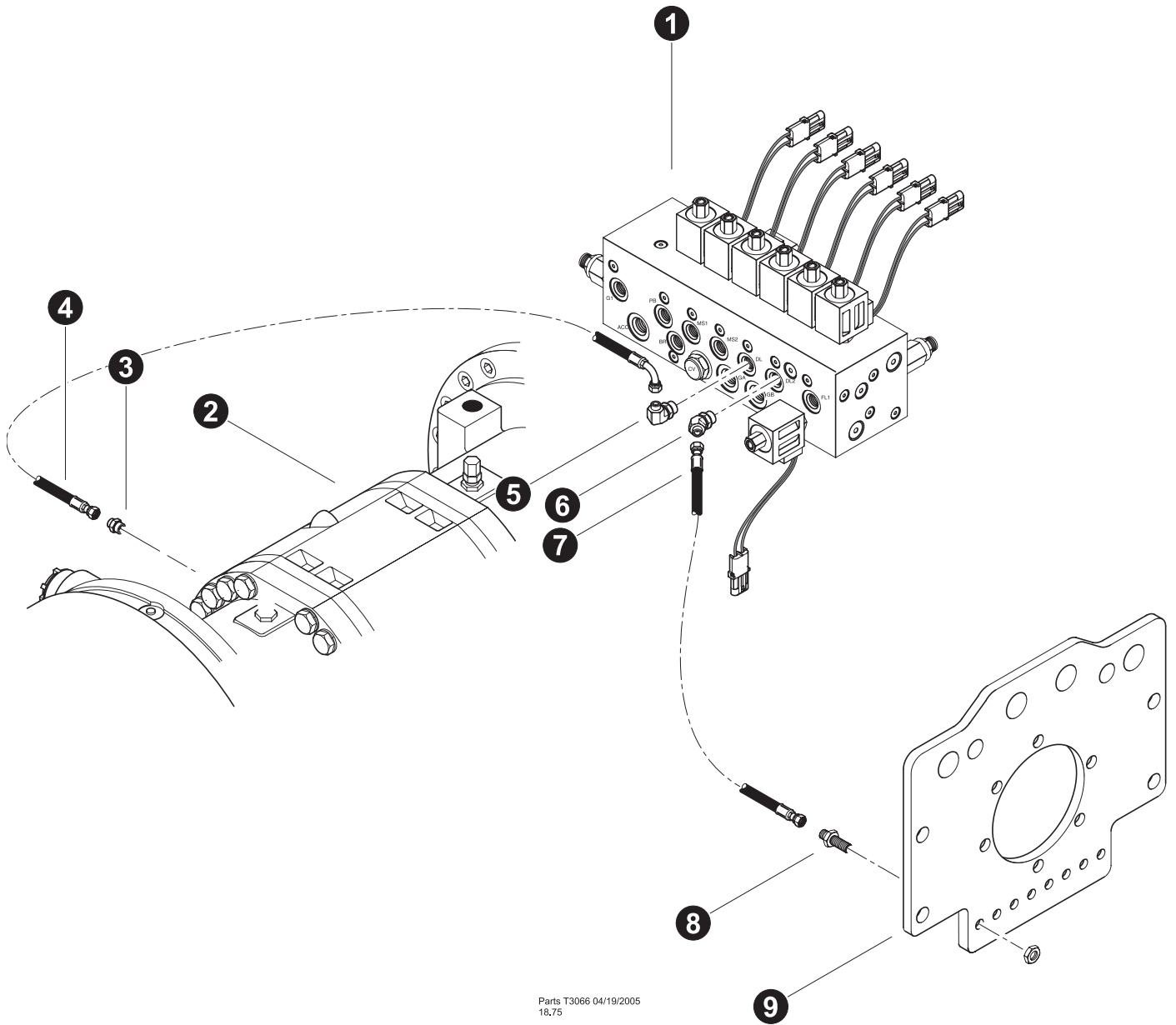
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Shift Connections)
Machines SN-0152-04/14/06 and after**



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.

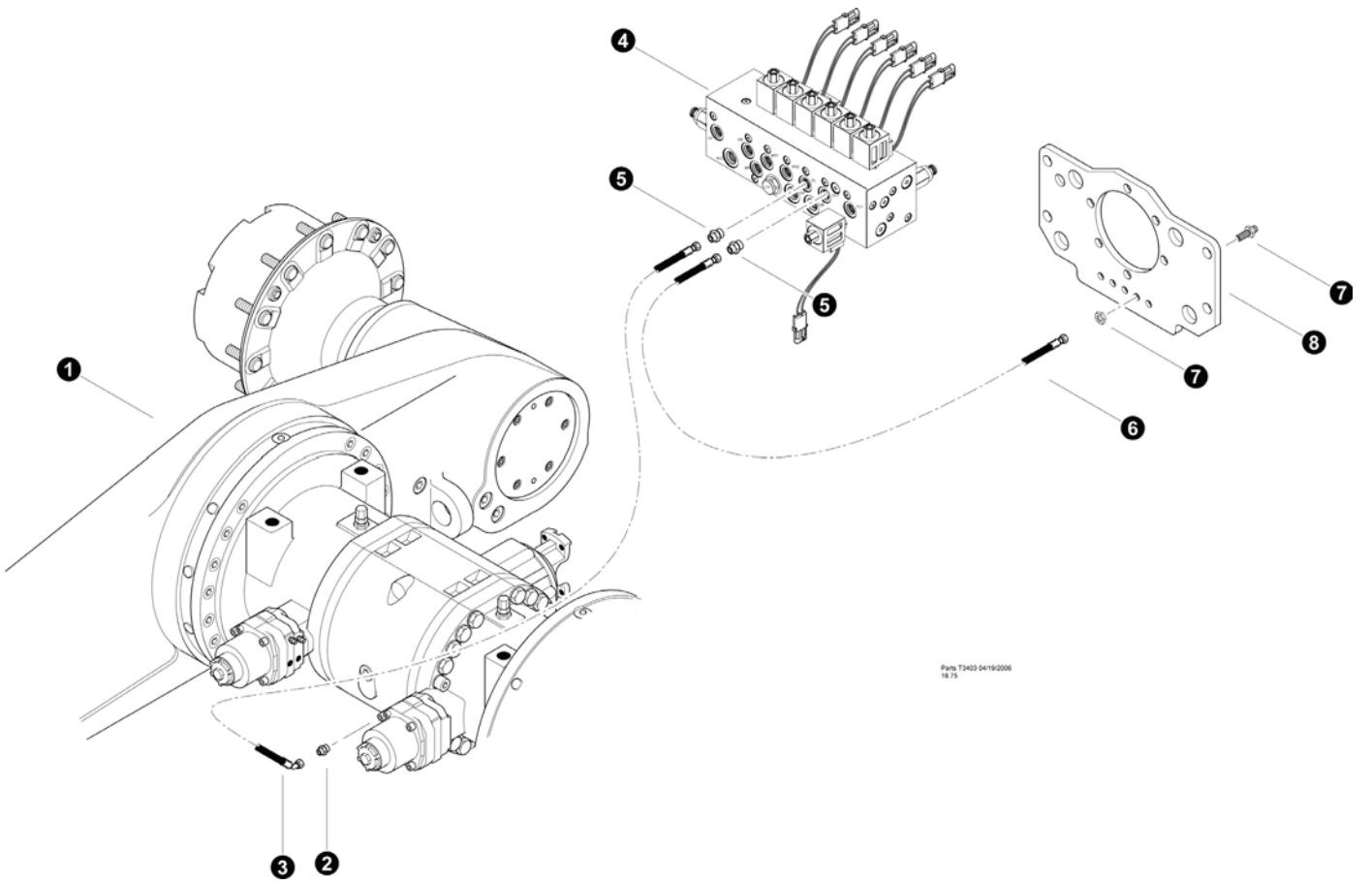


Parts T3066 04/19/2005
18,75



Lower Solenoid Manifold Circuits and Components Breakdown (Front Frame - Differential Lock Connections) Machines built before SN-0152-04/14/06


REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	REF.	1	 FRONT BOGIE AXLE	AX
3	19470-FF	1	CONNECTOR, STR METRIC - 4M14F8OMLOS	
4	-FF	1	HOSE ASSEMBLY - 2085-04-04OS-04O9 (Front Axle Differential Lock to Lower Manifold "DL" port)	
5	15133-FF	1	ELBOW, 90 - FF1868T-0406S	
6	23322-FF	1	ELBOW, 45 - 6-4 V5OLO-S	
7	-FF	1	HOSE ASSEMBLY - 2080-04-04OS-04OS (Differential Lock Bulkhead to Lower Manifold "DL2" port)	
8	18582-FF	1	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
9	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	

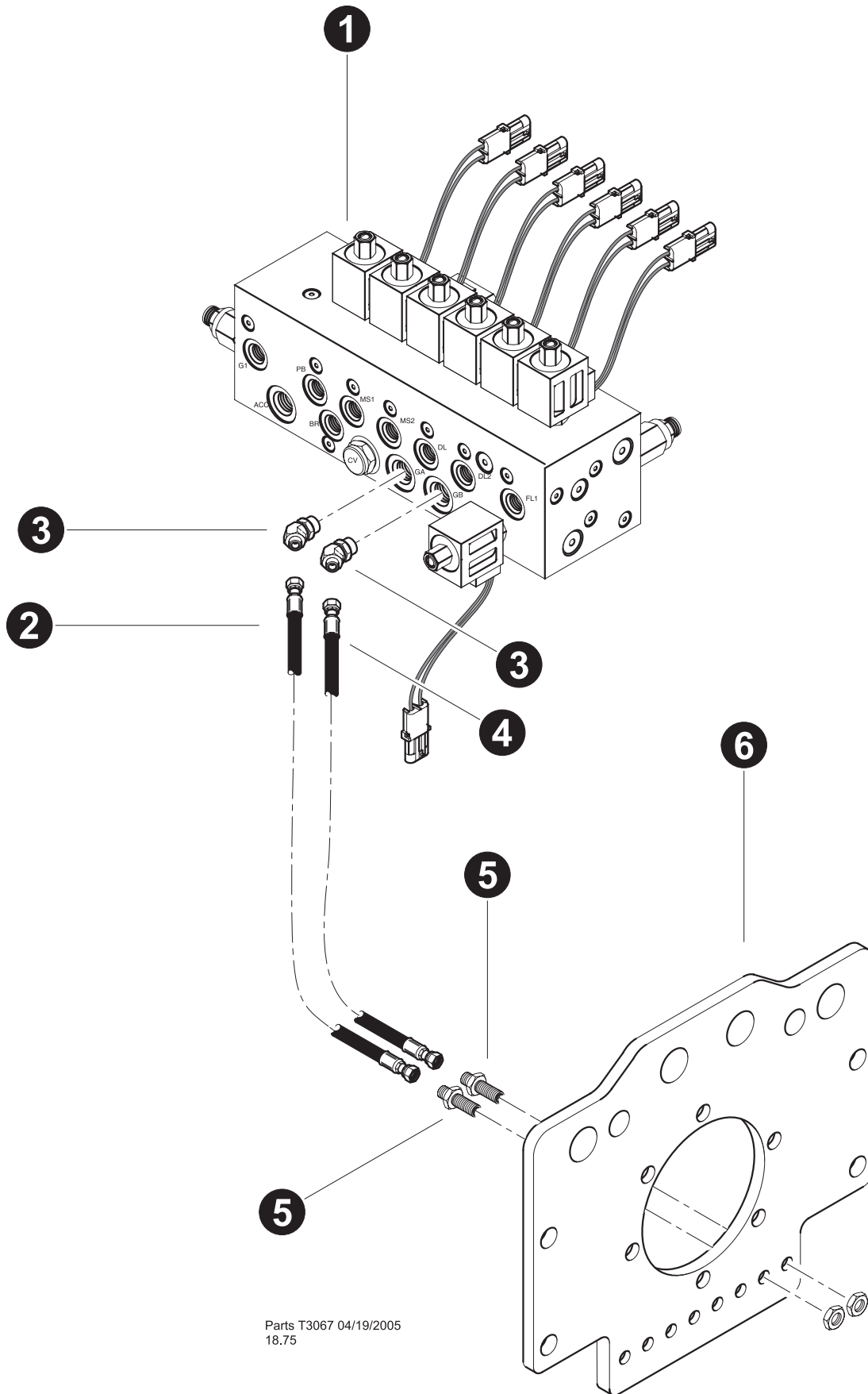
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Differential Lock Connections)
Machines SN-0152-04/14/06 and after**


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.

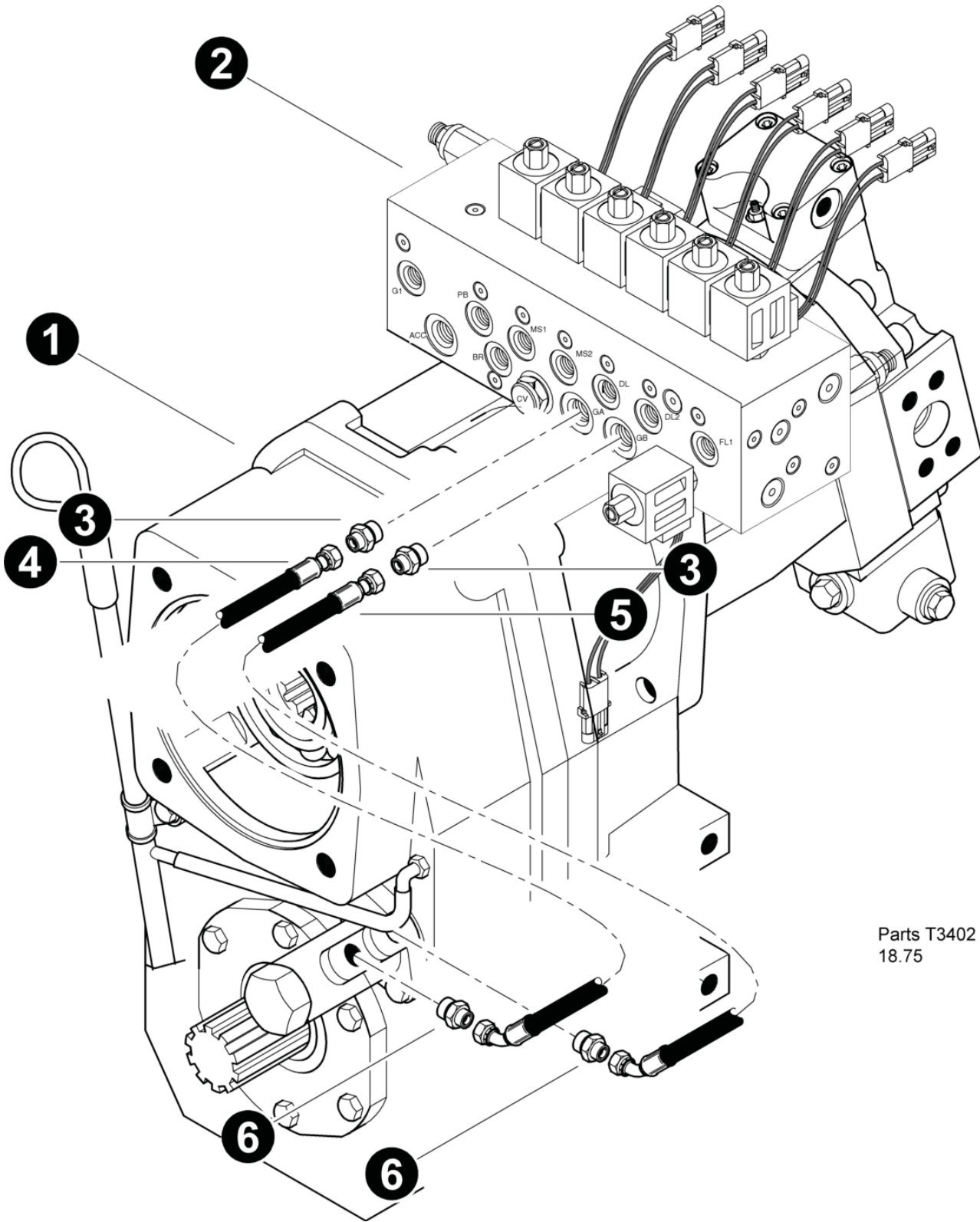


Parts T3067 04/19/2005
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Gear Box Shift Connections)
Machines built before SN-0152-04/14/06**



REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	-FF	1	HOSE ASSEMBLY - 2080-04-040S-040S (GA Bulkhead to Lower Manifold "GA" port)	
3	23322-FF	2	ELBOW, 45 - 6-4 V5OLO-S	
4	-FF	1	HOSE ASSEMBLY - 2080-04-040S-040S (GB Bulkhead to Lower Manifold "GB" port)	
5	18582-FF	2	CONNECTOR, STR BULKHEAD - FF1994T-0404S	
6	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	


 See referenced page for component or assembly breakdown.

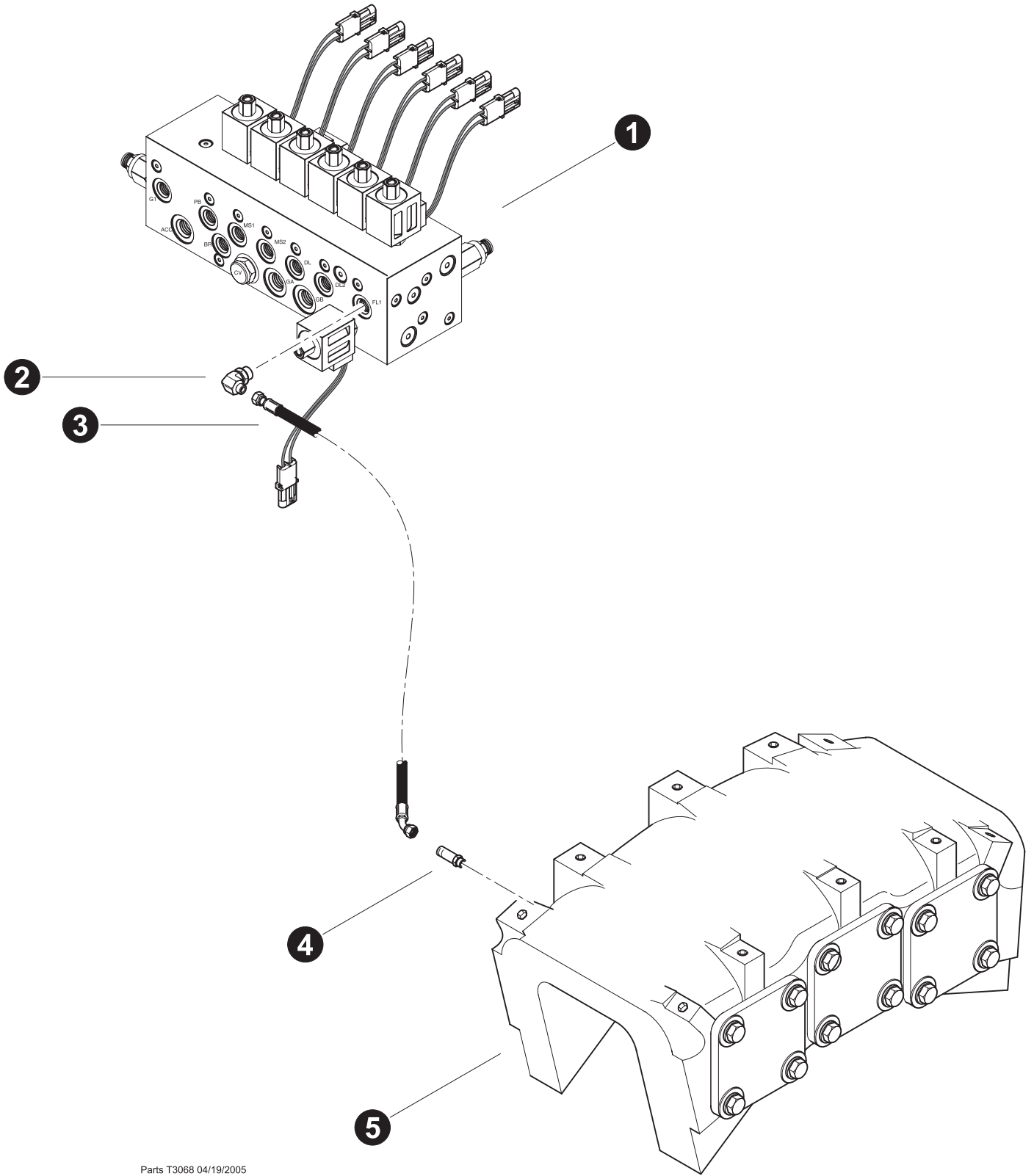


Parts T3402 04/19/2006
18.75

**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Gear Box Shift Connections)
Machines SN-0152-04/14/06 and after**



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.

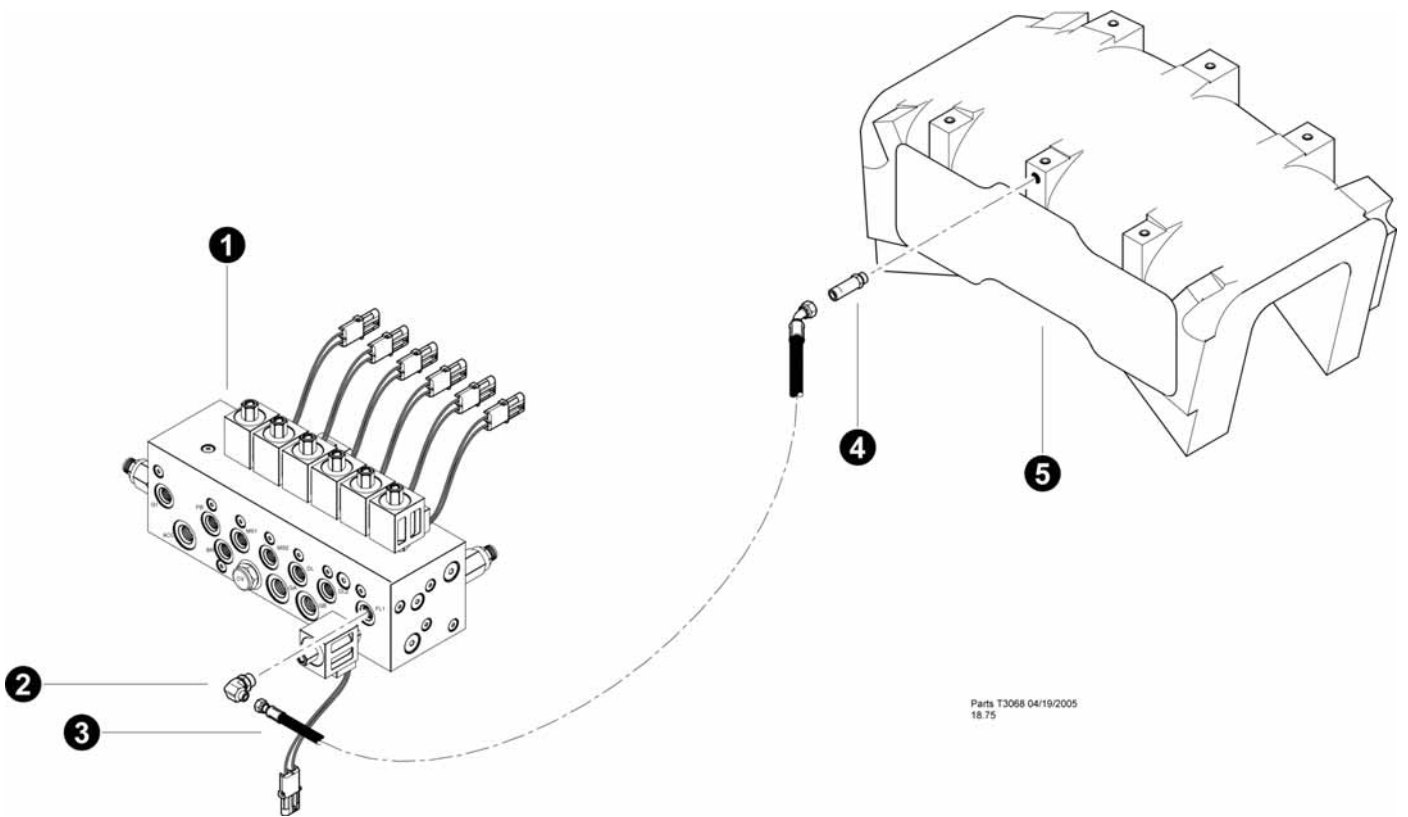


Parts T3068 04/19/2005
18.75



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Frame Lock Connections)
Machines built before SN-0152-04/14/06**


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 - 2028-04-040S-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

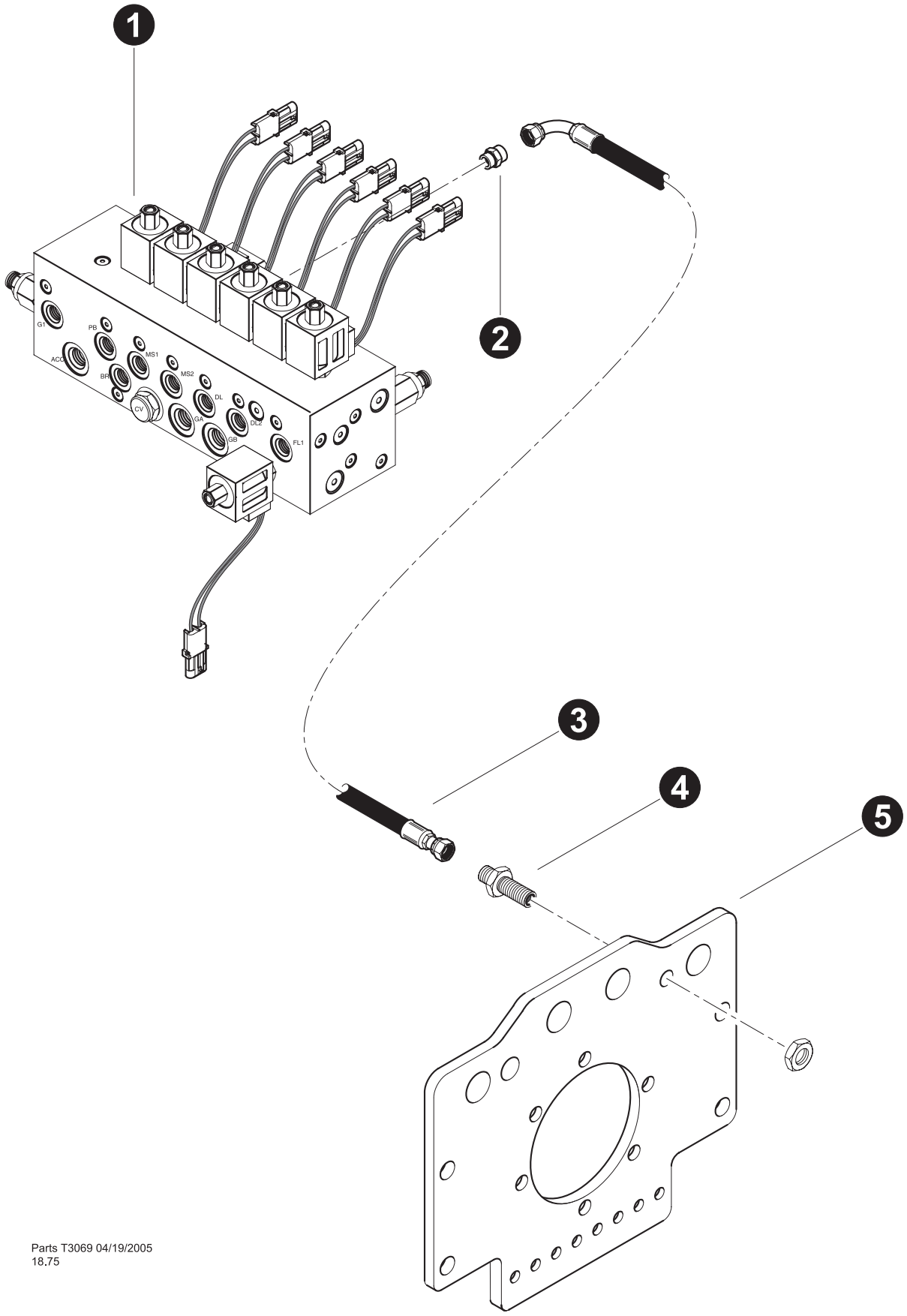
 See referenced page for component or assembly breakdown.



**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Frame Lock Connections)
Machines SN-0152-04/14/06 and after**


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.

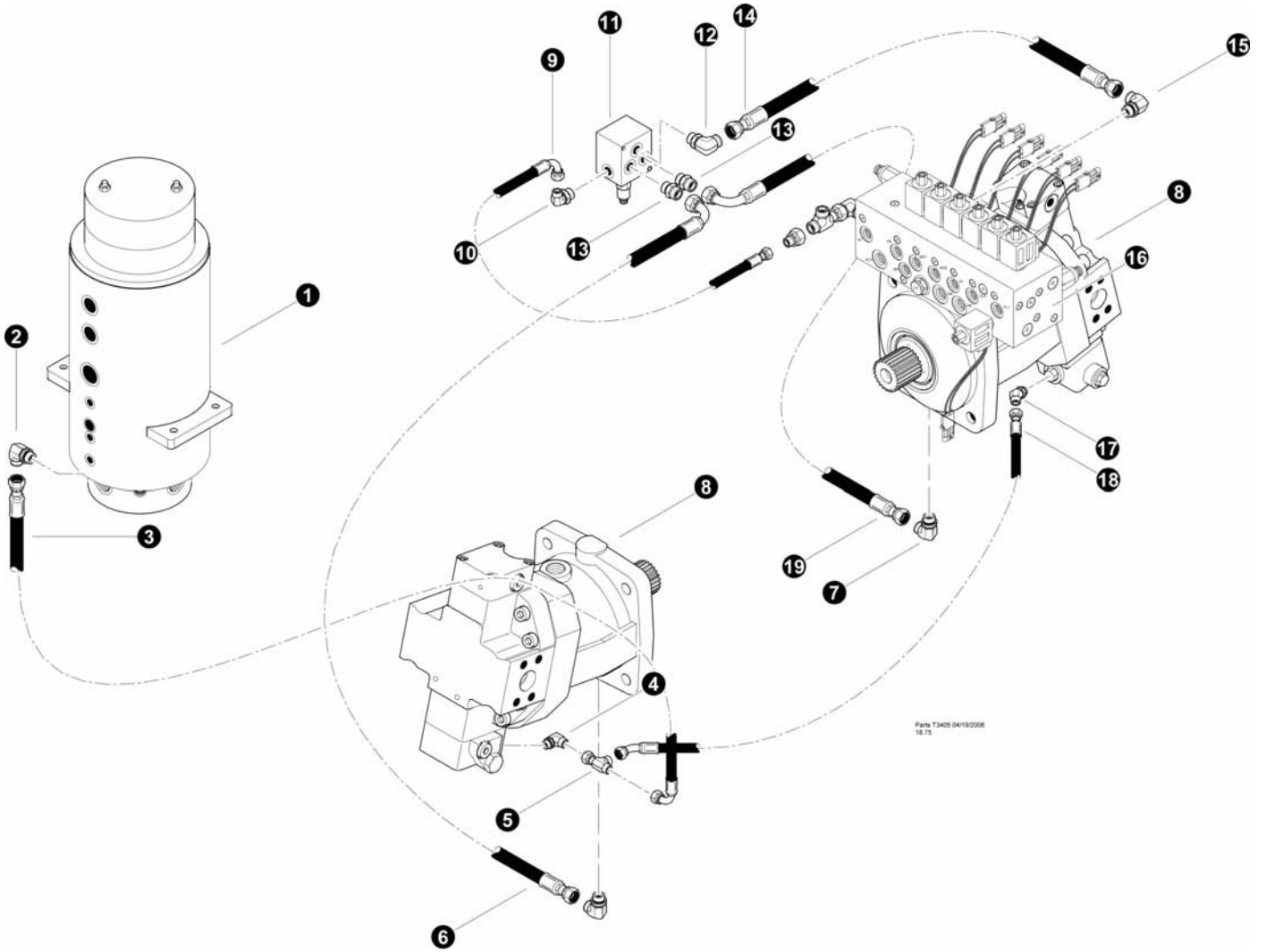


Parts T3069 04/19/2005
18.75





**Lower Solenoid Manifold Circuits
and Components Breakdown
(Front Frame - Motor Flushing Supply Connection)
Machines built before SN-0152-04/14/06**

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-4
2	18034-FF	1	CONNECTOR, STR - FF1852T-0606S	
3	-FF	1	HOSE ASSEMBLY - 2066-06-060S-0609 (Lower solenoid manifold port "flush" to motor flushing pressure bulkhead)	
4	50420-FF		CONNECTOR, STR BULKHEAD - 832-TT-06	
5	42290-FF	1	BRACKET, BEARING MOUNT - DRIVELINE (830)	

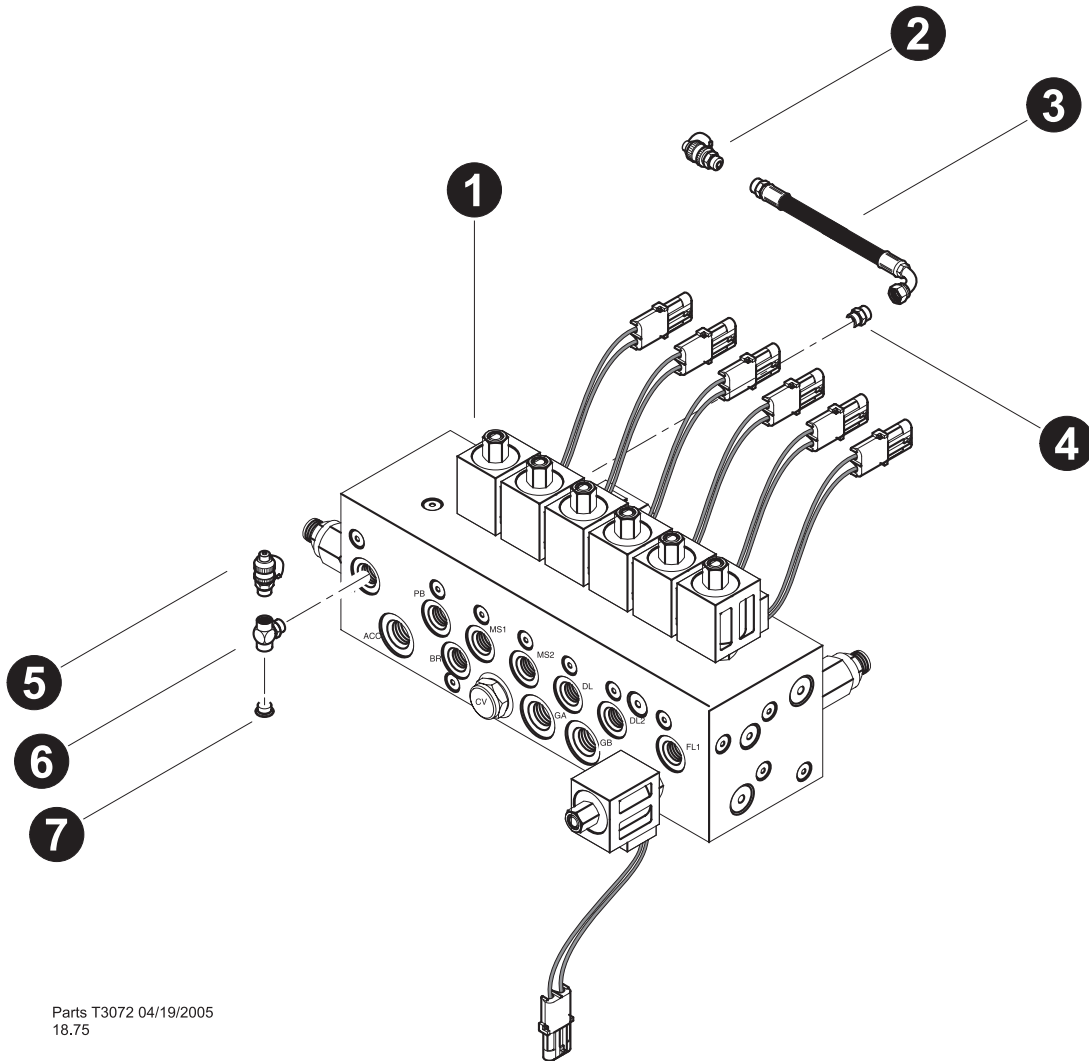
 See referenced page for component or assembly breakdown.



Lower Solenoid Manifold Circuits and Components Breakdown (Front Frame - Motor Flushing Supply and Return Connections) Machines SN-0152-04/14/06 and after


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 (Rotary 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-06O9 (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-04O9 (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-06O4 (Front Motor to Rear Motor)	
19	-FF	1	HOSE ASSEMBLY - 2025-06-06OS-06O9 (Flushing manifold to Rear Motor)	


 See referenced page for component or assembly breakdown.

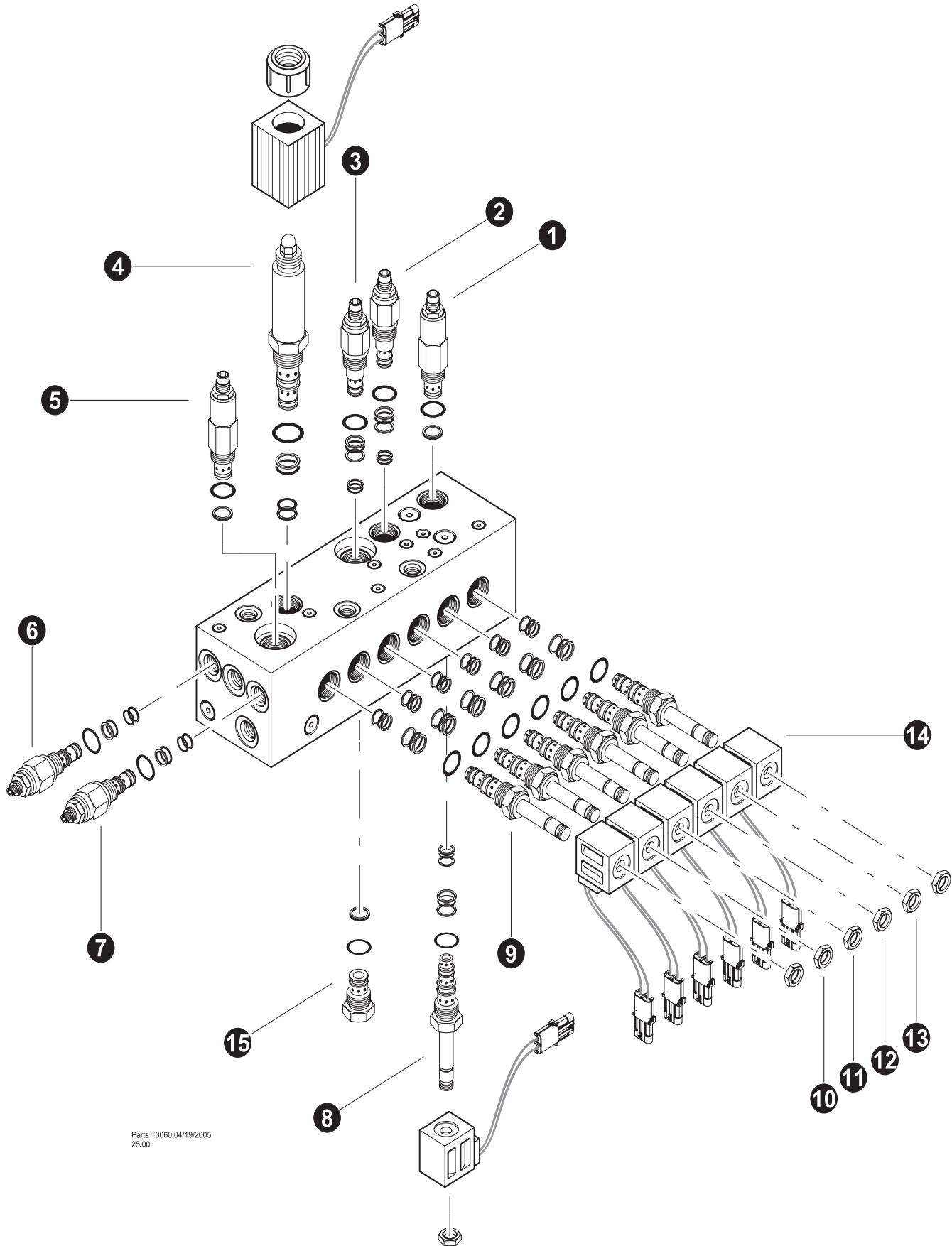


Parts T3072 04/19/2005
18.75

Lower Solenoid Manifold Circuits and Components Breakdown (Front Frame - Lower Manifold Gauge Ports)

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	REF.	1	 LOWER SOLENOID MANIFOLD	FF-5
2	16037-FF	1	TAP, GAUGE PORT - .25" SAE	
3	-FF	1	HOSE ASSEMBLY - 2006.5-04-04FF-04O9	
4	16541-FF		CONNECTOR, STR - FF1852T-0404S	
5	16037-FF	1	TAP, GAUGE PORT - .25" SAE	
6	24293-FF	1	TEE - 4-G5G5JAO-S	
7	11383-FF	1	PLUG - 6408-HHP-4	

 See referenced page for component or assembly breakdown.

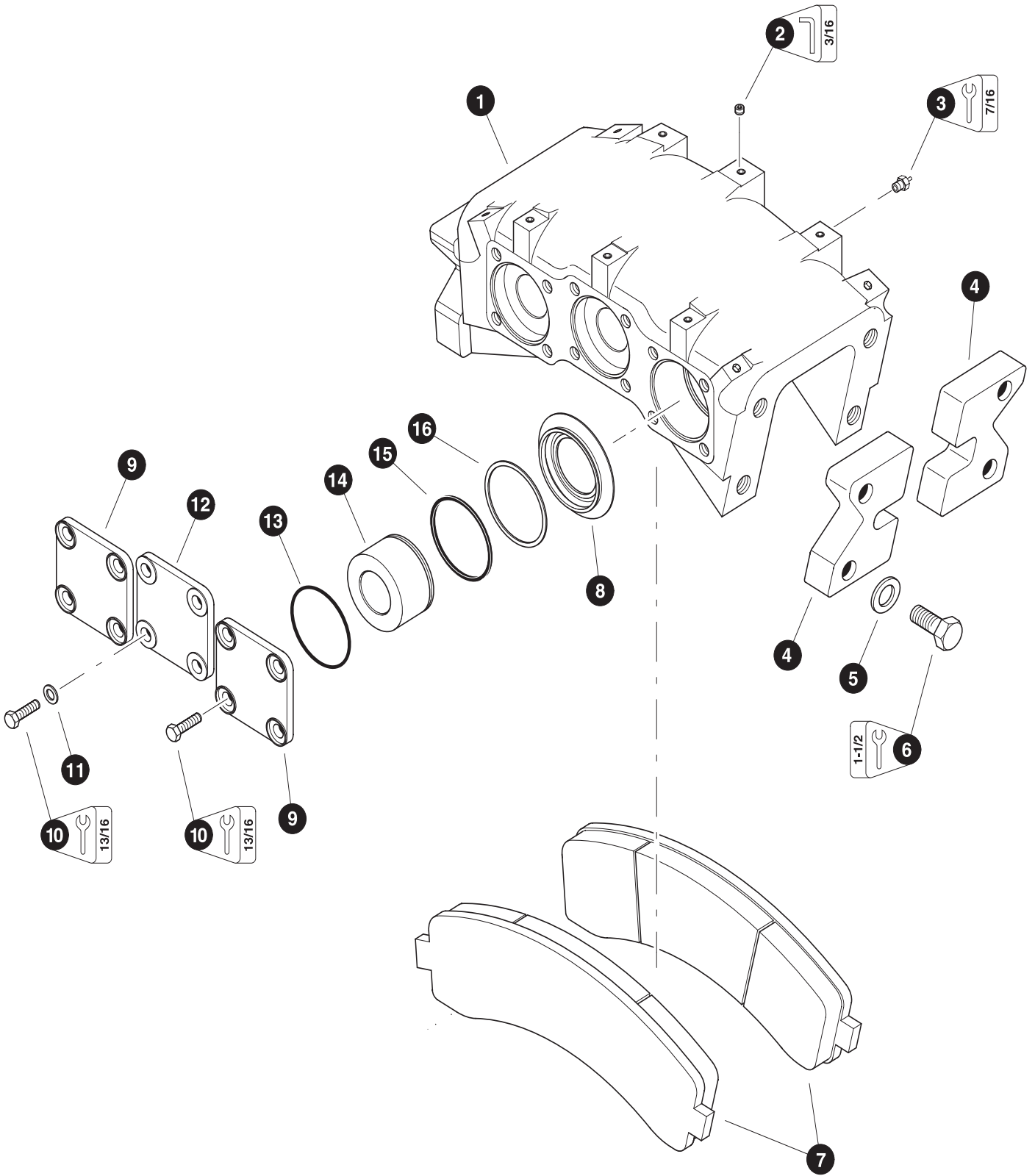


Parts T3060 04/19/2005
25.00






Lower Solenoid Manifold Circuits and Components Breakdown (Lower Solenoid Manifold Breakdown)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	51623-FF	1	<input type="checkbox"/> VALVE, LOWER MANIFOLD - CAN/BUS TF830	
		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 (Frame Lock Caliper Breakdown)

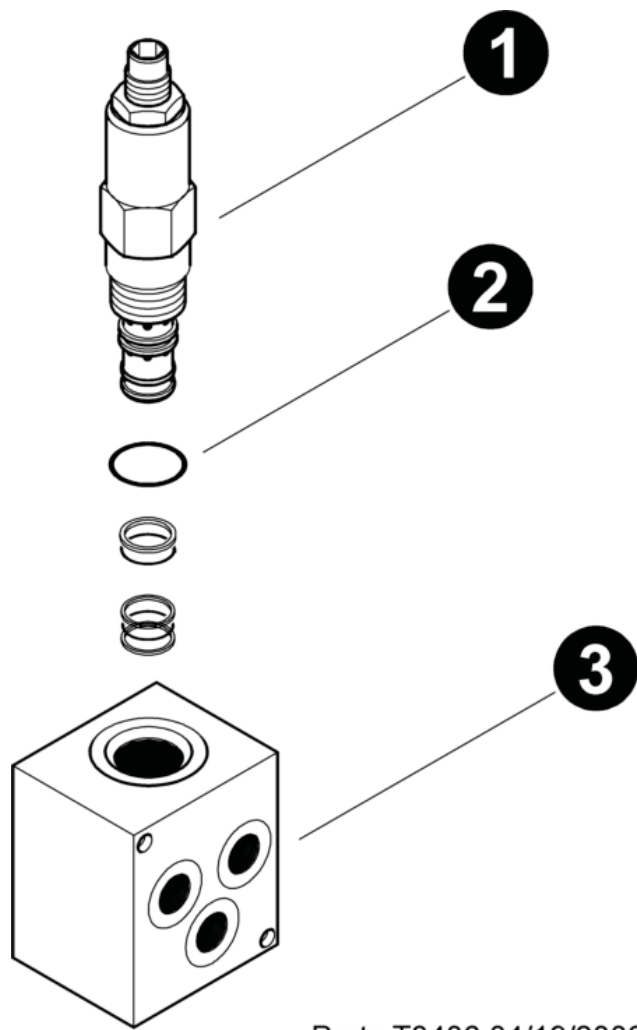
REF	PART #	QTY		DESCRIPTION	SEE PAGE
-	20953-FF	1		FRAME LOCK BRAKE	
1	NSS	1		HOUSING	
2	-----	13		PLUG	
3	-----	1		SCREW, bleed	
4	-----	4		RETAINER, brake pad	
5	-----	8		WASHER	
6	-----	8		BOLT	
7	24406-FF	1		PAD, brake (pair)	
8	NSS	6		BOOT, piston	
9	23445-FF	2		COVER, piston (Machined special to 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.



Parts T3406 04/19/2006
25

Lower Solenoid Manifold Circuits and Components Breakdown *(Flushing Relief Manifold)*

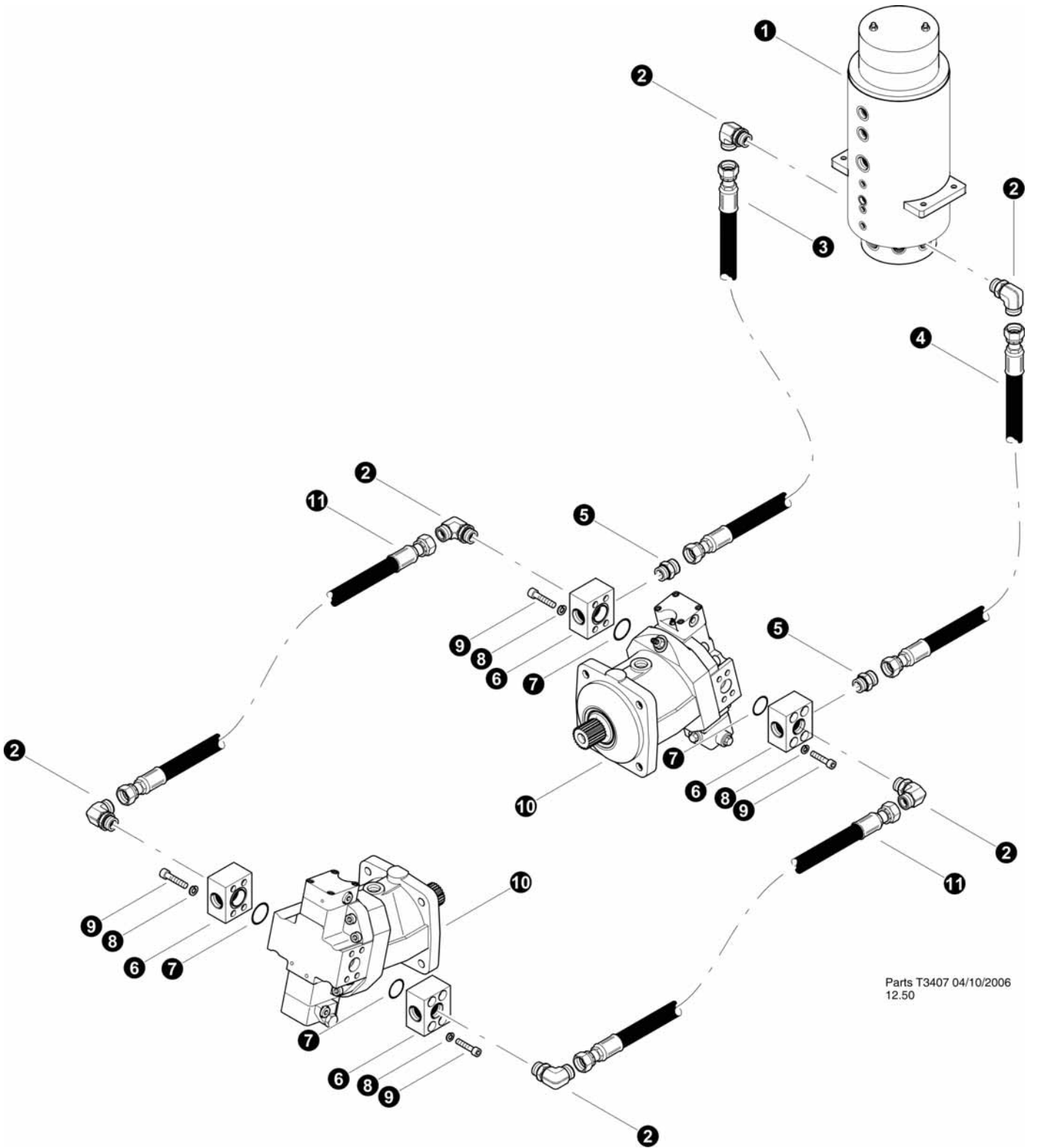
REF	PART #	QTY	DESCRIPTION	SEE PAGE
-	52148-FF	1	<input type="checkbox"/> MANIFOLD, FLUSHING - WHEEL MOTORS	
1	-FF	1	<input type="checkbox"/> VALVE, Sequence (PS10 - 36 - 0 - N - 04/)	
2	-FF	1	KIT, Seal (SK10-3X-BM)	
3	-FF	1	MANIFOLD - wheel motor flushing	

Kit or Assembly - includes all items indented underneath.

Section FF-5

TF 830, 840 Front Frame - Drive Motor Hydraulics


***(Transfer Case Mounted in Front Frame)
Machines SN-0152-04/14/06 and after***




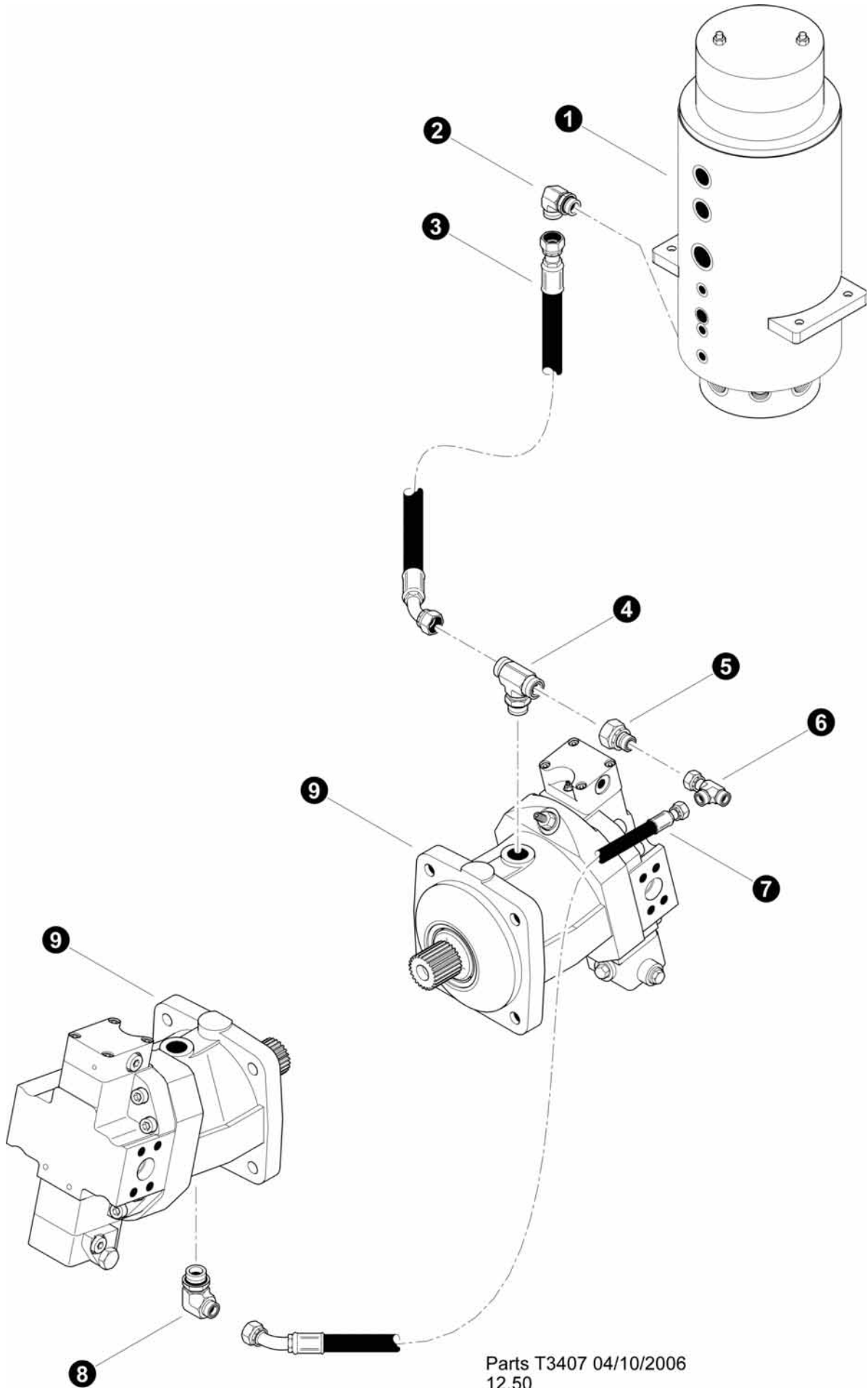
Parts T3407 04/10/2006
12.50

DRIVE MOTOR HYDRAULICS

**Front to Rear Hydraulic Motor Connection - Pressure
(Standard Front and All Rear Frames)
Machines SN-0152-04/14/06 and after**

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.



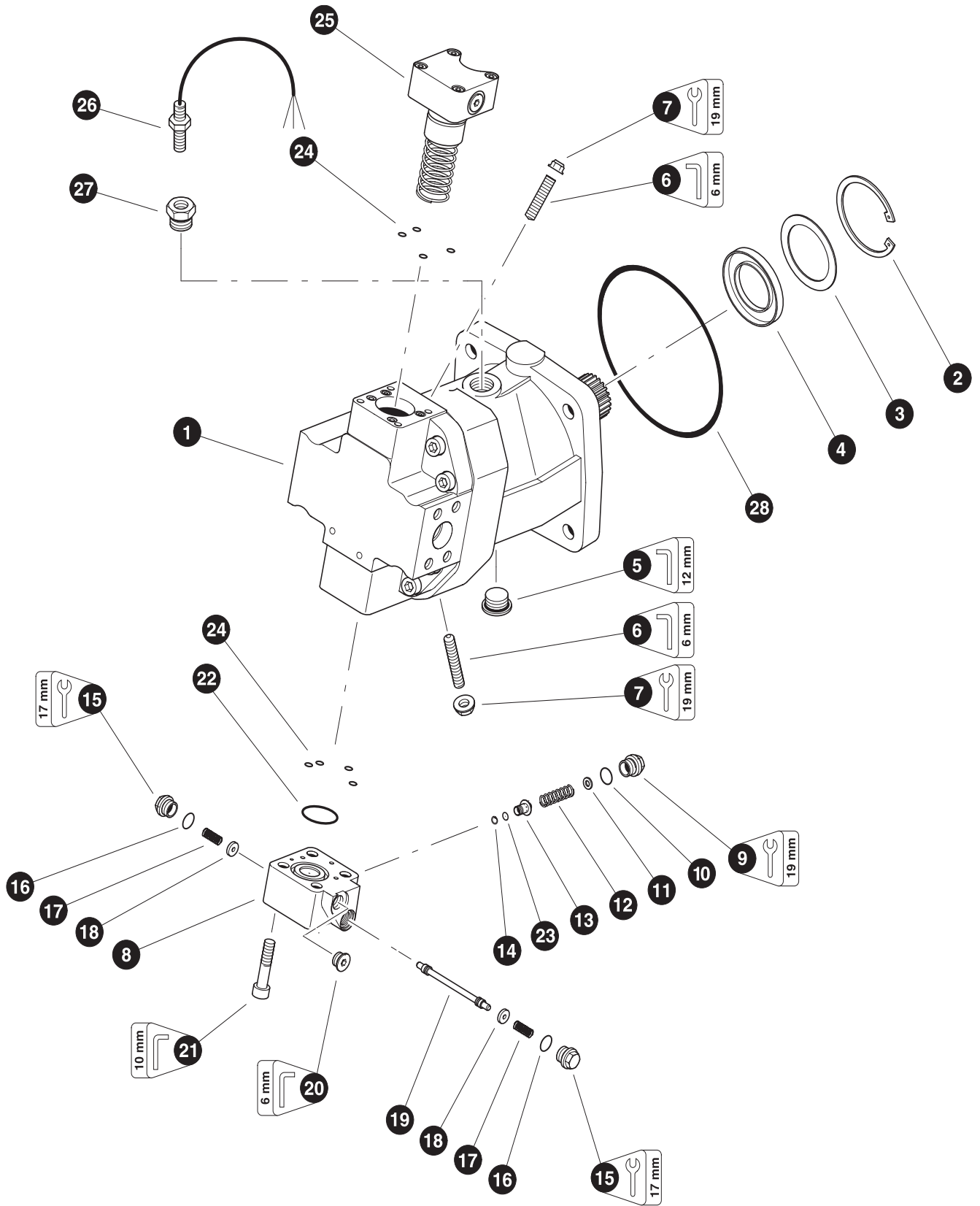
Parts T3407 04/10/2006
12.50

DRIVE MOTOR HYDRAULICS

ROTARY MANIFOLD TO REAR DRIVE MOTOR (Standard Front and All Rear Frames) *Machines SN-0152-04/14/06 and after*

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.



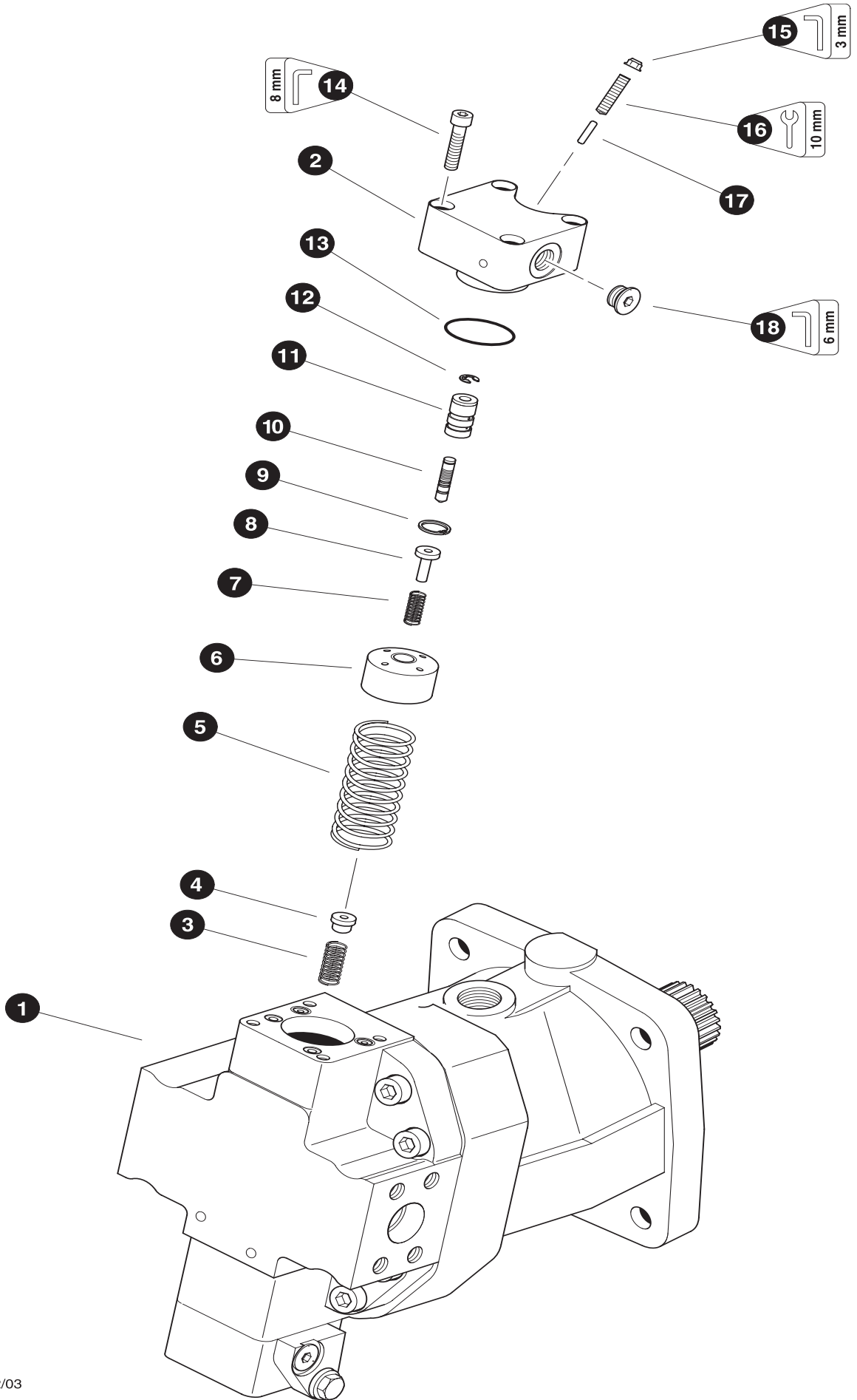
REXROTH 160cc MOTOR (Standard)

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 Control 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.

