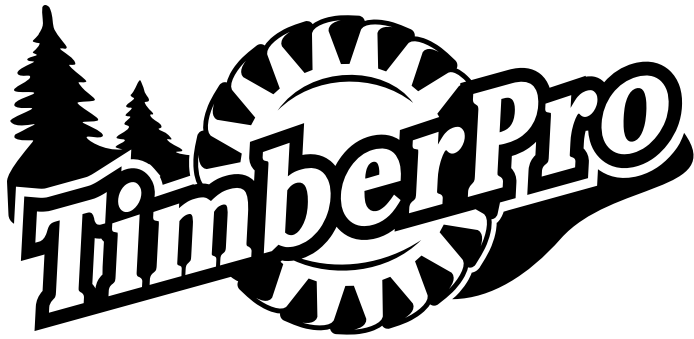




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# Parts Manual 830B / 840B



REV #0 - 01/23  
PN 53654





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| Drive Shaft Installation (2-Speed NAF) (STD Frame) ..... | FR-2-4 |

**Section FR-3: 830, 840 Rear Frame Hydraulics**

|                                                  |         |
|--------------------------------------------------|---------|
| Steer Cylinder Hydraulics .....                  | FR-3-2  |
| <b>Lower Mono Block Hydraulics</b>               |         |
| Parking Brake Hydraulics .....                   | FR-3-4  |
| Parking Brake Hydraulics (2 - Foot Longer) ..... | FR-3-6  |
| Travel Brake Hydraulics .....                    | FR-3-8  |
| Travel Brake Hydraulics (2 - Foot Longer) .....  | FR-3-10 |
| Differential Hydraulics .....                    | FR-3-12 |
| Differential Hydraulics (2 - Foot Longer) .....  | FR-3-14 |
| Steer Cylinder (Jarp) .....                      | FR-3-16 |

**Group AX****Axles, Transfer Cases & Wheels****Section AX-1: Tandem Axle (Tim 08) 830 Rear**

|                             |         |
|-----------------------------|---------|
| Differential .....          | AX-1-2  |
| Axle Beam .....             | AX-1-6  |
| Bogie Housing .....         | AX-1-8  |
| Outer Component (Hub) ..... | AX-1-10 |
| Brake Cylinder .....        | AX-1-12 |

**Section AX-2: Tandem Axle (Tim 17) 830 & 630 Front**

|                                       |         |
|---------------------------------------|---------|
| Differential .....                    | AX-2-2  |
| Axle Beam .....                       | AX-2-6  |
| Bogie Housing .....                   | AX-2-8  |
| Outer Component (Planetary Hub) ..... | AX-2-10 |
| Brake Cylinder .....                  | AX-2-12 |

**Section AX-3: Tandem Axles (Tim 22) 840 Front and Rear**

|                                       |         |
|---------------------------------------|---------|
| Differential .....                    | AX-3-2  |
| Axle Beam .....                       | AX-3-8  |
| Bogie Housing .....                   | AX-3-10 |
| Outer Component (Planetary Hub) ..... | AX-3-12 |
| Brake Cylinder .....                  | AX-3-14 |

**Section AX-4: Single Axle (Tim 14) 630 Rear**

|                                       |         |
|---------------------------------------|---------|
| Differential .....                    | AX-4-2  |
| Axle Beam .....                       | AX-4-8  |
| Outer Component (Planetary Hub) ..... | AX-4-12 |
| Brake Cylinder .....                  | AX-4-14 |

**Section AX-5: Gear Box (Tim 15) 830 & 840 Dual Motor**

|                      |        |
|----------------------|--------|
| Breakdown .....      | AX-5-2 |
| Shift Cylinder ..... | AX-5-6 |

**Section AX-6: Gear Box (Tim 16) 630 Dual Motor**

|                            |         |
|----------------------------|---------|
| Outer Case Assembly .....  | AX-6-2  |
| Top Gear Set .....         | AX-6-4  |
| Bottom Gear Set .....      | AX-6-6  |
| Front Cover Assembly ..... | AX-6-8  |
| Shift Cylinder .....       | AX-6-10 |

**Section AX-5: Wheel Assemblies**

|                           |        |
|---------------------------|--------|
| Wheel Assemblies:         |        |
| Nokian Tires .....        | AX-6-2 |
| Firestone Tires .....     | AX-6-4 |
| Dual Configurations ..... | AX-6-6 |

**Group FB****Bunks, Stakes & Headache Rack****Section FB-1: Structural and Installation**

|                                                     |        |
|-----------------------------------------------------|--------|
| Floating Bunk Installation .....                    | FB-1-2 |
| Log Bunk & Stake Installation (Rear Frame) .....    | FB-1-4 |
| Log Bunk & Stake Installation (Floating Bunk) ..... | FB-1-6 |
| Headache (Log) Rack Breakdown & Installation .....  | FB-1-8 |

**Group CB****Clam Bunk****Section CB-1: Structural**

|                                        |        |
|----------------------------------------|--------|
| Clam Bunk Access Covers & Guards ..... | CB-1-2 |
| Clam Bunk Lower Base Components .....  | CB-1-4 |
| Clam Bunk Arm Installation .....       | CB-1-6 |
| Clam Bunk Unit Installation .....      | CB-1-8 |

**Section CB-2: Hydraulics**

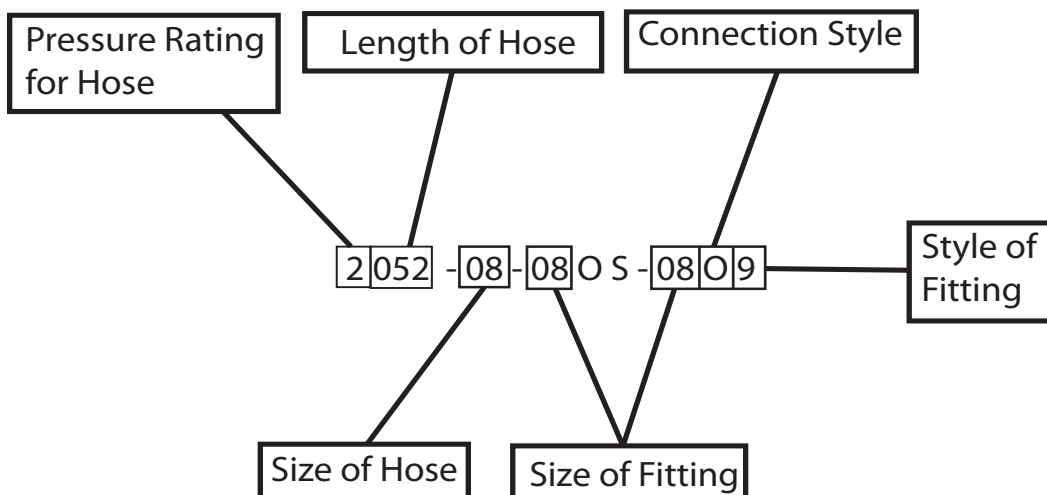
|                                                                 |        |
|-----------------------------------------------------------------|--------|
| Left Arm Cylinder Hoses .....                                   | CB-2-2 |
| Right Arm Cylinder Hoses .....                                  | CB-2-4 |
| Clam Bunk Valve to Rotary Manifold (pressure and tank) .....    | CB-2-6 |
| Clam Bunk Valve to Rotary Manifold (Load Sense and Drain) ..... | CB-2-8 |

**Section CB-3: Valve and Cylinders**

|                          |         |
|--------------------------|---------|
| Clam Bunk Valve .....    | CB-3-2  |
| Valve Work Section ..... | CB-3-4  |
| End Cap. ....            | CB-3-6  |
| Solenoid Cap.....        | CB-3-8  |
| Inlet Section.....       | CB-3-10 |
| Outlet Section .....     | CB-3-12 |
| Cylinder .....           | CB-3-14 |

**Section CB-4: Electrical Harness**

|                            |        |
|----------------------------|--------|
| Control Valve Harness..... | CB-4-2 |
|----------------------------|--------|



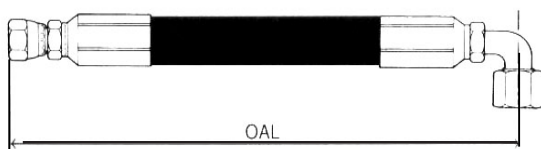
## Explanation of Hose Assemblies

### Pressure Rating for Hoses

The Number representing the hose pressure rating is actually the number of wires in the hoses makeup. Since pressure ratings and wire content can vary between manufactures and styles of hoses. It is recommended that the replacement hose matches the pressure rating of the hose it is replacing.

### Length of Hose

This is the actual length of the hose measured in a straight line including the fittings.



### Size of Hose

The number representing the size of the hose is as follows.

|            |             |
|------------|-------------|
| 04 = .25"  | 06 = .3875" |
| 08 = .5"   | 10 = .625"  |
| 12 = .75"  | 16 = 1"     |
| 20 = 1.25" | 24 = 1.5"   |

### Size of the Fitting

The size of the fitting is the same code as the sizing used for hose listed above.

### Connection Style

The Connection Style of fitting is coded as follows.

"J" = Jic

"O" = O-ring Face Seal

"P" = Pipe

### Style of Fitting

The Style of Fitting is coded as follows.

"S" = Strait

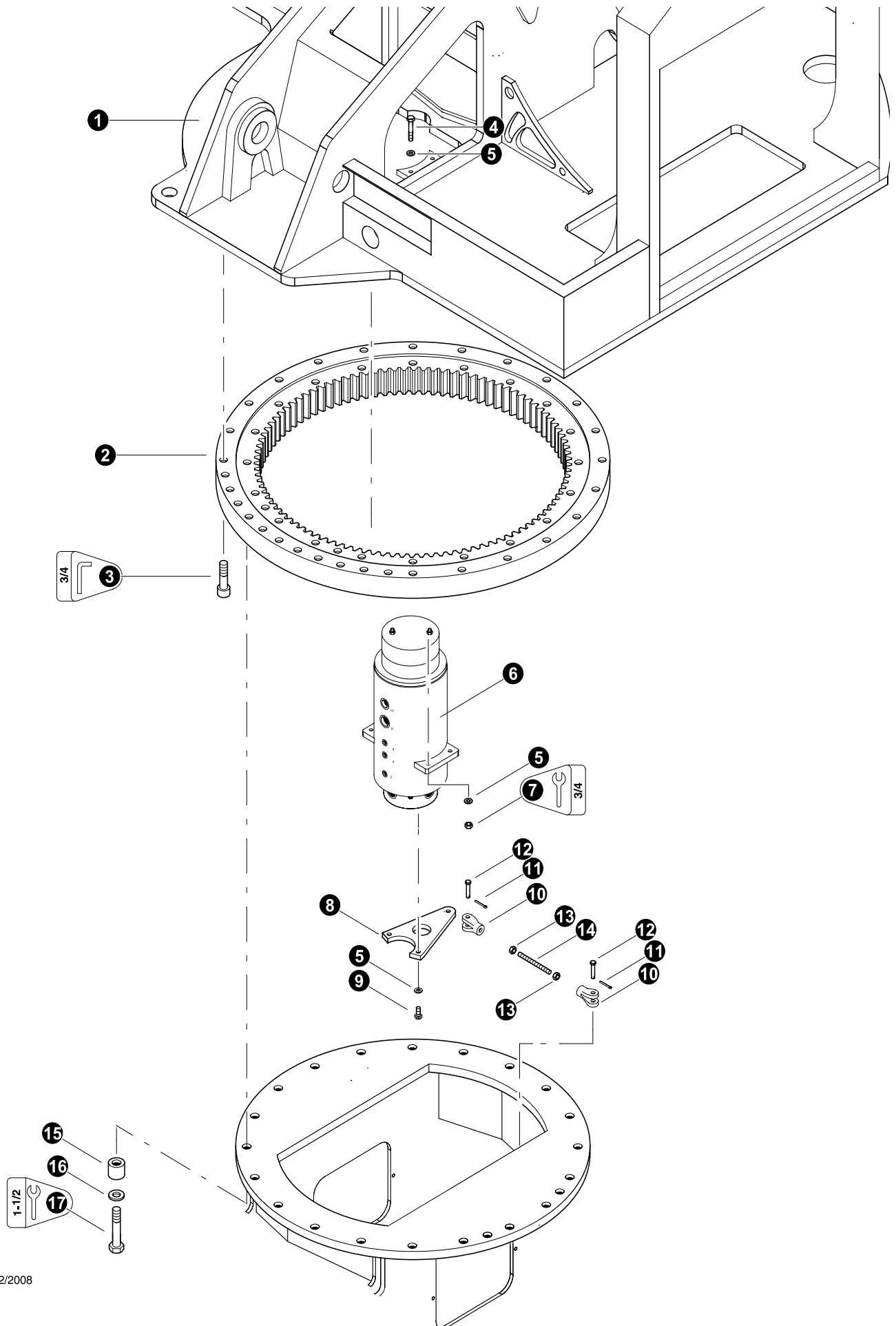
"4" = 45 degree

"9" = 90 degree

# **Section UP-1**

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## **Upper Turntable - Structural Components, Doors, and Covers**



T3556 03/22/2008  
9.375

## UPPER TURNTABLE INSTALLATION (Non-Leveling Machines)

| REF | PART #   | QTY | DESCRIPTION                                                                                                             | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 52852-UP | 1   | WELDMENT, UPPER T.T. - 830 COMPLETE<br>(Machine 8TF-0314 and TL725B-0026 and before)                                    |             |
| 1   | 53770-UP | 1   | WELDMENT, UPPER T.T. - 830 COMPLETE "FLUSH FRONT"<br>(Machines 0315-080609 until 0327-123109)                           |             |
| 1   | 54024-UP | 1   | WELDMENT, UPPER T.T. - 830 COMPLETE "ECCENTRIC SWING"<br>(Machine 0328-021010 and after)                                |             |
| 2   | 19631-UP | 1   | BEARING, swing                                                                                                          |             |
| 3   | 51690-UP | 30  | BOLT, ALLEN HEAD - 1" X 4.5" (Torque to 1000 ft.lbs (1355 Nm))                                                          |             |
| 4   | 15565-UP | 4   | BOLT - 1/2" x 2-1/2"                                                                                                    |             |
| 5   | 15534-UP | 10  | WASHER, SAE flat - 1/2"                                                                                                 |             |
| 6   | REF.     | 1   |  ROTARY MANIFOLD ..... UP-1            |             |
| 7   | 10815-UP | 4   | NUT, lock - 1/2"                                                                                                        |             |
| 8   | 52379-UP | 1   | BRACKET, SWIVEL LOCK - TORQUE ARM NEW                                                                                   |             |
| 9   | 22463-UP | 2   | BOLT, special - 1/2" x 1-1/4" (Hole drilled in head for<br>safety wire)(See Note 1 Below)                               |             |
|     | 22464-UP | 10" | WIRE, safety - 16 gauge                                                                                                 |             |
| 10  | 52381-UP | 2   |  YOKE, ROTARY MANIFOLD (810) 5/8 X 5/8 |             |
| 11  | -UP      | 2   | KEY, COTTER                                                                                                             |             |
| 12  | -UP      | 2   | PIN,                                                                                                                    |             |
| 13  | 52395-UP | 2   | NUT, JAM .63-18NF HEX (PLATED)                                                                                          |             |
| 14  | 52394-UP | 1   | STUD, 5/8"-18NF X 7.5 LG (ZINC PLATED)                                                                                  |             |
| 15  | 12463-UP | 24  | SPACER, bolt - upper turntable mounting                                                                                 |             |
| 16  | 18532-UP | 24  | WASHER, SAE FLAT THICK - 1"                                                                                             |             |
| 17  | 18535-UP | 24  | BOLT - 1" x 5" (Torque to 1000 ft.lbs (1350 Nm))                                                                        |             |



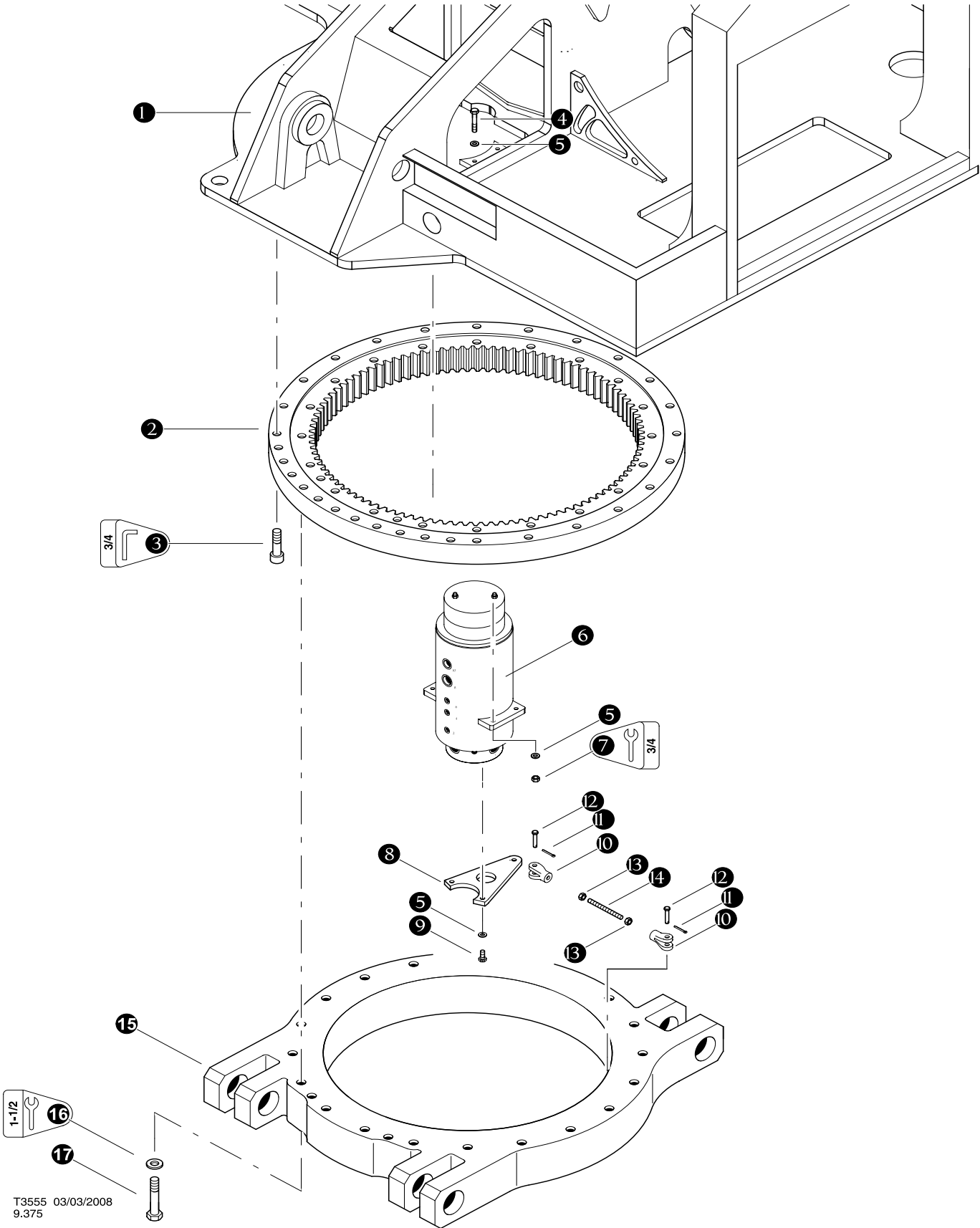
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

**Note: 1**

Use Loctite 272 (blue) during installation. MOTOR, SWING - L&amp;S W/56 MOTOR





## UPPER TURNTABLE INSTALLATION (Leveling Machine)

| REF | PART #   | QTY |                                                                                     | DESCRIPTION                                                                                   | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------|
| 1   | 52852-UP | 1   |                                                                                     | WELDMENT, UPPER T.T. - 830 COMPLETE<br>(Machine 8TF-0314 and TL725B-0026 and before)          |             |
| 1   | 53770-UP | 1   |                                                                                     | WELDMENT, UPPER T.T. - 830 COMPLETE "FLUSH FRONT"<br>(Machines 0315-080609 until 0327-123109) |             |
| 1   | 54024-UP | 1   |                                                                                     | WELDMENT, UPPER T.T. - 830 COMPLETE "ECCENTRIC SWING"<br>(Machine 0328-021010 and after)      |             |
| 2   | 19631-UP | 1   |                                                                                     | BEARING, swing                                                                                |             |
| 3   | 51690-UP | 30  |                                                                                     | BOLT, ALLEN HEAD - 1" X 4.5" (Torque to 1000 ft.lbs (1355 Nm))                                |             |
| 4   | 15565-UP | 4   |                                                                                     | BOLT - 1/2" x 2-1/2"                                                                          |             |
| 5   | 15534-UP | 10  |                                                                                     | WASHER, SAE flat - 1/2"                                                                       |             |
| 6   | REF.     | 1   |    | ROTARY MANIFOLD .....                                                                         | UP-1        |
| 7   | 10815-UP | 4   |                                                                                     | NUT, lock - 1/2"                                                                              |             |
| 8   | 52379-UP | 1   |                                                                                     | BRACKET, SWIVEL LOCK - TORQUE ARM NEW                                                         |             |
| 9   | 22463-UP | 2   |                                                                                     | BOLT, special - 1/2" x 1-1/4" (Hole drilled in head for<br>safety wire)(See Note 1 Below)     |             |
|     | 22464-UP | 10" |                                                                                     | WIRE, safety - 16 gauge                                                                       |             |
| 10  | 52381-UP | 2   |    | YOKE, ROTARY MANIFOLD (810) 5/8 X 5/8                                                         |             |
| 11  | -UP      | 2   |                                                                                     | KEY, COTTER                                                                                   |             |
| 12  | -UP      | 2   |                                                                                     | PIN,                                                                                          |             |
| 13  | 52395-UP | 2   |                                                                                     | NUT, JAM .63-18NF HEX (PLATED)                                                                |             |
| 14  | 52394-UP | 1   |                                                                                     | STUD, 5/8"-18NF X 7.5 LG (ZINC PLATED)                                                        |             |
| 15  | REF.     | 1   |  | LOWER TURNTABLE - LEVELING FRAME .....                                                        | BF-1 / HL-1 |
| 16  | 18532-UP | 24  |                                                                                     | WASHER, SAE FLAT THICK - 1"                                                                   |             |
| 17  | 18580-UP | 24  |                                                                                     | BOLT - 1" x 8" (Torque to 1000 ft.lbs (1350 Nm))                                              |             |



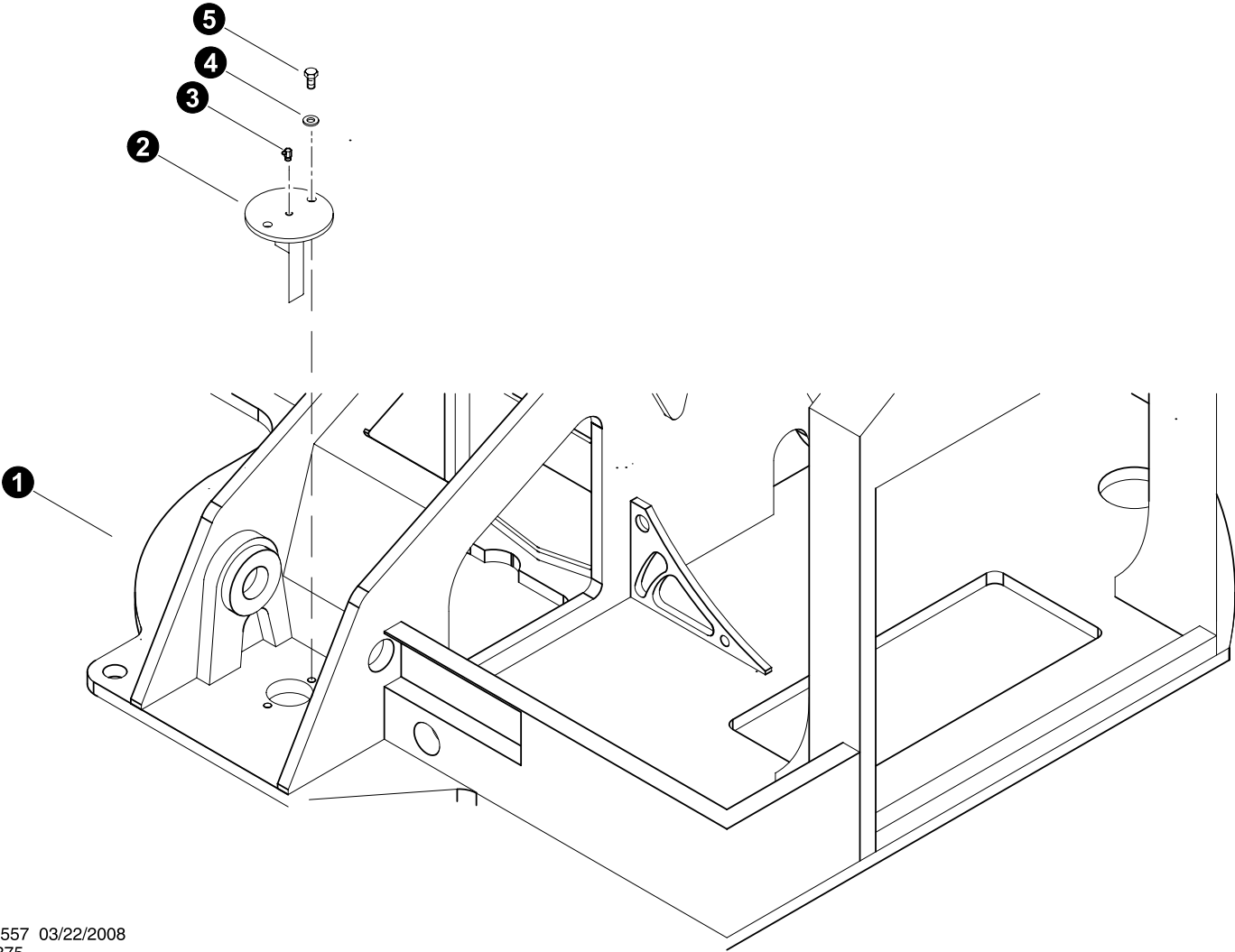
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

**Note: 1**

Use Loctite 272 (blue) during installation.



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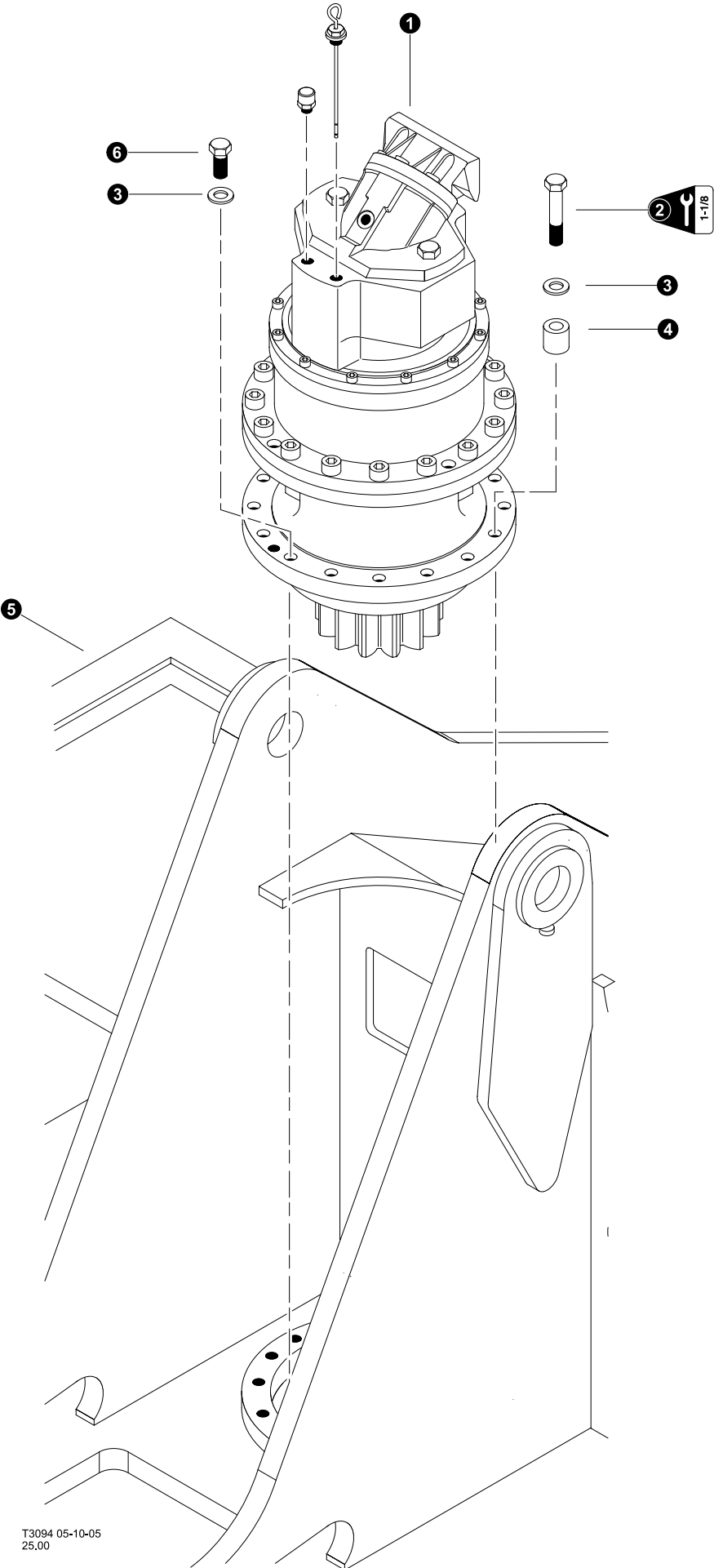
## UPPER TURNTABLE INSTALLATION (Swing Bearing Grease Line)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT .....    | UP-1        |
| 2   | 17612-UP | 1   |                                                                                   | CUP, BULL GEAR GREASE - WIDE GEAR |             |
| 3   | 15662-UP | 1   |                                                                                   | FITTING, GREASE - .25-28" - 90    |             |
| 4   | 15528-UP | 2   |                                                                                   | WASHER, SAE FLAT - .375"          |             |
| 5   | 15542-UP | 2   |                                                                                   | BOLT - .375" X .75"               |             |

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

### **Note: 1**

Use Loctite 272 (blue) during installation.



## SWING MOTOR INSTALLATION (Lohmann/Rexroth)

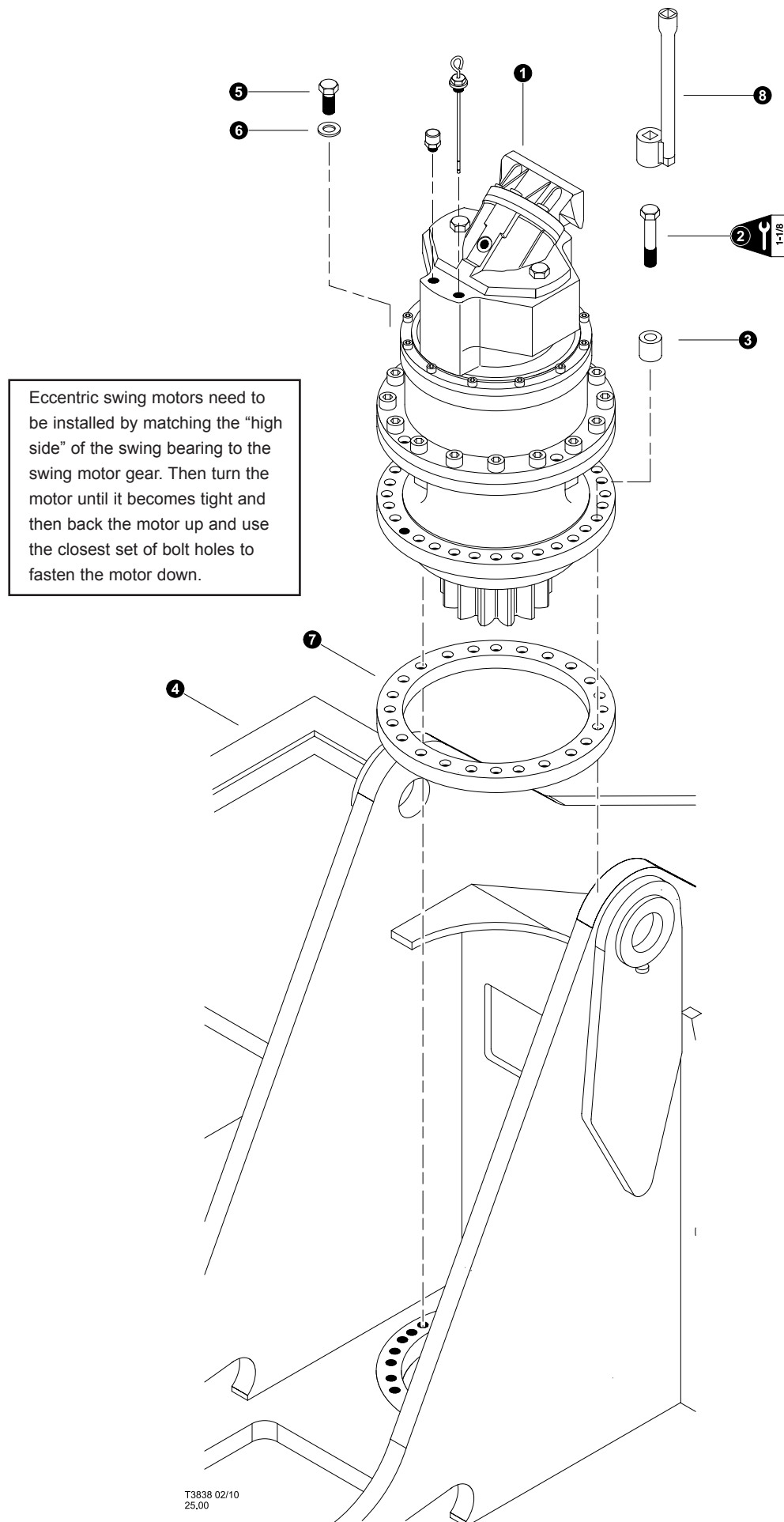
Machines built before 0327-123109

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SWING MOTOR - Lohmann/Rexroth . . . . .                          | LH,HH       |
| 2   | 10720-UP | 15  |                                                                                   | BOLT - 5/8" x 3" (Torque to 230 ft.lbs (310 Nm)) (see note 1)    |             |
| 3   | 10771-UP | 16  |                                                                                   | WASHER, SAE flat - 5/8"                                          |             |
| 4   | 19242-UP | 15  |                                                                                   | SPACER, bolt                                                     |             |
| 5   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT . . . . .                               | UP-1        |
| 6   | 15502-UP | 1   |                                                                                   | BOLT - .625" X 1.5" (Torque to 230 ft.lbs (310 Nm)) (see note 1) |             |

 See reference page for component or assembly breakdown.

### **Note: 1**

Use Loctite 272 (red - high strength) during installation.



## SWING MOTOR INSTALLATION (Lohmann/Rexroth)

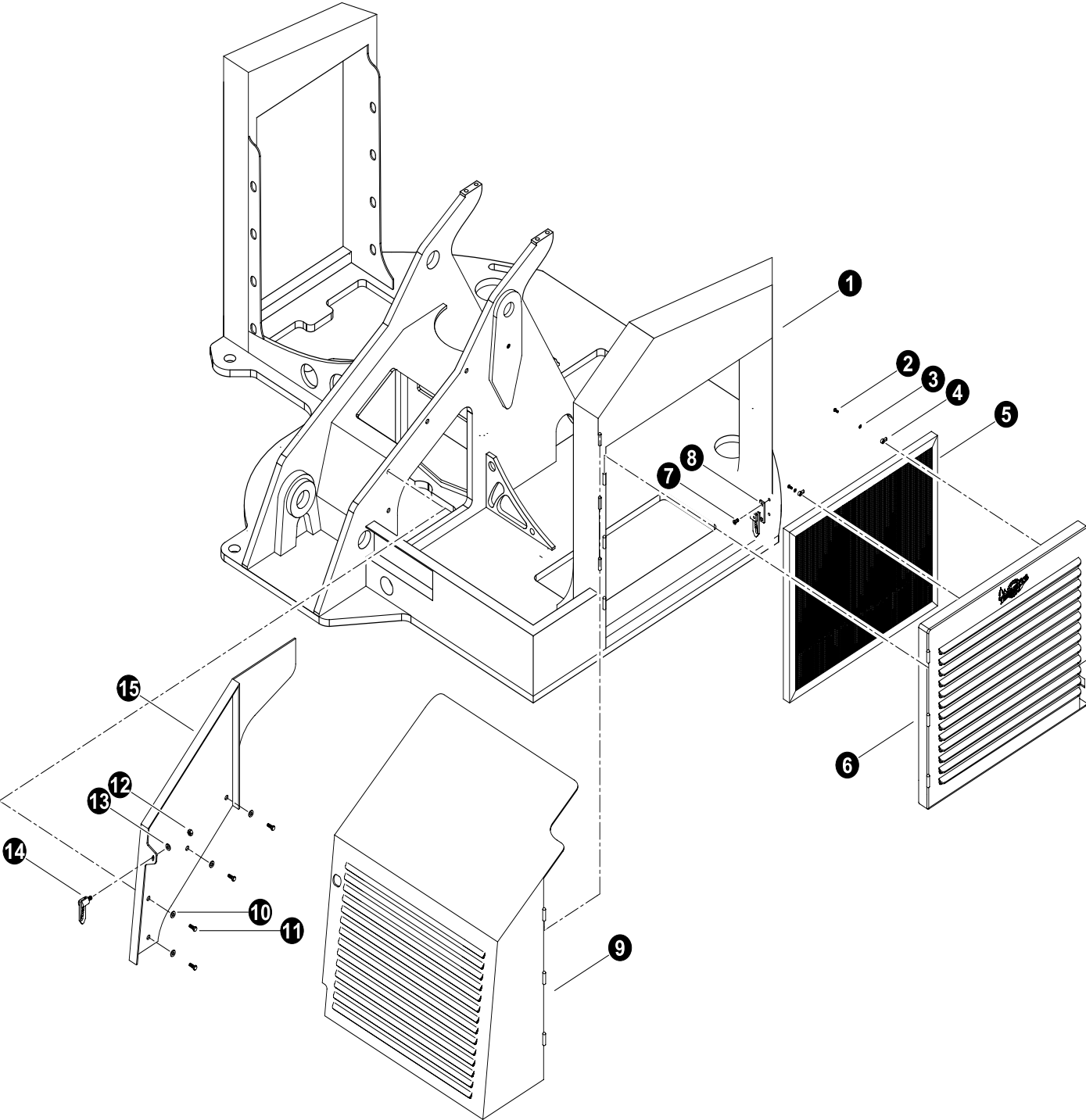
Machines built after 0328-021010

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SWING MOTOR - Lohmann/Rexroth . . . . .                          | LH,HH       |
| 2   | 10720-UP | 23  |                                                                                   | BOLT - 5/8" x 3.75" (Torque to 230 ft.lbs (310 Nm)) (see note 1) |             |
| 3   | 19242-UP | 23  |                                                                                   | SPACER, bolt                                                     |             |
| 4   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT . . . . .                               | UP-1        |
| 5   | 15517-UP | 1   |                                                                                   | BOLT - .625" X 2.5" (Torque to 230 ft.lbs (310 Nm)) (see note 1) |             |
| 6   | 10771-UP | 1   |                                                                                   | WASHER, SAE flat - 5/8"                                          |             |
| 7   | 54026-UP | 1   |                                                                                   | SPACER, SWING MOTOR                                              |             |
| 8   | -UP      | 1   |                                                                                   | TOOL, Swing Motor Torque Socket                                  |             |

 See reference page for component or assembly breakdown.

### **Note: 1**

Use Loctite 272 (red - high strength) during installation.



Parts T3558  
03/19/08

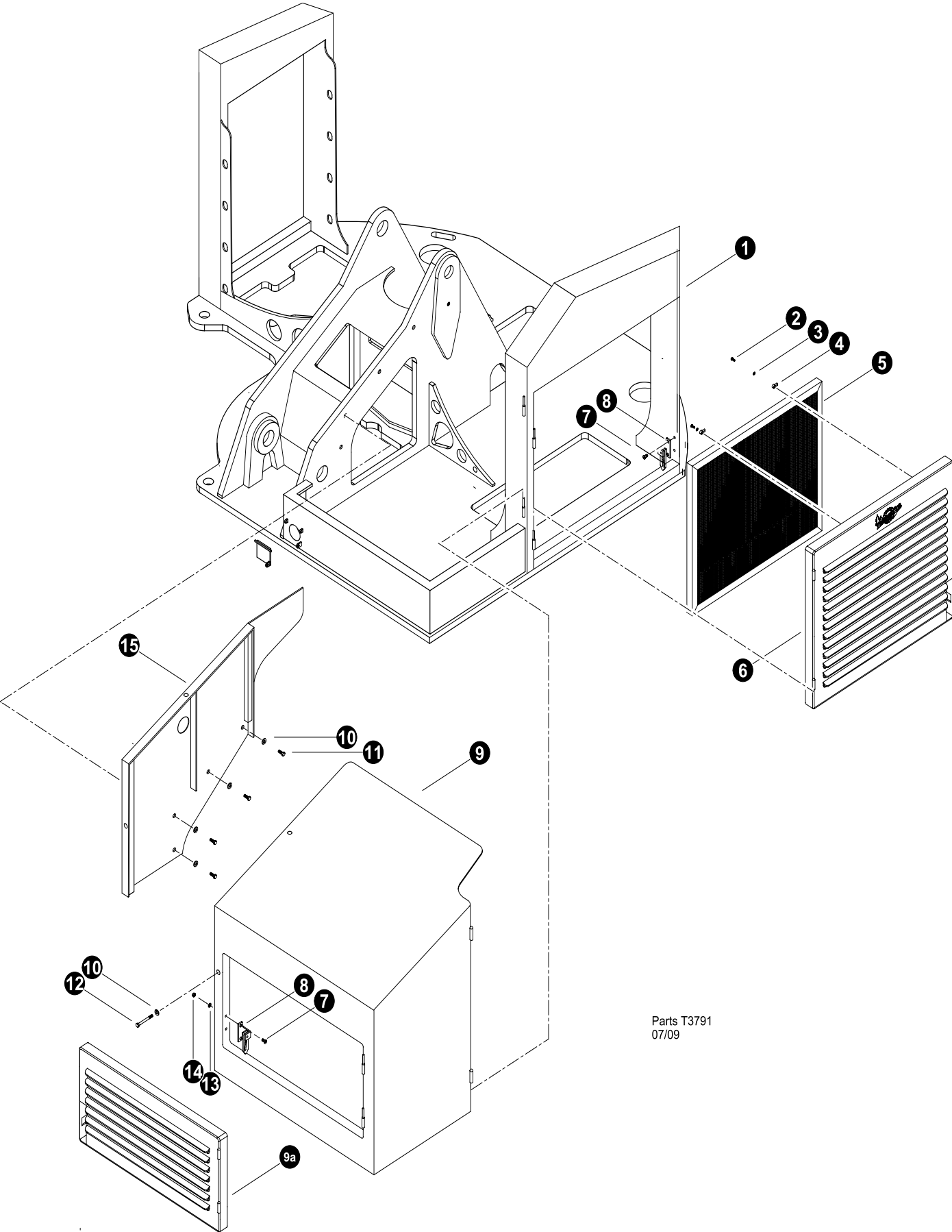


**UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION****Front Door and Side Radiator Door Install  
(Machine 8TF-0314 and TL725B-0026 and before)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT .....          | UP-1        |
| 2   | 15576-UP | 2   |                                                                                   | BOLT - .25" X 1"                        |             |
| 3   | 10757-UP | 4   |                                                                                   | WASHER, SAE FLAT - .25"                 |             |
| 4   | 24542-UP | 2   |                                                                                   | LATCH, SCREEN (RADIATOR)                |             |
| 5   | 52201-UP | 1   |                                                                                   | SCREEN, RADIATOR 630/810/830            |             |
| 6   | 52980-UP | 1   |                                                                                   | DOOR, - RADIATOR                        |             |
| 7   | 51850-UP | 2   |                                                                                   | BOLT, CAM LATCH - FHSCS 3/8 - 16 X 1 ZB |             |
| 8   | 51657-UP | 1   |                                                                                   | LATCH, CAM - DOOR R.H. (RADIATOR-GULLW) |             |
| 9   | 52926-UP | 1   |                                                                                   | DOOR, FRONT SWING OUT +3                |             |
| 10  | 15528-UP | 4   |                                                                                   | WASHER, SAE FLAT - .375"                |             |
| 11  | 11707-UP | 4   |                                                                                   | BOLT - .375" X 1"                       |             |
| 12  | 10815-UP | 1   |                                                                                   | NUT, LOCK - .5"                         |             |
| 13  | 10804-UP | 3   |                                                                                   | WASHER, flat - 1/2"                     |             |
| 14  | 51883-UP | 1   |                                                                                   | LATCH, CAM - 1.5" FRONT DOOR 630/830    |             |
| 15  | 53054-UP | 1   |                                                                                   | PANEL, INSIDE FRONT DOOR                |             |



See reference page for component or assembly breakdown.



Parts T3791  
07/09

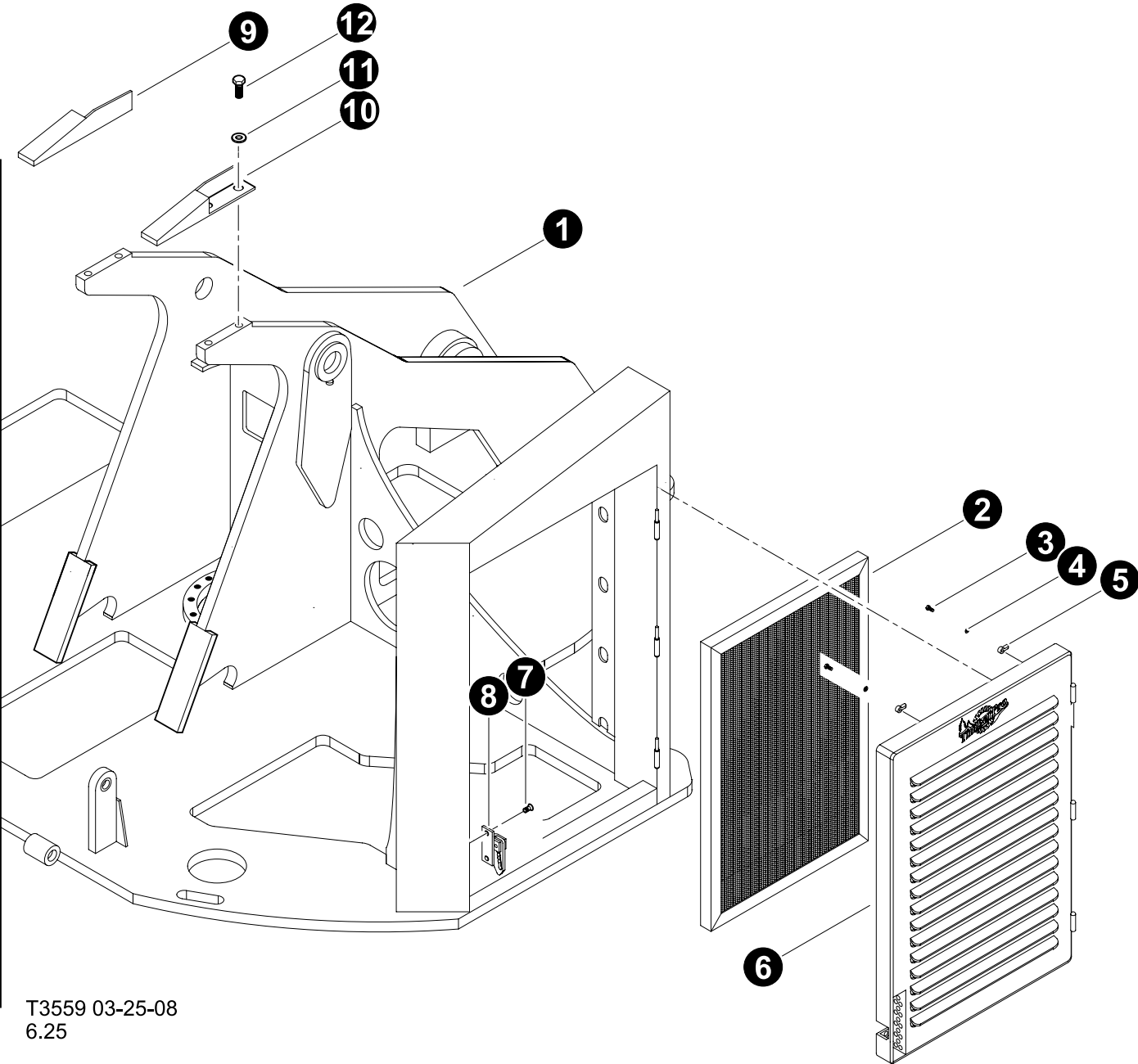
**UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION**

**Front Door and Side Radiator Door Install**  
**(Machine TL725B-0027 and anything built after 07/16/09)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT .....             | UP-1        |
| 2   | 15576-UP | 2   |                                                                                   | BOLT - .25" X 1"                           |             |
| 3   | 10757-UP | 4   |                                                                                   | WASHER, SAE FLAT - .25"                    |             |
| 4   | 24542-UP | 2   |                                                                                   | LATCH, SCREEN (RADIATOR)                   |             |
| 5   | 52201-UP | 1   |                                                                                   | SCREEN, RADIATOR 630/810/830               |             |
| 6   | 52980-UP | 1   |                                                                                   | DOOR, - RADIATOR                           |             |
| 7   | 51850-UP | 2   |                                                                                   | BOLT, CAM LATCH - FHSCS 3/8 - 16 X 1 ZB    |             |
| 8   | 51657-UP | 1   |                                                                                   | LATCH, CAM - DOOR R.H. (RADIATOR-GULLW)    |             |
| 9   | 53878-UP | 1   |                                                                                   | DOOR, FRONT SWING OUT-FLUSH FRONT UPPER    |             |
| 9a  | 53879-UP | 1   |                                                                                   | DOOR, FRONT LOUVERD-FLUSH FRONT UPPER      |             |
| 10  | 15528-UP | 4   |                                                                                   | WASHER, SAE FLAT - .375"                   |             |
| 11  | 11707-UP | 4   |                                                                                   | BOLT - .375" X 1"                          |             |
| 12  | 10834-UP | 2   |                                                                                   | BOLT - .5" X 4"                            |             |
| 13  | 15528-UP | 2   |                                                                                   | WASHER, SAE FLAT - .375"                   |             |
| 14  | -UP      | 1   |                                                                                   | LATCH, CAM - 1.5" FRONT DOOR 630/830       |             |
| 15  | 53877-UP | 1   |                                                                                   | PANEL, INSIDE FRONT DOOR-FLUSH FRONT UPPER |             |



See reference page for component or assembly breakdown.



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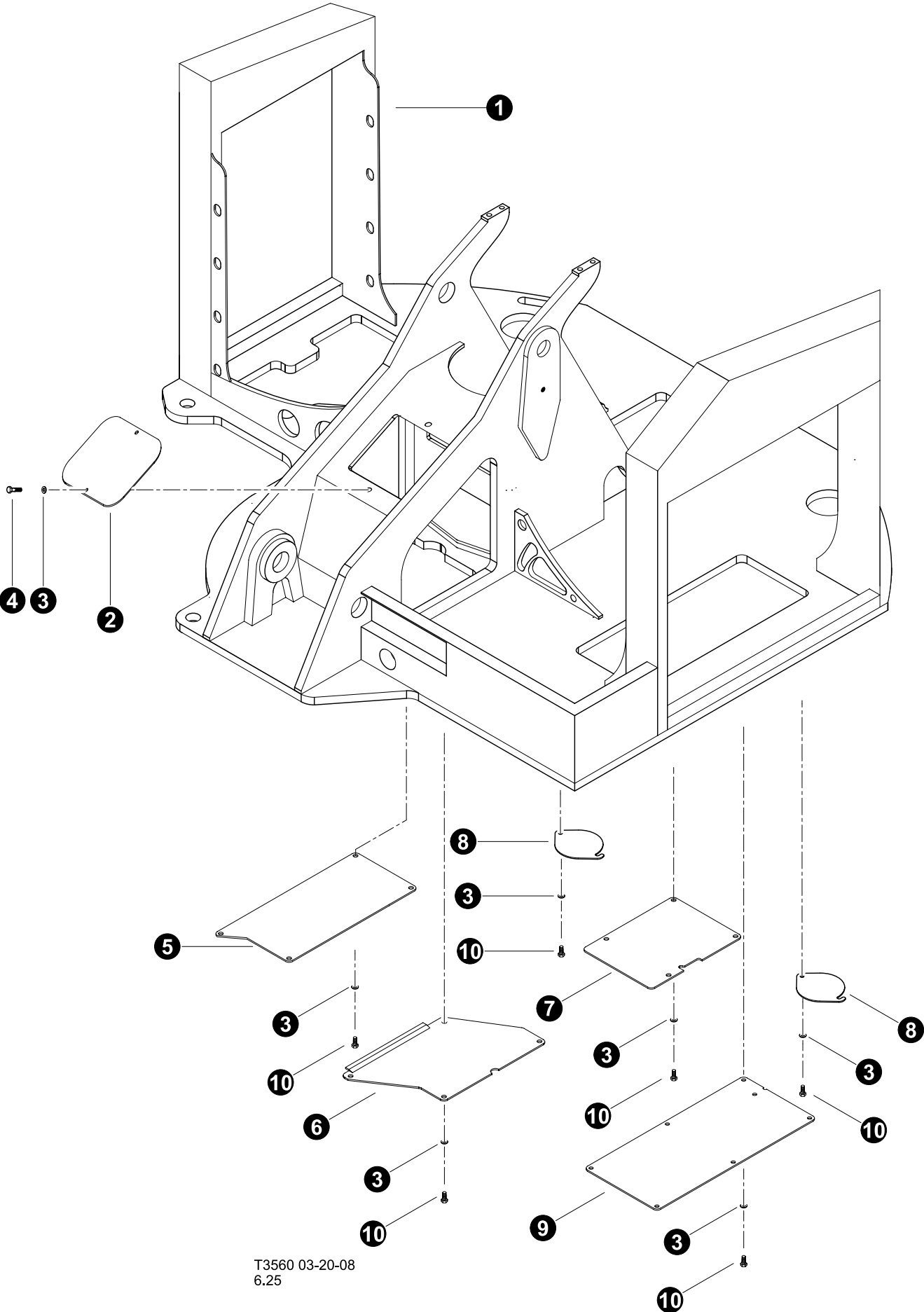
## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION

### (Rear Panels and Oil Cooler Door Installation)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT . . . . .      | UP-1        |
| 2   | 52200-UP | 1   |                                                                                   | SCREEN, OIL COOLER 630/810/830          |             |
| 3   | 15576-UP | 2   |                                                                                   | BOLT - .25" X 1"                        |             |
| 4   | 10757-UP | 4   |                                                                                   | WASHER, SAE FLAT - .25"                 |             |
| 5   | 24542-UP | 2   |                                                                                   | LATCH, SCREEN (Oil Cooler)              |             |
| 6   | 51660-UP | 1   |                                                                                   | DOOR, OIL COOLER                        |             |
| 7   | 51850-UP | 2   |                                                                                   | BOLT, CAM LATCH - FHSCS 3/8 - 16 X 1 ZB |             |
| 8   | 51658-UP | 1   |                                                                                   | LATCH, CAM - DOOR L.H. (OIL COOLER)     |             |
| 9   | 53131-UP | 1   |                                                                                   | WEDGE, GULLWING STOP R.H.               |             |
| 10  | 53132-UP | 1   |                                                                                   | WEDGE, GULLWING STOP L.H.               |             |
| 11  | 10771-UP | 4   |                                                                                   | WASHER, SAE FLAT - .625"                |             |
| 12  | 15502-UP | 4   |                                                                                   | BOLT - .625" X 1.5"                     |             |



See reference page for component or assembly breakdown.

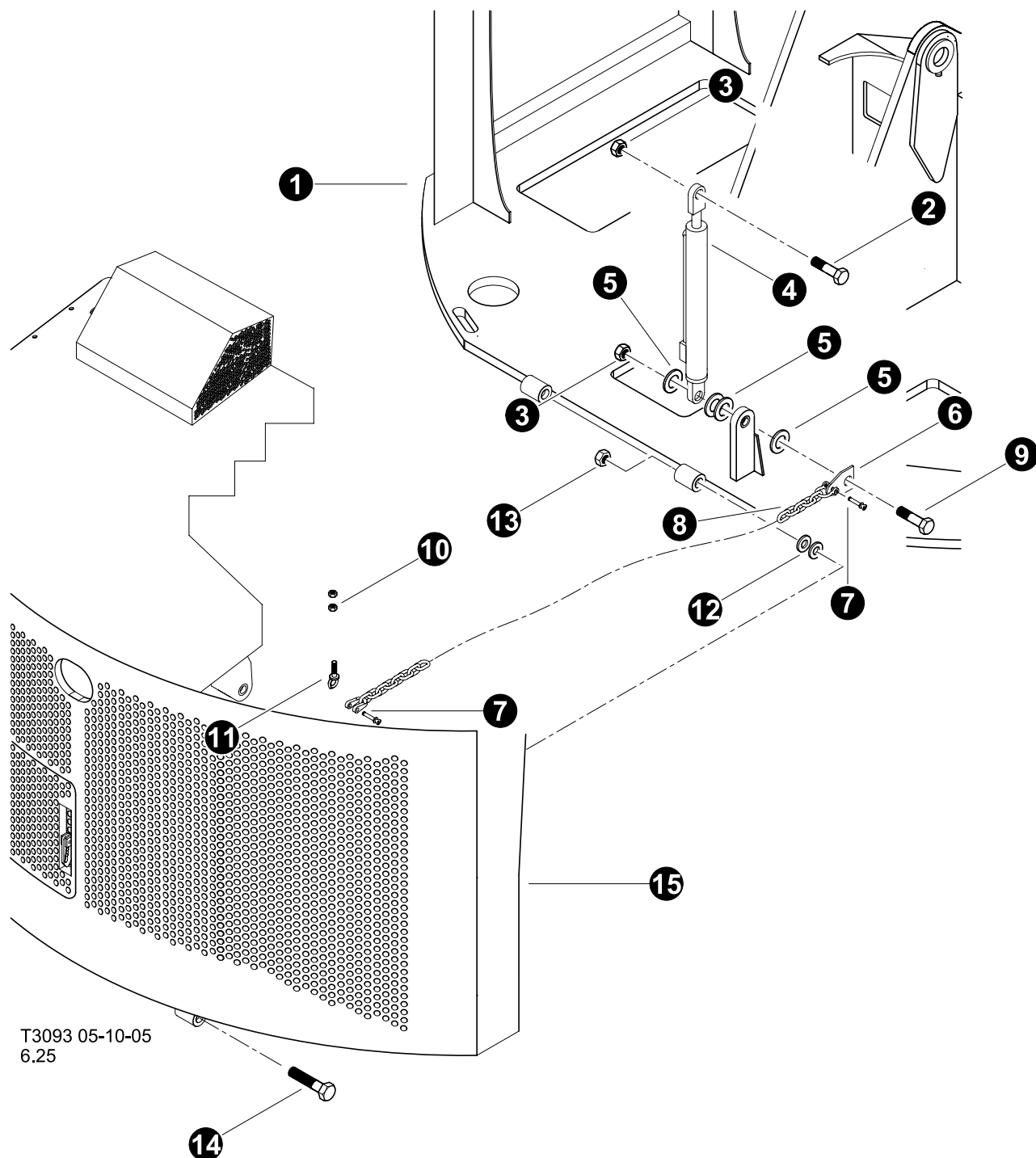


## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION (COVER INSTALLATIONS)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT .....       | UP-1        |
| 2   | 40894-UP | 1   |                                                                                   | COVER, RISER                         |             |
| 3   | 15534-UP | 24  |                                                                                   | WASHER, SAE flat - 1/2"              |             |
| 4   | 10739-UP | 2   |                                                                                   | BOLT - 1/2" x 1-1/2"                 |             |
| 5   | 52895-UP | 1   |                                                                                   | COVER, OIL COOLER OUTSIDE - BOTTOM   |             |
| 6   | 52894-UP | 1   |                                                                                   | COVER, OIL COOLER INSIDE BOTTOM      |             |
| 7   | 52896-UP | 1   |                                                                                   | COVER, REAR BOOM BOTTOM              |             |
| 8   | 12150-UP | 2   |                                                                                   | COVER, ACCESS - RAD FILL / STEER CYL |             |
| 9   | 51946-UP | 1   |                                                                                   | COVER, RADIATOR BOTTOM               |             |
| 10  | 10783-UP | 22  |                                                                                   | BOLT - .5" X 1"                      |             |



See reference page for component or assembly breakdown.





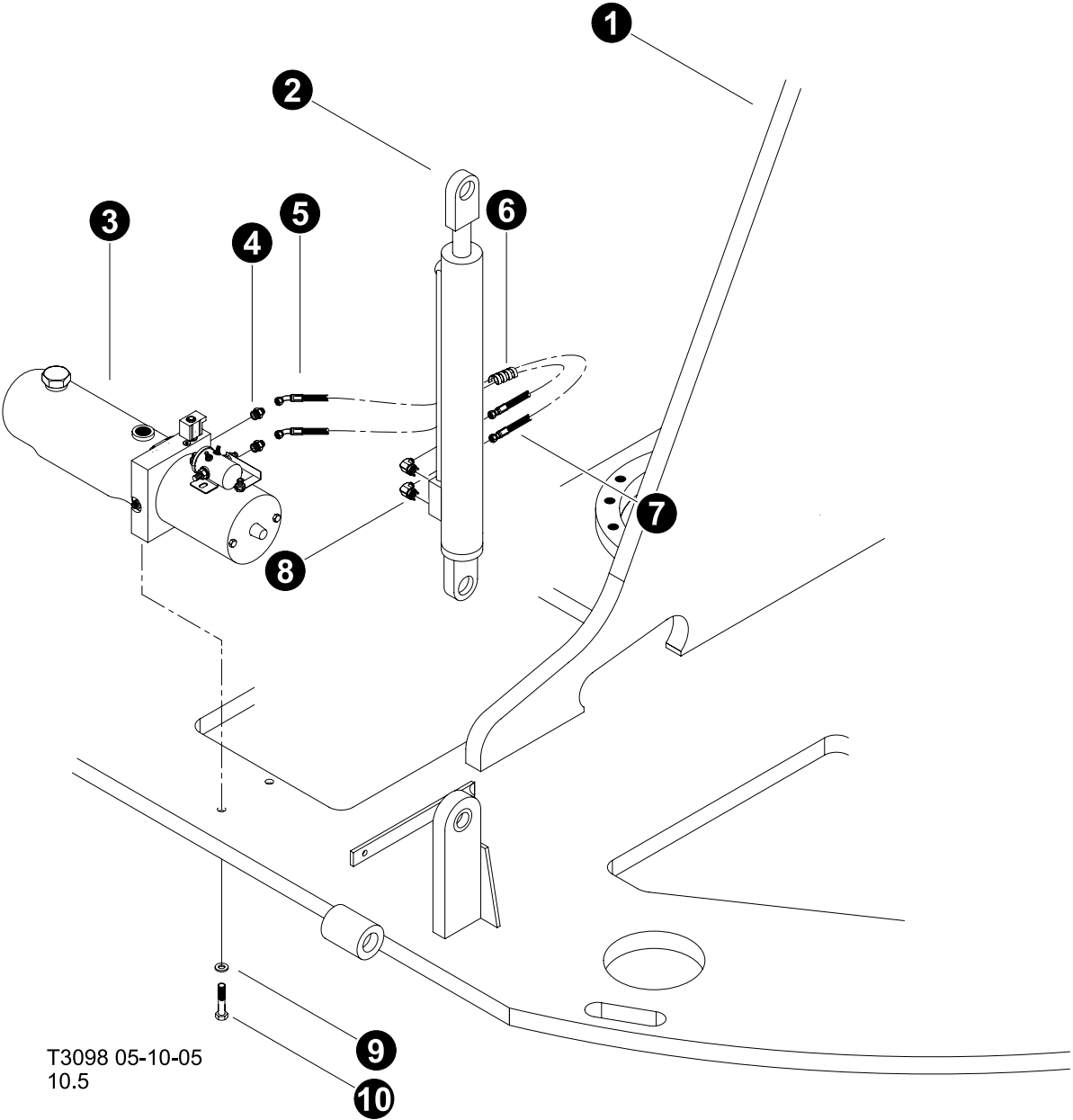
## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION (Gull Wing Door Installation)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT . . . . .                | UP-1        |
| 2   | 52025-UP | 1   |                                                                                   | BOLT, GULLWING CYL. - 1.25" - 7 X 7"              |             |
| 3   | 52026-UP | 2   |                                                                                   | NUT,HEX GULLWING CYL. - 1.25" - GRD 9 (See Note1) |             |
| 4   | REF.     | 1   |  | GULL WING CYLINDER. . . . .                       | UP-1        |
| 5   | 22531-UP | 4   |                                                                                   | WASHER, SAE FLAT - 1.25"                          |             |
| 6   | 52844-UP | 1   |                                                                                   | LINK, GULLWING SAFETY CHAIN                       |             |
| 7   | 51936-UP | 2   |                                                                                   | CLEVIS, 3/8" - GULLWING                           |             |
| 8   | 51934-UP | 1   |                                                                                   | CHAIN, 35 LINK - GULLWING                         |             |
| 9   | 52024-UP | 1   |                                                                                   | BOLT, GULLWING CYL. - 1.25" - 5.5"                |             |
| 10  | 10711-UP | 2   |                                                                                   | NUT, HEX - .5"                                    |             |
| 11  | 51935-UP | 1   |                                                                                   | BOLT, EYE - LIFT .5" - GULLWING                   |             |
| 12  | 15579-UP | 4   |                                                                                   | WASHER, SAE FLAT - 1"                             |             |
| 13  | 18253-UP | 2   |                                                                                   | NUT, LOCK - 1"                                    |             |
| 14  | 18529-UP | 2   |                                                                                   | BOLT - 1" X 9" (Cut down to 7.5")                 |             |
| 15  | REF      | 1   |  | DOOR, GULLWING - ASSEMBLY . . . . .               | UP-1        |

 See reference page for component or assembly breakdown.

**Note: 1**

Use Loctite 272 (blue) during installation.



## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION

### (Gull Wing Lift Pump Installation)

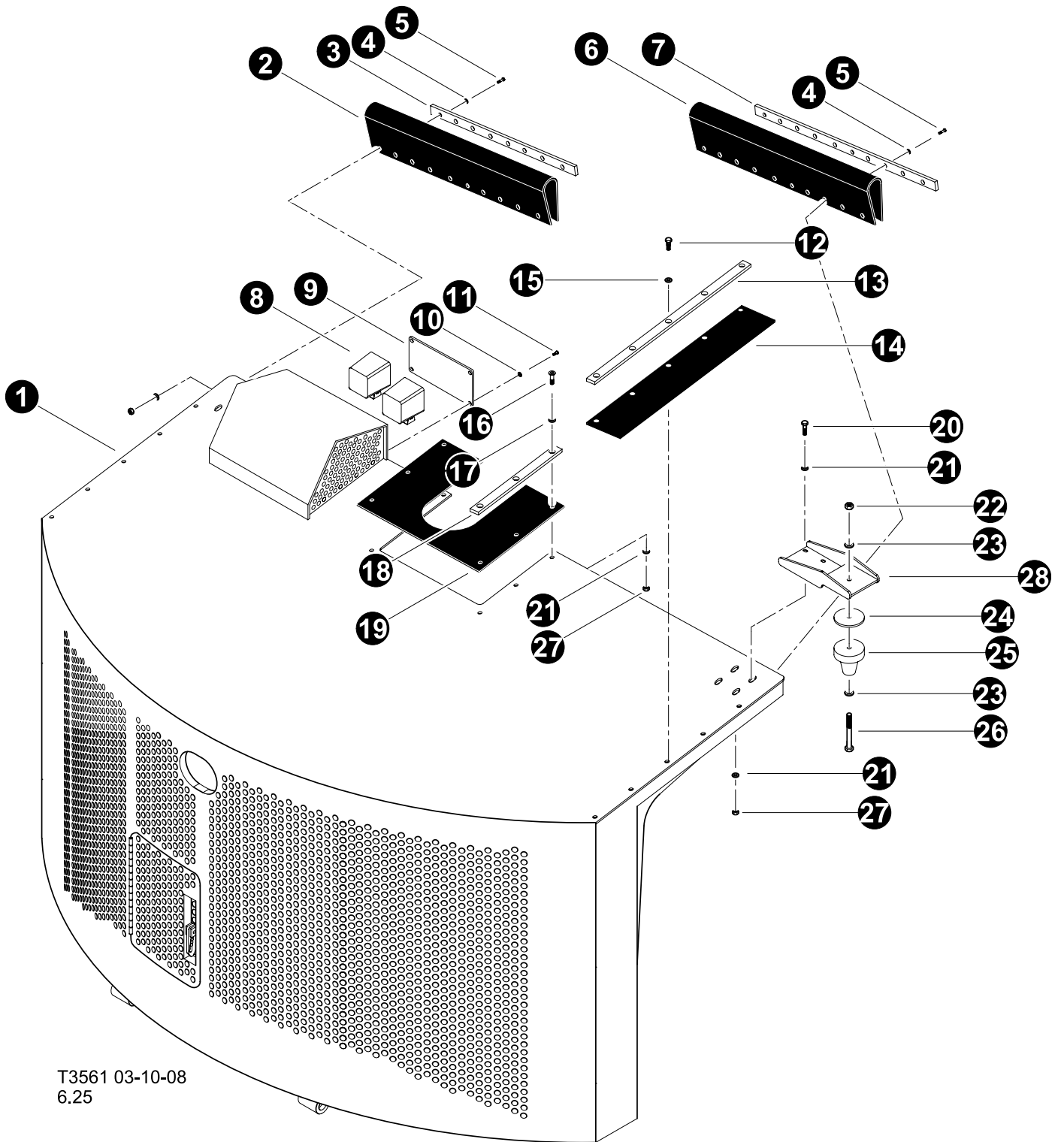
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE WELDMENT .....        | UP-1        |
| 2   | REF.     | 1   |  | GULL WING CYLINDER. ....              | UP-1        |
| 3   | 51577-UP | 1   |                                                                                   | PUMP, POWER UNIT - GULL WING          |             |
| 4   | 15124-UP | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0406S        |             |
| 5   | 50606-UP | 1   |                                                                                   | HOSE ASSEMBLY - 2043-04OS-0404        |             |
| 6   | 20843-UP | 3ft |  | PROTECTOR, HOSE - SPRIAL (.78")(BULK) |             |
| 7   | 50606-UP | 1   |                                                                                   | HOSE ASSEMBLY - 2043-04OS-0404        |             |
| 8   | 15133-UP | 2   |                                                                                   | ELBOW, 90 - FF1868T-0406S             |             |
| 9   | 15528-UP | 2   |                                                                                   | WASHER, SAE FLAT - .375"              |             |
| 10  | 15529-UP | 2   |                                                                                   | BOLT - .375" X 2"                     |             |



See reference page for component or assembly breakdown.



Item sold in bulk (per foot). Please specify on order amount needed.



## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION

### (Gull Wing Assembly and Installation)

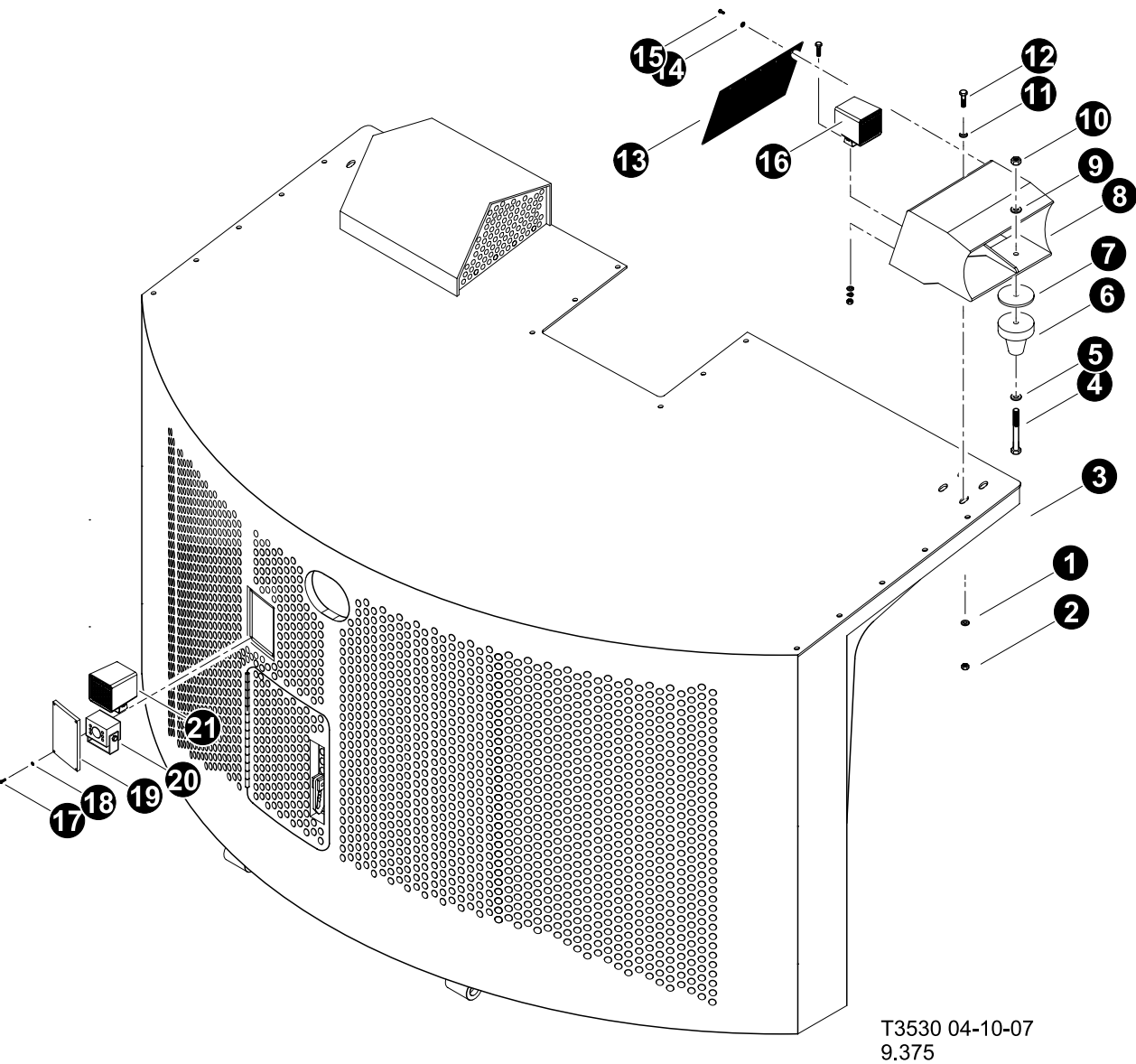
| REF | PART #   | QTY | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|------------------------------------------|-------------|
| 1   | 52853-UP | 1   | DOOR, GULLWING+3"                        |             |
| 2   | 52833-UP | 1   | BELTING, GULLWING END - SHORT            |             |
| 3   | 52835-UP | 1   | RETAINER, GULLWING END BELTING - SHORT   |             |
| 4   | 10757-UP | 36  | WASHER, SAE FLAT - .25"                  |             |
| 5   | 15575-UP | 18  | BOLT - .25" X 1.5"                       |             |
| 6   | 52834-UP | 1   | BELTING, GULLWING END - LONG             |             |
| 7   | 52836-UP | 1   | RETAINER, GULLWING END BELTING - LONG    |             |
| 8   | REF      | 2   | LIGHTS .....                             | ES-1        |
| 9   | 53029-UP | 1   | LEXAN, LIGHT COVER -GULLWING             |             |
| 10  | 10757-UP | 4   | WASHER, SAE FLAT - .25"                  |             |
| 11  | 18309-UP | 4   | BOLT - .25" X 1.25"                      |             |
| 12  | 10731-UP | 10  | BOLT - .375" X 1.5"                      |             |
| 13  | 42645-UP | 2   | BAR, GULLWING RUBBER STIFFENER           |             |
| 14  | 42646-UP | 2   | RUBBER, SEAL - GULLWING UPPER SEAM       |             |
| 15  | 15528-UP | 10  | WASHER, SAE FLAT - .375"                 |             |
| 16  | 52199-UP | 6   | BOLT, BUTTON HEAD - 3/8"-16 X 1-1/4" USS |             |
| 17  | 15528-UP | 6   | WASHER, SAE FLAT - .375"                 |             |
| 18  | 42689-UP | 2   | BAR, RUBBER RETAINER - BOOM              |             |
| 19  | 52842-UP | 1   | BELTING, GULLWING CENTER                 |             |
| 20  | 10402-UP | 8   | BOLT - .375" X 1.25"                     |             |
| 21  | 10802-UP | 16  | WASHER, FLAT - .375"                     |             |
| 22  | 10815-UP | 2   | NUT, LOCK - .5"                          |             |
| 23  | 15534-UP | 4   | WASHER, SAE FLAT - .5"                   |             |
| 24  | 15524-UP | 2   | WASHER, ISOLATOR MOUNT - .625" X 3.5"    |             |
| 25  | 51702-UP | 2   | ISOLATOR, GULLWING MOUNTING-URETHANE     |             |
| 26  | 10835-UP | 2   | BOLT - .5" X 4.5"                        |             |
| 27  | 10813-UP | 14  | NUT, LOCK - .375"                        |             |
| 28  | 51776-UP | 2   | MOUNT, GULLWING TOP                      |             |



See reference page for component or assembly breakdown.



Item sold in bulk (per foot). Please specify on order amount needed.



## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION (Gull Wing Options)

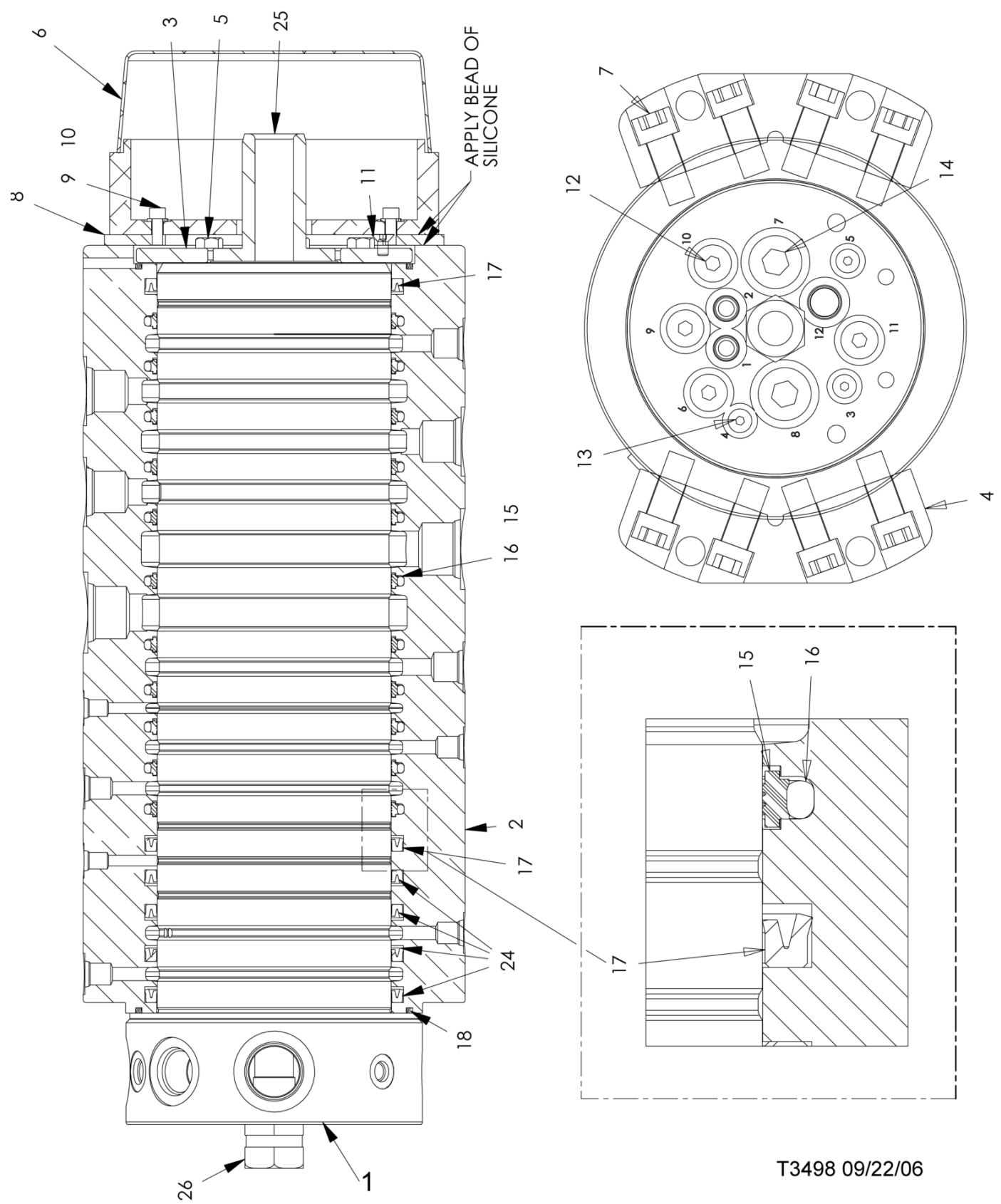
| REF | PART #   | QTY | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|---------------------------------------|-------------|
| 1   | 10802-UP | 16  | WASHER, FLAT - .375"                  |             |
| 2   | 10813-UP | 16  | NUT, LOCK - .375"                     |             |
| 3   | REF      | 1   | DOOR, GULLWING . . . . .              | UP-1        |
| 4   | 10835-UP | 2   | BOLT - .5" X 4.5"                     |             |
| 5   | 15534-UP | 4   | WASHER, SAE FLAT - .5"                |             |
| 6   | 51702-UP | 2   | ISOLATOR, GULLWING MOUNTING           |             |
| 7   | 15524-UP | 2   | WASHER, ISOLATOR MOUNT - .625" X 3.5" |             |
| 8   | 52664-UP | 1   | BRACKET, LIGHT GULLWING MOUNTED R.H.  |             |
| -   | 52665-UP | 1   | BRACKET, LIGHT GULLWING MOUNTED L.H.  |             |
| 9   | 15534-UP | 4   | WASHER, SAE FLAT - .5"                |             |
| 10  | 10815-UP | 2   | NUT, LOCK - .5"                       |             |
| 11  | 10802-UP | 16  | WASHER, FLAT - .375"                  |             |
| 12  | 10402-UP | 16  | BOLT - .375" X 1.25"                  |             |
| 13  | 52750-UP | 1   | BELTING, LIGHT BRACKET GUARD          |             |
| 14  | 10800-UP | 10  | WASHER, FLAT - .25"                   |             |
| 15  | 23264-UP | 10  | BOLT - .25" X .5"                     |             |
| 16  | REF      | 4   | LIGHT, . . . . .                      | ES-1        |
| 17  | 15576-UP | 4   | BOLT - .25" X 1"                      |             |
| 18  | 10757-UP | 4   | WASHER, SAE FLAT - .25"               |             |
| 19  | 53048-UP | 1   | LEXAN, LIGHT/CAMERA COVER -GULLWING   |             |
| 20  | REF      | 4   | CAMERA, Rearview System . . . . .     | ES-2        |
| 21  | REF      | 4   | LIGHT, . . . . .                      | ES-1        |



See reference page for component or assembly breakdown.



Item sold in bulk (per foot). Please specify on order amount needed.



T3498 09/22/06



## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION

### (HYDRA DYNE TECHNOLOGY - ROTARY MANIFOLD)

Used on machine 0279-100208 and before 0280 and Above

| REF | PART #   | QTY |   | DESCRIPTION                                                     | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------------------------------|-------------|
| -   | 52377-UP | 1   | ☐ | MANIFOLD, ROTARY - 12 PORT (Hydra Dyne) (0166 & 0170 and above) |             |
| 1   |          | 1   |   | SPOOL, ROTARY - TP1214001                                       |             |
| 2   |          | 1   |   | BARREL, 12 PASS ROTARY - TP1214002                              |             |
| 3   |          | 1   |   | RETAINER, SPOOL - HD1214020                                     |             |
| 4   |          | 2   |   | MOUNTING PLATE - TP1214003                                      |             |
| 5   |          | 8   |   | HEX BOLT 3/8-16 BY 0.75 / 35 FT-LBS - HHCS 06-16-075            |             |
| 6   |          | 1   |   | ELECTRIC SLIP RING - S15DP07LM1                                 |             |
| 7   |          | 8   |   | SHCS METRIC CLASS 12.9 - SHCS M16X040                           |             |
| 8   |          | 1   |   | MOUNTING PLATE - TP1214004                                      |             |
| 9   |          | 4   |   | SHCS 1/4-20X0.625 / 9 FT-LBS - SHCS 04-20-.63                   |             |
| 10  |          | 4   |   | LOCKWASHER 1/4" - 33891                                         |             |
| 11  |          | 4   |   | FLAT HEAD CAP SCREW - FHCS-04-20-0.50                           |             |
| 12  |          | 4   |   | STEEL PLUG, SAE #8 ORB33 FT-LBS - 05HP08                        |             |
| 13  |          | 3   |   | STEEL PLUG, SAE #4 ORB11 FT-LBS - 05HP04                        |             |
| 14  |          | 2   |   | STEEL PLUG, SAE #12 ORB68 FT-LBS - 05HP12                       |             |
| 15  |          | 11  | ⌘ | GLIDELOC SEAL - RN 140 250A RO                                  |             |
| 16  |          | 11  | ⌘ | O-RING HNBR 70 - N1173-70-359                                   |             |
| 17  |          | 2   | ⌘ | SEAL ENVIROMENTAL - NSS01P140155080                             |             |
| 18  |          | 2   | ⌘ | PISTON RING - TFE-SQ-06500                                      |             |
| 19  |          | 8   | ⌘ | PLASTIC PLUG, SAE #6 ORB - RPO-106                              |             |
| 20  |          | 4   | ⌘ | PLASTIC PLUG, SAE #8 ORB - RPO-108                              |             |
| 21  |          | 3   | ⌘ | PLASTIC PLUG, SAE #4 OR - RPO-104B                              |             |
| 22  |          | 4   | ⌘ | PLASTIC PLUG, SAE #16 ORB - RPO-116                             |             |
| 23  |          | 6   | ⌘ | PLASTIC PLUG, SAE #12 ORB - RPO-112                             |             |
| 24  |          | 4   | ⌘ | SEAL ENVIROMENTAL - PUC-2006-1128                               |             |
| 25  |          | 1   |   | TORQUE TUBE - TP1214005                                         |             |
| 26  |          | 1   |   | FITTING, LIQUID TIGHT - TB 2931                                 |             |
| -   | 52615-UP | 1   | ⌘ | KIT, SEAL REPAIR - ROTARY MAN - 52377                           |             |



See reference page for component or assembly breakdown.

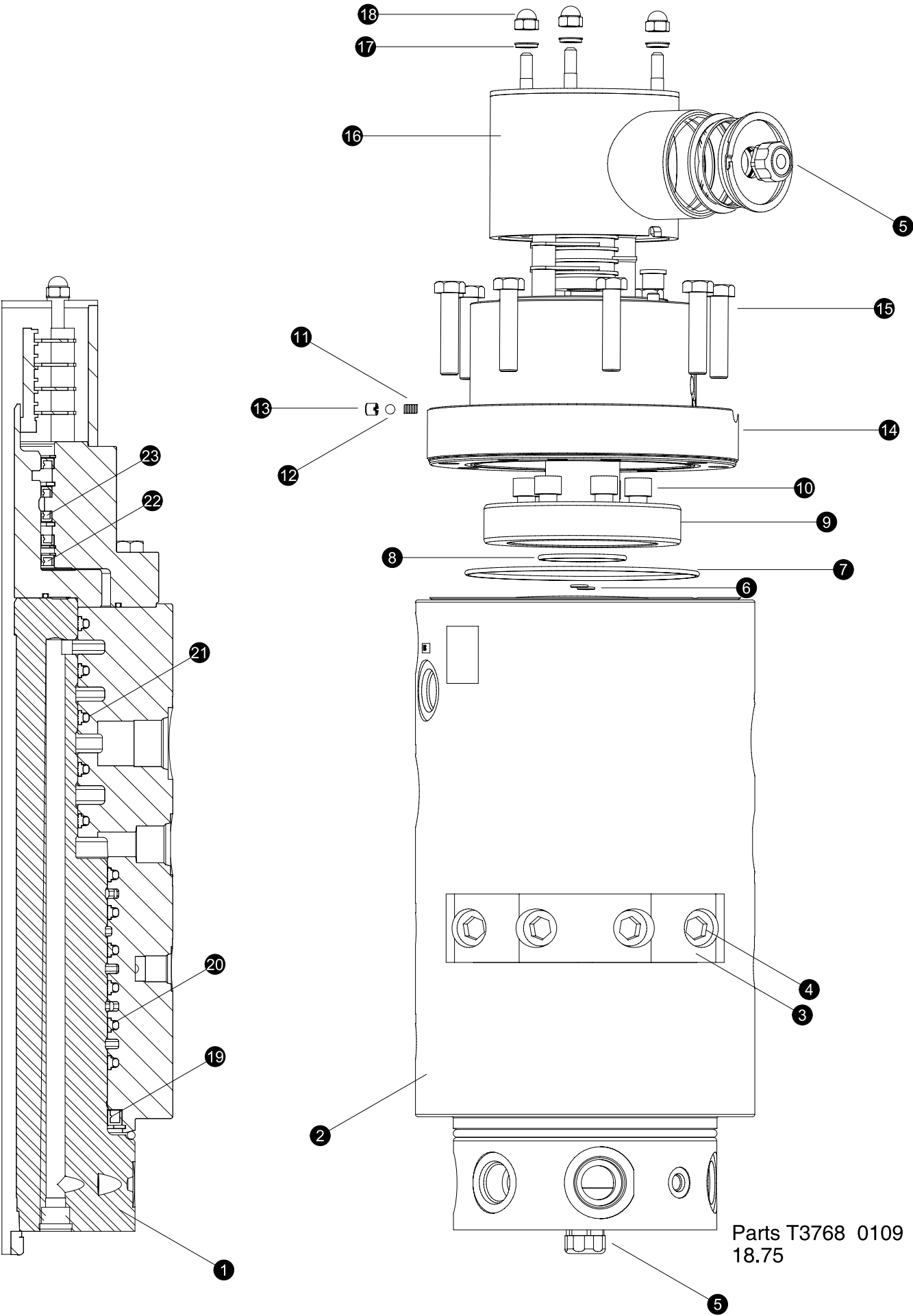


Kit or Assembly - includes all items indented underneath.



Parts Included in Seal Repair Kit.

Please contact TimberPro Dealer or Factory before attempting to disassemble or repair rotary manifold. Rotary manifolds need to be serviced by authorized TimberPro service technicians only.



**UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION****(HYDRA DYNE TECHNOLOGY - ROTARY MANIFOLD)****Used on machine 0280-101008 to 0326-123009**

| REF | PART #          | QTY |   | DESCRIPTION                                            | SEE SECTION |
|-----|-----------------|-----|---|--------------------------------------------------------|-------------|
| -   | 53605-UP        | 1   | ☐ | MANIFOLD, ROTARY - 12 PORT (Hydra Dyne) (0280-present) |             |
| 1   | TP121431        | 1   |   | SPOOL, ROTARY -                                        |             |
| 2   | TP121432        | 1   |   | BARREL, 12 PASS ROTARY -                               |             |
| 3   | HD1214003       | 2   |   | MOUNTING PLATE -                                       |             |
| 4   |                 | 8   |   | BOLT, Allen - M16 X 40MM (202 FTLBS)                   |             |
| 5   | HD121417        | 2   |   | FITTING, Liquid tight (electrical)                     |             |
| 6   | N1470-012       | 2   |   | O-RING - 1/2" X 3/8" X 1/6"                            |             |
| 7   | N1470-258       | 1   |   | O-RING - 6 1/4" X 6" X 1/8"                            |             |
| 8   | N1407-227       | 1   |   | O-RING - 2 3/8" X 2 1/8" X 1/8"                        |             |
| 9   | HD1414006       | 1   |   | SPOOL, FUEL                                            |             |
| 10  |                 | 6   |   | BOLT, ALLEN HEAD - 12MM-1.75P X 20MM (81 FTLBS)        |             |
| 11  | C0610-041-0095S | 1   |   | SPRING,                                                |             |
| 12  |                 | 1   |   | BALL, STEEL 1/4"                                       |             |
| 13  | 329-008         | 1   |   | INSERT, EZ LOCK                                        |             |
| 14  | HD1414-005      | 1   |   | CAP, FUEL                                              |             |
| 15  |                 | 8   |   | BOLT, M12 X 55MM (70 FTLBS)                            |             |
| 16  | 52007-UP        | 1   | ☐ | SLIP RING UNIT (7 WIRE)                                |             |
| -   | RCAA093782      | 1   |   | HARNESS, CENTER                                        |             |
| -   | RCAA093783      | 1   |   | HARNESS, BRUSHES                                       |             |
| -   | HD091407        | 3   |   | STUD, 5/16"                                            |             |
| -   | HD091415        | 1   |   | COVER, SLIP RING                                       |             |
| -   | HD091412        | 1   |   | CAP, TOP - SLIP RING                                   |             |
| -   | S08XP07HDT1     | 1   |   | ELECTRICAL ASSEMBLY (7 WIRE)                           |             |
| 17  | 33156           | 3   |   | WASHER, SEAL                                           |             |
| 18  | 70961           | 3   |   | NUT, ACORN                                             |             |
| 19  | U90-363         | 1   |   | ORING, URETHANE                                        |             |
| -   | HD1014007       | 1   |   | SEAL, ENVIRO 140MM                                     |             |
| -   | WH-629          | 1   |   | SPIRAL SNAP RING                                       |             |
| 20  | RN140250AR0     | 6   |   | GLIDELOC SEAL                                          |             |
| -   | N1173-70-359    | 6   |   | ORING HNBR 70                                          |             |
| 21  | RN100250AR0     | 5   |   | GLIDELOC SEAL                                          |             |
| -   | N1173-70-346    | 5   |   | ORING HNBR 70                                          |             |
| 22  | HD050068070     | 3   |   | SEAL, ENVIRO 50MMX68X7                                 |             |
| -   | WH-267          | 3   |   | SPIRAL SNAP RING                                       |             |
| 23  | HD050065070     | 3   |   | SEAL, ENVIRO 50MMX65X7                                 |             |
| -   | WHM-256         | 3   |   | SPIRAL SNAP RING                                       |             |

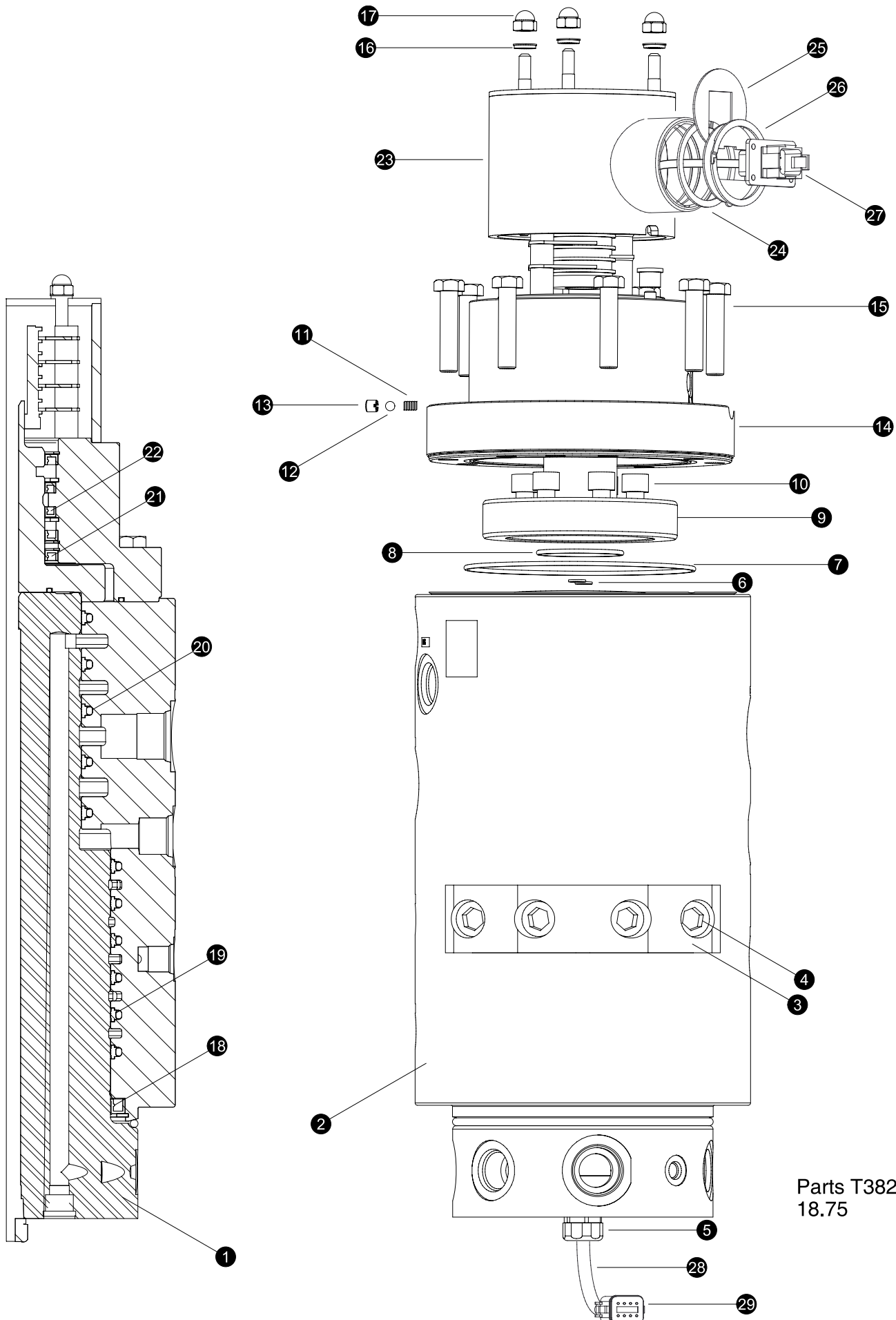
- -UP 1 ⌘ KIT, SEAL REPAIR - ROTARY MAN - 52377

☐ See reference page for component or assembly breakdown.

☐ Kit or Assembly - includes all items indented underneath.

⌘ Parts Included in Seal Repair Kit.

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Parts T3827 1209  
18.75

**UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION****(HYDRA DYNE TECHNOLOGY - ROTARY MANIFOLD)****Used on machines built after 0326-123009**

| REF | PART #          | QTY |   | DESCRIPTION                                               | SEE SECTION |
|-----|-----------------|-----|---|-----------------------------------------------------------|-------------|
| -   | 53605-UP        | 1   | ☐ | MANIFOLD, ROTARY - 12 PORT (Hydra Dyne) (0327-present)    |             |
| 1   | TP121431        | 1   |   | SPOOL, ROTARY -                                           |             |
| 2   | TP121432        | 1   |   | BARREL, 12 PASS ROTARY -                                  |             |
| 3   | HD1214003       | 2   |   | MOUNTING PLATE -                                          |             |
| 4   |                 | 8   |   | BOLT, Allen - M16 X 40MM (202 FTLBS)                      |             |
| 5   | HD121417        | 2   |   | FITTING, Liquid tight (electrical)                        |             |
| 6   | N1470-012       | 2   |   | O-RING - 1/2" X 3/8" X 1/6"                               |             |
| 7   | N1470-258       | 1   |   | O-RING - 6 1/4" X 6" X 1/8"                               |             |
| 8   | N1407-227       | 1   |   | O-RING - 2 3/8" X 2 1/8" X 1/8"                           |             |
| 9   | HD1414006       | 1   |   | SPOOL, FUEL                                               |             |
| 10  |                 | 6   |   | BOLT, ALLEN HEAD - 12MM-1.75P X 20MM (81 FTLBS)           |             |
| 11  | C0610-041-0095S | 1   |   | SPRING,                                                   |             |
| 12  |                 | 1   |   | BALL, STEEL 1/4"                                          |             |
| 13  | 329-008         | 1   |   | INSERT, EZ LOCK                                           |             |
| 14  | HD1414-005      | 1   |   | CAP, FUEL                                                 |             |
| 15  |                 | 8   |   | BOLT, M12 X 55MM (70 FTLBS)                               |             |
| 16  | 33156           | 3   |   | WASHER, SEAL                                              |             |
| 17  | 70961           | 3   |   | NUT, ACORN                                                |             |
| 18  | U90-363         | 1   |   | ORING, URETHANE                                           |             |
| -   | HD1014007       | 1   |   | SEAL, ENVIRO 140MM                                        |             |
| -   | WH-629          | 1   |   | SPIRAL SNAP RING                                          |             |
| 19  | RN140250AR0     | 6   |   | GLIDELOC SEAL                                             |             |
| -   | N1173-70-359    | 6   |   | ORING HNBR 70                                             |             |
| 20  | RN100250AR0     | 5   |   | GLIDELOC SEAL                                             |             |
| -   | N1173-70-346    | 5   |   | ORING HNBR 70                                             |             |
| 21  | HD050068070     | 3   |   | SEAL, ENVIRO 50MMX68X7                                    |             |
| -   | WH-267          | 3   |   | SPIRAL SNAP RING                                          |             |
| 22  | HD050065070     | 3   |   | SEAL, ENVIRO 50MMX65X7                                    |             |
| -   | WHM-256         | 3   |   | SPIRAL SNAP RING                                          |             |
| 23  | 54100-UP        | 1   | ☐ | SLIP RING UNIT (8 WIRE)                                   |             |
| -   | S08XP08HDT1     | 1   |   | ELECTRICAL RINGS AND SHOES ASSEMBLY (8 WIRE)              |             |
| 24  | -UP             | 1   |   | SEAL                                                      |             |
| 25  | HD121419        | 1   |   | PLATE, connector mount                                    |             |
| 26  | HD121420        | 1   |   | PLATE, connector mount                                    |             |
| -   | WHM-250         | 1   |   | SNAP RING                                                 |             |
| 27  | AD13093         |     |   | RECEPTICAL, 8 - PIN (AD13096 - lock / AD13013 pins)       |             |
| 28  | -UP             |     |   | HARNESS,                                                  |             |
| -   | HD091415        | 1   |   | COVER, SLIP RING                                          |             |
| -   | HD091412        | 1   |   | CAP, TOP - SLIP RING                                      |             |
| 29  | AD13092         |     |   | CONNECTOR, 8 - SOCKET (AD13097 - lock / AD1301 - sockets) |             |
| -   | -UP             | 1   | ⌘ | KIT, SEAL REPAIR - ROTARY MAN - 52377                     |             |



See reference page for component or assembly breakdown.

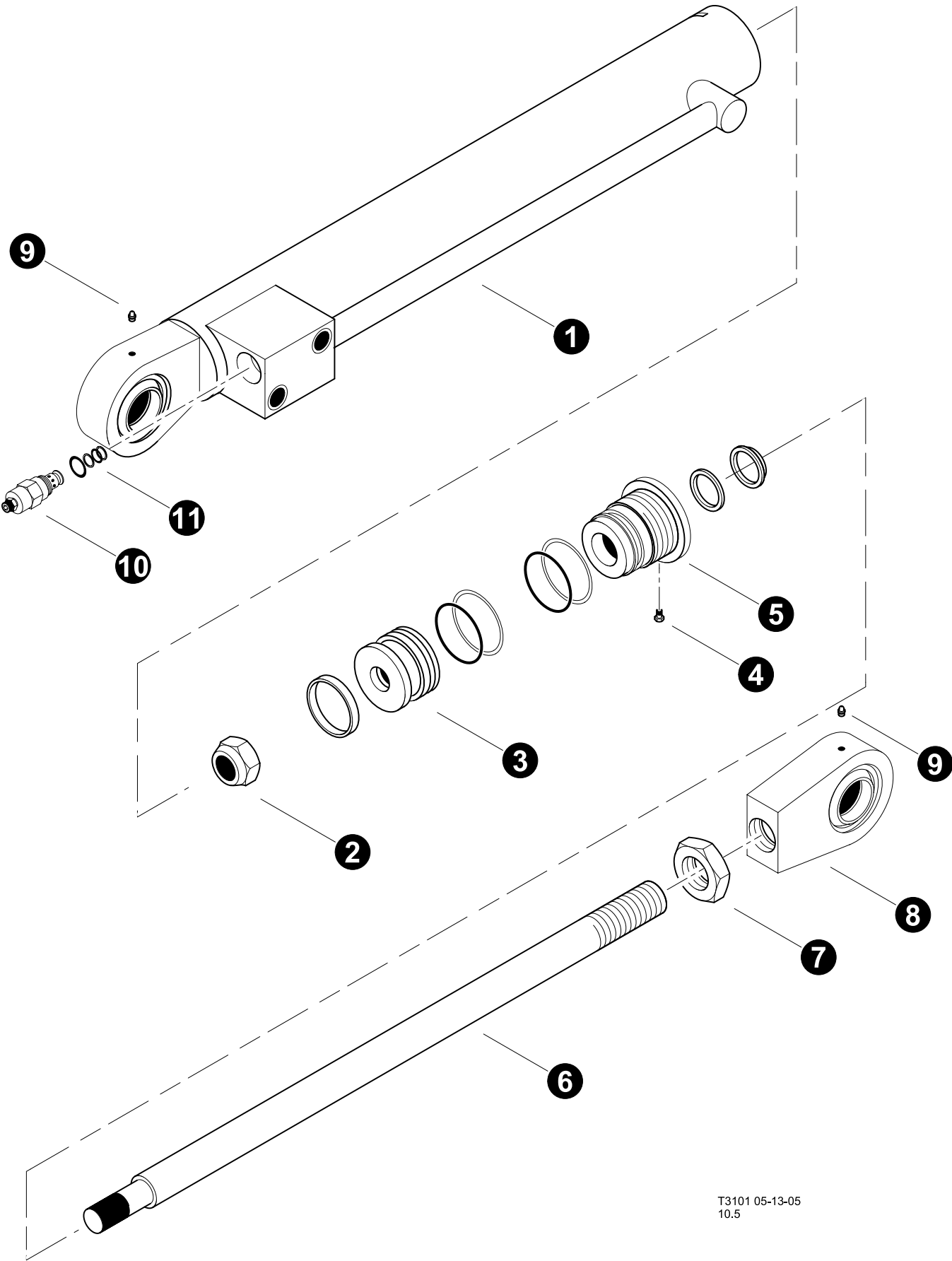


Kit or Assembly - includes all items indented underneath.



Parts Included in Seal Repair Kit.

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T3101 05-13-05  
10.5

## UPPER TURNTABLE GUARDS, PANELS & COVERS INSTALLATION (Gull Wing Lift Cylinder Breakdown)

| REF | PART #   | QTY |                          | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------|-------------|
| -   | 51870-UP | 1   | <input type="checkbox"/> | CYLINDER, GULLWING LIFT - 830/630 |             |
| 1   |          | 1   |                          | BARREL ASSEMBLY (203026B)         |             |
| 2   |          | 1   |                          | NUT (712065A)                     |             |
| 3   |          | 1   |                          | PISTON ASSEMBLY (400221B)         |             |
| 4   |          | 1   |                          | SCREW (711127A)                   |             |
| 5   |          | 1   |                          | ROD BEARING ASSEMBLY (500736B)    |             |
| 6   |          | 1   |                          | ROD ASSEMBLY (301692B)            |             |
| 7   |          | 1   |                          | NUT - JAM (712117A)               |             |
| 8   |          | 1   |                          | ROD EYE ASSEMBLY (660794B)        |             |
| 9   |          | 2   |                          | GREASE FITTING (717000A)          |             |
| 10  |          | 1   |                          | VALVE CARTRIDGE (725047A)         |             |
| 11  |          | 1   |                          | SEAL KIT - CARTRIDGE (SKV-1021)   |             |
| -   | 52011-UP | 1   |                          | KIT, SEAL REPAIR - GULL WING CYL  |             |



See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

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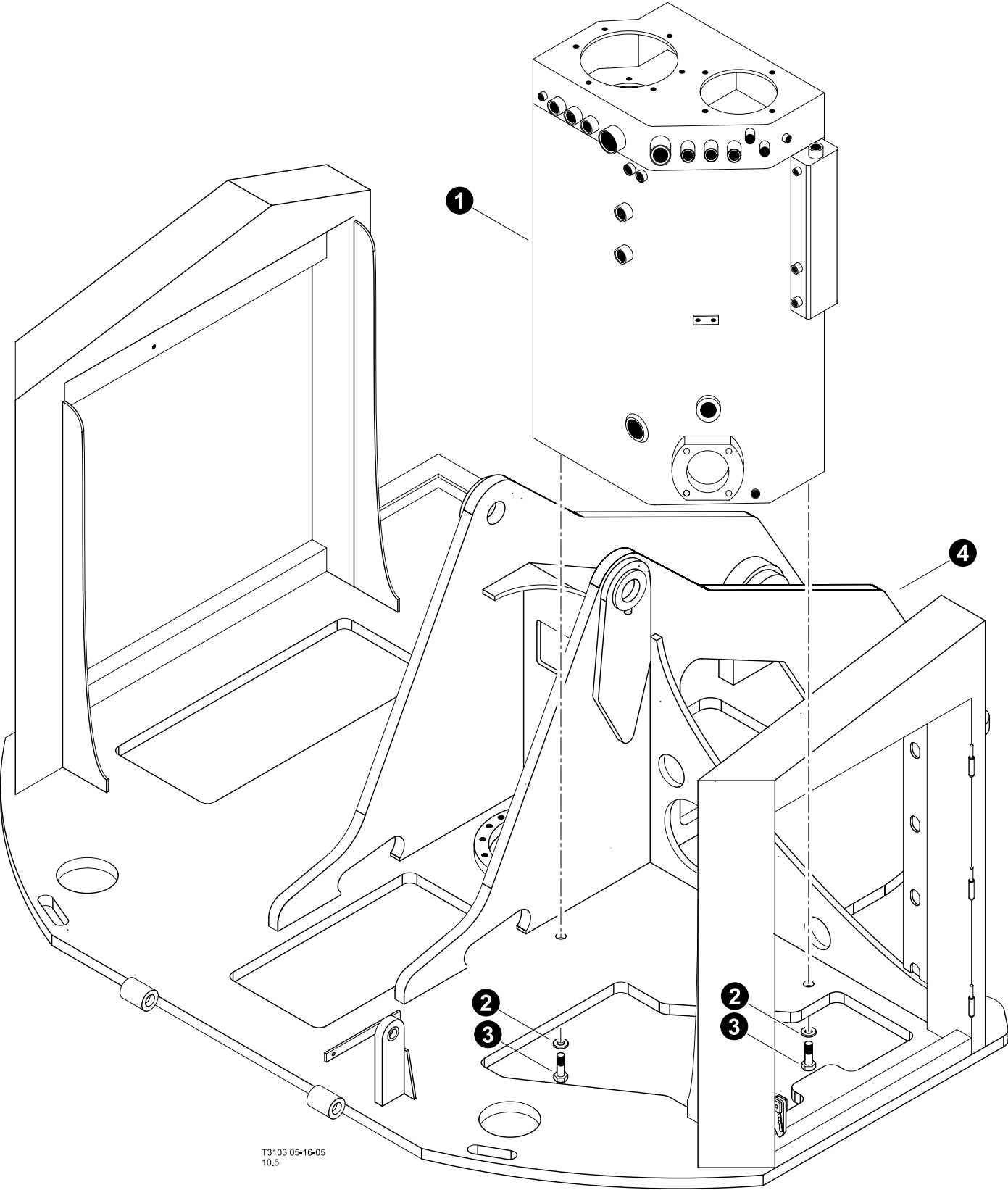
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## Section UP-2

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### Upper Turntable - Hydraulic Tank



## HYDRAULIC TANK INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------|-------------|
| 1   | 51583-UP | 1   |                                                                                   | TANK, HYDRAULIC OIL (830,840 & 630) |             |
| 3   | 15681-UP | 2   |                                                                                   | BOLT - .625" X 2.25"                |             |
| 2   | 10805-UP | 2   |                                                                                   | WASHER, FLAT - .625"                |             |
| 4   | REF      | 1   |  | UPPER TURNTABLE ASSEMBLY .....      | UP-1        |

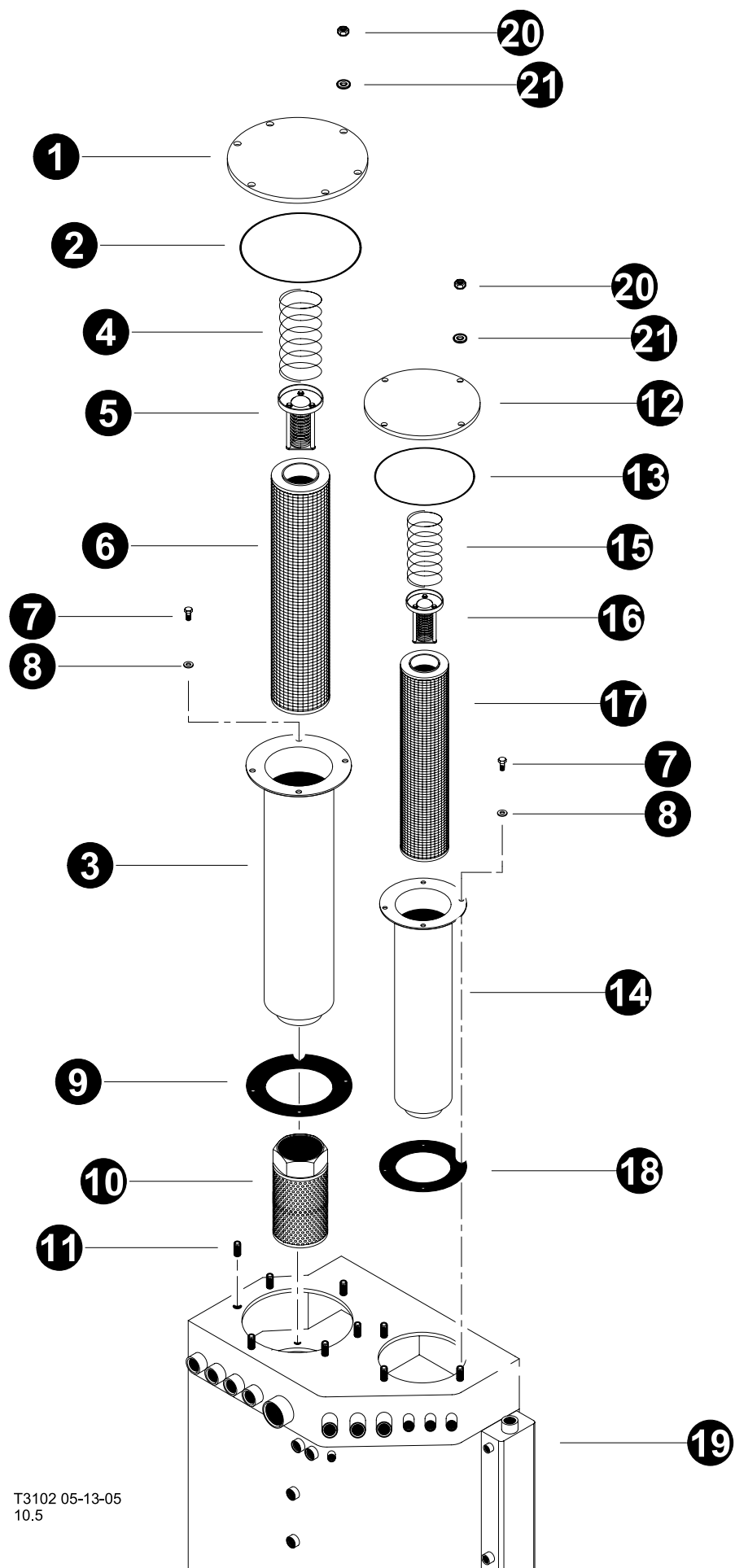


See reference page for component or assembly breakdown.



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## HYDRAULIC TANK FILTER ASSEMBLES

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   |          | 1   |   | COVER - RETURN FILTER                   |             |
| 2   | 42310-UP | 1   |   | O-RING                                  |             |
| 3   | 51620-UP | 1   | ☐ | FILTER KIT, HYD. TANK MAIN RETURN       |             |
| 4   |          | 1   |   | SPRING, RETURN FILTER                   |             |
| 5   |          | 1   |   | BYPASS CHECK, RETURN FILTER             |             |
| 6   | 52350-UP | 1   |   | ELEMENT, MAIN RETURN HYD TANK           |             |
| 7   | 15542-UP | 8   |   | BOLT - .375" X .75"                     |             |
| 8   | 15528-UP | 8   |   | WASHER, SAE FLAT - .375"                |             |
| 9   | 52126-UP | 1   | ⌘ | SEAL, Gasket (BFT-3)                    |             |
| 10  | 51624-UP | 1   |   | DIFFUSER, FILTER - MAIN RETURN HYD TANK |             |
| 11  | 42393-UP | 1   |   | STUD - .5"-13NC X .5"-20NF X 2.0LG"     |             |
| 12  |          | 1   |   | COVER - CASE DRAIN                      |             |
| 13  | 15600-UP | 1   |   | O-RING - 8" DIA. -369                   |             |
| 14  | 51621-UP | 1   | ☐ | FILTER KIT, HYD. TANK MAIN RETURN       |             |
| 15  |          | 1   |   | SPRING, CASE DRAIN FILTER               |             |
| 16  |          | 1   |   | BYPASS CHECK, CASE DRAIN FILTER         |             |
| 17  | 22647-UP | 1   |   | ELEMENT, RETURN FILTER (Case Drain)     |             |
| 18  |          | 1   | ⌘ | SEAL, Gasket (LFT-642)                  |             |
| 19  | REF      | 1   | ☐ | HYDRAULIC TANK ASSEMBLY.....            | UP-2        |
| 20  | 42394-UP | 10  |   | NUT, HEX .5-20NF                        |             |
| 21  | 15534-UP | 10  |   | WASHER, SAE FLAT - .5"                  |             |



See reference page for component or assembly breakdown.



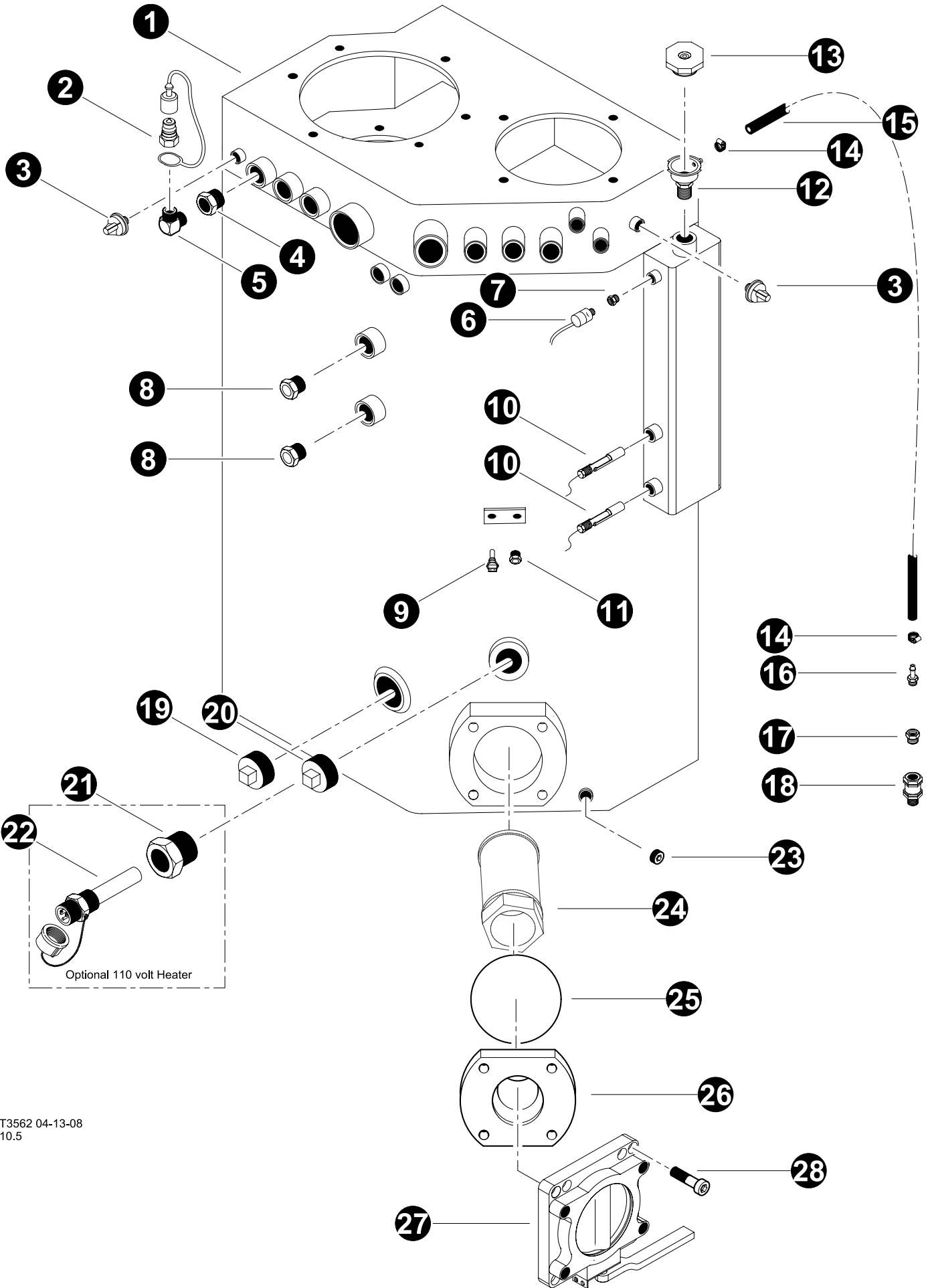
Kit or Assembly - includes all items indented underneath.



Part of Seal Repair Kit #52126



Part of Seal Repair Kit #16852



T3562 04-13-08  
10.5

## HYDRAULIC TANK

### Hydraulic Tank Components installation

| REF | PART #    | QTY  |                                                                                   | DESCRIPTION                                                 | SEE SECTION |
|-----|-----------|------|-----------------------------------------------------------------------------------|-------------------------------------------------------------|-------------|
| 1   | REF       | 1    |  | HYDRAULIC TANK ASSEMBLY. ....                               | UP-2        |
| 2   | 17307M-UP | 1    |                                                                                   | QUICK DISCONNECT - .5" (MALE)                               |             |
| -   | 17323F-UP | 1    |                                                                                   | COVER, DUST - QUICK DISCONNECT (FEMALE)                     |             |
| 3   | 51764-UP  | 2    |                                                                                   | SWITCH, PRESSURE - SCHROEDER (830/630)                      |             |
| 4   | 16805-UP  | 1    |                                                                                   | BUSHING, REDUCER - 6405-12-8                                |             |
| 5   | 17487-UP  | 1    |                                                                                   | ELBOW, 90 - 5500-8                                          |             |
| 6   | 51737-UP  | 1    |                                                                                   | SWITCH, PRESSURE - VACUUM PUMP SHUTOFF                      |             |
| 7   | 11318-UP  | 1    |                                                                                   | BUSHING, REDUCER - 5406-6-4                                 |             |
| 8   | 24308-UP  | 2    |                                                                                   | SIGHT GLASS                                                 |             |
| 9   | 24531-UP  | 1    |                                                                                   | TRANSDUCER, HYD TEMP (IQAN SYSTEM)                          |             |
| 10  | 51379-UP  | 2    |                                                                                   | SWITCH, HYD. OIL LEVEL .50 NPT GEMS                         |             |
| 11  | 11360-UP  | 1    |                                                                                   | PLUG - 5406-P-2                                             |             |
| 12  | 17156-UP  | 1    |                                                                                   | STEM, HYDRAULIC TANK RELIEF CAP                             |             |
| 13  | 18135-UP  | 1    |                                                                                   | CAP, HYD. RESERVOIR RELIEF - 13 PSI                         |             |
| 14  | 16202-UP  | 1    |                                                                                   | CLAMP, HOSE - WORM STYLE - .625"                            |             |
| 15  | 16238-UP  | 5 ft |  | HOSE, FUEL LINE (BULK ROLL) - .3125"                        |             |
| 15  | 22229-UP  | 1    |                                                                                   | TEE - 8-G5G5JAO-S                                           |             |
| 16  | 16990-UP  | 1    |                                                                                   | CONNECTOR, STR HOSE BARB - 4244-5-4                         |             |
| 17  | 11318-UP  | 1    |                                                                                   | BUSHING, REDUCER - 5406-6-4                                 |             |
| 18  | 15652-UP  | 1    |                                                                                   | VALVE, CHECK - HYDRAULIC/FUEL TANK                          |             |
| 19  | 42392-UP  | 1    |                                                                                   | PLUG, BLACK PIPE - 2.0" HYD. TANK 830/630                   |             |
| 20  | 42392-UP  | 1    |                                                                                   | PLUG, BLACK PIPE - 2.0" HYD. TANK 830/630                   |             |
| 21  | 26397-UP  | 1    |                                                                                   | BUSHING, BLACK - 2" X 1.25"                                 |             |
| 22  | 19286-UP  | 1    |                                                                                   | ELEMENT, HEATER - HYD. TANK (120V 600W) (OPTIONAL)          |             |
| 23  | 10751-UP  | 1    |                                                                                   | PLUG - 5406-P-8                                             |             |
| 24  | 15842-UP  | 1    |                                                                                   | FILTER, SCREEN - IMPLEMENT                                  |             |
| 25  | 51726-UP  | 1    |                                                                                   | O-RING, HDYRAULIC TANK - 830/630                            |             |
| 26  | 42306-UP  | 1    |                                                                                   | PLATE, INTER.-SUCTION PORT 100mm VALVE                      |             |
| 27  | 54786-UP  | 1    |                                                                                   | VALVE, SHUT OFF - BUTTERFLY (4") Must also order new #42306 |             |
| 28  | 18918-UP  | 4    |                                                                                   | BOLT, ALLEN HEAD - .5" X 2.5"                               |             |



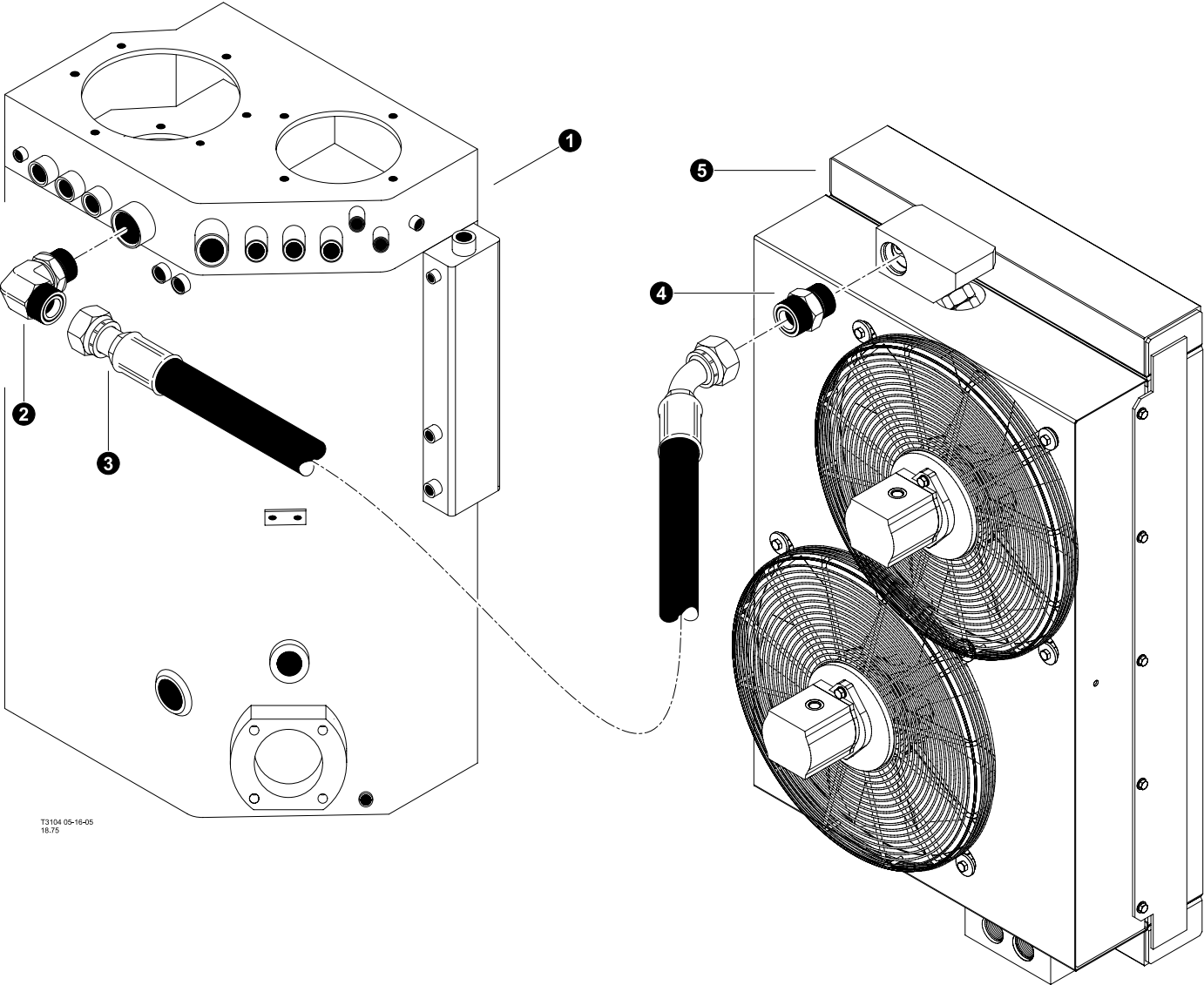
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Sold in bulk per foot - Please specify length when ordering.





## HYDRAULIC TANK

### Hydraulic Tank Return Line to Oil Cooler

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY . . . . .                                                | UP-2        |
| 2   | 22438-UP | 1   |                                                                                   | ELBOW, 90 - 849L-TTO-24X24 (HYD TANK)                                            |             |
| 2   |          | 1   |                                                                                   | HOSE ASSEMBLY - 2023-24OS-2404 (Hydraulic tank return side to Oil Cooler Outlet) |             |
| 4   | 22448-UP | 1   |                                                                                   | CONNECTOR, STR - 848-TTO-24X24                                                   |             |
| 5   | REF      | 1   |  | HYDRAULIC OIL COOLER ASSEMBLY . . . . .                                          | UP-3        |

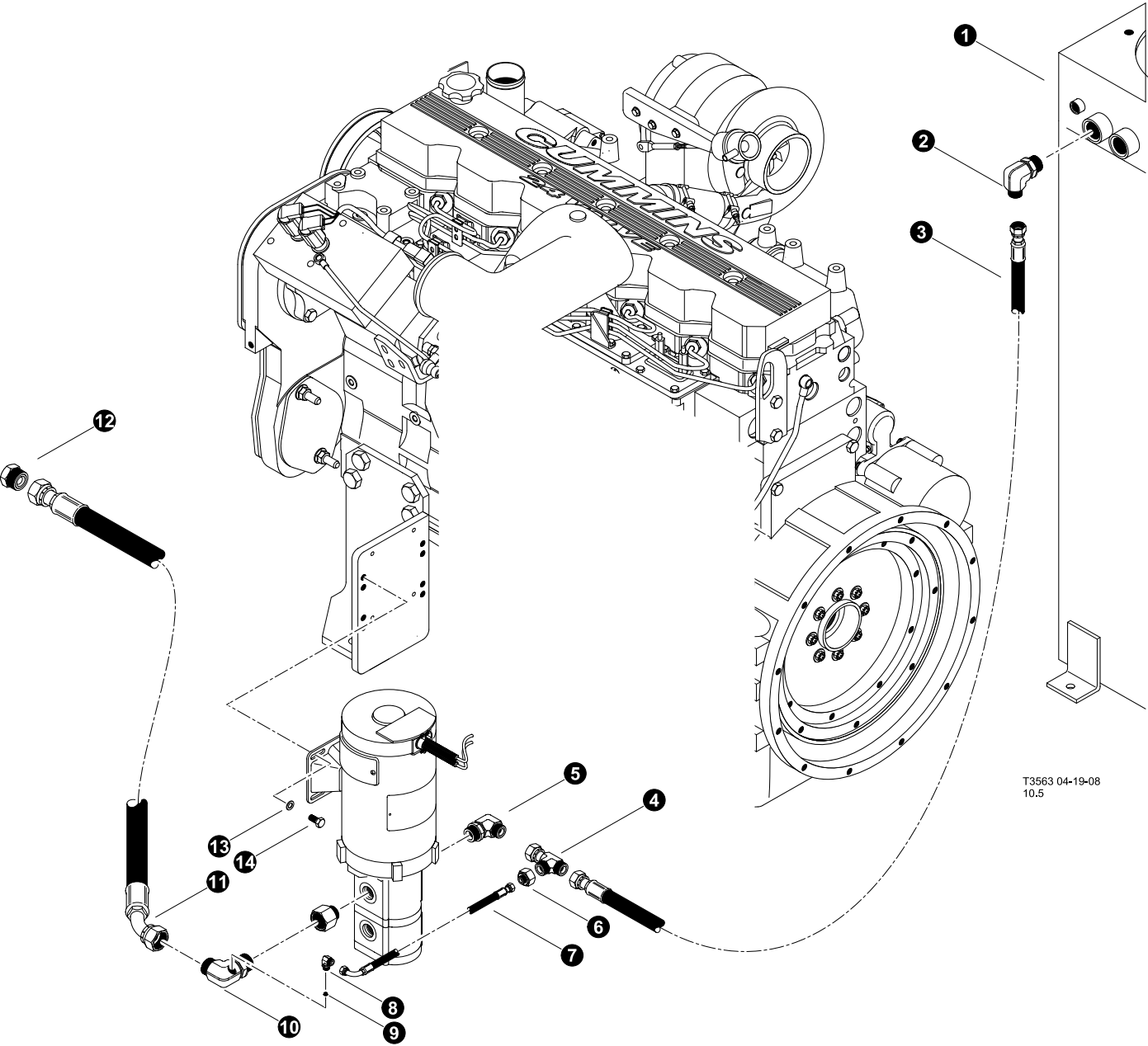


See reference page for component or assembly breakdown.



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T3563 04-19-08  
10.5

## HYDRAULIC TANK (Standard Hydraulic Tank Fill Pump System)

### SN 0073 and 0351 and Before

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY.....                            | UP-2        |
| 2   | 15372-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-0812S                               |             |
| 3   | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2074-08-08OS-08OS                       |             |
| 4   | 15433-UP | 1   |                                                                                   | TEE - FF2114T-0808S                                     |             |
| 5   | 15154-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-0810S                               |             |
| 6   | 19221-UP | 1   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                  |             |
| 7   | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2006.5-04-04OS-04O9                     |             |
| 8   | -UP      | 1   |                                                                                   | ELBOW, 90 - FF1868T-0406S (PN15133 - tapped for #4 SAE) |             |
| 9   | 52679-UP | 1   |                                                                                   | PLUG, HEX SOCKET (ORB) - 6409-02 .060 orifice           |             |
| 10  | 53109-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-1216S W/ #6 HOLE                    |             |
| 11  | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2050-12-12OS-12O4                       |             |
| 12  | 11392-UP | 1   |                                                                                   | PLUG - 2408-12                                          |             |
| 13  | 15528-UP | 4   |                                                                                   | WASHER, SAE FLAT - .375"                                |             |
| 14  | 15542-UP | 4   |                                                                                   | BOLT - .375" X .75"                                     |             |
| 15  | REF      | 1   |                                                                                   | FILL PUMP ASSEMBLY.....                                 | UP-2        |



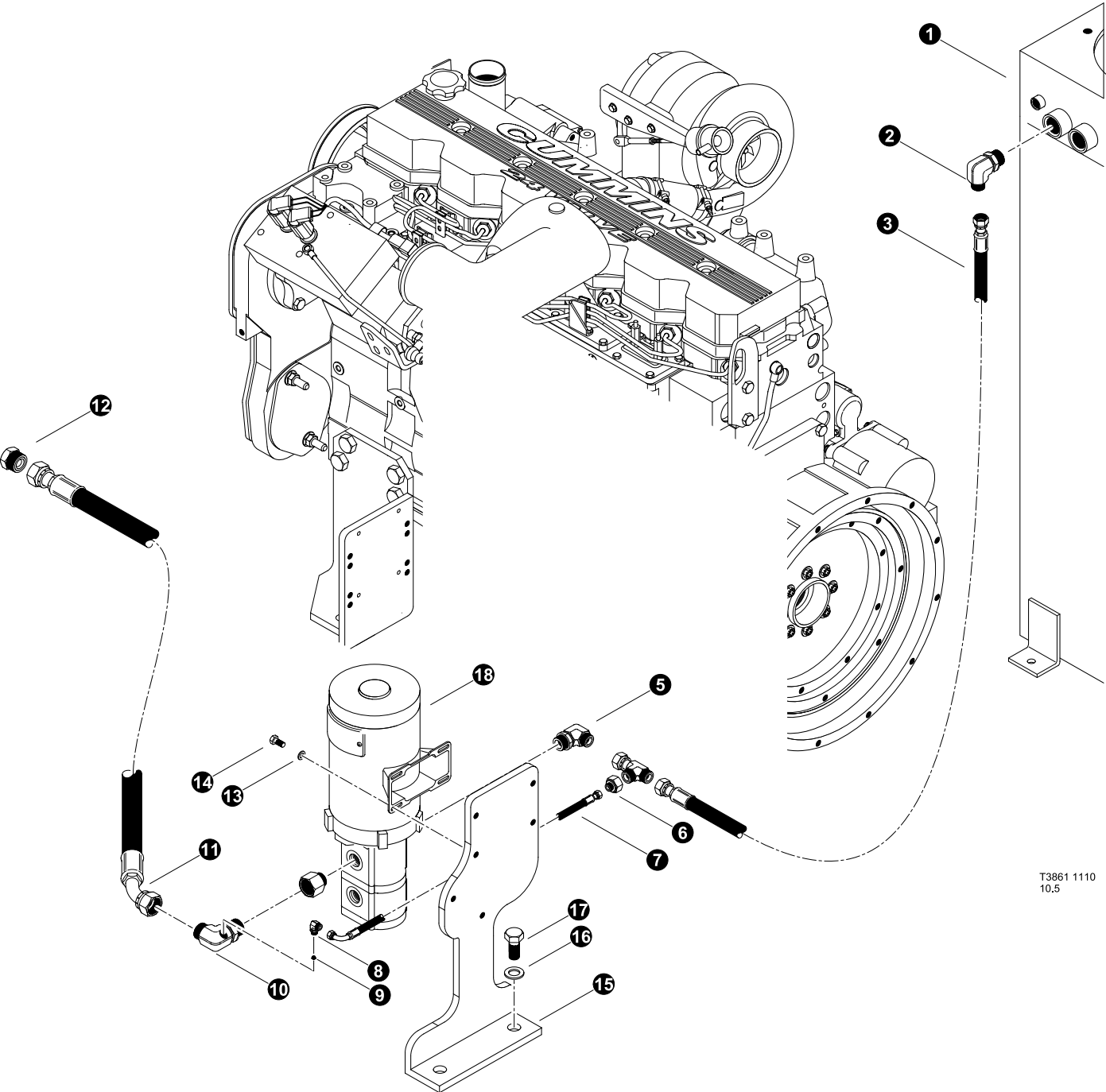
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Sold in bulk per foot - Please specify length when ordering.



T3861 1110  
10.5

## HYDRAULIC TANK (Standard Hydraulic Tank Fill Pump System)

### SN 0074 and 0352 and After

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY.....                            | UP-2        |
| 2   | 15372-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-0812S                               |             |
| 3   | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2074-08-08OS-08OS                       |             |
| 4   | 15433-UP | 1   |                                                                                   | TEE - FF2114T-0808S                                     |             |
| 5   | 15154-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-0810S                               |             |
| 6   | 19221-UP | 1   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                  |             |
| 7   | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2006.5-04-04OS-04O9                     |             |
| 8   | -UP      | 1   |                                                                                   | ELBOW, 90 - FF1868T-0406S (PN15133 - tapped for #4 SAE) |             |
| 9   | 52679-UP | 1   |                                                                                   | PLUG, HEX SOCKET (ORB) - 6409-02 .060 orifice           |             |
| 10  | 53109-UP | 1   |                                                                                   | ELBOW, 90 - FF1868T-1216S W/ #6 HOLE                    |             |
| 11  | -UP      | 1   |                                                                                   | HOSE ASSEMBLY - 2050-12-12OS-12O4                       |             |
| 12  | 11392-UP | 1   |                                                                                   | PLUG - 2408-12                                          |             |
| 13  | 15528-UP | 4   |                                                                                   | WASHER, SAE FLAT - .375"                                |             |
| 14  | 15542-UP | 4   |                                                                                   | BOLT - .375" X .75"                                     |             |
| 15  | 54191-UP | 1   |                                                                                   | BRACKET, FILL PUMP                                      |             |
| 16  | 15534-UP | 2   |                                                                                   | WASHER, SAE FLAT - .5"                                  |             |
| 17  | 50100-UP | 2   |                                                                                   | BOLT - .5" X 1.25"                                      |             |
| 18  | REF      | 1   |                                                                                   | FILL PUMP ASSEMBLY.....                                 | UP-2        |



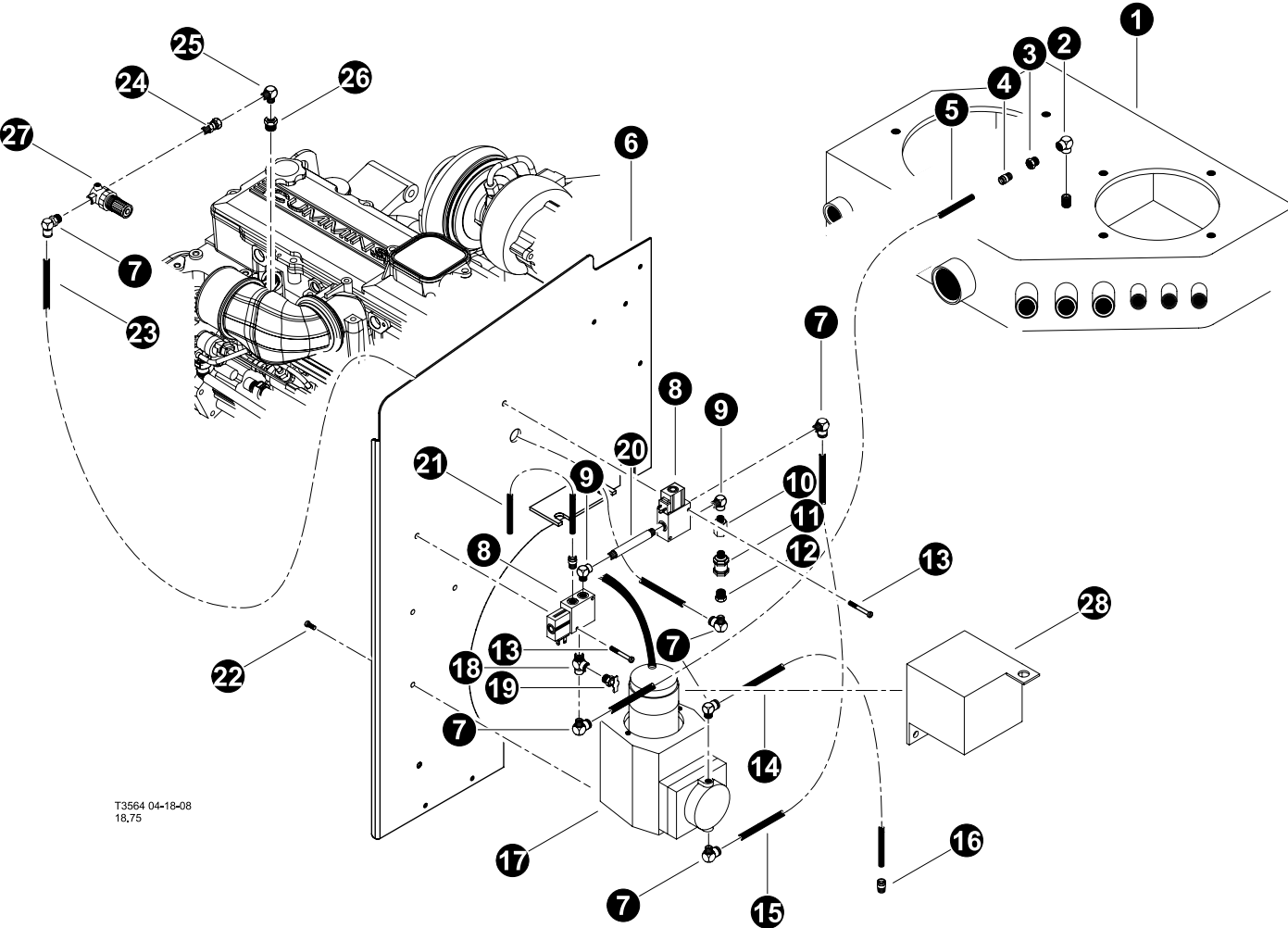
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Sold in bulk per foot - Please specify length when ordering.



T3564 04-18-08  
18.75

## HYDRAULIC TANK

### (Hydraulic Tank Vent / Vacuum System)

| REF | PART #   | QTY |                                                                                     | DESCRIPTION                        | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------|------------------------------------|-------------|
| 1   | REF      | 1   |    | HYDRAULIC TANK ASSEMBLY. ....      | UP-2        |
| 2   | 16251-UP | 2   |                                                                                     | ELBOW, 90 STREET - 5502-4          |             |
| 3   | 11318-UP | 1   |                                                                                     | BUSHING, REDUCER - 5406-6-4        |             |
| 4   | 52145-UP | 1   |                                                                                     | ADAPTER, EXPANDER - 3/8 X 1/4 FG-S |             |
| 5   | 51738-UP | ft  |    | HOSE, 3/8" PUSH ON - VACUUM PUMP   |             |
| 6   | REF      | 1   |                                                                                     | PANEL, REAR ENGINE SHIELD. ....    | EE-1        |
| 7   | 51739-UP | 1   |                                                                                     | CONNECTOR, ELBOW -PUSH ON (VACUUM) |             |
| 8   | 51616-UP | 2   |                                                                                     | VALVE, VACUUM PUMP - HYD TANK      |             |
| 9   | 21147-UP | 1   |                                                                                     | ELBOW, 90 STREET .25" NPT - BRASS  |             |
| 10  | 52145-UP | 1   |                                                                                     | ADAPTER, EXPANDER - 3/8 X 1/4 FG-S |             |
| 11  | 15652-UP | 1   |                                                                                     | VALVE, CHECK - HYDRAULIC/FUEL TANK |             |
| 12  | 11318-UP | 1   |                                                                                     | BUSHING, REDUCER - 5406-6-4        |             |
| 13  | 16128-UP | 2   |                                                                                     | SCREW, MACHINE - #10-24 X 1.5"     |             |
| 14  | 51738-UP | ft  |    | HOSE, 3/8" PUSH ON - VACUUM PUMP   |             |
| 15  | 51738-UP | ft  |    | HOSE, 3/8" PUSH ON - VACUUM PUMP   |             |
| 16  | 51739-UP | 1   |                                                                                     | CONNECTOR, ELBOW -PUSH ON (VACUUM) |             |
| 17  | REF.     | 1   |                                                                                     | PUMP, VACUUM - HYD TANK. ....      | UP-2        |
| 18  | 10393-UP | 1   |                                                                                     | TEE - 5602-4                       |             |
| 19  | 15650-UP | 1   |                                                                                     | VALVE, TANK VENT - DC602-6         |             |
| 20  | 53084-UP | 1   |                                                                                     | NIPPLE, PIPE - 1/4" x 4"           |             |
| 21  | 51738-UP | ft  |   | HOSE, 3/8" PUSH ON - VACUUM PUMP   |             |
| 22  | 16129-UP | 4   |                                                                                     | SCREW, MACHINE - #10-24 X .75"     |             |
| 23  | 51738-UP | ft  |  | HOSE, 3/8" PUSH ON - VACUUM PUMP   |             |
| 24  | 11331-UP | 1   |                                                                                     | CONNECTOR, STR SWIVEL - 1404-4-4   |             |
| 25  | 52741-UP | 1   |                                                                                     | ELBOW, MALE PIPE - 1/4 CR-S        |             |
| 26  | 24290-UP | 1   |                                                                                     | BUSHING, REDUCER - 5406-12-4       |             |
| 27  | 15649-UP | 1   |                                                                                     | REGULATOR, TURBO BOOST             |             |
| 28  | 52984-UP | 1   |                                                                                     | COVER, VACUUM PUMP                 |             |



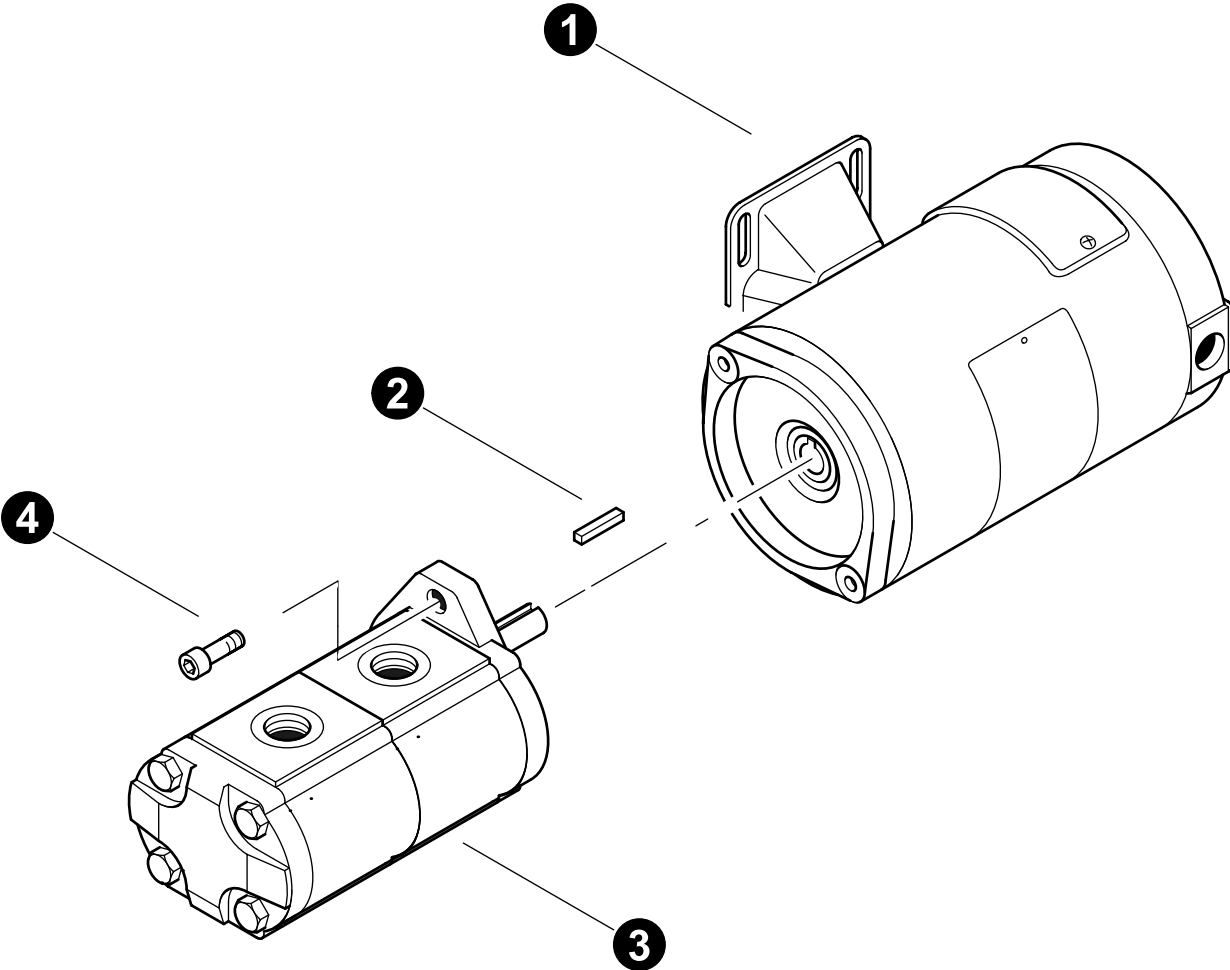
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Sold in bulk per foot - Please specify length when ordering.



T3109 04/16/08



## HYDRAULIC FILL PUMP BREAKDOWN

| REF | PART #   | QTY |                          | DESCRIPTION                                     | SEE SECTION |
|-----|----------|-----|--------------------------|-------------------------------------------------|-------------|
| -   | -UP      | 1   | <input type="checkbox"/> | ASSEMBLY - HYDRAULIC FILL PUMP with COOLER LOOP |             |
| 1   | 51503-UP | 1   |                          | MOTOR, HYD OIL FILL (ELECTRIC) - 24V            |             |
| 2   | -UP      | 1   |                          | KEY,                                            |             |
| 3   | 52567-UP | 1   |                          | PUMP, electric hydraulic oil fill               |             |
| 4   | -UP      | 2   |                          | BOLT, ALLEN HEAD - .375" X 1"                   |             |



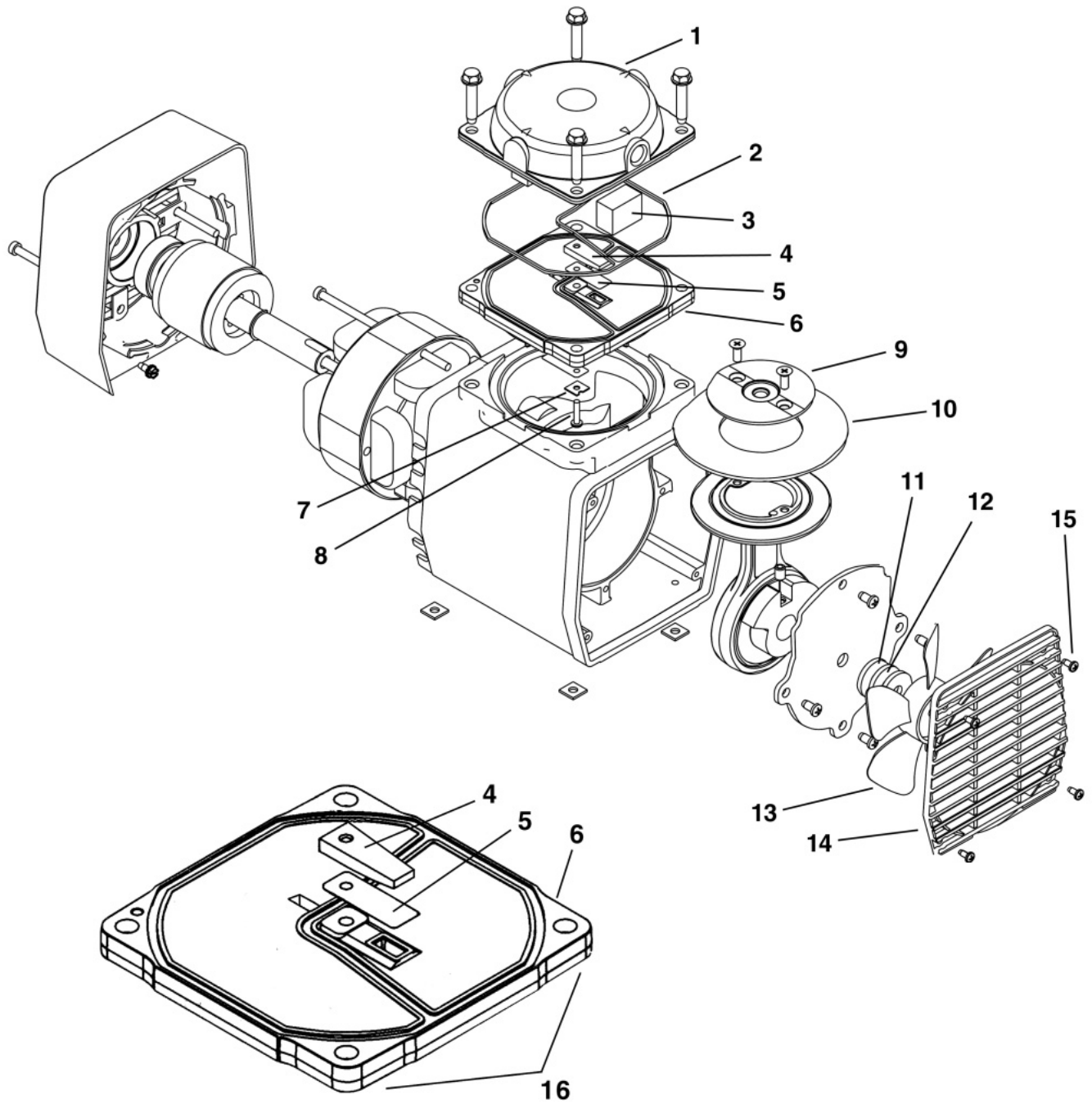
See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Sold in bulk per foot - Please specify length when ordering.



**VACUUM PUMP BREAKDOWN**

| REF | PART #   | QTY |   | DESCRIPTION                    | SEE SECTION |
|-----|----------|-----|---|--------------------------------|-------------|
| -   | 51615-UP | 1   | ☐ | VACUUM PUMP                    |             |
| 1   | -UP      | 1   |   | HEAD (AP500)                   |             |
| 2   | -UP      | 1   |   | O-RING, HEAD (AP513)           |             |
| 3   | -UP      | 2   |   | FILTER, MUFFLER (AT712A)       |             |
| 4   | -UP      | 1   |   | VALVE, LIMITER (AP110)         |             |
| 5   | -UP      | 2   |   | VALVE, LEAF (AF817)            |             |
| 6   | -UP      | 1   |   | PLATE, VALVE (AP504)           |             |
| 7   | -UP      | 1   |   | RETAINER, VALVE (AF819A)       |             |
| 8   | -UP      | 1   |   | SCREW, VALVE (BB330A)          |             |
| 9   | -UP      | 1   |   | PLATE, RETAINER (AF809)        |             |
| 10  | -UP      | 1   |   | DIAPHRAGM, COMPRESSOR (AF818A) |             |
| 10  | -UP      | 1   |   | DIAPHRAGM, VACUUM (AF818B)     |             |
| 11  | -UP      | 3   |   | SPACER, FELT (AA929)           |             |
| 12  | -UP      | 1   |   | SPACER (AD996)                 |             |
| 13  | -UP      | 1   |   | FAN (AF533)                    |             |
| 14  | -UP      | 1   |   | GRILL (AF807)                  |             |
| 15  | -UP      | 4   |   | RIVET (AP534)                  |             |
| 16  | -UP      | 1   |   | ASSEMBLY, VALVE PLATE (AP519)  |             |



See reference page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



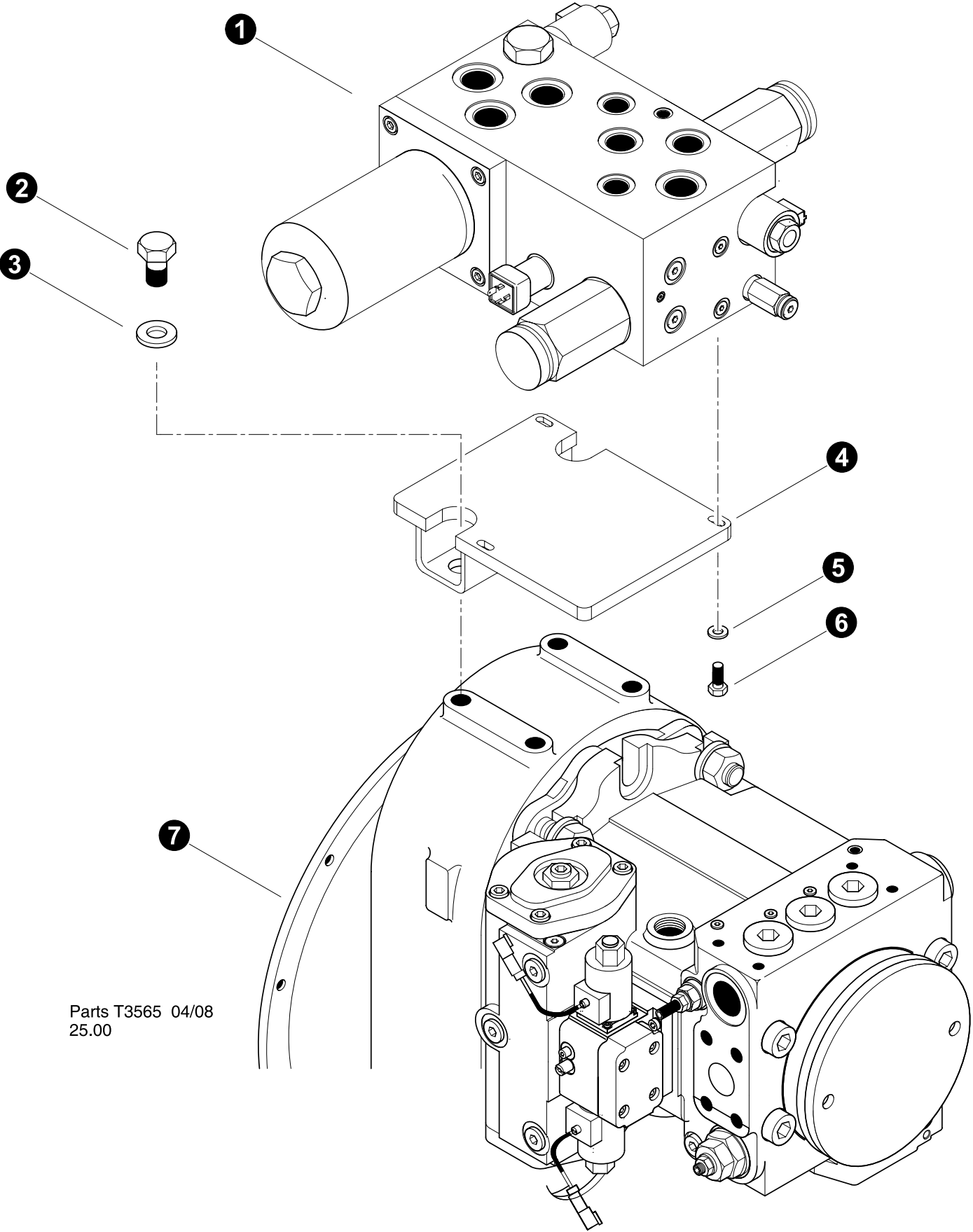
Sold in bulk per foot - Please specify length when ordering.

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## **Section UP-3**

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### **Upper Turntable - Radiator and Oil Cooler Fan Drive System**



Parts T3565 04/08  
25.00

**RADIATOR AND COOLER FAN CIRCUIT****Fan Drive Manifold installation**

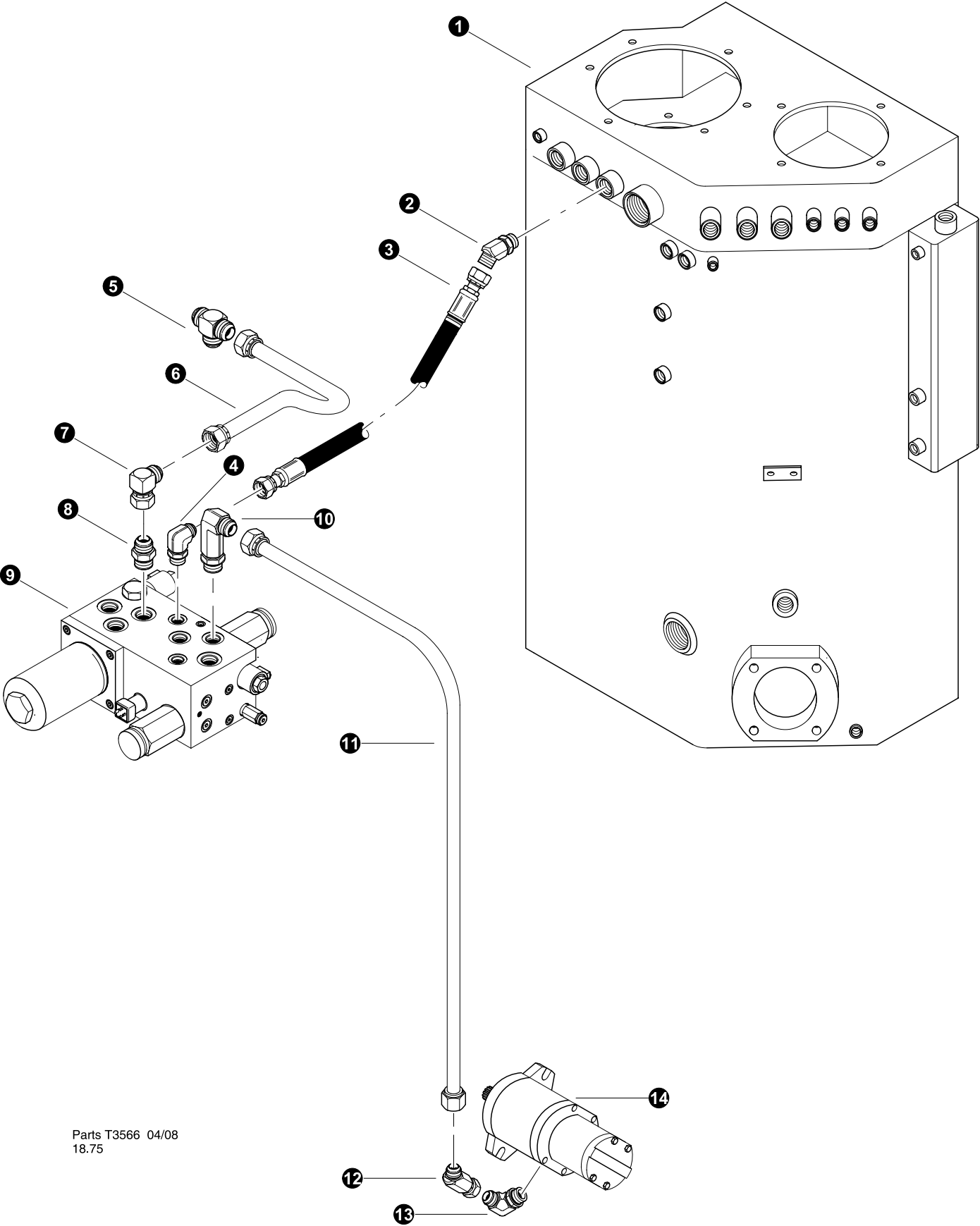
| REF | PART #   | QTY | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------|-------------|
| 1   | REF      | 1   | VALVE, FAN CONTROL . . . . .      | UP-3        |
| 2   | 24088-UP | 2   | BOLT - .5625" X 1.25"             |             |
| 3   | 10771-UP | 2   | WASHER, SAE FLAT - .5/8"          |             |
| 4   | 52961-UP | 1   | MOUNT, FAN/CHARGE VALVE           |             |
| 5   | 10731-UP | 3   | WASHER, SAE FLAT - .5/8"          |             |
| 6   | 10731-UP | 3   | BOLT - .375" X 1.5"               |             |
| 7   | REF      | 1   | PUMP DRIVE TRANSMISSION . . . . . | EE-4        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3566 04/08  
18.75



**RADIATOR AND COOLER FAN CIRCUIT****Fan Drive Pressure and Tank Connections**

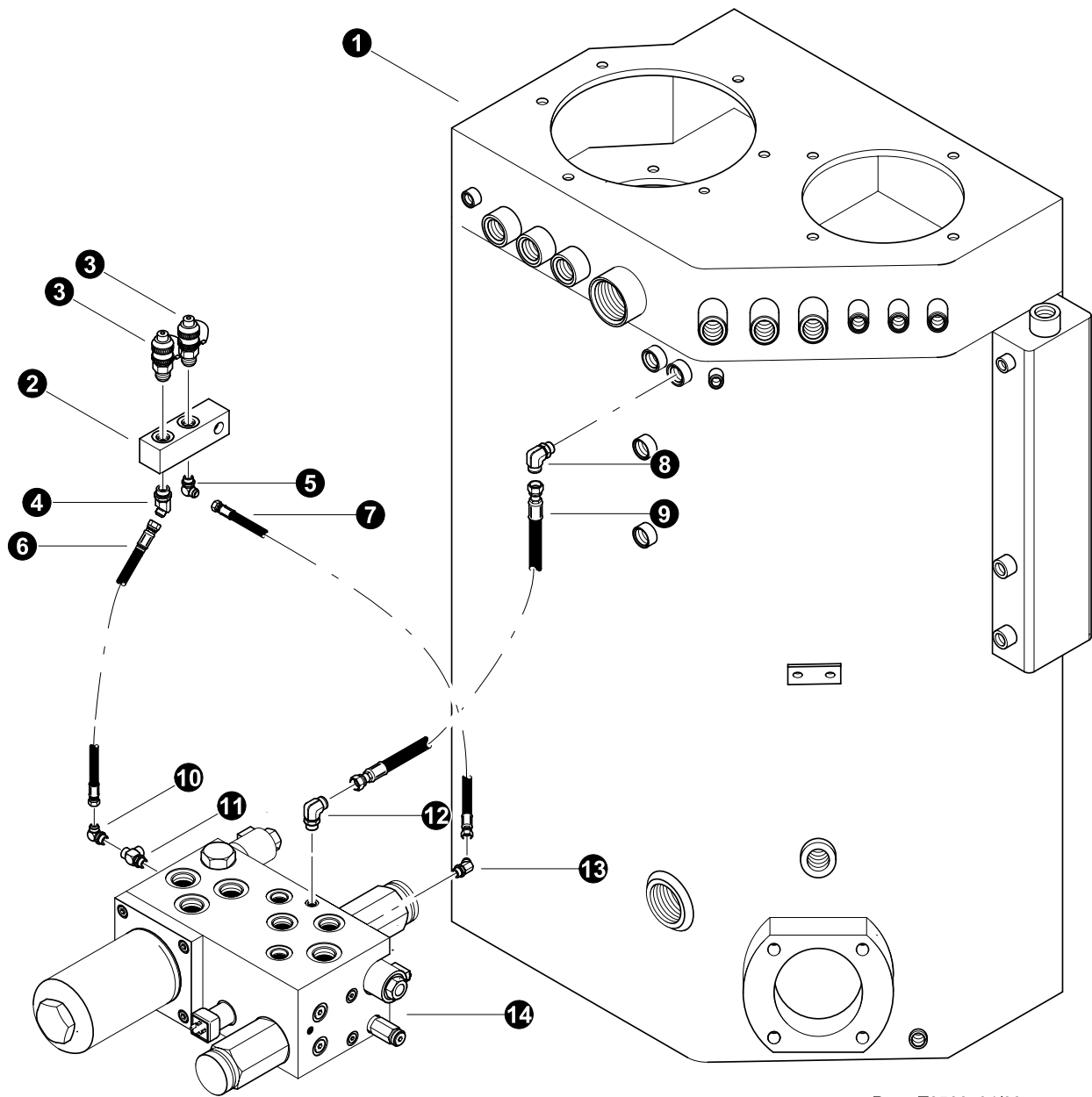
| REF | PART #   | QTY | DESCRIPTION                                                    | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------------|-------------|
| 1   | REF      | 1   | HYDRAULIC TANK ASSEMBLY.....                                   | UP-2        |
| 2   | 19127-UP | 1   | ELBOW, 45 - FF2068T-1212S                                      |             |
| 3   | -UP      | 1   | HOSE ASSEMBLY - 2136 12 12OS 1204 (T2 port to Hyd Tank Return) |             |
| 4   | 15484-UP | 1   | ELBOW, 90 - 16 C5OX-S                                          |             |
| 5   | 52970-UP | 1   | TEE, UNION - 16 JTXO                                           |             |
| 6   | 53128-UP | 1   | TUBELINE, CHARGE/FAN MANIFOLD 'T1' PORT                        |             |
| 7   | 52968-UP | 1   | ELBOW, 90 - 16 C6XO JIC                                        |             |
| 8   | 15497-UP | 1   | CONNECTOR, STR - 16 F5OX-S                                     |             |
| 9   | REF      | 1   | FAN CONTROL MANIFOLD.....                                      | UP-3        |
| 10  | 52971-UP | 1   | ELBOW, 90 - 16 CC5OX JIC/ORB (LONG)                            |             |
| 11  | 52937-UP | 1   | TUBELINE, CHARGE PUMP                                          |             |
| 12  | 15110-UP | 1   | ELBOW, 45 SWIVEL - 16 V6X-S                                    |             |
| 13  | 15484-UP | 1   | ELBOW, 90 - 16 C5OX-S                                          |             |
| 14  | REF      | 1   | WHEEL DRIVE CHARGE PUMP.....                                   | WD-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3566 04/08  
18.75

**RADIATOR AND COOLER FAN CIRCUIT****Fan Drive Gauge and Drain Connections**

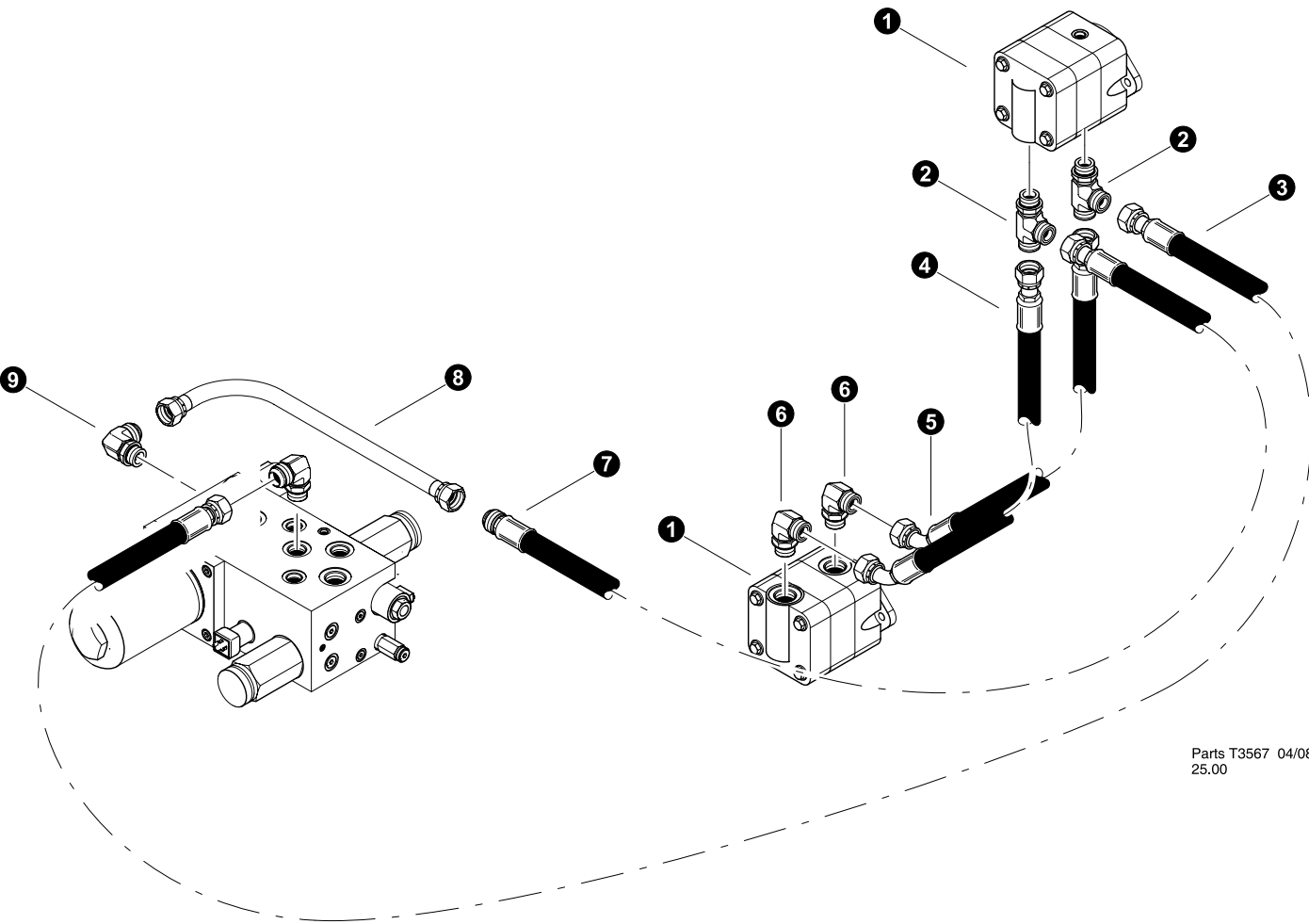
| REF | PART #   | QTY | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------|-------------|
| 1   | REF      | 1   | HYDRAULIC TANK ASSEMBLY.....      | UP-2        |
| 2   | 23544-UP | 1   | MANIFOLD, PRESSURE CHECK (2-PORT) |             |
| 3   | 16037-UP | 2   | Gauge Tap 1/4" Sae                |             |
| 4   | 51884-UP | 1   | ELBOW, 45 - (4 V50X-S)            |             |
| 5   | 51931-UP | 1   | ELBOW, 90 - 4-6 C50X-S (JIC)      |             |
| 6   | -UP      | 1   | HOSE ASSEMBLY - 2008 02 04JS 04JS |             |
| 7   | -UP      | 1   | HOSE ASSEMBLY - 2015 02 04JS 04JS |             |
| 8   | 20031-UP | 1   | ELBOW, 90 - 6-8 C5OLO-S           |             |
| 9   | -UP      | 1   | HOSE ASSEMBLY - 2022 06 06OS 06OS |             |
| 10  | 51931-UP | 1   | ELBOW, 90 - 4-6 C50X-S (JIC)      |             |
| 11  | 52186-UP | 1   | TEE, RUN - MALE (4 A0G5J5-S)      |             |
| 12  | 16296-UP | 1   | ELBOW, 90 - FF1868T-0606S         |             |
| 13  | 51884-UP | 1   | ELBOW, 45 - (4 V50X-S)            |             |
| 14  | REF      | 1   | FAN CONTROL MANIFOLD.....         | UP-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3567 04/08  
25.00

**RADIATOR AND COOLER FAN CIRCUIT****Oil Cooler Fan Motor Pressure and Tank**

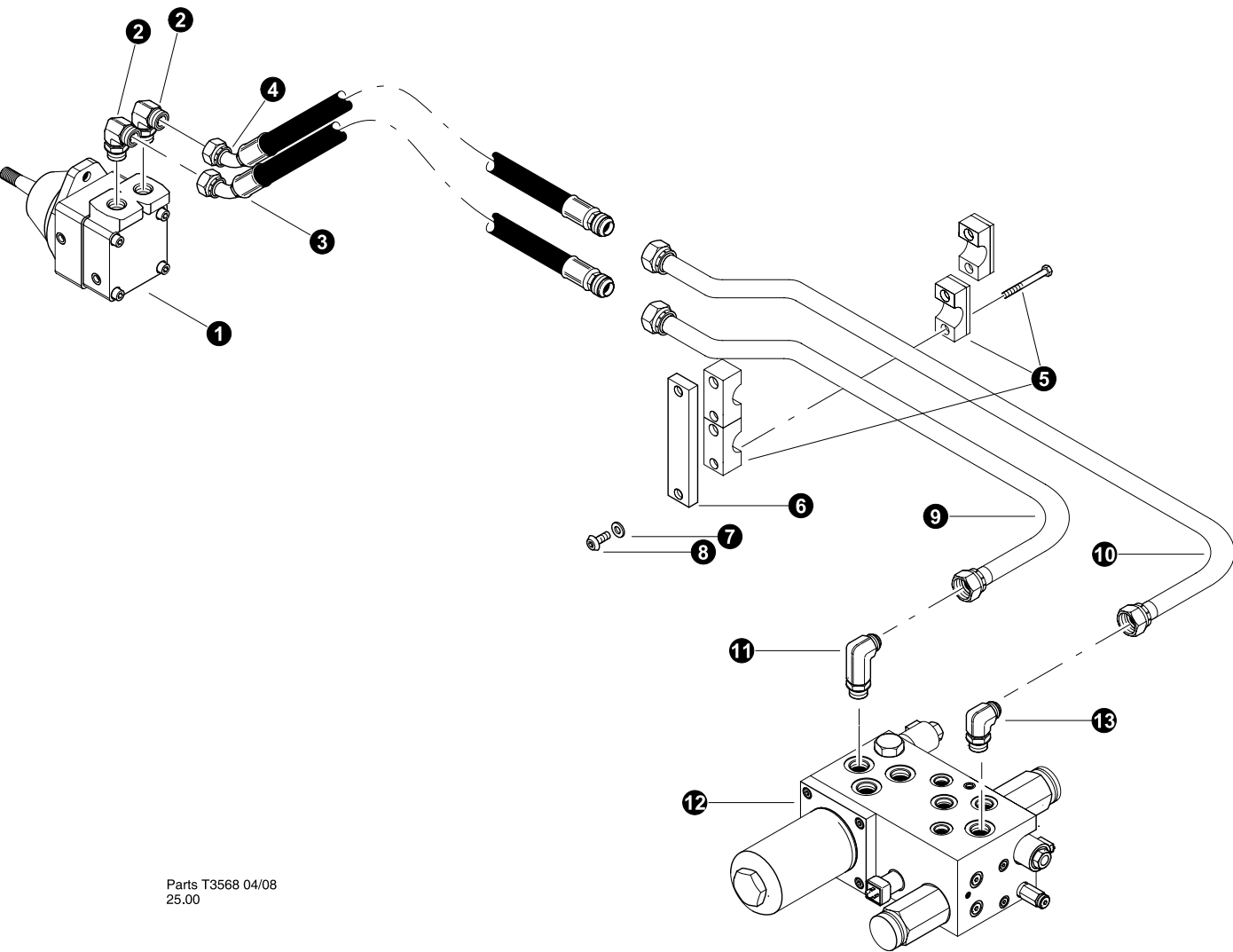
| REF | PART #   | QTY | DESCRIPTION                                                               | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------|-------------|
| 1   | REF      | 2   | FAN DRIVE MOTOR .....                                                     | UP-3        |
| 2   | 51969-UP | 2   | TEE, RUN - 12 R50LO-S                                                     |             |
| 3   | -UP      | 1   | HOSE ASSEMBLY 2032 12 12JS 12OS (HFB port on fan Manifold to Motor Tee)   |             |
| 4   | -UP      | 1   | HOSE ASSEMBLY 2011.5 12 12OS 1204 (Motor to Motor Jumper)                 |             |
| 5   | -UP      | 1   | HOSE ASSEMBLY 2011.5 12 12OS 1204 (Motor to Motor Jumper)                 |             |
| 6   | 17688-UP | 2   | ELBOW, 90 - FF1868T-1212S                                                 |             |
| 7   | -UP      | 1   | HOSE ASSEMBLY - 2032 12 12JS 120S (HFA port on Fan Manifold to Motor Tee) |             |
| 8   | 52938-UP | 1   | TUBELINE, CHARGE/FAN MANIFOLD HA PORT                                     |             |
| 9   | 15484-UP | 1   | ELBOW, 90 - 16 C5OX-S                                                     |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



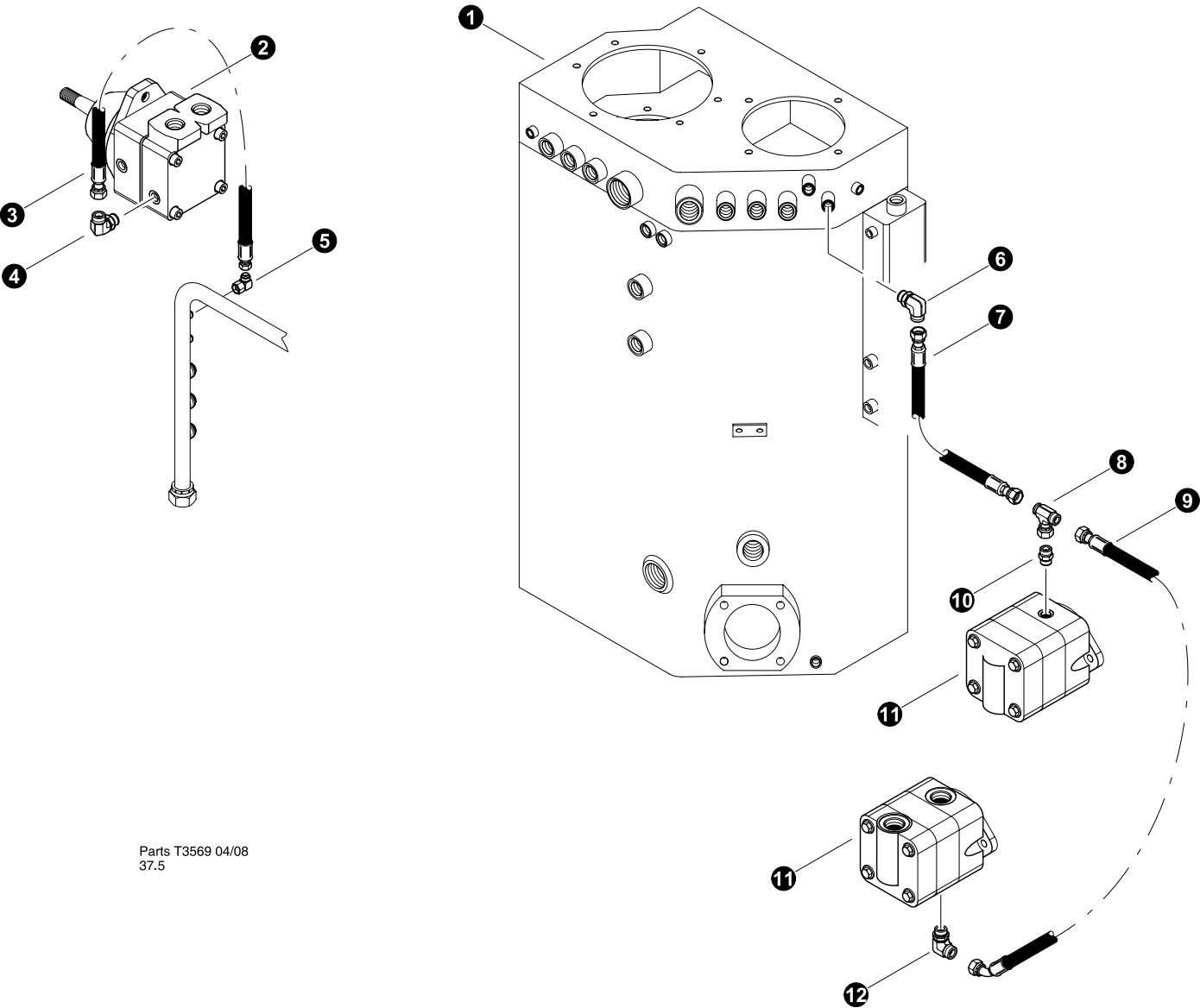
Parts T3568 04/08  
25.00

**RADIATOR AND COOLER FAN CIRCUIT****Radiator Fan Motor Pressure and Tank**

| REF | PART #   | QTY | DESCRIPTION                                                               | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------|-------------|
| 1   | REF      | 2   | FAN DRIVE MOTOR . . . . .                                                 | UP-3        |
| 2   | 19128-UP | 2   | ELBOW, 90 - FF1868T-1216S                                                 |             |
| 3   | -UP      | 1   | HOSE ASSEMBLY 2025 12 12JS 1204 (EFB port bulkhead to radiator fan motor) |             |
| 4   | -UP      | 1   | HOSE ASSEMBLY 2026 12 12JS 1204 (EFA port bulkhead to radiator fan motor) |             |
| 5   | 52992-UP | 2   | CLAMP, STEEL TUBELINE - SINGLE                                            |             |
| 6   | 52379-UP | 1   | BRACKET, SWIVEL LOCK - TORQUE ARM NEW                                     |             |
| 7   | 15559-UP | 2   | WASHER, SAE FLAT - .3125"                                                 |             |
| 8   | -UP      | 2   | BOLT, BUTTON HEAD - 5/16 (Lawson 81477)                                   |             |
| 9   | 53127-UP | 1   | TUBELINE, CHARGE/FAN MANIFOLD 'EB' PORT                                   |             |
| 10  | 53126-UP | 1   | TUBELINE, CHARGE/FAN MANIFOLD 'EA' PORT                                   |             |
| 11  | 52971-UP | 1   | ELBOW, 90 - 16 CC50X JIC/ORB (LONG)                                       |             |
| 12  | REF      | 1   | FAN CONTROL MANIFOLD. . . . .                                             | UP-3        |
| 13  | 15484-UP | 1   | ELBOW, 90 - 16                                                            |             |



See referenced page for component or assembly breakdown.



Parts T3569 04/08  
37.5



**RADIATOR AND COOLER FAN CIRCUIT****Fan Motor Case Drains**

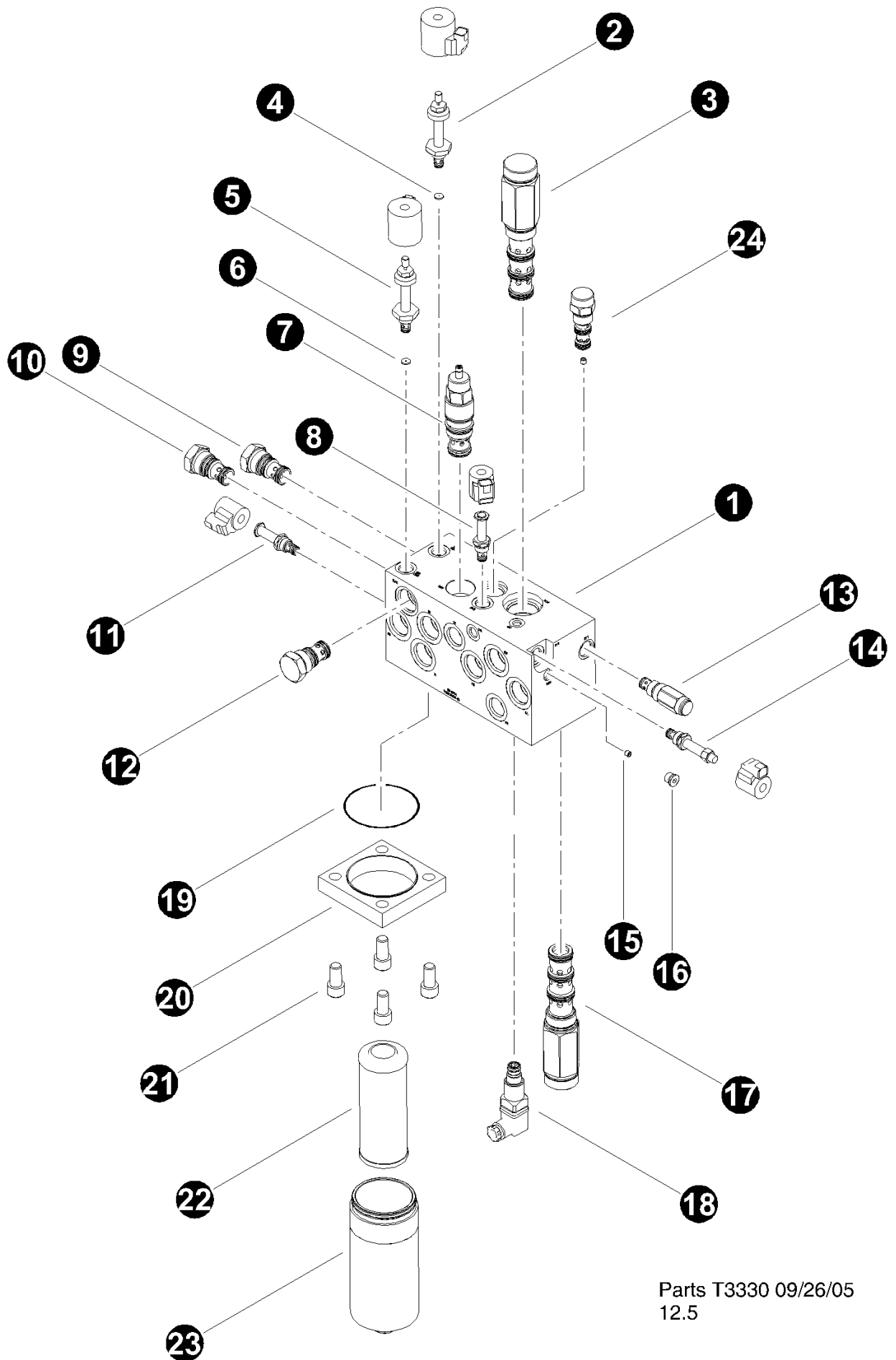
| REF | PART #   | QTY | DESCRIPTION                                                      | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | HYDRAULIC TANK BREAKDOWN .....                                   | UP-2        |
| 2   | REF      | 2   | FAN DRIVE MOTOR .....                                            | UP-3        |
| 3   | -UP      | 1   | HOSE ASSEMBLY 2022 06 04JS 06OS (Fan Motor to Case Drain Tube)   |             |
| 4   | 16296-UP | 1   | ELBOW, 90 - FF1868T-0606S                                        |             |
| 5   | 16661-UP | 1   | ELBOW, 90 SWIVEL - 6500-6                                        |             |
| 6   | 20031-UP | 1   | ELBOW, 90 - 6-8 C5OLO-S                                          |             |
| 7   | -UP      | 1   | HOSE ASSEMBLY 2009.5 06 06OS 0604 (fan motor case drain to tank) |             |
| 8   | 52900-UP | 1   | SWIVEL, NUT BRANCH TEE                                           |             |
| 9   | -UP      | 1   | HOSE ASSEMBLY 2034 06 06OS 0604 (Cooler Fan Case Jumper)         |             |
| 10  | 18034-UP | 1   | CONNECTOR, STR - FF1852T-0606S                                   |             |
| 11  | REF      | 2   | FAN DRIVE MOTOR .....                                            | UP-3        |
| 12  | 16296-UP | 1   | ELBOW, 90 - FF1868T-0606S                                        |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

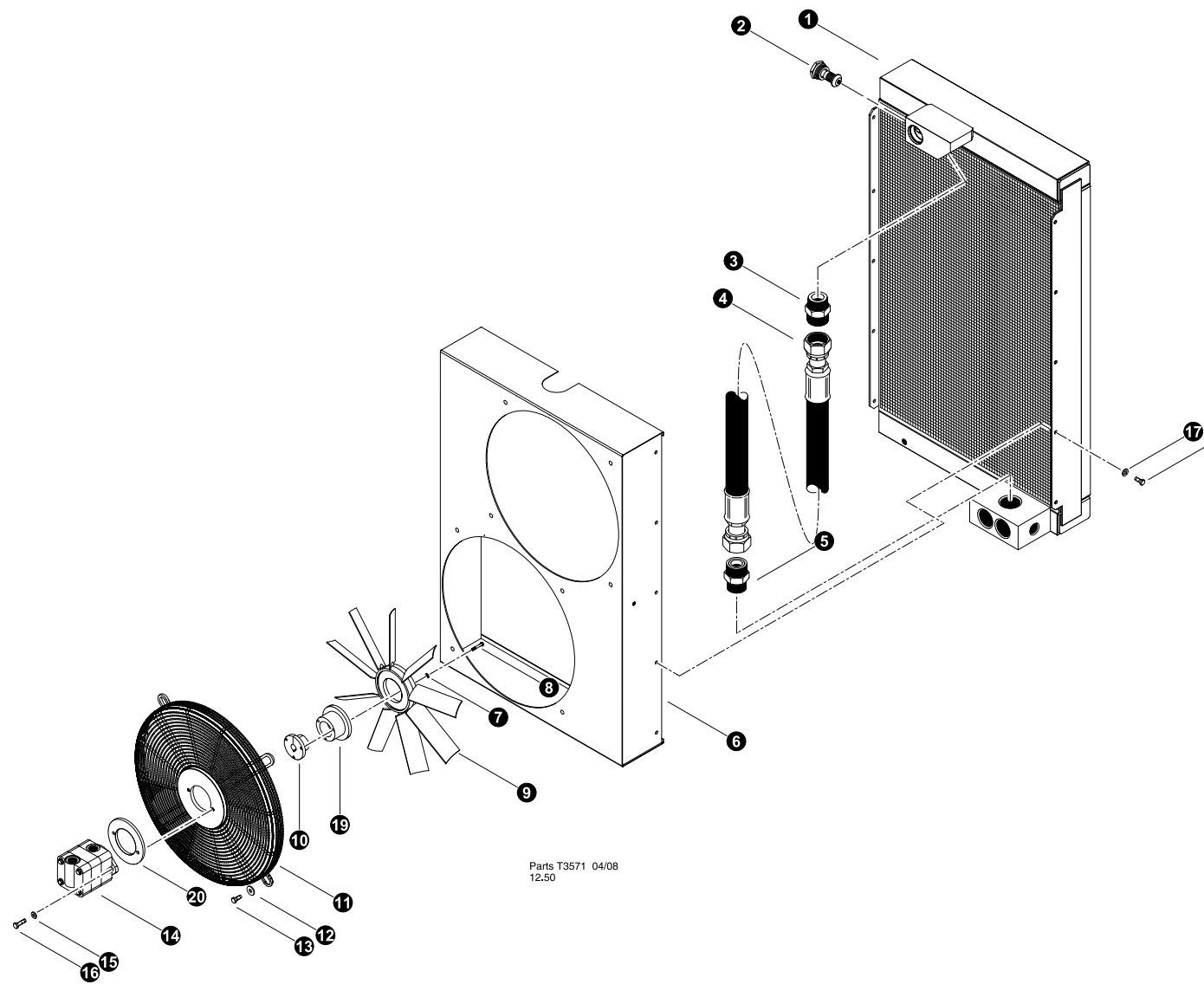


Parts T3330 09/26/05  
12.5

**RADIATOR AND COOLER FAN CIRCUIT****Fan Drive Manifold Breakdown**

| REF | PART #   | QTY |                          | DESCRIPTION                                       | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------------------------|-------------|
| -   | 52099-UP | 1   | <input type="checkbox"/> | VALVE, FAN / CHARGE SYSTEM CONTROL                |             |
| 1   | -UP      | 1   |                          | MANIFOLD, fan / charge                            |             |
| 2   | 52092-UP | 1   |                          | CARTRIDGE, HYDRAFORCE -TS38-20BM-0-N-24ER-VCO8-2  |             |
| -   | -UP      | 1   |                          | COIL, 24 V (4303724) NUT (4540560)                |             |
| -   | 52225-UP |     |                          | KIT, SEAL (SKO8-2X-B)                             |             |
| 3   | 52134-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - PD42-M40N-0-N-160-VC42-M4 |             |
| -   | 52226-UP |     |                          | KIT, SEAL (SK42-4X-MMM)                           |             |
| 4   | -UP      | 1   |                          | ORIFACE                                           |             |
| 5   | 52092-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE -TS38-20BM-0-N-24ER-VCO8-2  |             |
| -   | -UP      | 1   |                          | COIL, 24 V (4303724) - NUT (4540560)              |             |
| -   | 52225-UP |     |                          | KIT, SEAL (SKO8-2X-B)                             |             |
| 6   | -UP      | 1   |                          | ORIFACE                                           |             |
| 7   | 52223-UP | 1   | <input type="checkbox"/> | CARTRIDGE, SUN HYDRAULICS - SCGA-LDNT-17A         |             |
| -   | 52227-UP |     |                          | KIT, SEAL (990-017-006)                           |             |
| 8   | 52222-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - SV08-20-0-N-24ER          |             |
| -   | -UP      | 1   |                          | COIL, 24 V (4303624) NUT (7004400)                |             |
| -   | 52228-UP |     |                          | KIT, SEAL (SKO8-3X-MM)                            |             |
| 9   | 52220-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-70-VC16-S3   |             |
| -   | 52229-UP |     |                          | KIT, SEAL (SK16-3X-MM)                            |             |
| 10  | 52220-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-70-VC16-S3   |             |
| -   | 52229-UP |     |                          | KIT, SEAL (SK16-3X-MM)                            |             |
| 11  | 52221-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE -SV08-21-VCO8-2             |             |
| -   | -UP      | 1   |                          | COIL, 24 V (4303624) NUT (7004410)                |             |
| -   | -UP      |     |                          | KIT, SEAL (SKO8-2X-T)                             |             |
| 12  | 52220-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-0-70-VC16-S3 |             |
| -   | 52229-UP |     |                          | KIT, SEAL (SK16-3X-MM)                            |             |
| 13  | 21673-UP | 1   | <input type="checkbox"/> | CARTRIDGE, relief valve (RV10)                    |             |
| -   | -UP      |     |                          | KIT, SEAL (SK10-2X-MM)                            |             |
| 14  | 52091-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - SVO8-30M-0-P-24ER-VCO8-3  |             |
| -   | -UP      | 1   |                          | COIL, 24 V (4303624) NUT (7004400)                |             |
| -   | 52228-UP |     |                          | KIT, SEAL (SKO8-3X-MM)                            |             |
| 15  | -UP      | 1   |                          | ORIFACE                                           |             |
| 16  | -UP      | 1   |                          | PLUG                                              |             |
| 17  | 52134-UP | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - PD42-M40N-0-N-160-VC42-M4 |             |
| -   | 52226-UP |     |                          | KIT, SEAL (SK42-4X-MMM)                           |             |
| 18  | 17675-UP | 1   |                          | SWITCH, filter indicator                          |             |
| 19  | -UP      | 1   |                          | O-RING, Filter canister flange                    |             |
| 20  | -UP      | 1   |                          | FLANGE, Filter canister                           |             |
| 21  | -UP      | 4   |                          | BOLT, ALLEN -                                     |             |
| 22  | 19861-UP | 1   |                          | ELEMENT, hydrostatic charge filter                |             |
| 23  | 19864-UP | 1   | <input type="checkbox"/> | CANISTER                                          |             |
| -   | 19863-UP | 1   |                          | O-RING, canister                                  |             |
| -   | 19862-UP | 1   |                          | RING, back-up - canister                          |             |
| 24  | -UP      | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EP12-S35-0-N-90-VC12-S3   |             |
| -   | 52230-UP |     |                          | KIT, SEAL (SK12-3X-MM)                            |             |

☐ Kit or assembly. Includes all items indented underneath.



**RADIATOR AND COOLER FAN CIRCUIT****Oil Cooler Breakdown**

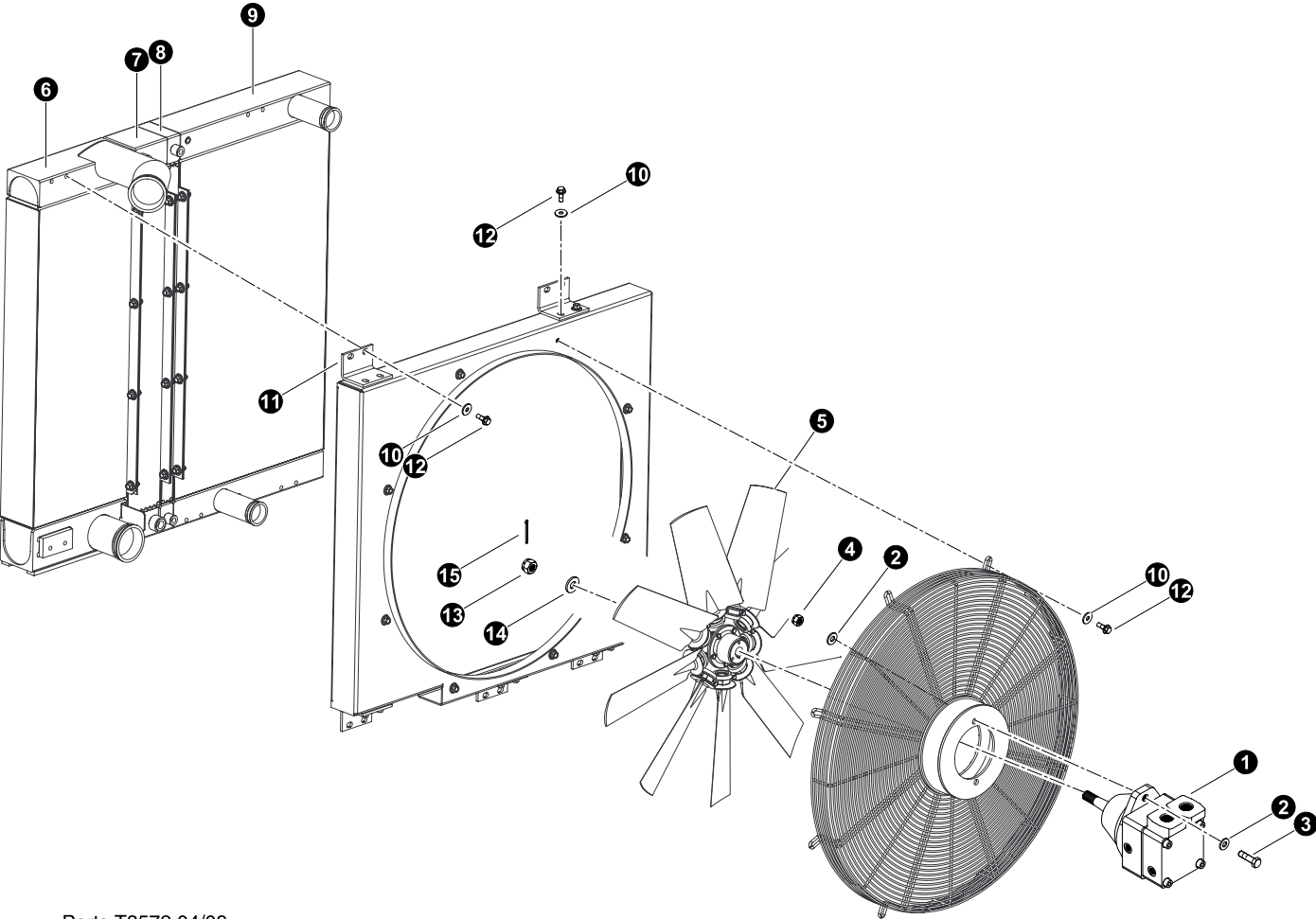
| REF | PART #   | QTY |   | DESCRIPTION                               | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------|-------------|
| -   | 52534-UP | 1   | ☐ | COOLER, OIL - HYD REMOTE MOUNT (complete) |             |
| 1   | 52018-UP | 1   |   | OIL COOLER, CORE (830)                    |             |
| 2   | 22491-UP | 1   |   | VALVE, RELIEF - 1.5" BYPASS (GT)          |             |
| 3   | 22319-UP | 1   |   | CONNECTOR, STR - THERMAL BYPASS (GT)      |             |
| 4   |          | 1   |   | HOSE ASSEMBLY -                           |             |
| 5   | 22319-UP | 1   |   | CONNECTOR, STR - THERMAL BYPASS (GT)      |             |
| 6   | 52017-UP | 1   | ☐ | SHROUD, OIL COOLER                        |             |
| 7   | 10818-UP | 6   |   | BOLT - .25" X 3"                          |             |
| 8   | 10756-UP | 6   |   | WASHER, LOCK - .25"                       |             |
| 9   | 52020-UP | 2   |   | FAN, OIL COOLER 19" (830)                 |             |
| 10  | 52505-UP | 1   |   | HUB, TAPER FAN - OIL COOLER (830)         |             |
| 11  | 52019-UP | 2   |   | GUARD, FAN (830 OIL COOLER)               |             |
| 12  |          | 8   |   | WASHER, .375" (FENDER WASHER)             |             |
| 13  | 11707-UP | 8   |   | BOLT - .375" X 1"                         |             |
| 14  | REF      | 2   | ☐ | MOTOR, HYDRAULIC OIL COOLER FAN. . . . .  | UP-3        |
| 15  | 10701-UP | 4   |   | WASHER, LOCK - .375"                      |             |
| 16  | 10402-UP | 4   |   | BOLT - .375" X 1.25"                      |             |
| 17  | 15559-UP | 10  |   | WASHER, SAE FLAT - .3125"                 |             |
| 18  | 15605-UP | 10  |   | BOLT - .3125" X .75"                      |             |
| 19  | 52034-UP | 1   |   | HUB, FAN MOUNT - COOLER (830)             |             |
| 20  | 52996-UP | 1   |   | SPACER, FAN MOTOR OIL COOLER              |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3572 04/08  
25

**RADIATOR AND COOLER FAN CIRCUIT****Radiator Breakdown**

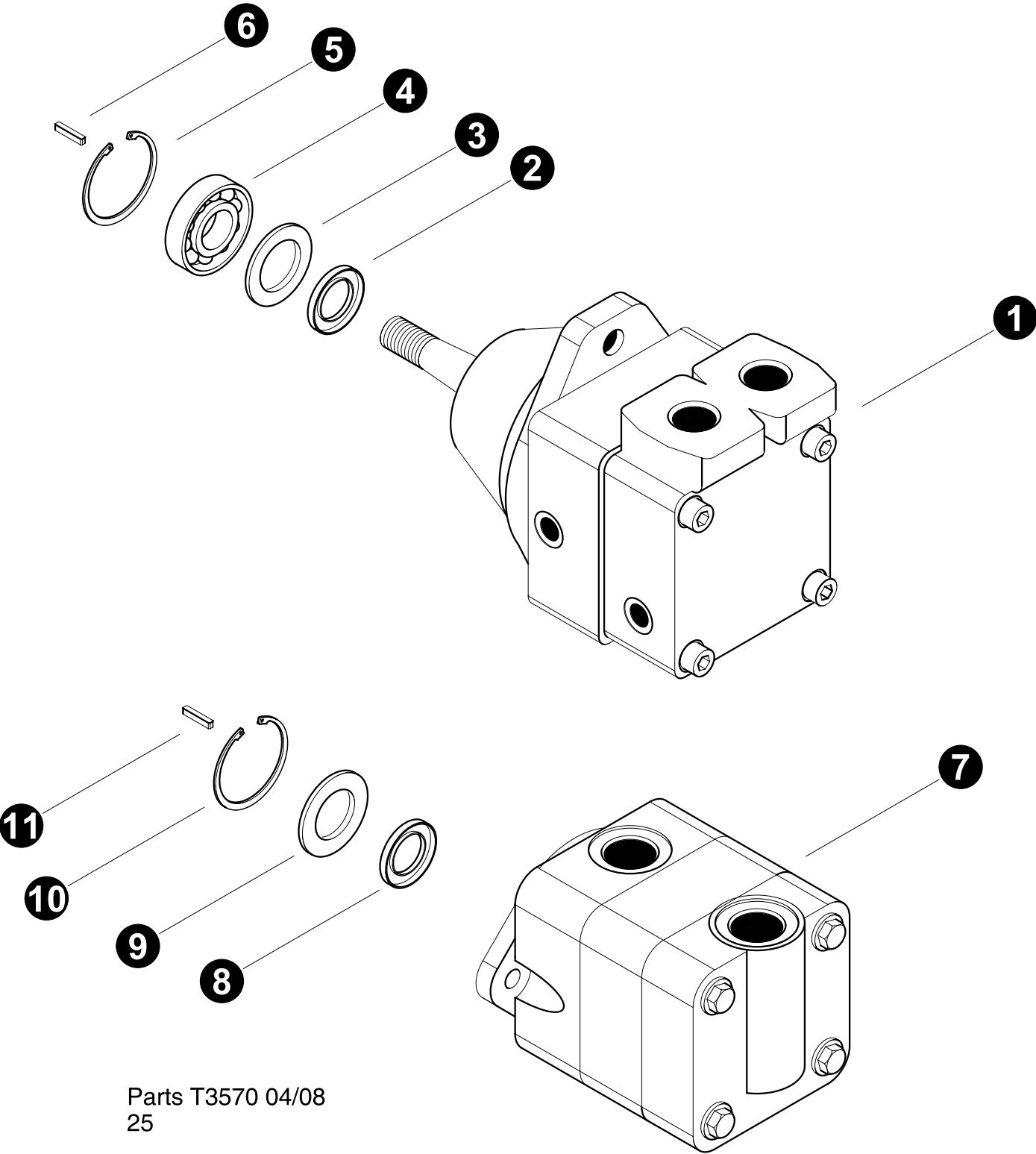
| REF | PART #   | QTY |   | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------|-------------|
| 1   | REF      | 1   |   | MOTOR, RADIATOR FAN .....                  | UP-3        |
| 2   | 10736-UP | 2   |   | BOLT - .5" X 2"                            |             |
| 3   | 15534-UP | 4   |   | WASHER, SAE FLAT - .5"                     |             |
| 4   | 10815-UP | 2   |   | NUT, LOCK - .5"                            |             |
| 5   | 53216-UP | 1   |   | FAN, ENGINE - AKG RADIATOR                 |             |
| -   | 52799-UP | 1   | ☐ | RADIATOR/CHARGE AIR - HYD DRIVE (AKG)      |             |
| 6   | -UP      | 1   |   | Charge Air Cooler (AKG 3918.002.5000)      |             |
| 7   | -UP      | 1   |   | A/C Condenser (AKG 3918.002.6000)          |             |
| 8   | -UP      | 1   |   | Gearbox Oil Cooler (AKG 3918.002.4000)     |             |
| 9   | -UP      | 1   |   | Radiator (AKG 3918.002.2000)               |             |
| 10  | -UP      | 30  |   | Washer, 3/8" (AKG 8054.036.0000)           |             |
| 11  | -UP      | 1   |   | Bracket, angle (AKG 3918.002.0001)         |             |
| 12  | -UP      | 30  |   | Bolt, flanged head 3/8 (AKG 8050.037.0000) |             |
| 13  | 53189-UP | 1   |   | NUT, CASTLE - M16-1.5                      |             |
| 14  | 10771-UP | 1   |   | WASHER, SAE FLAT - .625"                   |             |
| 15  | -UP      | 1   |   | Pin, cotter 1" x 1/8" (Lawson 1029)        |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3570 04/08  
25



**RADIATOR AND COOLER FAN CIRCUIT****Fan Drive Motors**

| REF | PART #   | QTY |   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|---|------------------------------------------|-------------|
| 1   | 52979-UP | 1   | ☐ | MOTOR, FAN DRIVE - RADIATOR (VANE STYLE) |             |
| 2   | -UP      | 1   |   | SEAL, SHAFT - RADIATOR FAN MOTOR         |             |
| 3   |          | 1   |   | RETAINER, SEAL                           |             |
| 4   |          | 1   |   | BEARING                                  |             |
| 5   |          | 1   |   | RING, SNAP                               |             |
| 6   |          | 1   |   | KEY -                                    |             |
| 7   | 52875-UP | 1   | ☐ | MOTOR, FAN DRIVE - OIL COOLER (VANE STYL |             |
| 8   | -UP      | 1   |   | SEAL, SHAFT                              |             |
| 9   |          | 1   |   | RETAINER, SEAL                           |             |
| 10  |          | 1   |   | RING, SNAP                               |             |
| 11  |          | 1   |   | KEY -                                    |             |



See referenced page for component or assembly breakdown.



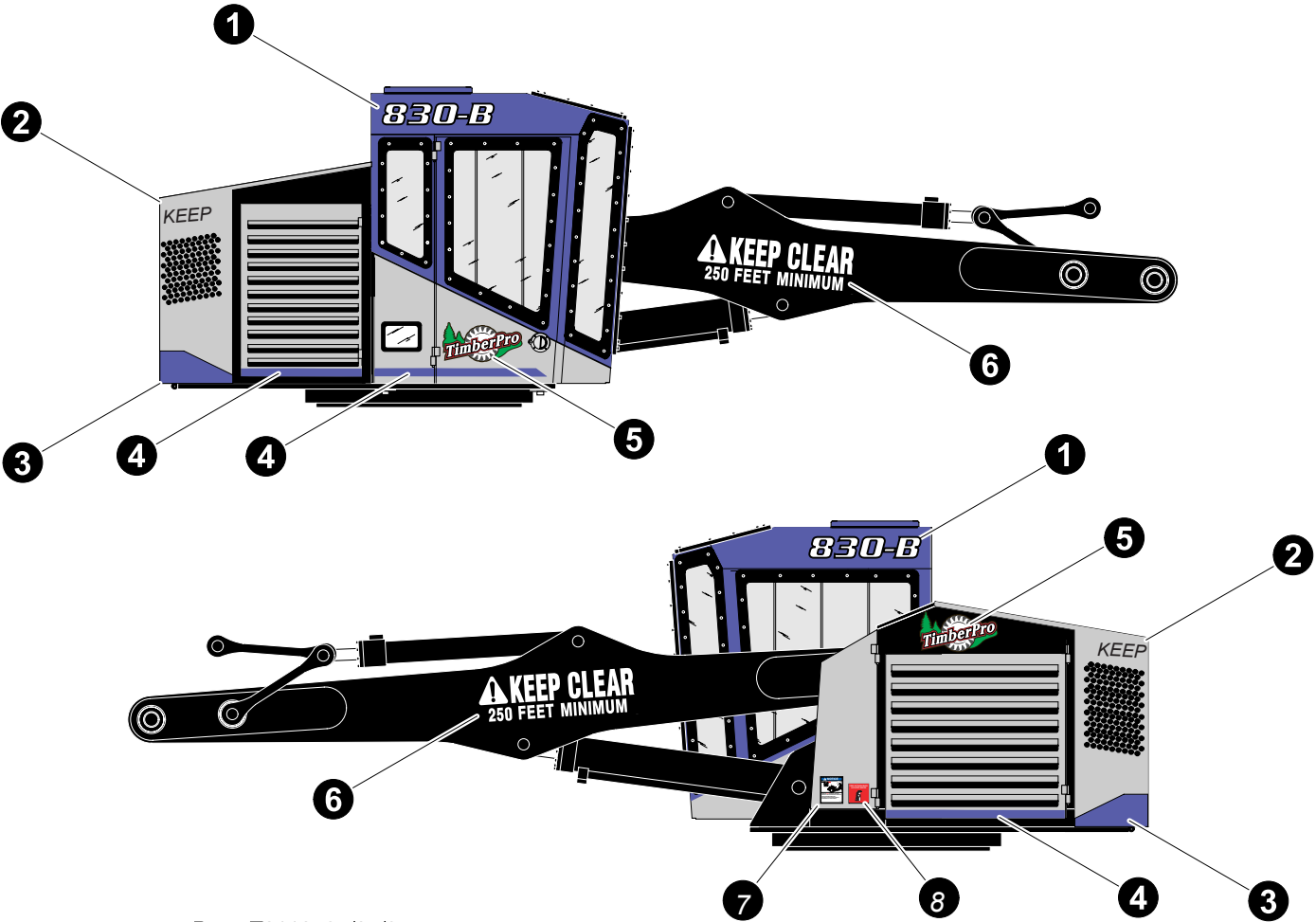
Kit or Assembly - includes all items indented underneath.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

# Section UP-4

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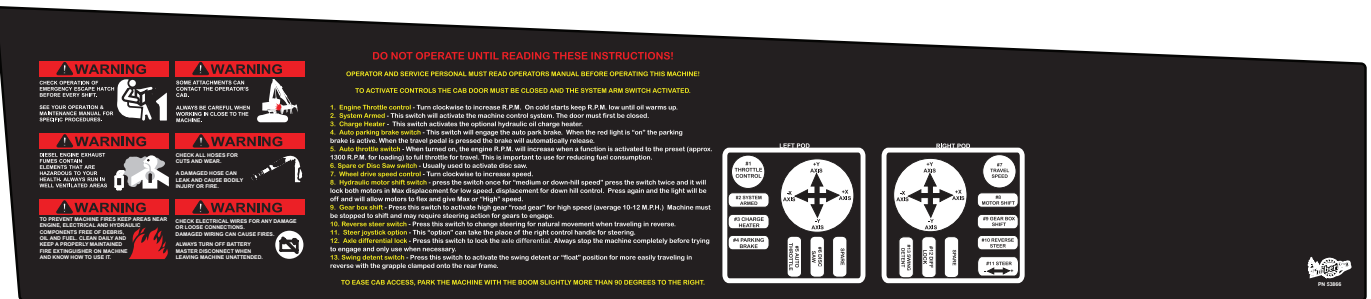
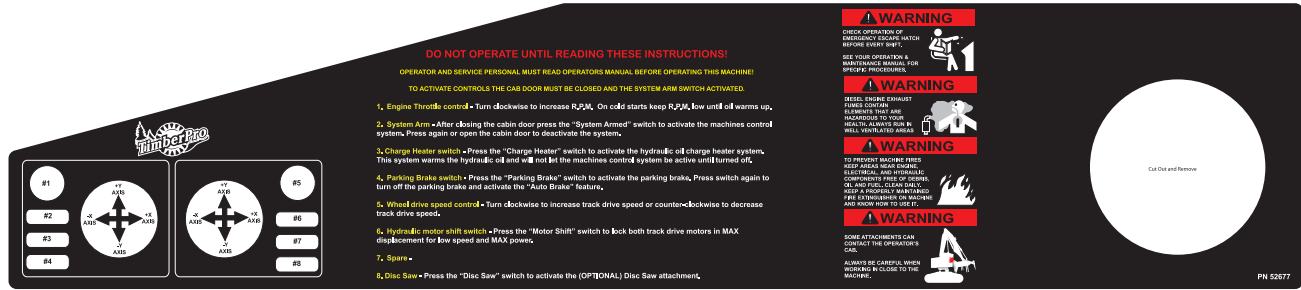
## Upper Turntable - Decals



Parts T3119 05/25/05

**UPPER TURNTABLE DECALS**

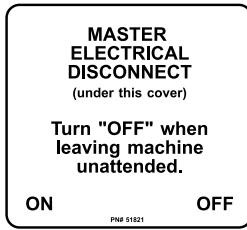
| REF | PART #     | QTY   | DESCRIPTION                                     | SEE SECTION |
|-----|------------|-------|-------------------------------------------------|-------------|
| 1   | 53090-UP   | 2     | DECAL, MODEL# - TF830-B                         |             |
|     | 53091-UP   | 2     | DECAL, MODEL# - TF840-B                         |             |
|     | 53089-UP   | 2     | DECAL, MODEL# - TF630-B                         |             |
|     | 53248-UP   | 2     | DECAL, MODEL# - TN725-B                         |             |
|     | 53247-UP   | 2     | DECAL, MODEL# - TL725-B                         |             |
|     | 52678-UP   | 2     | DECAL, MODEL# - TL735-B                         |             |
|     |            |       |                                                 |             |
| 2   | 51917en-UP | 1     | DECAL, KEEP CLEAR 250 FEET - GULLWING (ENGLISH) |             |
|     | 51917ru-UP | 1     | DECAL, KEEP CLEAR 250 FEET - GULLWING (RUSSIAN) |             |
|     | 51917fr-UP | 1     | DECAL, KEEP CLEAR 250 FEET - GULLWING (FRENCH)  |             |
| 3   | 51914-UP   | 1     | DECAL, GULLWING STRIP - RED                     |             |
|     | 51915-UP   | 1     | DECAL, GULLWING STRIP - GREEN                   |             |
|     | 51916-UP   | 1     | DECAL, GULLWING STRIP - BLUE                    |             |
| 4   | 51918-UP   | 10 ft | DECAL, ACCENT STRIP - 2 INCH WIDTH (RED)        |             |
|     | 51919-UP   | 10 ft | DECAL, ACCENT STRIP - 2 INCH WIDTH (GREEN)      |             |
|     | 51920-UP   | 10 ft | DECAL, ACCENT STRIP - 2 INCH WIDTH (BLUE)       |             |
| 5   | 50695-UP   | 2     | DECAL, TIMBERPRO LOGO - 18" WHEEL               |             |
| 6   | 16059en-UP | 2     | DECAL, KEEP CLEAR (ENGLISH)                     |             |
|     | 16059ru-UP | 2     | DECAL, KEEP CLEAR (RUSSIAN)                     |             |
|     | 16059fr-UP | 2     | DECAL, KEEP CLEAR (FRENCH)                      |             |
| 7   | 24286-UP   | 1     | DECAL, WELDING NOTICE                           |             |
| 8   | 51820-UP   | 1     | DECAL, Fire Extinguisher inside                 |             |



**UPPER TURNTABLE DECALS****CAB DECALS**

| REF | PART #     | QTY | DESCRIPTION                                      | SEE SECTION |
|-----|------------|-----|--------------------------------------------------|-------------|
| 1   | 53035en-UP | 1   | DECAL, DASH - Slope Top (WHEELED) English        |             |
|     | 53035sp-UP | 1   | DECAL, DASH - Slope Top (WHEELED) Spanish        |             |
|     | 53035fr-UP | 1   | DECAL, DASH - Slope Top (WHEELED) French         |             |
|     | 53035ru-UP | 1   | DECAL, DASH - Slope Top (WHEELED) Russian        |             |
| 2   | 53866en-UP | 1   | DECAL, DASH - FLAT TOP (WHEELED) English         |             |
|     | 53866sp-UP | 1   | DECAL, DASH - FLAT TOP (WHEELED) Spanish         |             |
|     | 53866fr-UP | 1   | DECAL, DASH - FLAT TOP (WHEELED) French          |             |
|     | 53866ru-UP | 1   | DECAL, DASH - FLAT TOP (WHEELED) Russian         |             |
| 3   | 50694-UP   | 1   | DECAL, TIMBERPRO LOGO - 10" WHEEL                |             |
| 4   | 51873-UP   | 1   | DECAL, Vacuum Switch Warning                     |             |
| 5   | 51720-UP   | 1   | DECAL, electrical center warning                 |             |
| 6   | 51983-UP   | 1   | Decal, Flag USA 830-630                          |             |
| 7   | 18066-UP   | 1   | DECAL, TAPERED HUB TORQUE                        |             |
| 8   | 16062en-UP | 1   | DECAL, CAB OPS INSTRUCTION (english)             |             |
|     | 16062ru-UP | 1   | DECAL, CAB OPS INSTRUCTION (russsian)            |             |
|     | 16062fr-UP | 1   | DECAL, CAB OPS INSTRUCTION (french)              |             |
| 9   | 19540-UP   | 4   | DECAL, EMERGENCY ESCAPE - 1.5" DIA.              |             |
| 10  | 19539en-UP | 2   | DECAL, EMERGENCY ESCAPE - 2" x 12.625" (english) |             |
|     | 19539ru-UP | 2   | DECAL, EMERGENCY ESCAPE - 2" x 12.625" (russian) |             |
|     | 19539fr-UP | 2   | DECAL, EMERGENCY ESCAPE - 2" x 12.625" (french)  |             |

1



4



6



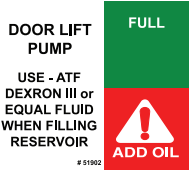
7



2



5



8



9



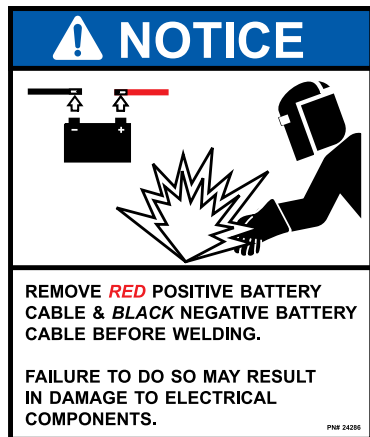
10



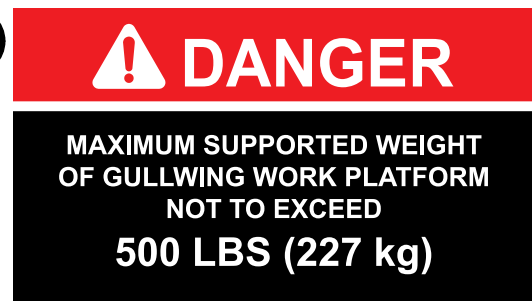
11



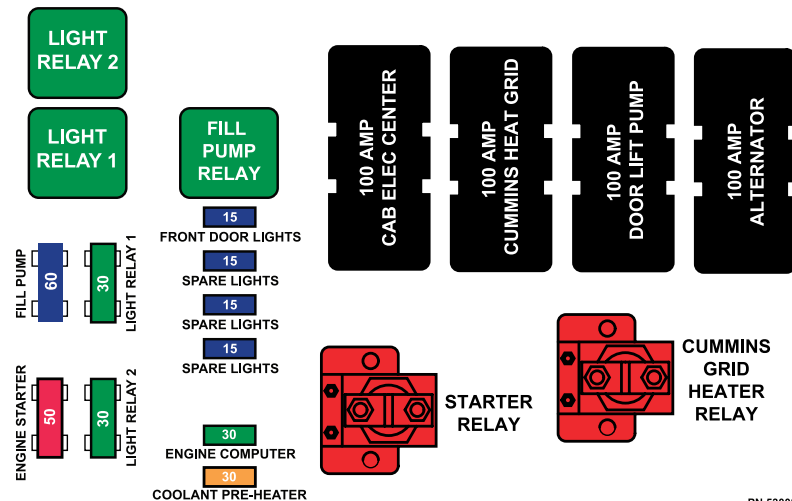
3



12



13

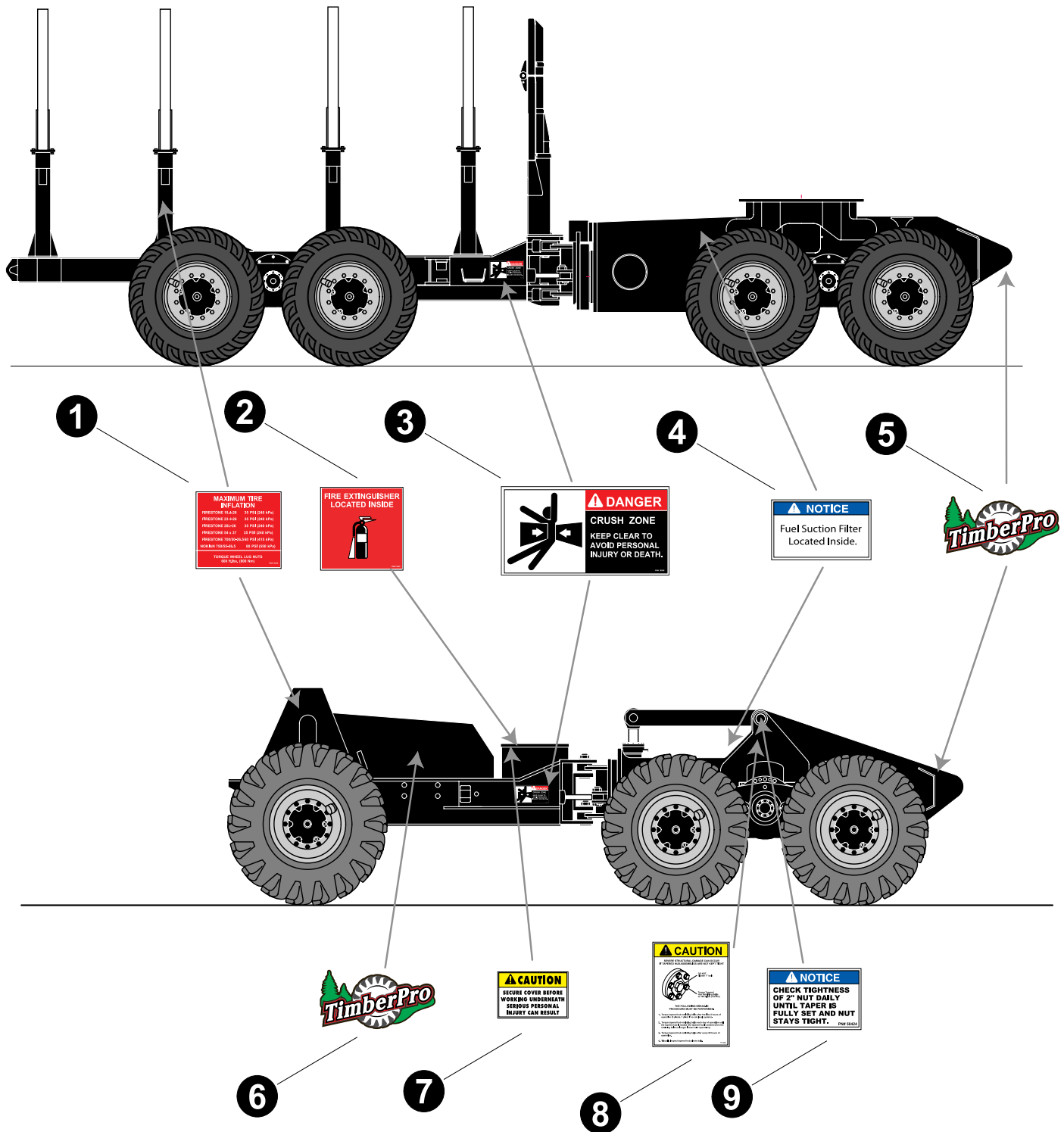


P/N 53008



**UPPER TURNTABLE DECALS****ENGINE & VALVE COMPARTMENT DECALS**

| REF | PART #   | QTY | DESCRIPTION                                      | SEE SECTION |
|-----|----------|-----|--------------------------------------------------|-------------|
| 1   | 51821-UP | 1   | DECAL, Master Disconnect Cover                   |             |
| 2   | 19765-UP | 1   | DECAL, KEEP CLEAR OF MOVING PARTS                |             |
| 3   | 24286-UP | 1   | DECAL, WELDING NOTICE - 300HP                    |             |
| 4   | 23451-UP | 1   | DECAL, GREASE FILTER CANISTER                    |             |
| 5   | 51902-UP | 1   | DECAL, Door Lift Pump Oil                        |             |
| 6   | 53201-UP | 1   | DECAL, pressure test charge (wheeled machine)    |             |
| 7   | 53202-UP | 1   | DECAL, pressure test imp drive (wheeled machine) |             |
| 8   | 53200-UP | 1   | DECAL, pressure test imp drive (track machine)   |             |
| 9   | 25959-UP | 1   | DECAL, DIESEL FUEL ONLY                          |             |
| 10  | 51820-UP | 1   | DECAL, Fire Extinguisher inside                  |             |
| 11  | 51927-UP | 1   | DECAL, Fire Suppression actuator inside          |             |
| 12  | 52672-UP | 1   | DECAL, GULLWING SUPPORT WEIGHT WARNING           |             |
| 13  | 53008-UP | 1   | DECAL, engine electrical center MDL              |             |



**UPPER TURNTABLE DECALS****TF 830, 840, AND 630 LOWER FRAME DECALS**

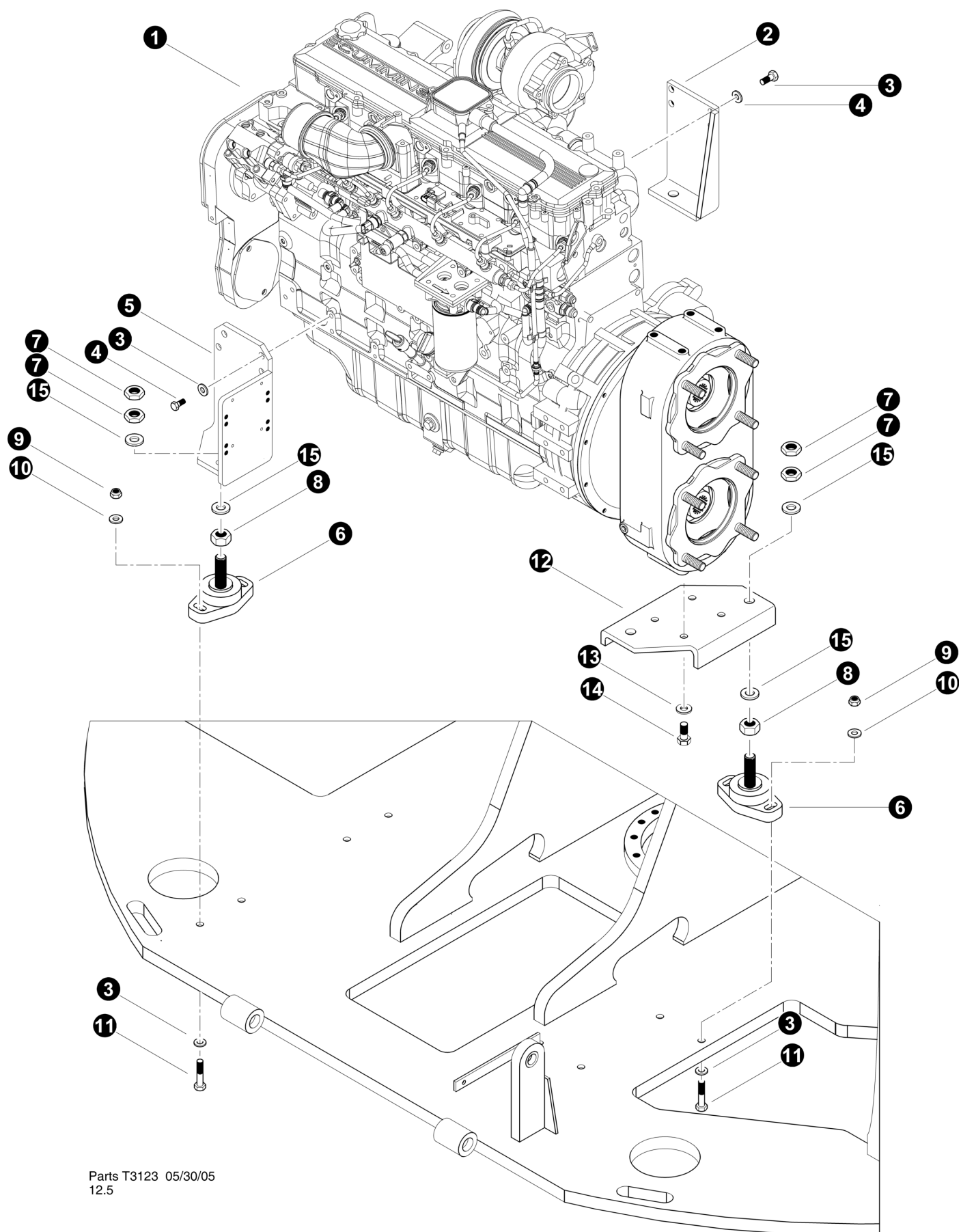
| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | 50964-UP | 2   | DECAL, TIMBERPRO LOGO - 10" WHEEL   |             |
| 2   | 19678-UP | 4   | DECAL, TIRE PRESSURE                |             |
| 3   | 16060-UP | 8   | DECAL, DANGER CRUSH ZONE            |             |
| 4   | 51261-UP | 1   | DECAL, Fuel Suction Filter location |             |
| 5   | 50695-UP | 2   | DECAL, TIMBERPRO LOGO - 18" WHEEL   |             |
| 6   | 50424-UP | 2   | DECAL, TORQUE 2" NUT NOTICE         |             |
| 7   | 50359-UP | 2   | DECAL, SECURE COVER CAUTION         |             |
| 8   | 18066-UP | 2   | DECAL, TAPERED HUB TORQUE           |             |
| 9   | 50424-UP | 2   | DECAL, TORQUE 2" NUT NOTICE         |             |

[illegible]

# ***Section EE-1***

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## ***Cummins QSC Engine - Installation and Parts***



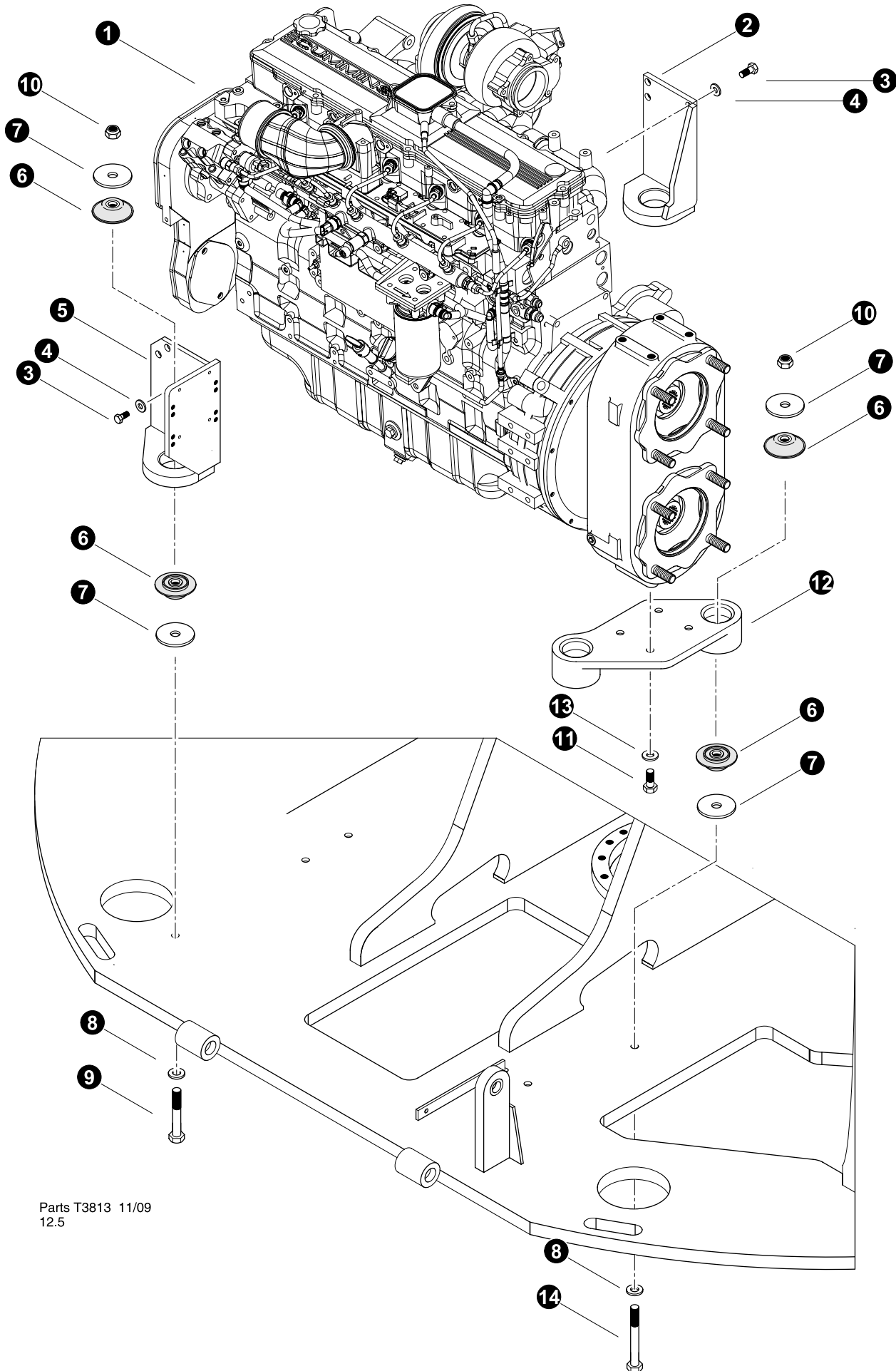
# ENGINE INSTALLATION

## Cummins QSC 8.3L

### (machine SN-0322 and before)

| REF | PART #   | QTY |   | DESCRIPTION                                                       | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------------------------------|-------------|
| 1   | 52154-EE | 1   |   | ENGINE, CUMMINS - C8.3 - 300HP (TIER 3)                           |             |
| 2   | 51602-EE | 1   |   | MOUNT, ENGINE - C8.3 (RF-300)                                     |             |
| 3   | 15534-EE | 14  |   | WASHER, SAE FLAT - .5"                                            |             |
| 4   | 15551-EE | 8   |   | BOLT - 12mm-1.75P x 40mm ( <b>Torque to 92 ft.lbs. (122 Nm)</b> ) |             |
| 5   | 51601-EE | 1   |   | MOUNT, ENGINE - C8.3 (LF-300)                                     |             |
| 6   | 51678-EE | 4   | ☐ | ISOLATOR, ENGINE MOUNT - MARINE STYLE                             |             |
| 7   | -EE      | 8   |   | NUT, JAM - .75"                                                   |             |
| 8   | 10776-EE | 4   |   | NUT, HEX - .75"                                                   |             |
| 9   | 10815-EE | 8   |   | NUT, LOCK - .5"                                                   |             |
| 10  | 10804-EE | 8   |   | WASHER, FLAT - .5"                                                |             |
| 11  | 15567-EE | 8   |   | BOLT - .5" X 2.5"                                                 |             |
| 12  | 51647-EE | 1   |   | MOUNT, ENGINE REAR 830/630                                        |             |
| 13  | 10771-EE | 4   |   | WASHER, SAE flat - 5/8                                            |             |
| 14  | 15526-EE | 4   |   | BOLT - 5/8" x 2" ( <b>Torque to 92 ft.lbs. (122 Nm)</b> )         |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T3813 11/09  
12.5



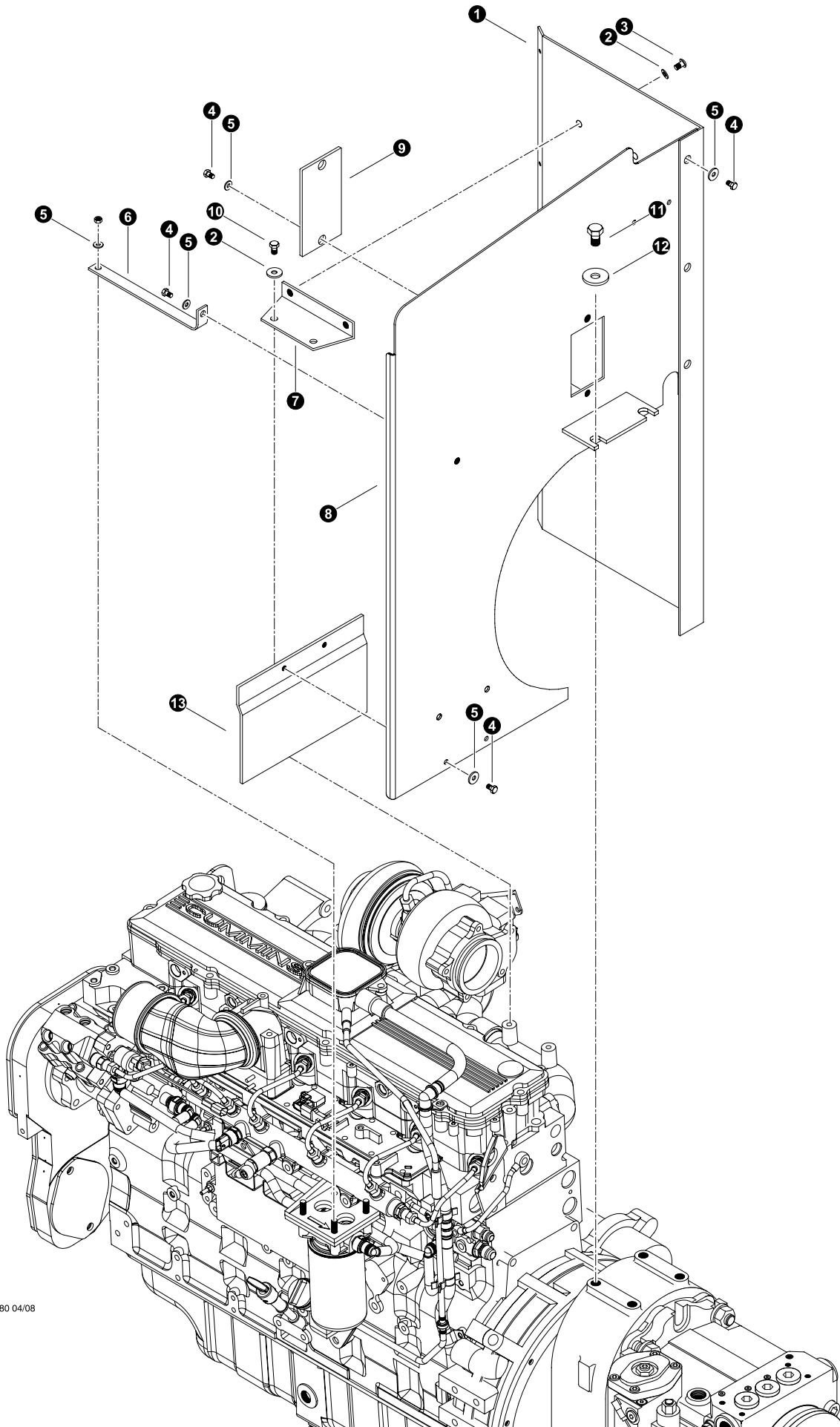
## ENGINE INSTALLATION

### Cummins QSC 8.3L

#### (machine SN-0323 and after)

| REF | PART #   | QTY | DESCRIPTION                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------|-------------|
| 1   | 52154-EE | 1   | ENGINE, CUMMINS - C8.3 - 300HP (TIER 3)                         |             |
| 2   | 53936-EE | 1   | MOUNT, ENGINE - C8.3 (RF-300)CAT MT                             |             |
| 3   | 15534-EE | 8   | WASHER, SAE FLAT - .5"                                          |             |
| 4   | 15551-EE | 8   | BOLT - 12mm-1.75P x 40mm <b>(Torque to 92 ft.lbs. (122 Nm))</b> |             |
| 5   | 53937-EE | 1   | MOUNT, ENGINE - C8.3 (LF-300)CAT MT                             |             |
| 6   | 17904-EE | 8   | ISOLATOR, ENGINE MOUNT (CAT)                                    |             |
| 7   | 17918-EE | 8   | WASHER, isolator mount .875"                                    |             |
| 8   | 15550-EE | 8   | WASHER, SAE flat - 3/4"                                         |             |
| 9   | 10845-EE | 2   | BOLT - 3/4" x 5.5"                                              |             |
| 10  | 10817-EE | 2   | NUT, lock 3/4"                                                  |             |
| 11  | 15526-EE | 4   | BOLT - 5/8" x 2" <b>(Torque to 92 ft.lbs. (122 Nm))</b>         |             |
| 12  | 53938-EE | 1   | MOUNT, ENGINE REAR 830/630 CAT MT                               |             |
| 13  | 10771-EE | 4   | WASHER, SAE flat - 5/8                                          |             |
| 14  | -EE      | 2   | BOLT - 3/4" x ?"                                                |             |

☐ Kit or Assembly - includes all items indented underneath.

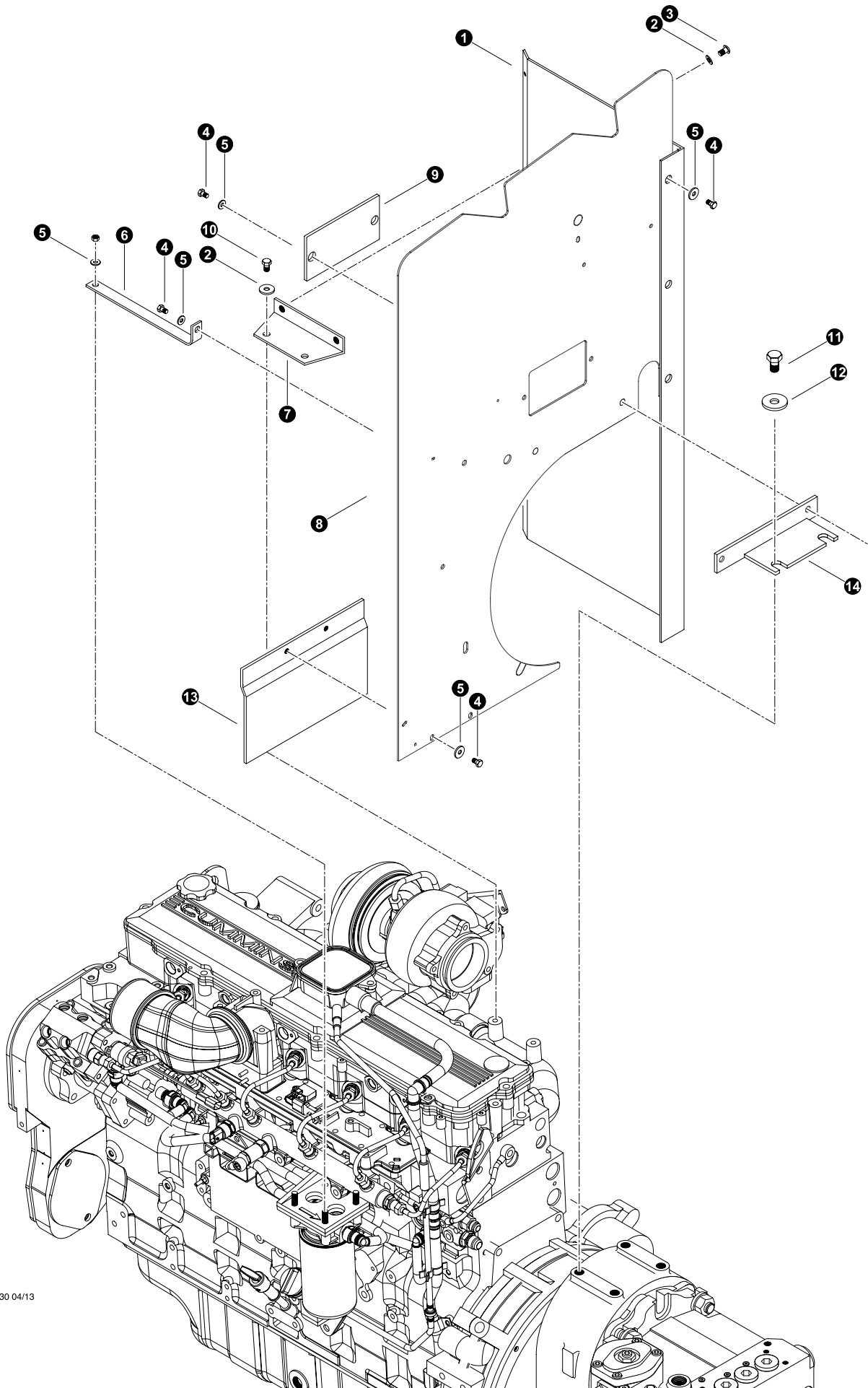


Parts T3580 04/08  
25.00

**BARRIER PANELS - REAR**  
**Cummins QSC 8.3L**  
**SN 0445 AND Before**

| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | 52920-EE | 1   | BARRIER, FRONT WHEEL MACHINES C8.3  |             |
| 2   | 10802-EE | 2   | WASHER, FLAT - .375"                |             |
| 3   | -EE      | 2   | BOLT, BUTTON HEAD - 3/8"-16 (81477) |             |
| 4   | 15605-EE | 8   | BOLT - .3125" X .75"                |             |
| 5   | 15559-EE | 8   | WASHER, SAE FLAT - .3125"           |             |
| 6   | 42661-EE | 1   | BRACE, BARRIER                      |             |
| 7   | 52705-EE | 1   | BRACKET, BARRIER (WHEEL MACHINES)   |             |
| 8   | 52983-EE | 1   | BARRIER, REAR                       |             |
| 9   | -EE      | 1   | COVER, REAR BARRIER                 |             |
| 10  | 17395-EE | 2   | BOLT - 10MM-1.5P X 20MM             |             |
| 11  | 15502-EE | 2   | BOLT - .625" X 1.5"                 |             |
| 12  | 10771-EE | 2   | WASHER, SAE FLAT - .625"            |             |
| 13  | 52703-EE | 1   | BARRIER, BOTTOM (WHEEL MACHINES)    |             |

☐ Kit or Assembly - includes all items indented underneath.

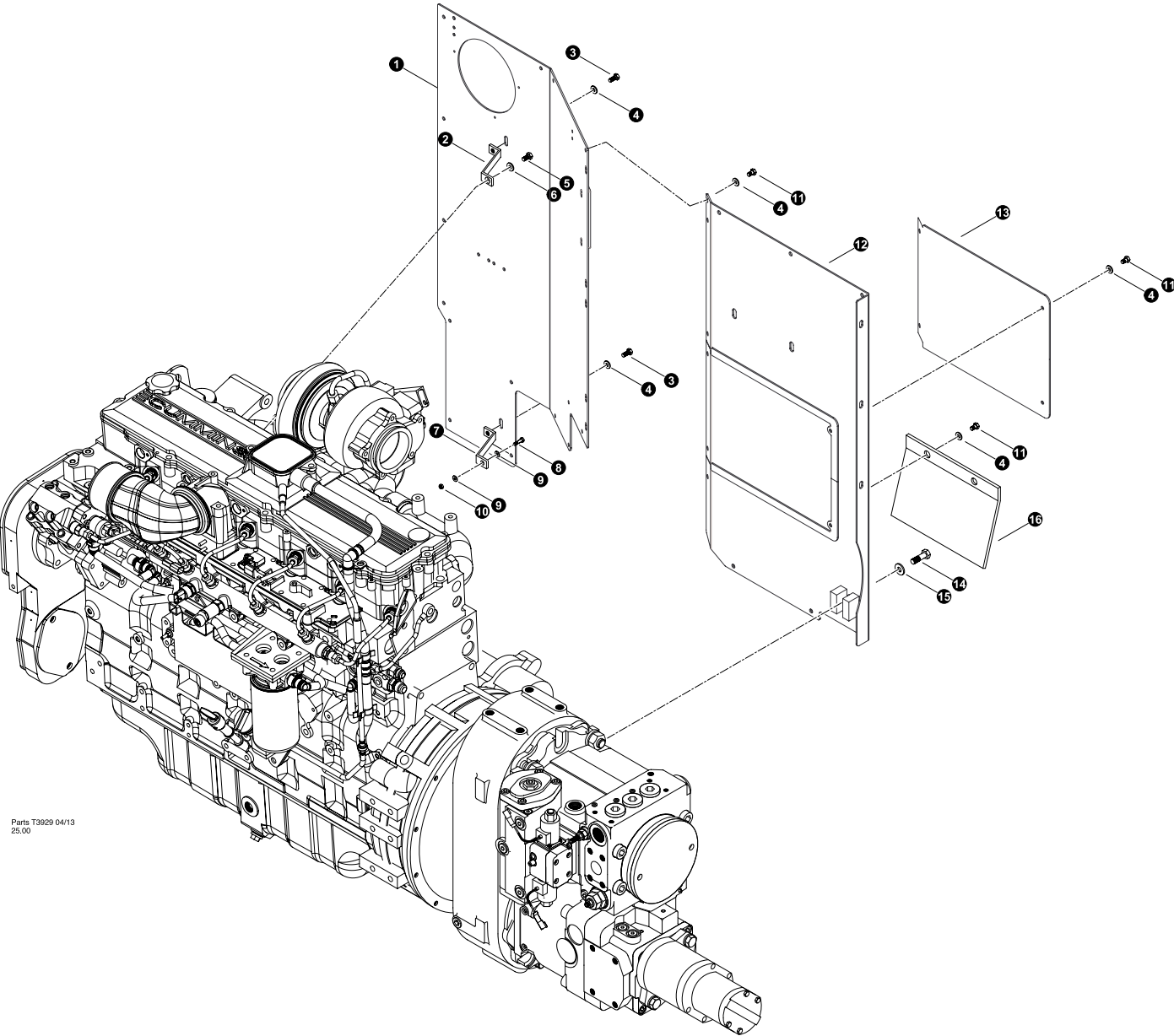


Parts T3930 04/13  
25.00

**BARRIER PANELS - REAR**  
**Cummins QSC 8.3L**  
**SN 0446 AND AFTER**

| REF | PART #   | QTY | DESCRIPTION                            | SEE SECTION |
|-----|----------|-----|----------------------------------------|-------------|
| 1   | 52920-EE | 1   | BARRIER, FRONT WHEEL MACHINES C8.3     |             |
| 2   | 10802-EE | 2   | WASHER, FLAT - .375"                   |             |
| 3   | -EE      | 2   | BOLT, BUTTON HEAD - 3/8"-16 (81477)    |             |
| 4   | 15605-EE | 8   | BOLT - .3125" X .75"                   |             |
| 5   | 15559-EE | 8   | WASHER, SAE FLAT - .3125"              |             |
| 6   | 42661-EE | 1   | BRACE, BARRIER                         |             |
| 7   | 52705-EE | 1   | BRACKET, BARRIER (WHEEL MACHINES)      |             |
| 8   | 55027-EE | 1   | BARRIER, REAR - UNIVERSAL 830/735      |             |
| 9   | 45755-EE | 1   | COVER, REAR BARRIER                    |             |
| 10  | 17395-EE | 2   | BOLT - 10MM-1.5P X 20MM                |             |
| 11  | 15502-EE | 2   | BOLT - .625" X 1.5"                    |             |
| 12  | 10771-EE | 2   | WASHER, SAE FLAT - .625"               |             |
| 13  | 52703-EE | 1   | BARRIER, BOTTOM (WHEEL MACHINES)       |             |
| 14  | 55028-EE | 1   | BRACKET, REAR BARRRIER PANEL - WHEELED |             |

☐ Kit or Assembly - includes all items indented underneath.

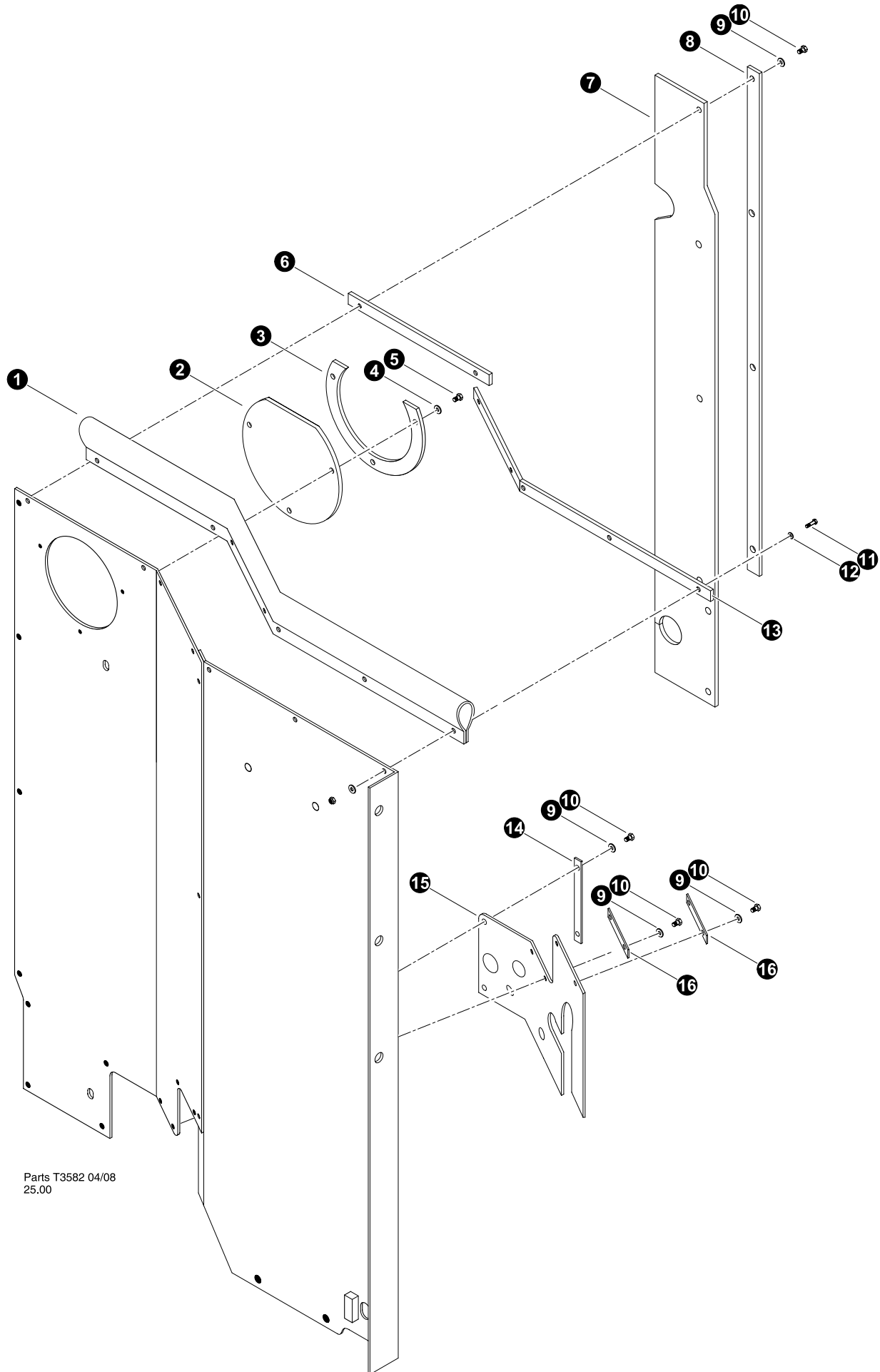


Parts T3929 04/13  
25.00

## BARRIER PANELS - Front Cummins QSC 8.3L

| REF | PART #   | QTY |                          | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|--------------------------|----------------------------------------------|-------------|
| 1   | 52921-EE | 1   |                          | BARRIER, SIDE WHEEL MACHINES C8.3            |             |
| 2   | 53007-EE | 1   |                          | BAR, ENGINE BARRIER FRT/TOP BRACE C8.3       |             |
| 3   | 15605-EE | 2   |                          | BOLT - .3125" X .75"                         |             |
| 4   | -EE      | 7   |                          | WASHER, FLAT - .3125"                        |             |
| 5   | 17395-EE | 1   |                          | BOLT - 10MM-1.5P X 20MM                      |             |
| 6   | 10802-EE | 1   |                          | WASHER, FLAT - .375"                         |             |
| 7   | 52959-EE | 1   |                          | BAR, ENGINE BARRIER FRT/BOTTOM BRACE C8.     |             |
| 8   | 15575-EE | 1   |                          | BOLT - .25" X 1.5"                           |             |
| 9   | 10800-EE | 2   |                          | WASHER, FLAT - .25"                          |             |
| 10  | 10811-EE | 1   |                          | NUT, LOCK - .25"                             |             |
| 11  | -EE      | 4   |                          | BOLT, BUTTON HEAD - .3125" X .75" (81477)    |             |
| 12  | 52920-EE | 1   | <input type="checkbox"/> | BARRIER, FRONT WHEEL MACHINES C8.3           |             |
| 13  | -EE      | 1   |                          | COVER, Front Barrier                         |             |
| 14  | -EE      | 1   |                          | BOLT - 12MM-1.75P X 60MM                     |             |
| 15  | 15534-EE | 1   |                          | WASHER, SAE FLAT - .5"                       |             |
| 16  | 43491-EE | 1   |                          | BARRIER, LOWER FOR FRONT WHEEL MACHINES C8.3 |             |

☐ Kit or Assembly - includes all items indented underneath.



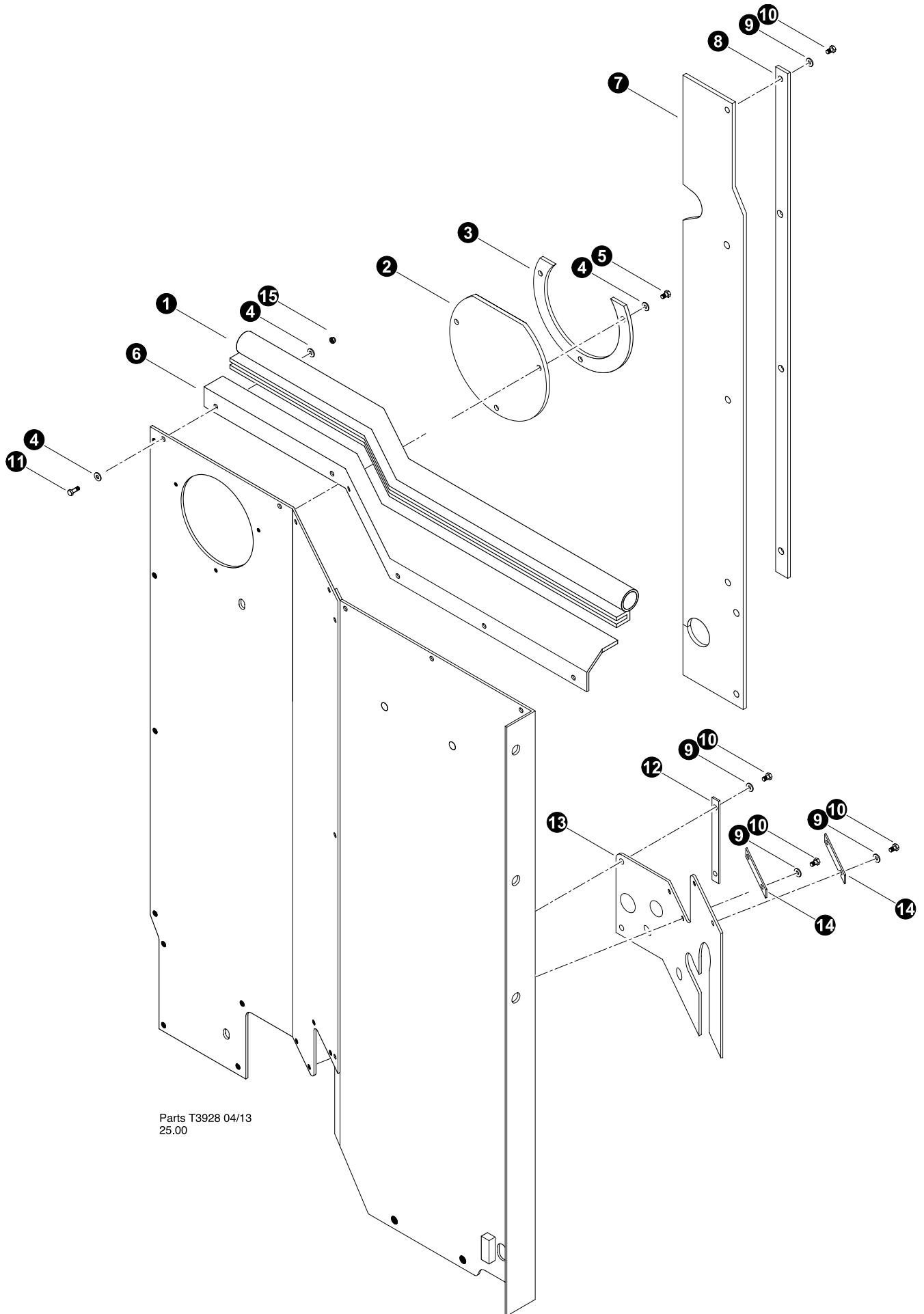
Parts T3582 04/08  
25.00



**BARRIER PANELS - RUBBER SEALS**  
**Cummins QSC 8.3L**  
**SN 0445 AND Before**

| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | 53138-EE | 1   | BELTING, BARRIER TOP                |             |
| 2   | 53204-EE | 1   | BELTING, AIR CLEANER SEAL           |             |
| 3   | 53177-EE | 1   | BAR, RETAINER ROUND AIR CLEANER     |             |
| 4   | 10800-EE | 3   | WASHER, FLAT - .25"                 |             |
| 5   | 17255-EE | 3   | SCREW, SELF TAPPING - #10-24 X .75" |             |
| 6   | 53051-EE | 1   | BAR, RETAINER 1/8x1x12              |             |
| 7   | 52925-EE | 1   | BELTING, BARRIER END-VERTICAL       |             |
| 8   | 53052-EE | 1   | BAR, RETAINER 1/8x1x31.75           |             |
| 9   | 10800-EE | 4   | WASHER, FLAT - .25"                 |             |
| 10  | 15604-EE | 4   | BOLT - .25" X .75"                  |             |
| 11  | 15604-EE | 7   | BOLT - .25" X .75"                  |             |
| 12  | 10800-EE | 3   | WASHER, FLAT - .25"                 |             |
| 13  | 53137-EE | 1   | BAR, RETAINER 1/8x1x31.75 FORMED    |             |
| 14  | 53050-EE | 1   | BAR, RETAINER 1/8x1x9               |             |
| 15  | 53083-EE | 1   | BELTING, BARRIER-BOTTOM             |             |

☐ Kit or Assembly - includes all items indented underneath.

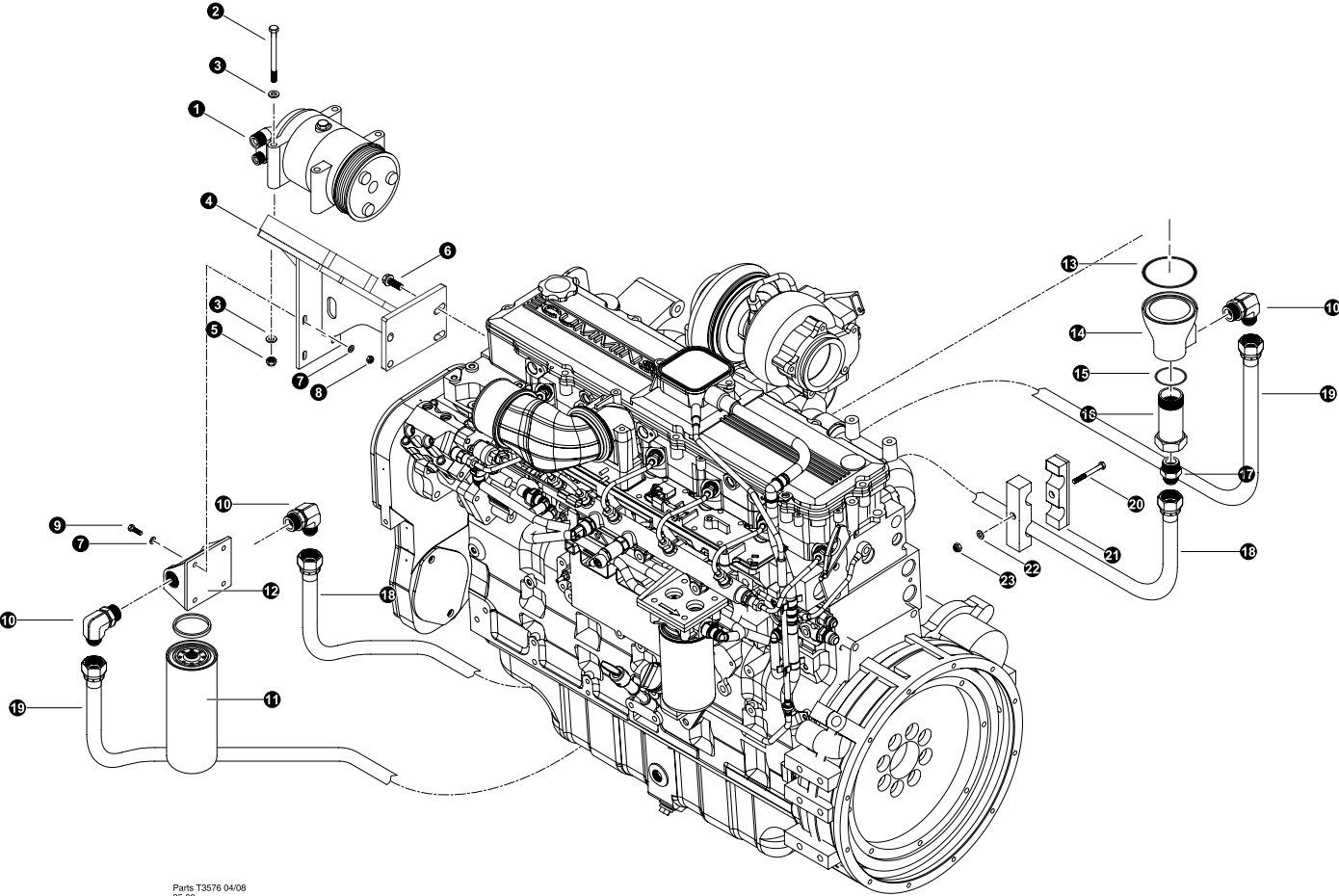


Parts T3928 04/13  
25.00

**BARRIER PANELS - RUBBER SEALS**  
**Cummins QSC 8.3L**  
**SN 0446 AND AFTER**

| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | 54846-EE | 4ft | CHANNEL, EDGE PROTECTOR - 1"        |             |
| 2   | 53204-EE | 1   | BELTING, AIR CLEANER SEAL           |             |
| 3   | 53177-EE | 1   | BAR, RETAINER ROUND AIR CLEANER     |             |
| 4   | 10800-EE | 3   | WASHER, FLAT - .25"                 |             |
| 5   | 17255-EE | 3   | SCREW, SELF TAPPING - #10-24 X .75" |             |
| 6   | 45266-EE | 1   | SHEET, FILLER PLATE                 |             |
| 7   | 52925-EE | 1   | BELTING, BARRIER END-VERTICAL       |             |
| 8   | 53052-EE | 1   | BAR, RETAINER 1/8x1x31.75           |             |
| 9   | 10800-EE | 4   | WASHER, FLAT - .25"                 |             |
| 10  | 15604-EE | 4   | BOLT - .25" X .75"                  |             |
| 11  | 18309-EE | 7   | BOLT - .25" X 1.25"                 |             |
| 12  | 53049-EE | 1   | BAR, RETAINER 1/8x1x6               |             |
| 13  | 53083-EE | 1   | BELTING, BARRIER-BOTTOM             |             |
| 14  | 53050-EE | 2   | BAR, RETAINER 1/8x1x9               |             |
| 15  | 10811-EE | 5   | NUT, LOCK - .25"                    |             |

☐ Kit or Assembly - includes all items indented underneath.



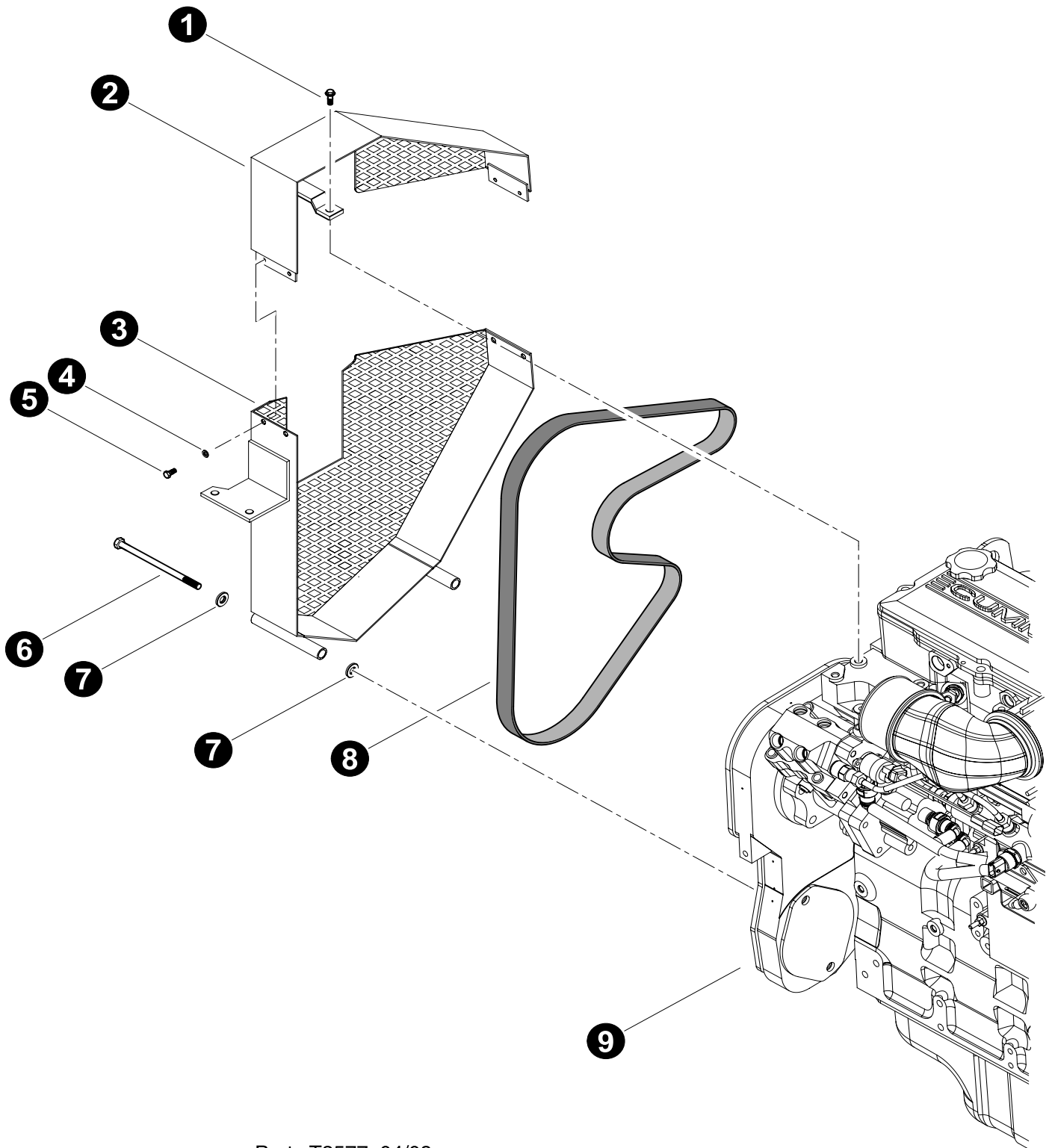
Parts T3576 04/08  
25/00

## A/C COMPRESSOR & OIL FILTER INSTALLATION

| REF | PART #   | QTY |   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------------|-------------|
| 1   | 52532-EE | 1   |   | COMPRESSOR, AC (flange mount / rear discharge)          |             |
| 2   | 19251-EE | 4   |   | BOLT - .3125" X 5"                                      |             |
| 3   | 15559-EE | 8   |   | WASHER, SAE FLAT - .3125"                               |             |
| 4   | 52964-EE | 1   |   | MOUNT, COMPRESSOR / OIL FILTER                          |             |
| 5   | 10812-EE | 4   |   | NUT, LOCK - .3125"                                      |             |
| 6   | 24605-EE | 4   |   | BOLT - 10mm-1.5P x 30mm ( <i>Flange Head</i> )          |             |
| 7   | 15528-EE | 4   |   | WASHER, SAE FLAT - .375"                                |             |
| 8   | 10813-EE | 4   |   | NUT, LOCK - .375"                                       |             |
| 9   | 10402-EE | 4   |   | BOLT - .375" X 1.25"                                    |             |
| 10  | 15484-EE | 3   |   | ELBOW, 90 - 16 C5OX-S                                   |             |
| 11  | 16070-EE | 1   |   | FILTER, engine oil                                      |             |
| 12  | 52339-EE | 1   | ☐ | Relocation Kit - Oil Filter                             |             |
| 12  | -EE      | 1   |   | ADAPTER, FILTER HEAD (4063933)                          |             |
| 13  | -EE      | 1   |   | O-RING, Oil Filter Relocation Housing - Large (3899283) |             |
| 14  | -EE      | 1   |   | COVER, FILTER HEAD (3899624)                            |             |
| 15  | -EE      | 1   |   | O-RING, Oil Filter Relocation Housing - Small (3899728) |             |
| 16  | -EE      | 1   |   | Manifold, fastner fitting (3899625)                     |             |
| 17  | 15497-EE | 1   |   | CONNECTOR, STR - 16 F5OX-S                              |             |
| 18  | 52944-EE | 1   |   | TUBELINE, ENGINE OIL FILTER - OUT                       |             |
| 19  | 52945-EE | 1   |   | TUBELINE, ENGINE OIL FILTER - IN                        |             |
| 20  | 10824-EE | 1   |   | BOLT - .3125" X 2.5"                                    |             |
| 21  | 52991-EE | 1   |   | CLAMP, STEEL TUBELINE - DOUBLE                          |             |
| 22  | 15559-EE | 1   |   | WASHER, SAE FLAT - .3125"                               |             |
| 23  | 10812-EE | 1   |   | NUT, LOCK - .3125"                                      |             |



See referenced page for component or assembly breakdown.



Parts T3577 04/08  
12.5

## ENGINE BELT AND SHROUDS

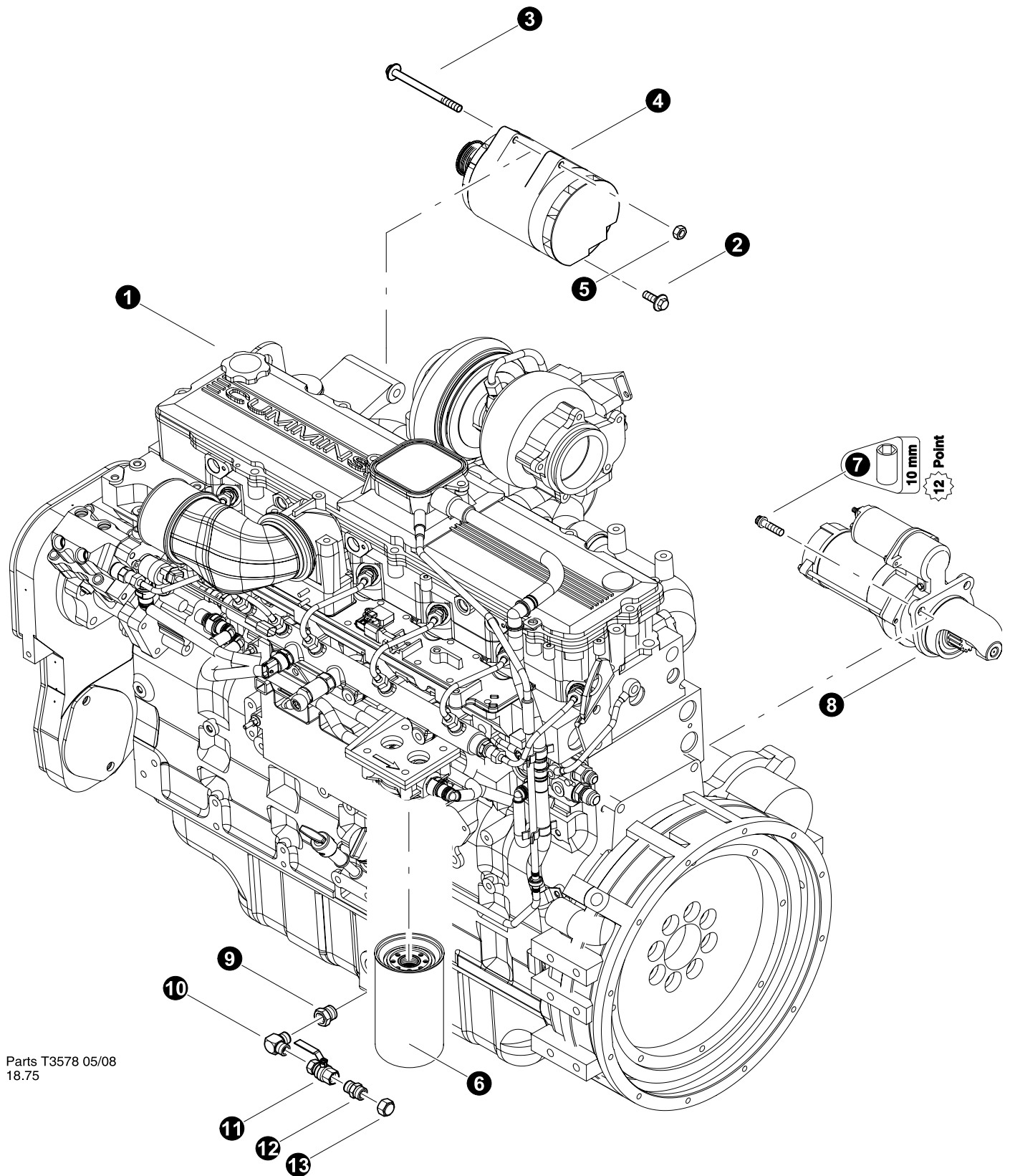
| REF | PART #   | QTY |   | DESCRIPTION                                      | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------------|-------------|
| 1   | 24605-EE | 1   |   | BOLT - 10mm-1.5P x 30mm ( <i>Flange Head</i> )   |             |
| -   | 52927-EE | 1   | ☐ | SHROUD, BELT CUMMINS QSC Tier 3 (top and bottom) |             |
| 2   |          | 1   |   | SHROUD, TOP                                      |             |
| 3   |          | 1   |   | SHROUD, BOTTOM                                   |             |
| 4   | 10757-EE | 4   |   | WASHER, SAE FLAT - .25"                          |             |
| 5   | 15604-EE | 4   |   | BOLT - .25" X .75"                               |             |
| 6   | 51772-EE | 1   |   | BOLT - 12MM X 180MM FAN GUARD (830/630)          |             |
| 7   | 15534-EE | 4   |   | WASHER, SAE FLAT - .5"                           |             |
| 8   | 51777-EE | 1   |   | BELT, FAN - CUMMINS CHARGE AIR (830/630)         |             |
| 9   | REF.     | 1   | ☐ | ENGINE - Cummins QSC8.3-C.....                   | EE-1        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3578 05/08  
18.75



## ALTERNATOR, STARTER & MISC. COMPONENTS

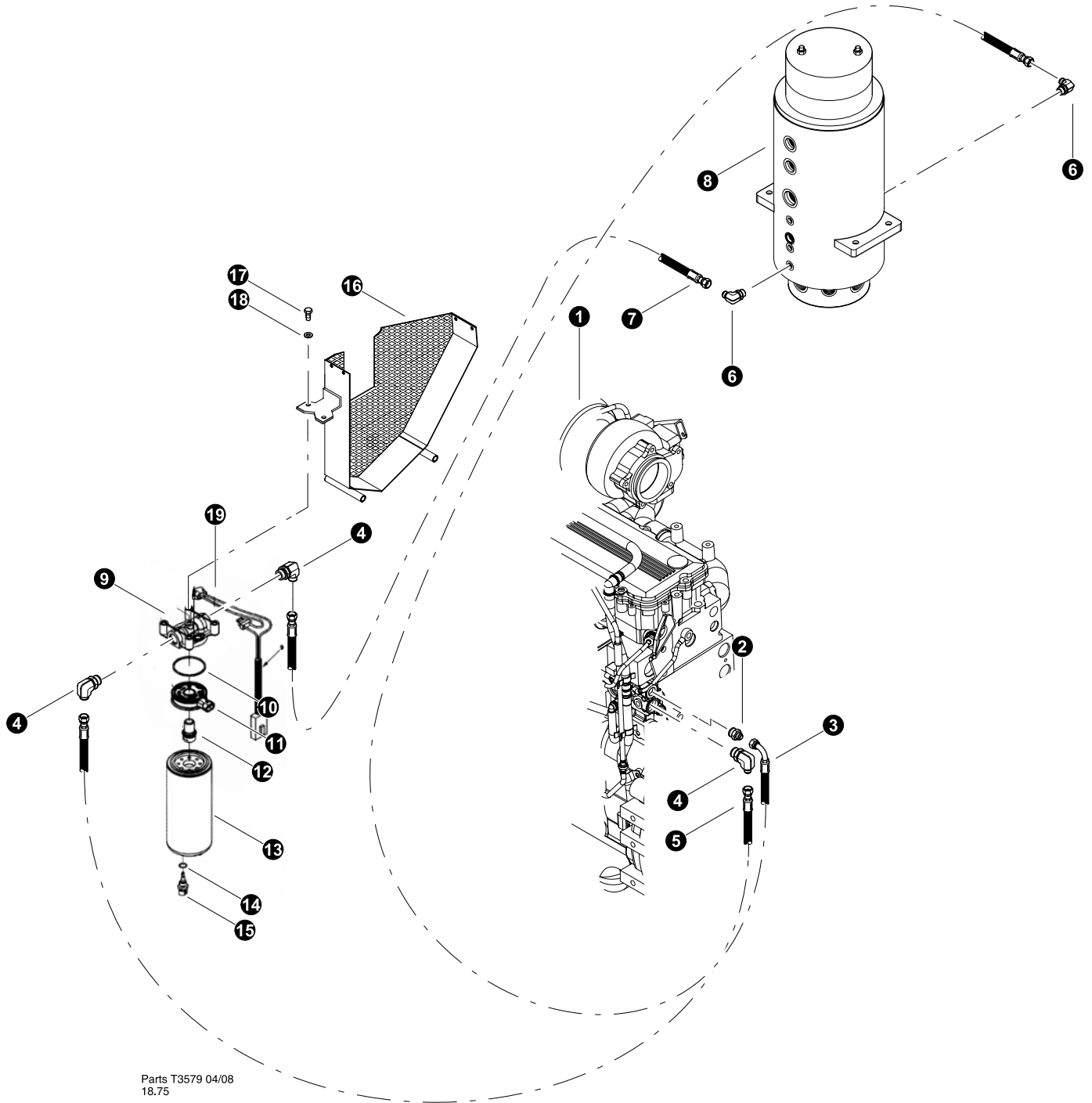
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins QSC8.3-C.....           | EE-1        |
| 2   | 50149-EE | 1   |                                                                                   | BOLT - 12mm x 25mm                       |             |
| 3   | --       | 2   |                                                                                   | BOLT, flange head - 12mm x 150 mm        |             |
| 4   | 53246-EE | 1   |                                                                                   | ALTERNATOR, TIER 3 CUMMINS - 24V/100A    |             |
| 5   | --       | 1   |                                                                                   | NUT, flange - 12mm                       |             |
| 6   | 52848-EE | 1   |                                                                                   | FILTER, FUEL - PRIMARY QSB TIER 3        |             |
| 7   |          | 3   |                                                                                   | BOLT, 12 point cap - 10mm x 35 mm        |             |
| 8   | 53240-EE | 1   |                                                                                   | STARTER - C8.3C/QSC (24V) 3102767        |             |
| 9   | 40978-EE | 1   |                                                                                   | CONNECTOR, STR MET/ENG M18-.38NPT F8OHGS |             |
| 10  | 40979-EE | 1   |                                                                                   | ELBOW, 90 MALE .38NPT BLACK 150#         |             |
| 11  | 40980-EE | 1   |                                                                                   | VALVE, BALL .38NPT BRASS PADLOCK         |             |
| 12  | 22902-EE | 1   |                                                                                   | CONNECTOR, STR - 848-TT-08X06            |             |
| 13  | 15434-EE | 1   |                                                                                   | CAP - FF9863-08S                         |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

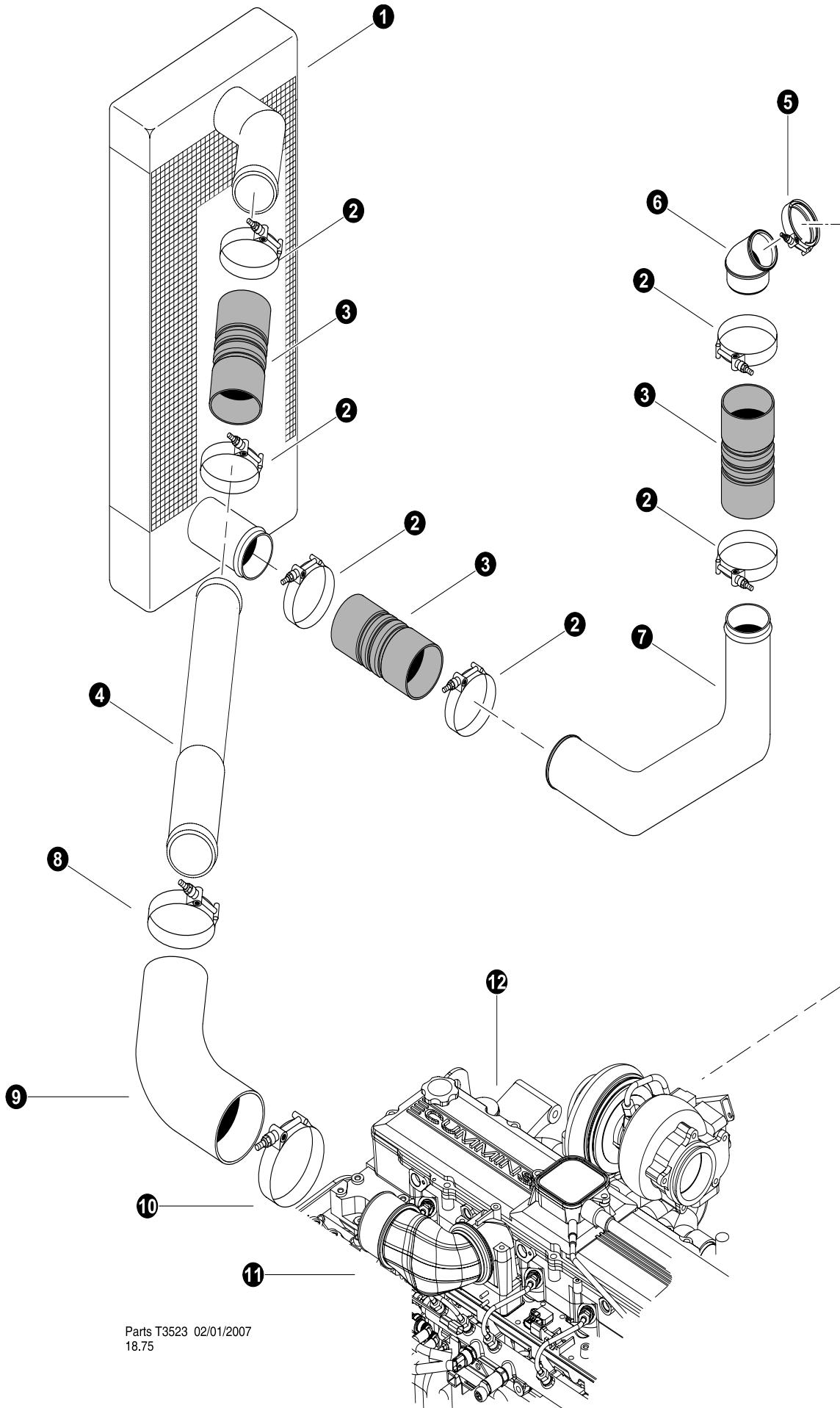


## FUEL LINES

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins QSC8.3-C . . . . .                                                               | EE-1        |
| 2   | 53103-EE | 1   |                                                                                   | FITTING, 6-8 - ORB-JIC 830-B                                                                      |             |
| 3   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2140-06-06JS-06J9-W ( <i>Fuel return to rotary manifold port #1 or FR</i> )       |             |
| 4   | 53073-EE |     |                                                                                   | ELBOW, ( 6-JIC 10-ORB 90)                                                                         |             |
| 5   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2069-06-06JS-06JS-W ( <i>Fuel supply to fuel filter out</i> )                     |             |
| 6   | 15480-EE | 2   |                                                                                   | ELBOW, 90 - 6801-6                                                                                |             |
| 7   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2090-06-06JS-06JS-W ( <i>rotary manifold port #2 or FS to fuel filter inlet</i> ) |             |
| 8   | REF      | 1   |  | ROTARY MANIFOLD ASSEMBLY . . . . .                                                                | UP-1        |
| 9   | -EE      | 1   |                                                                                   | HEAD, Fuel Filter (3944986)                                                                       |             |
| 10  | -EE      | 1   |                                                                                   | SEAL, Rectangular Ring (3913695)                                                                  |             |
| 11  | -EE      | 1   |                                                                                   | Element, Fuel Heater (3943910)                                                                    |             |
| 12  | -EE      | 1   |                                                                                   | Adapter, Filter Head (3943780)                                                                    |             |
| 13  | 24062-EE | 1   |                                                                                   | FILTER, FUEL (CUMMINS QSC - ELECTRONIC) . . . . .                                                 |             |
| 14  | -EE      | 1   |                                                                                   | Seal, O-Ring (3944821)                                                                            |             |
| 15  | -EE      | 1   |                                                                                   | Sensor, Water in Fuel (3944270)                                                                   |             |
| 16  | REF      | 1   |                                                                                   | BRACKET, FUEL FILTER TIER (Fan Guard) . . . . .                                                   | EE-1        |
| 17  | 11707-EE | 2   |                                                                                   | BOLT - .375" X 1"                                                                                 |             |
| 18  | 15528-EE | 2   |                                                                                   | WASHER, SAE FLAT - .375"                                                                          |             |
| 19  | -EE      | 1   |                                                                                   | Thermostat, Fuel Heater (3942357)                                                                 |             |



See referenced page for component or assembly breakdown.



Parts T3523 02/01/2007  
18.75

## CHARGE AIR (Air To Air Connections Tier 3 engine)

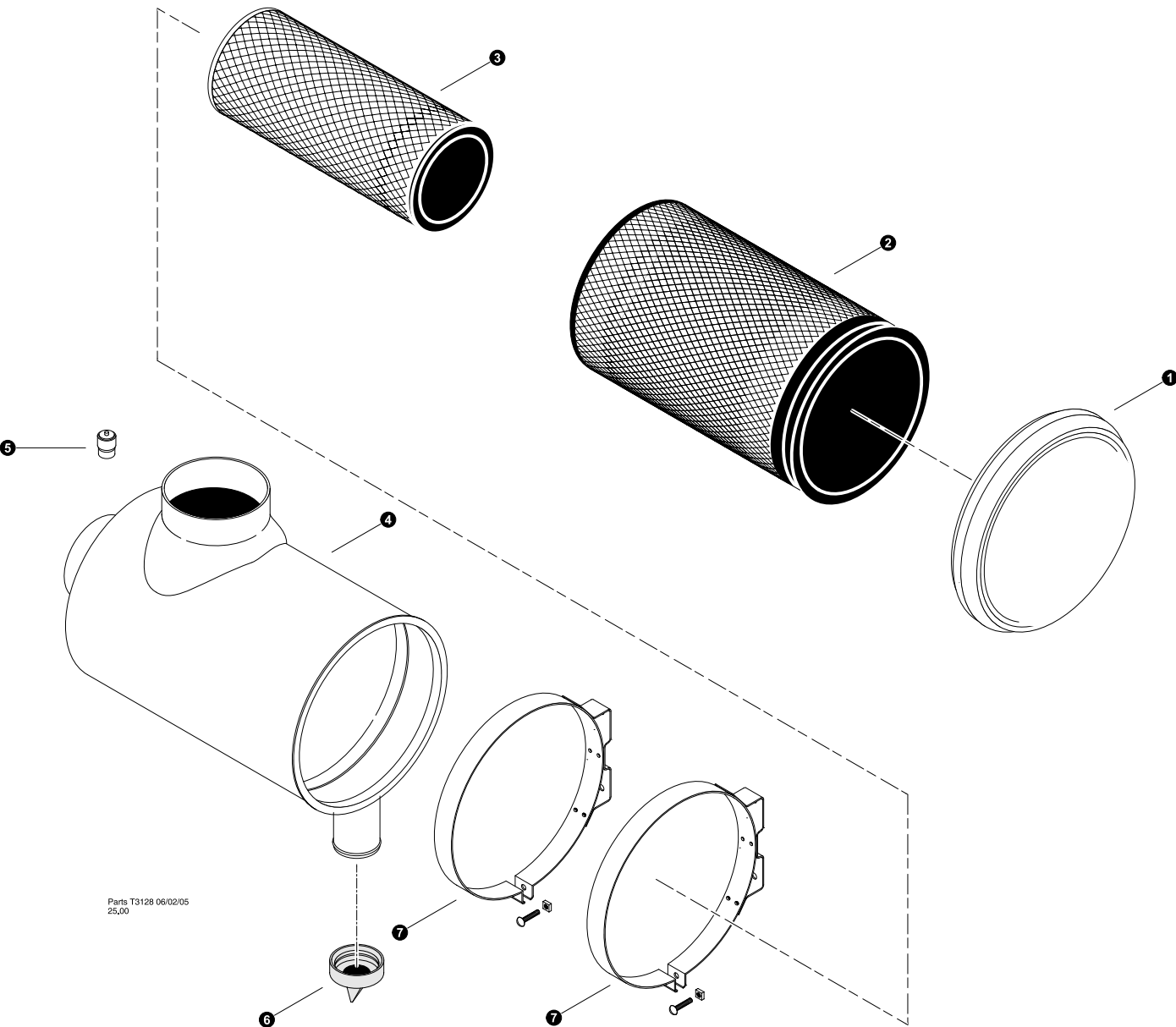
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.     | 1   |  | RADIATOR / AIR COOLER ASSEMBLY .....     | EE-3        |
| 2   | -EE      | 6   |                                                                                   | CLAMP, spring hose - 4" (3926703)        |             |
| 3   | 24686-EE | 4   |                                                                                   | CONNECTOR, rubber                        |             |
| 4   | 52591-EE | 1   |                                                                                   | TUBE, AIR/AIR TOP CUMMINS 630/830 TIER 3 |             |
| 5   | -EE      | 1   |                                                                                   | CLAMP, V-Band - 3101325                  |             |
|     | -EE      | 1   |                                                                                   | O-RING, - 3102802                        |             |
| 6   | -EE      | 1   |                                                                                   | PIPE, Air Transfer elbow, 45° - 3918350  |             |
| 7   | 51734-EE | 1   |                                                                                   | TUBE, AIR/AIR BOTTOM CUMMINS 630/830     |             |
| 8   | -EE      | 1   |                                                                                   | CLAMP, strap band - 4 1/4"               |             |
| 9   | 52729-EE | 1   |                                                                                   | ELBOW, 45 - 4" BOOT(AIR TO AIR TIER 3 C) |             |
| 10  | -EE      | 1   |                                                                                   | CLAMP, strap band - 4 1/4"               |             |
| 11  | 52054-EE | 1   |  | MANIFOLD, CHARGE AIR INTAKE (QSC / 830)  |             |
| -   | -EE      | 1   |                                                                                   | AIR INTAKE, 90° - 3968371                |             |
| -   | -EE      | 1   |                                                                                   | SEAL, O-RING - 3682177                   |             |
| -   | -EE      | 1   |                                                                                   | CLAMP, V-Band - 3067979                  |             |
| 12  | REF.     | 1   |  | ENGINE - Cummins QSC8.3-C.....           | EE-3        |



See referenced page for component or assembly breakdown.



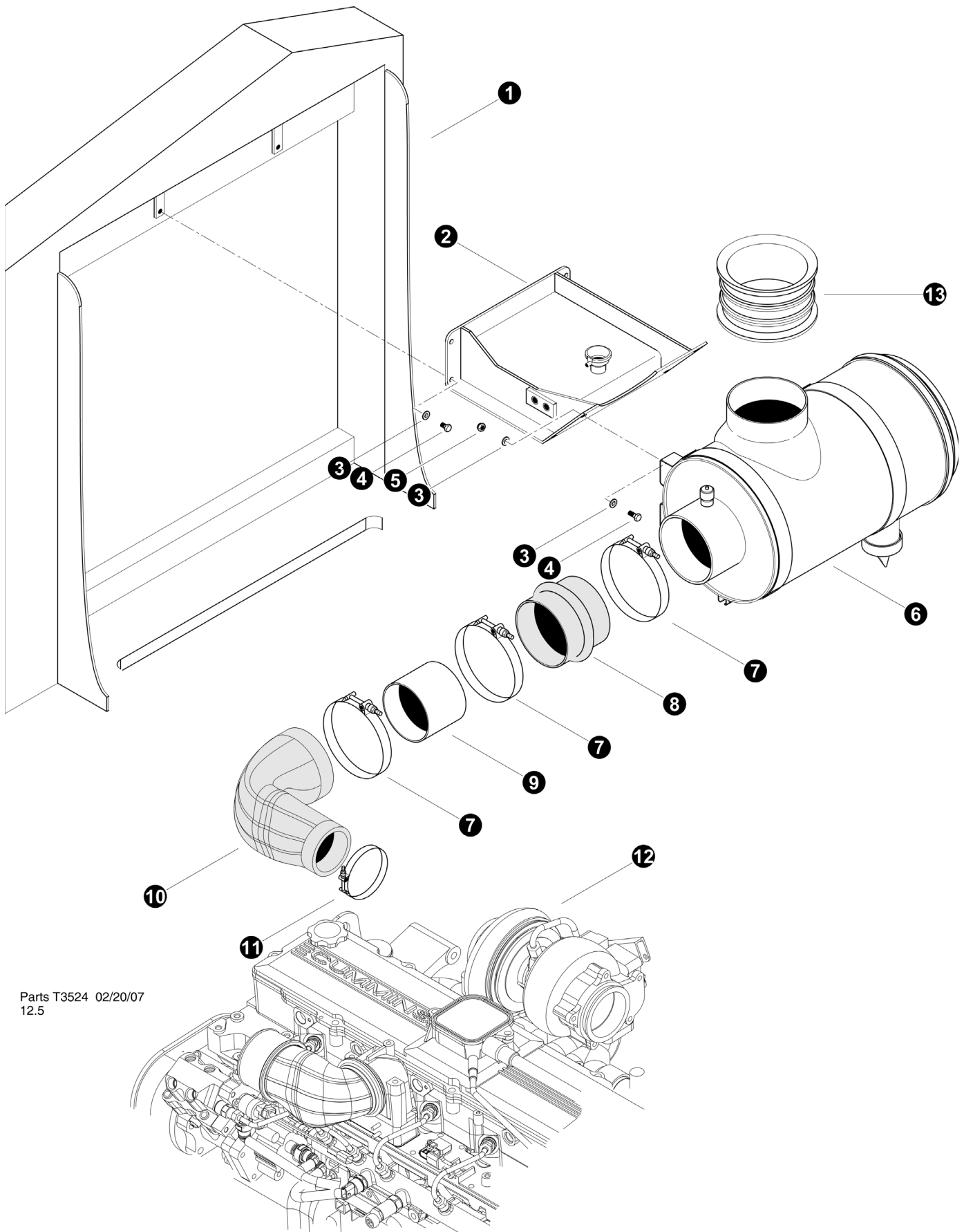
Kit or Assembly - includes all items indented underneath.



**AIR CLEANER ASSEMBLY**

| REF | PART #   | QTY |                          | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------------|-------------|
| -   | 51729-EE | 1   | <input type="checkbox"/> | AIR CLEANER ASSEMBLY - 830/630        |             |
| 1   | ---      | 1   |                          | COVER - AIR CLEANER                   |             |
| 2   | 51756-EE | 1   |                          | FILTER, air cleaner - primary         |             |
| 3   | 51757-EE | 1   |                          | FILTER, air cleaner - secondary       |             |
| 4   | ---      | 1   |                          | CANISTER, air cleaner                 |             |
| 5   | 16114-EE | 1   |                          | INDICATOR, air cleaner filter service |             |
| 6   | 52053-EE | 1   |                          | BOOT, Air Cleaner Dust                |             |
| 7   | 20450-EE | 2   | <input type="checkbox"/> | CLAMP, air cleaner band               |             |
| -   | 15591-EE | 1   |                          | BOLT - 5/16" x 1-1/2"                 |             |
| -   | 10788-EE | 1   |                          | NUT, nylock - 5/16"                   |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T3524 02/20/07  
12.5

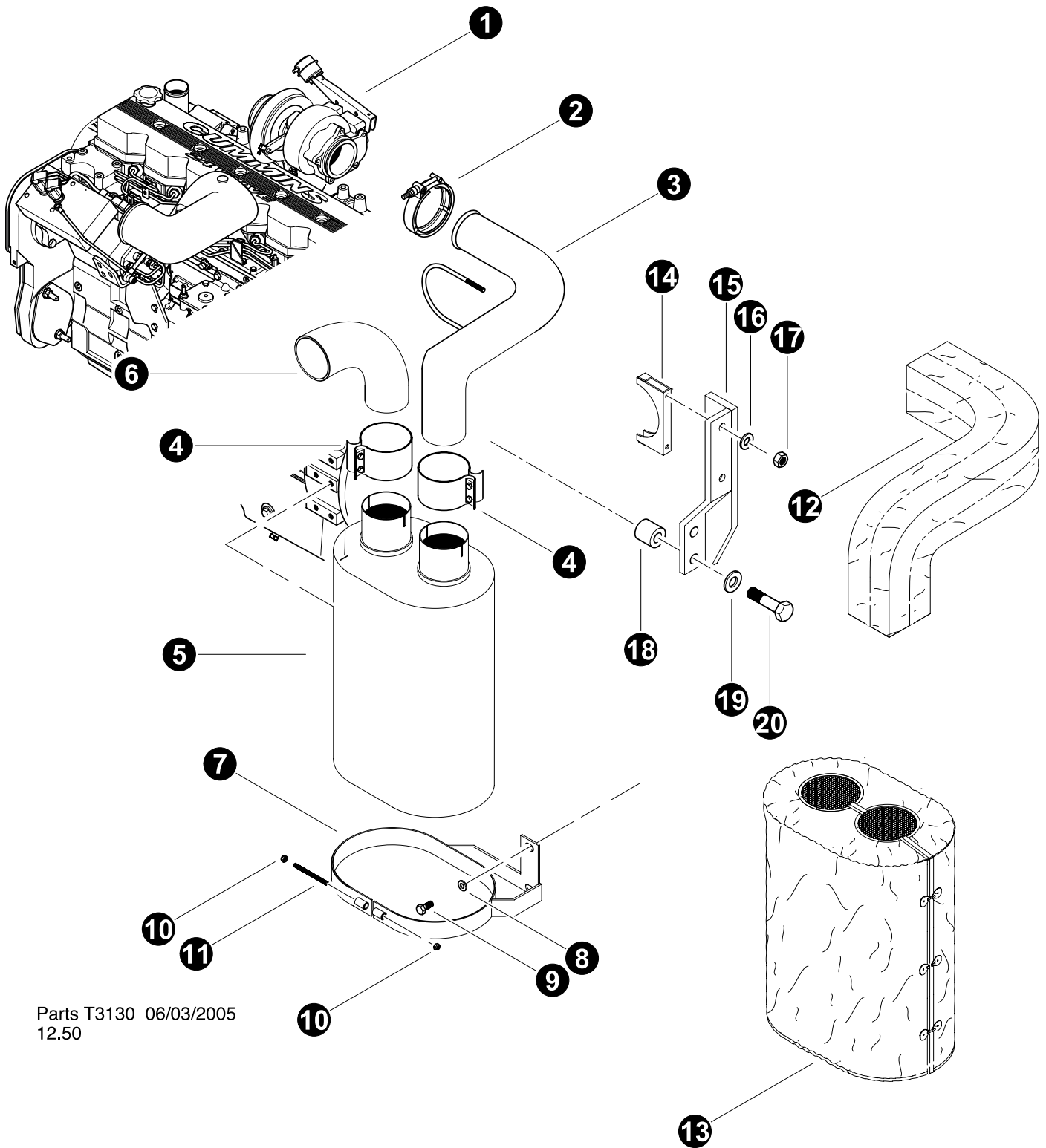


**AIR CLEANER INSTALLATION****(Tier 3 engine)**

| REF | PART #    | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|-----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.      | 1   |  | UPPER TURNTABLE .....                    | UP-1        |
| 2   | REF.      | 1   |  | TANK, EXPANSION .....                    | EE-3        |
| 3   | 15528-EE  | 12  |                                                                                   | WASHER, SAE FLAT - .375"                 |             |
| 4   | 11707-EE  | 4   |                                                                                   | BOLT - .375" X 1"                        |             |
| 5   | 10813-EE  | 4   |                                                                                   | NUT, LOCK - .375"                        |             |
| 6   | REF.      | 1   |  | AIR CLEANER ASSEMBLY. ....               | EE-1        |
| 7   | 51728 -EE | 2   |                                                                                   | CLAMP, strap band - 5-1/2"               |             |
| 8   | 52055-EE  | 1   |                                                                                   | HOSE, HUMP AIR CLEANER (5" X 5") CUMMINS |             |
| 9   | 51827-EE  | 1   |                                                                                   | TUBE, AIR CLEANER ( 5" DIA X 3") CUMMINS |             |
| 10  | -EE       | 1   |                                                                                   | ELBOW, 90° rubber ( <i>Cobra</i> ) ()    |             |
| 11  | 15697-EE  | 1   |                                                                                   | CLAMP, strap band - 4-1/2"               |             |
| 12  | REF.      | 1   |  | ENGINE - Cummins C8.3-C .....            | EE-1        |
| 13  | 52147-EE  | 1   |                                                                                   | FLANGE, RUBBER SEAL - AIR CLEANER        |             |



See referenced page for component or assembly breakdown.



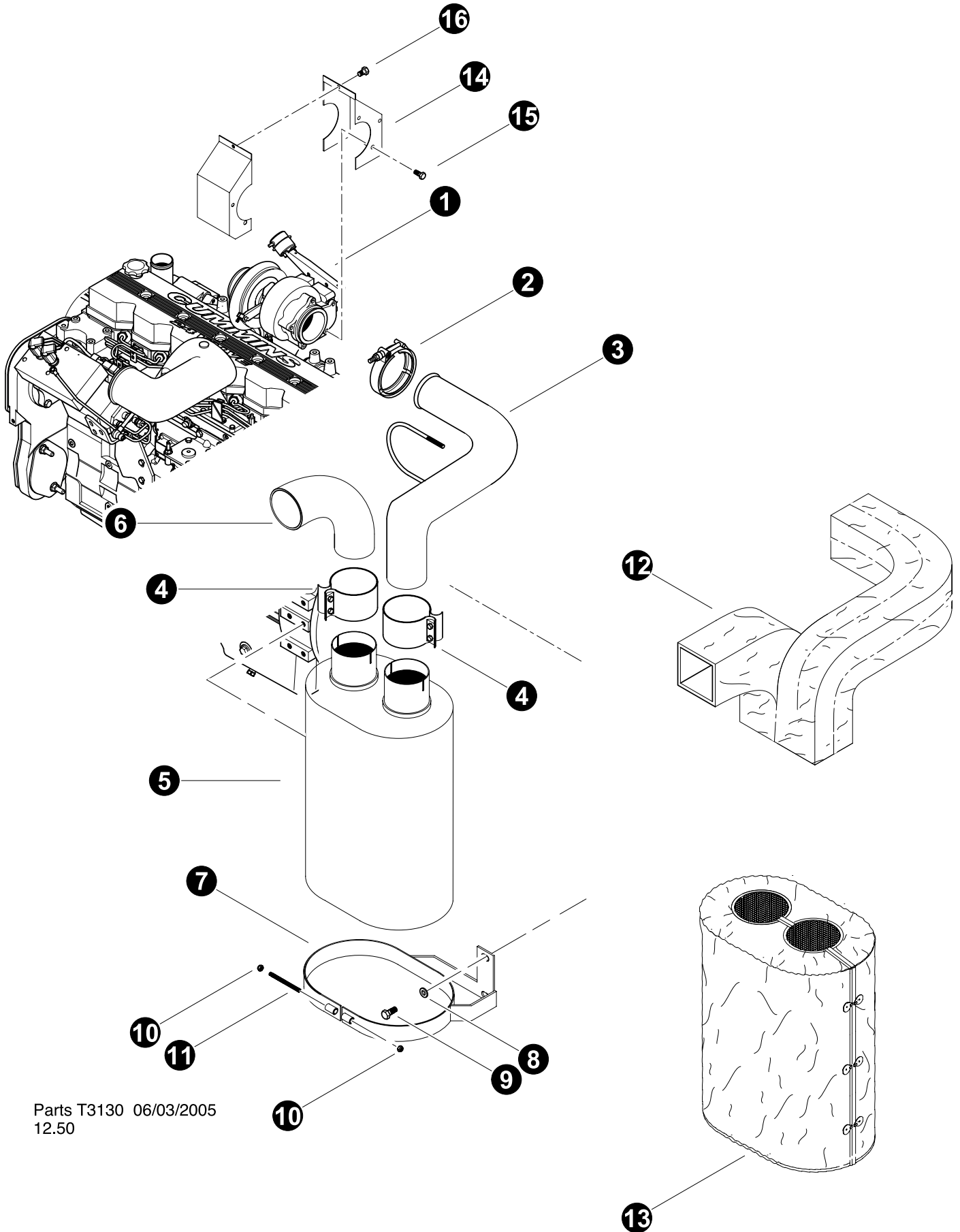
Parts T3130 06/03/2005  
12.50

**MUFFLER INSTALLATION****Before 2012**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins C8.3-C . . . . .       | EE-1        |
| 2   | 20452-EE | 1   |                                                                                   | CLAMP, turbo exhaust (3905216)          |             |
| 3   | 51613-EE | 1   |                                                                                   | PIPE, EXHAUST - CUMMINS C - 830 MACH    |             |
| 4   | 51871-EE | 2   |                                                                                   | CLAMP, MUFFLER - 830/630 - 4" EASY SEAL |             |
| 5   | 51656-EE | 1   |                                                                                   | MUFFLER, CUMMINS / JD (TF830)           |             |
| 6   | 51956-EE | 1   |                                                                                   | ELBOW, EXHAUST - CUMMINS (830/630)      |             |
| 7   | 51677-EE | 2   |                                                                                   | MOUNT, MUFFLER - CUMMINS - 830          |             |
| 8   | 15534-EE | 14  |                                                                                   | WASHER, SAE FLAT - .5"                  |             |
| 9   | 18415-EE | 2   |                                                                                   | BOLT - 12MM-1.75P X 30MM                |             |
| 10  | 10812-E  | 2   |                                                                                   | NUT, LOCK - .3125"                      |             |
| 11  | -EE      |     |                                                                                   | ROD, THREADED - .3125"                  |             |
| 12  | 51716-EE | 1   |                                                                                   | INSULATION, EXHAUST TUBE (CUMMINS 830)  |             |
| 13  | 51715-EE | 1   |                                                                                   | INSULATION, MUFFLER - 830               |             |
| 14  | 54510-EE | 1   |                                                                                   | CLAMP, EXHAUST STABILIZING - 830/735    |             |
| 15  | 54505-EE | 1   |                                                                                   | BRACKET, MUFFLER                        |             |
| 16  | 15528-EE | 2   |                                                                                   | WASHER, SAE FLAT - .375"                |             |
| 17  | 10813-EE | 2   |                                                                                   | NUT, LOCK - .375"                       |             |
| 18  | -EE      | 2   |                                                                                   | SPACER                                  |             |
| 19  | 18735-EE | 2   |                                                                                   | WASHER, FLAT - 12MM                     |             |
| 20  | 16136-EE | 2   |                                                                                   | BOLT - 12MM-1.75P X 45MM                |             |



See referenced page for component or assembly breakdown.



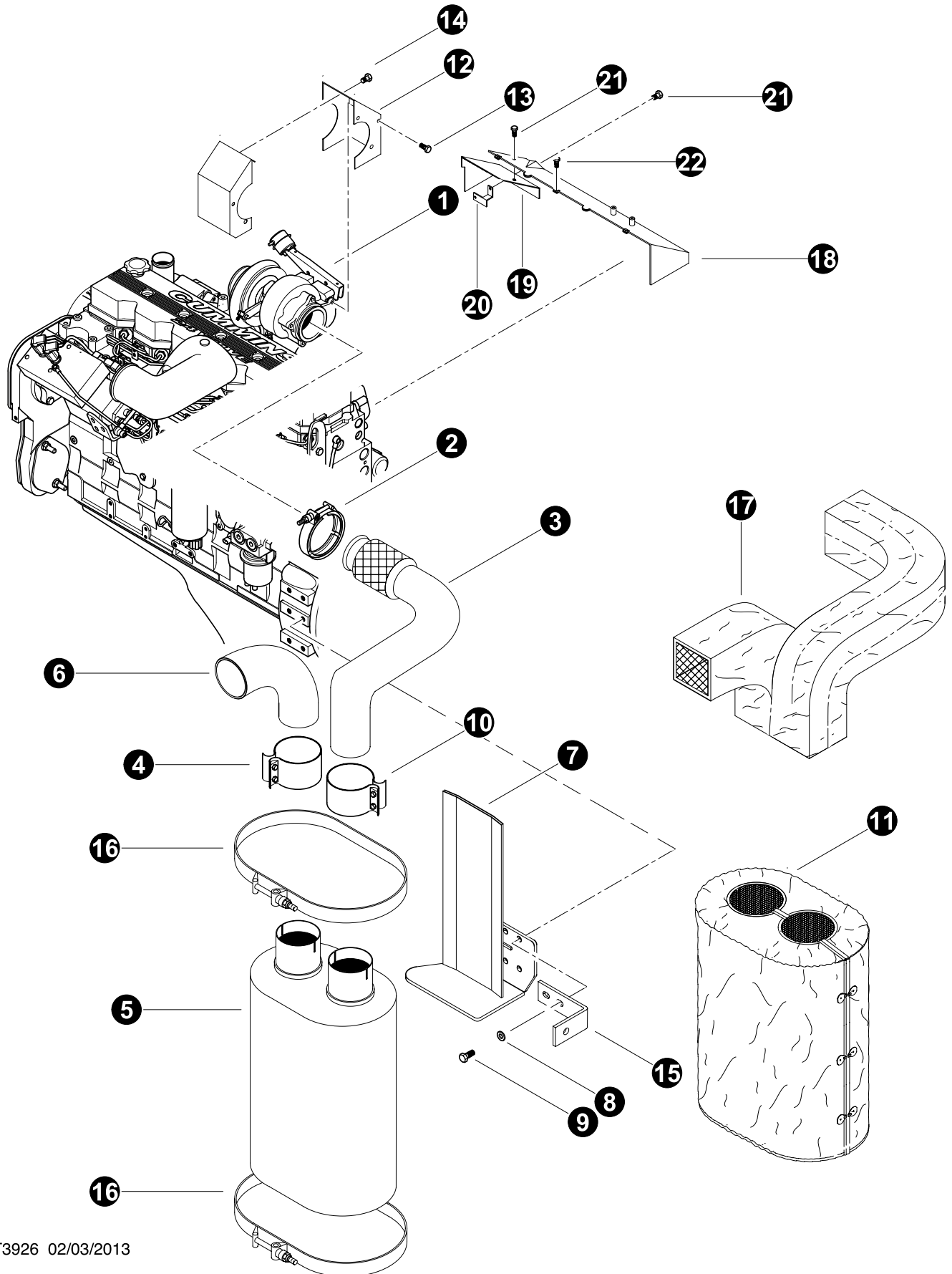
Parts T3130 06/03/2005  
12.50

**MUFFLER INSTALLATION****Machine 0445 and Before**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins C8.3-C . . . . .                        | EE-1        |
| 2   | 20452-EE | 1   |                                                                                   | CLAMP, turbo exhaust (3905216)                           |             |
| 3   | 52628-EE | 1   |                                                                                   | PIPE, EXHAUST - CUMMINS C - 830 MACH                     |             |
| 4   | 51871-EE | 2   |                                                                                   | CLAMP, MUFFLER - 830/630 - 4" EASY SEAL                  |             |
| 5   | 51656-EE | 1   |                                                                                   | MUFFLER, CUMMINS / JD (TF830)                            |             |
| 6   | 51956-EE | 1   |                                                                                   | ELBOW, EXHAUST - CUMMINS (830/630)                       |             |
| 7   | 51677-EE | 2   |                                                                                   | MOUNT, MUFFLER - CUMMINS - 830                           |             |
| 8   | 15534-EE | 14  |                                                                                   | WASHER, SAE FLAT - .5"                                   |             |
| 9   | 18415-EE | 2   |                                                                                   | BOLT - 12MM-1.75P X 30MM                                 |             |
| 10  | 10812-E  | 2   |                                                                                   | NUT, LOCK - .3125"                                       |             |
| 11  | -EE      |     |                                                                                   | ROD, THREADED - .3125"                                   |             |
| 12  | 54514-EE | 1   |                                                                                   | INSULATION, EXHAUST TUBE (CUMMINS 830)                   |             |
| 13  | 51715-EE | 1   |                                                                                   | INSULATION, MUFFLER - 830                                |             |
| 14  | 54839-EE | 1   |                                                                                   | GUARD, TURBO - DEBRIS DEFLECTOR (standard)               |             |
| 14  | 54852-EE | 1   |                                                                                   | GUARD, TURBO DEBRIES - LOW GULLWING (old style machines) |             |
| 15  | 25059-EE | 6   |                                                                                   | BOLT - 8MM-1.25P X 20MM                                  |             |
| 16  | 25059-EE | 1   |                                                                                   | BOLT - 8MM-1.25P X 20MM                                  |             |



See referenced page for component or assembly breakdown.



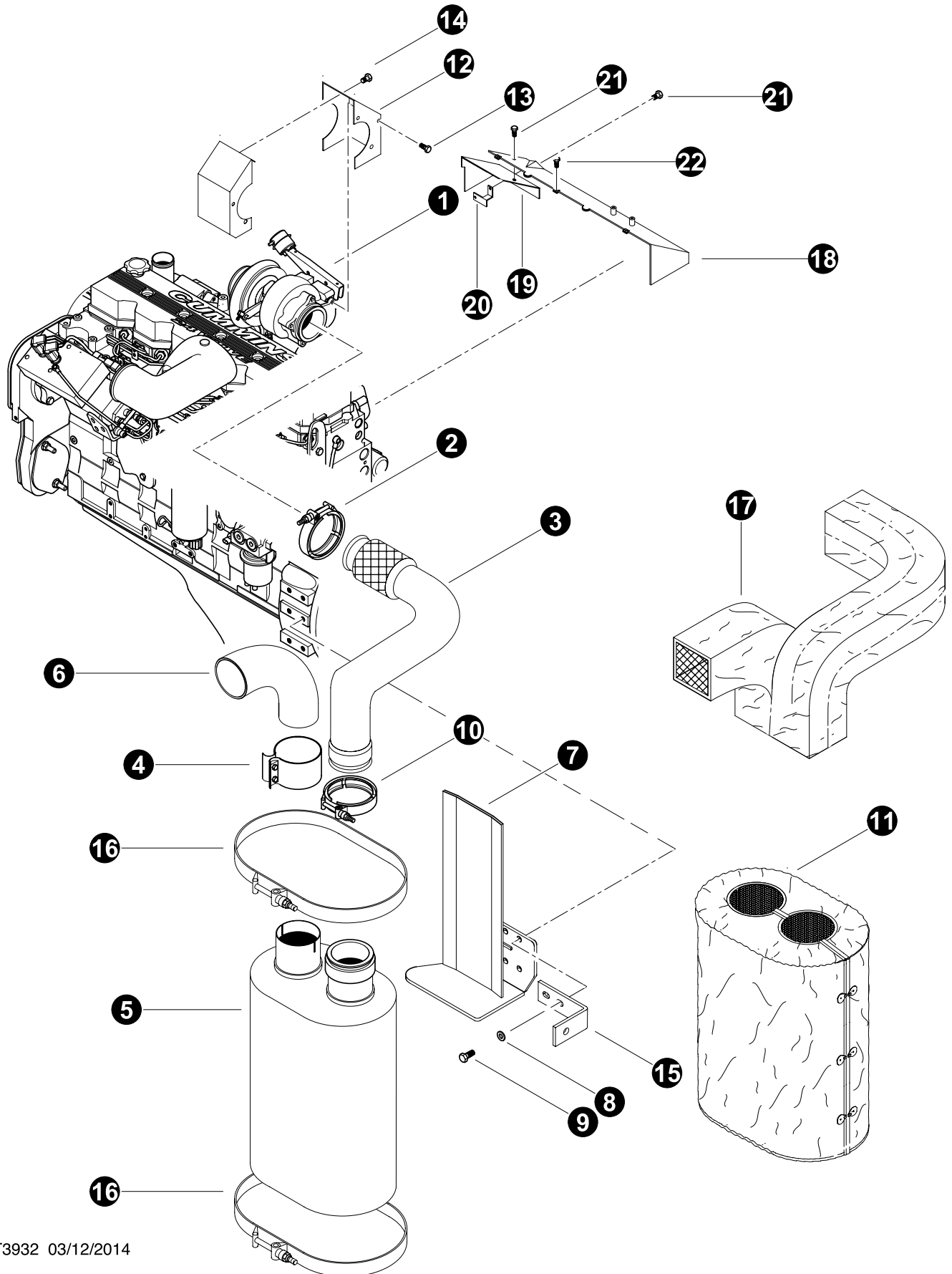
Parts T3926 02/03/2013  
12.50

**MUFFLER INSTALLATION****Machine 0446 and After**

| REF | PART #   | QTY | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  ENGINE - Cummins C8.3-C . . . . . | EE-1        |
| 2   | 20452-EE | 1   | CLAMP, turbo exhaust (3905216)                                                                                      |             |
| 3   | 55017-EE | 1   | PIPE, EXHAUST- CUMMINS - WITH FLEX                                                                                  |             |
| 4   | 51871-EE | 1   | CLAMP, MUFFLER - 830/630 - (4" EASY SEAL)                                                                           |             |
| 5   | 51656-EE | 1   | MUFFLER, CUMMINS / JD (TF830)                                                                                       |             |
| 6   | 51956-EE | 1   | ELBOW, EXHAUST - CUMMINS (830/630)                                                                                  |             |
| 7   | 45588-EE | 1   | WELDMENT, MUFFLER MOUNT - CUMMINS                                                                                   |             |
| 8   | 15534-EE | 8   | WASHER, SAE FLAT - .5"                                                                                              |             |
| 9   | 18415-EE | 2   | BOLT - 12MM -1.75P X 30MM                                                                                           |             |
| 10  | 51723-EE | 1   | CLAMP, MUFFLER - 830/630 (3.5" EasySeal)                                                                            |             |
| 11  | 55013-EE | 1   | INSULATION, MUFFLER (830/735)                                                                                       |             |
| 12  | 54839-EE | 1   | GUARD, TURBO - DEBRIS DEFLECTOR (standard)                                                                          |             |
| -   | 54852-EE | 1   | GUARD, TURBO DEBRIES - LOW GULLWING (old style machines)                                                            |             |
| 13  | 25060-EE | 2   | BOLT - 8MM-1.25P X 25MM                                                                                             |             |
| 14  | 25059-EE | 1   | BOLT - 8MM-1.25P X 20MM                                                                                             |             |
| 15  | 45598-EE | 1   | BAR, MUFFLER PANEL BRACKET                                                                                          |             |
| 16  | 55011-EE | 2   | CLAMP, MUFFLER MOUNTING - T-BOLT                                                                                    |             |
| 17  | 54514-EE | 1   | INSULATION, EXHAUST DISCHARGE TUBE 51956                                                                            |             |
| 18  | -EE      | 1   | GUARD, exhaust manifold - Long                                                                                      |             |
| 19  | -EE      | 1   | GUARD, exhaust manifold - Short                                                                                     |             |
| 20  | -EE      | 1   | BRACKET, exhaust manifold guard                                                                                     |             |
| 21  | -EE      | 2   | BOLT,                                                                                                               |             |
| 22  | -EE      | 3   | BOLT,                                                                                                               |             |



See referenced page for component or assembly breakdown.



Parts T3932 03/12/2014  
12.50



**MUFFLER INSTALLATION****Machine 0511 and After**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins C8.3-C . . . . .                        | EE-1        |
| 2   | 20452-EE | 1   |                                                                                   | CLAMP, turbo exhaust (3905216)                           |             |
| 3   | 46573-EE | 1   |                                                                                   | PIPE, EXHAUST- CUMMINS - WITH FLEX                       |             |
| 4   | 51871-EE | 1   |                                                                                   | CLAMP, MUFFLER - 830/630 - (4" EASY SEAL)                |             |
| 5   | 55349-EE | 1   |                                                                                   | MUFFLER, CUMMINS / JD (TF830)                            |             |
| 6   | 51956-EE | 1   |                                                                                   | ELBOW, EXHAUST - CUMMINS (830/630)                       |             |
| 7   | 45588-EE | 1   |                                                                                   | WELDMENT, MUFFLER MOUNT - CUMMINS                        |             |
| 8   | 15534-EE | 8   |                                                                                   | WASHER, SAE FLAT - .5"                                   |             |
| 9   | 18415-EE | 2   |                                                                                   | BOLT - 12MM -1.75P X 30MM                                |             |
| 10  | 20452-EE | 1   |                                                                                   | CLAMP, turbo exhaust (3905216)                           |             |
| 11  | 55013-EE | 1   |                                                                                   | INSULATION, MUFFLER (830/735)                            |             |
| 12  | 54839-EE | 1   |                                                                                   | GUARD, TURBO - DEBRIS DEFLECTOR (standard)               |             |
| -   | 54852-EE | 1   |                                                                                   | GUARD, TURBO DEBRIES - LOW GULLWING (old style machines) |             |
| 13  | 25060-EE | 2   |                                                                                   | BOLT - 8MM-1.25P X 25MM                                  |             |
| 14  | 25059-EE | 1   |                                                                                   | BOLT - 8MM-1.25P X 20MM                                  |             |
| 15  | 45598-EE | 1   |                                                                                   | BAR, MUFFLER PANEL BRACKET                               |             |
| 16  | 55011-EE | 2   |                                                                                   | CLAMP, MUFFLER MOUNTING - T-BOLT                         |             |
| 17  | 54514-EE | 1   |                                                                                   | INSULATION, EXHAUST DISCHARGE TUBE 51956                 |             |
| 18  | -EE      | 1   |                                                                                   | GUARD, exhaust manifold - Long                           |             |
| 19  | -EE      | 1   |                                                                                   | GUARD, exhaust manifold - Short                          |             |
| 20  | -EE      | 1   |                                                                                   | BRACKET, exhaust manifold guard                          |             |
| 21  | -EE      | 2   |                                                                                   | BOLT,                                                    |             |
| 22  | -EE      | 3   |                                                                                   | BOLT,                                                    |             |



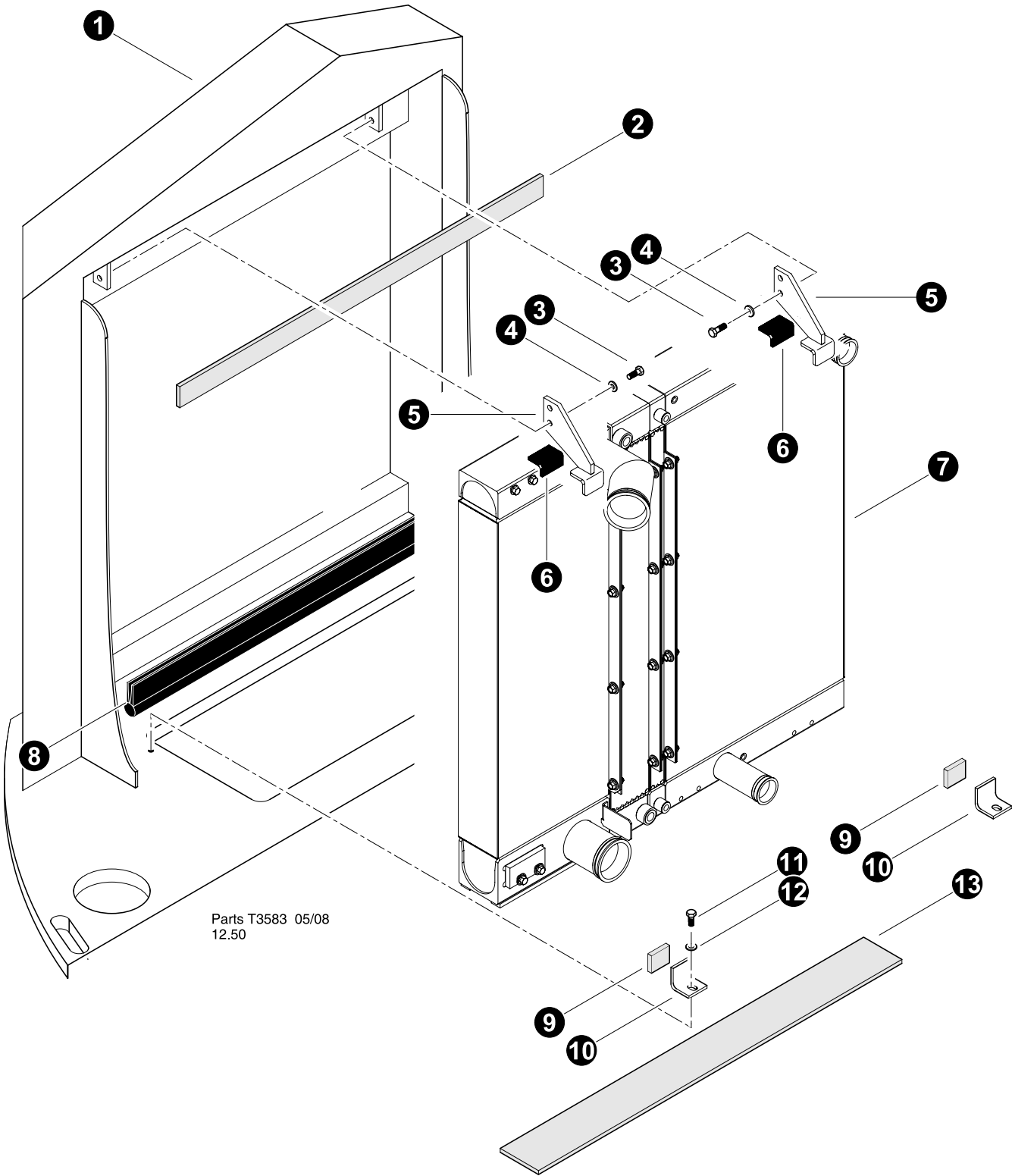
See referenced page for component or assembly breakdown.

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## **Section EE-3**

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### **Cummins Engine - Cooling System Installation**

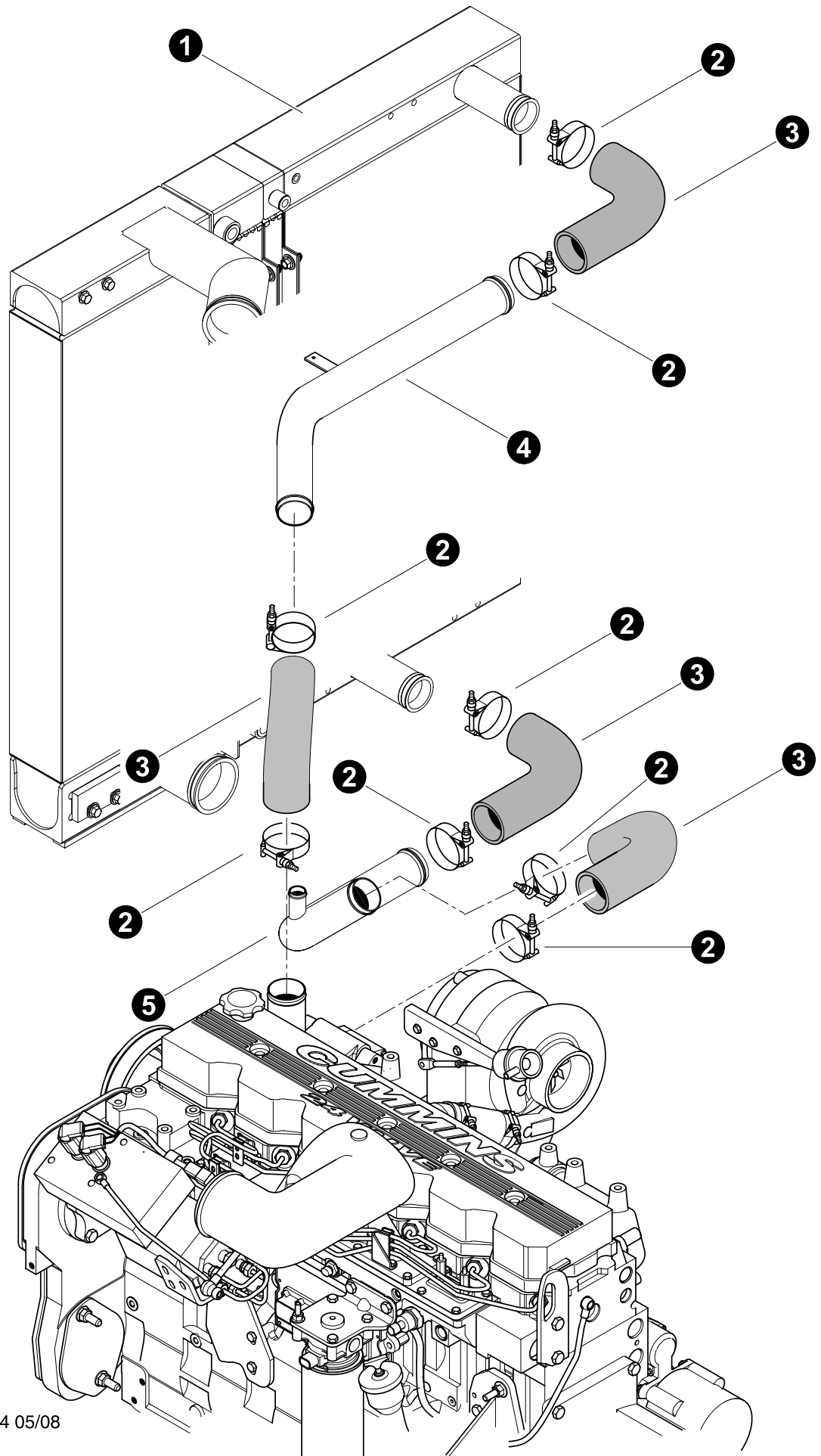


**RADIATOR/OIL & COOLER INSTALATION**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF      | 1   |  | UPPER TURNTABLE ASSEMBLY . . . . .       | UP-1        |
| 2   | 51825-EE | 2   |                                                                                   | RUBBER, ISOLATOR - RAD (2"X39"X1/4")     |             |
| 3   | 11707-EE | 4   |                                                                                   | BOLT - .375" X 1"                        |             |
| 4   | 10802-EE | 4   |                                                                                   | WASHER, FLAT - .375"                     |             |
| 5   | 52958-EE | 2   |                                                                                   | BRACKET, RADIATOR UPPER (AKG) CURRENT    |             |
| 6   | -EE      | 2   |                                                                                   | RUBBER, ISOLATOR - UPPER RAD BRACKETS    |             |
| 7   | REF      | 1   |  | RADIATOR / CHARGE AIR ASSEMBLY . . . . . | UP-3        |
| 8   | 52552-EE | 36" |                                                                                   | CHANNEL, EDGE PROTECTOR - 90DEG BULB     |             |
| 9   | -EE      | 2   |                                                                                   | RUBBER, ISOLATOR - LOWER RAD BRACKETS    |             |
| 10  | 42554-EE | 2   |                                                                                   | BRACKET, RADIATOR LOWER                  |             |
| 11  | 10783-EE | 2   |                                                                                   | BOLT - .5" X 1"                          |             |
| 12  | 15534-EE | 2   |                                                                                   | WASHER, SAE FLAT - .5"                   |             |
| 13  | 51826-EE | 1   |                                                                                   | RUBBER, ISOLATOR - RAD (6"X39"X1/4")     |             |



See referenced page for component or assembly breakdown.



Parts T3584 05/08  
12.5

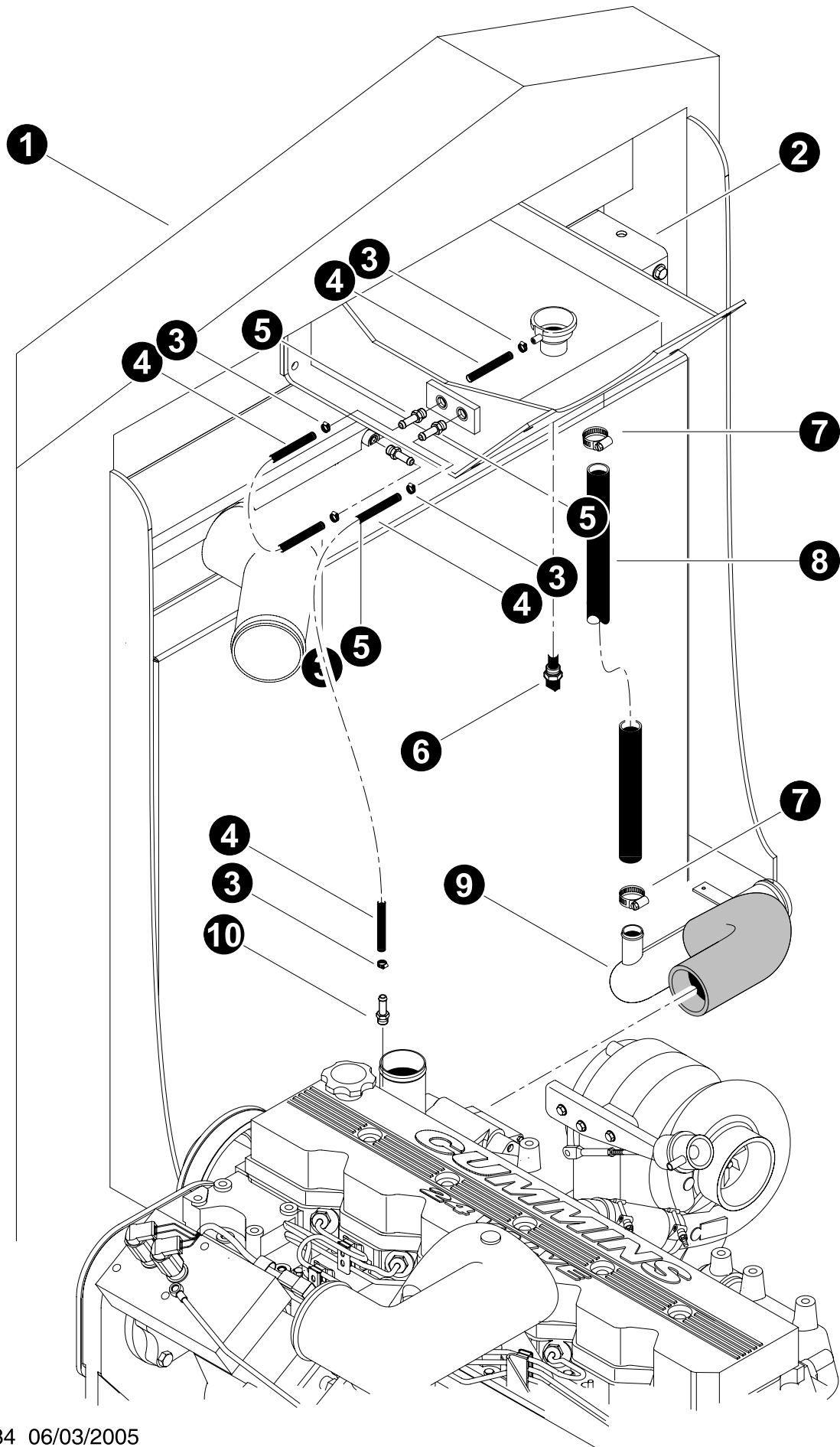
## RADIATOR TO ENGINE CONNECTIONS

### (QSC 300HP Engine)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF      | 1   |  | RADIATOR / CHARGE AIR ASSEMBLY .....     | UP-3        |
| 2   | 18103-EE | 8   |                                                                                   | CLAMP, CONSTANT TORQUE - #40             |             |
| 3   | 15617-EE | 4   |                                                                                   | HOSE, 90 DEG. RADIATOR - 2.5"            |             |
| 4   | 52976-EE | 1   |                                                                                   | TUBE, RADIATOR UPPER - CUMMINS W/AKG RAD |             |
| 5   | 52977-EE | 2   |                                                                                   | TUBE, RADIATOR LOWER - CUMMINS W/AKG RAD |             |



See referenced page for component or assembly breakdown.



Parts T3134 06/03/2005  
12.5

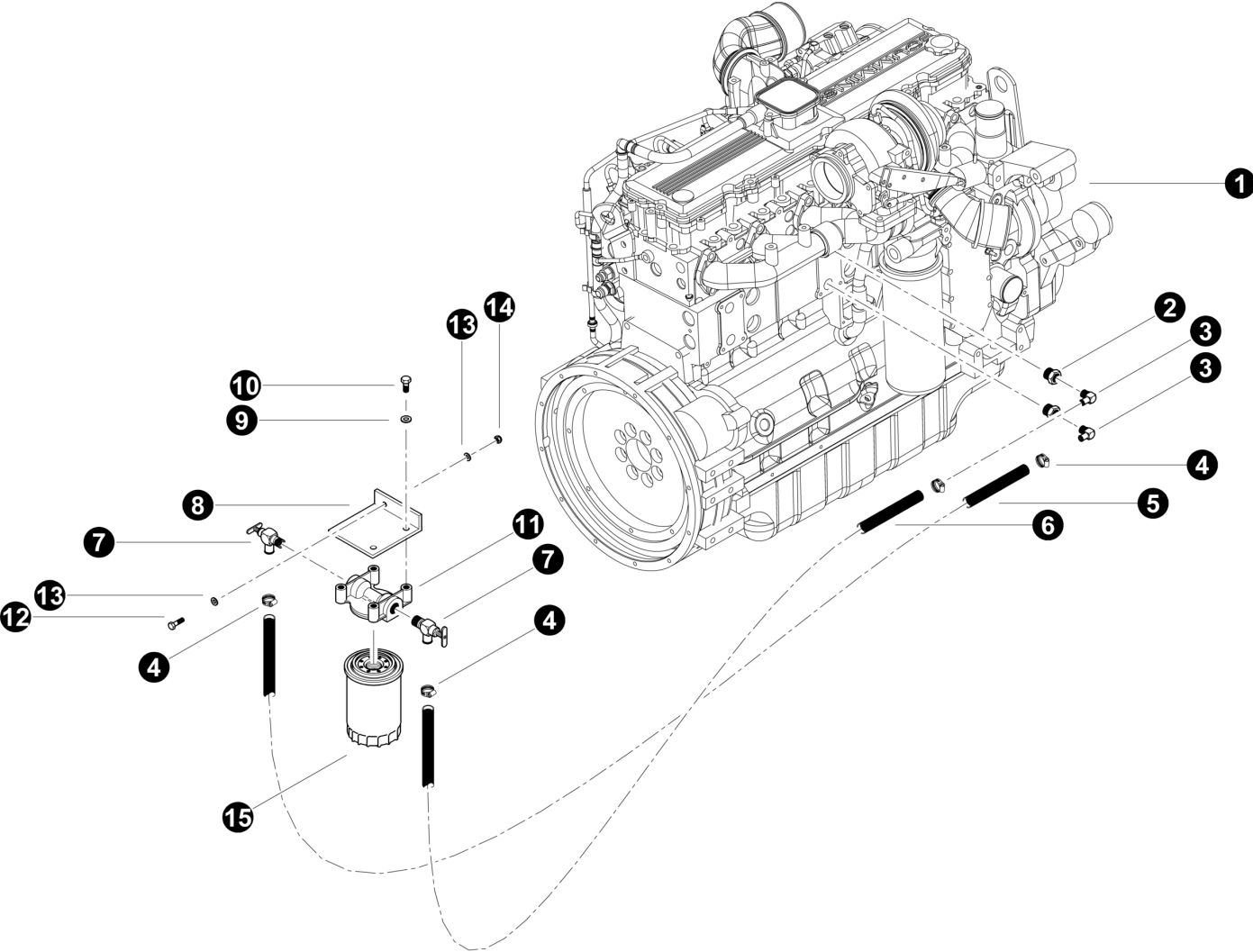


## OVER FLOW TANK CONNECTIONS

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | UPPER TURNTABLE ASSEMBLY .....                          | UP-1        |
| 2   | REF      | 1   |  | RADIATOR / CHARGE AIR ASSEMBLY .....                    | UP-3        |
| 3   | 16202-EE | 5   |                                                                                   | CLAMP, HOSE - WORM STYLE - .625"                        |             |
| 4   | 16283-EE | -   |                                                                                   | HOSE, FUEL LINE (BULK ROLL) - .3125"                    |             |
| 5   | 16989-EE | 3   |                                                                                   | CONNECTOR, STR HOSE BARB - 4245-5-2                     |             |
| 6   | 52661-EE | 1   |                                                                                   | SENSOR, LOW COOLANT - TIER 3                            |             |
| 7   | 16256-EE | 2   |                                                                                   | CLAMP, HOSE - WORM STYLE - 1"                           |             |
| 8   | 15677-EE | -   |                                                                                   | HOSE, HEATER - (BULK ROLL) 1" X 50'                     |             |
| 9   | REF      | 1   |  | LOWER RADIATOR TUBE ASSEMBLY .....                      | EE-3        |
| 10  | -EE      | 1   |                                                                                   | CONNECTOR, STR HOSE BARB (cummins with coolant orifice) |             |



See referenced page for component or assembly breakdown.



Parts T3525 02/03/2007  
12.5

## COOLANT FILTER INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF      | 1   |  | CUMMINS QSC ENGINE . . . . .             | EE-1        |
| 2   | 24288-EE | 2   |                                                                                   | BUSHING, BRASS - .375 X .75              |             |
| 3   | 24289-EE | 5   |                                                                                   | CONNECTOR, STR HOSE BARB - BRASS         |             |
| 4   | 16256-EE | 4   |                                                                                   | CLAMP, HOSE - WORM STYLE - 1"            |             |
| 5   | 25124-EE |     |                                                                                   | HOSE, FUEL LINE (BULK ROLL) - .375"      |             |
| 6   | 25124-EE |     |                                                                                   | HOSE, FUEL LINE (BULK ROLL) - .375"      |             |
| 7   | 52057-EE | 2   |                                                                                   | VALVE, SHUT OFF (Cummins Coolant Filter) |             |
| 8   | 51939-EE | 1   |                                                                                   | BRACKET, COOLANT FILTER                  |             |
| 9   | 11707-EE | 2   |                                                                                   | BOLT - .375" X 1"                        |             |
| 10  | 15528-EE | 2   |                                                                                   | WASHER, SAE FLAT - .375"                 |             |
| 11  | 16574-EE | 1   |                                                                                   | MOUNT, FILTER HEAD ASSEMBLY              |             |
| 12  | 15576-EE | 2   |                                                                                   | BOLT - .25" X 1"                         |             |
| 13  | 10811-EE | 2   |                                                                                   | NUT, LOCK - .25"                         |             |
| 14  | 10757-EE | 4   |                                                                                   | WASHER, SAE FLAT - .25"                  |             |
| 15  | 20445-EE | 1   |                                                                                   | FILTER, COOLANT - CUMMINS C SERIES       |             |



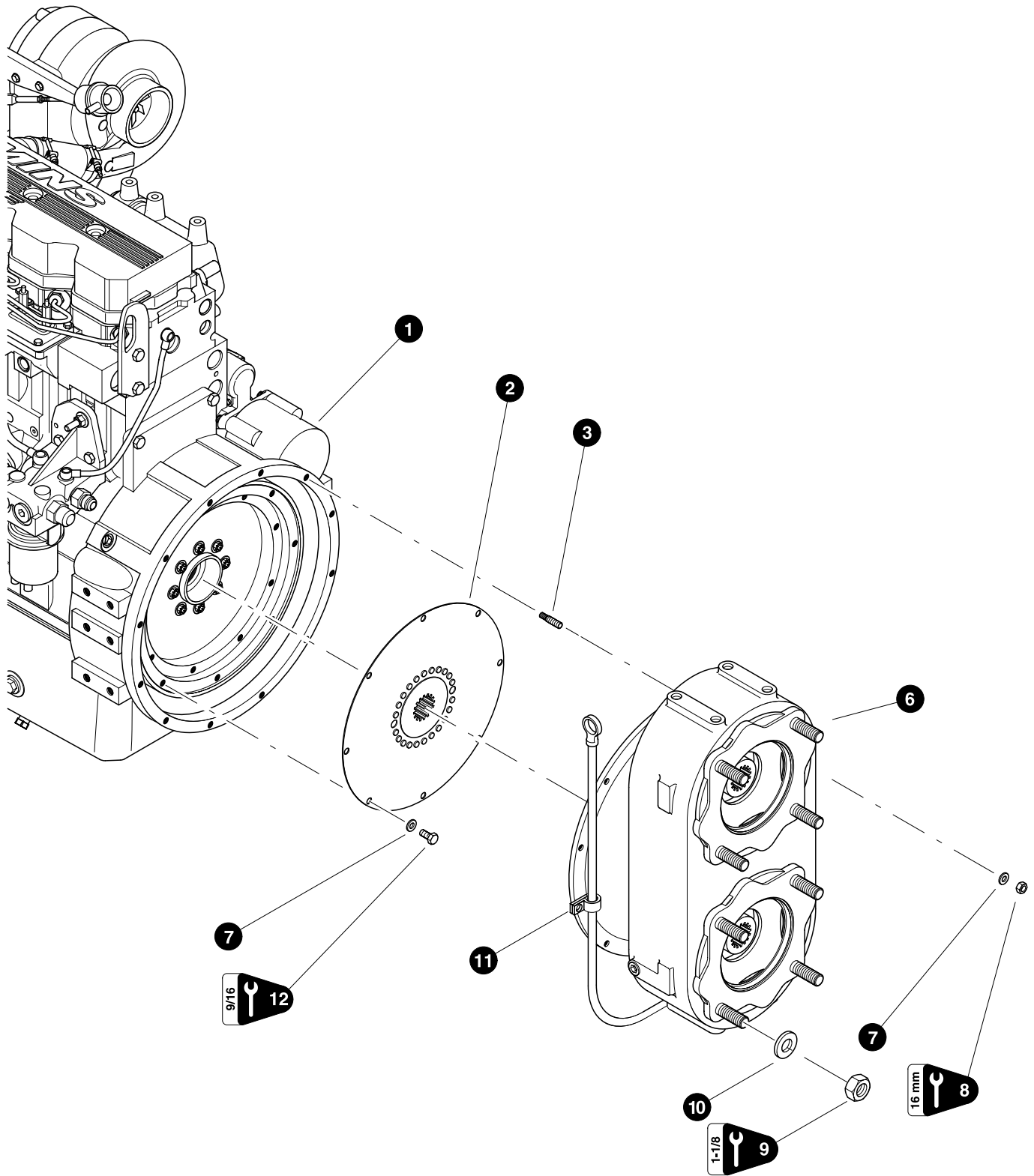
See referenced page for component or assembly breakdown.

[illegible]

## ***Section EE-4***

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### **Cummins Engine - Pump Drive Transmission**



Parts T2721 06/11/2003  
18.75

## PUMP DRIVE TRANSMISSION INSTALLATION (Funk)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE - Cummins QSC8.3. ....                                            | EE-3        |
| 2   | REF.     | 1   |  | DRIVE PLATE .....                                                        | EE-2        |
| 3   | 15531-EE | 12  |                                                                                   | STUD, threaded - 10mm x 45mm (See Note #1 below)                         |             |
| 4   | 23557-EE | 1   |                                                                                   | BREATHER                                                                 |             |
| 5   | 16808-EE | 1   |                                                                                   | BUSHING, reducer - 5406-8-2                                              |             |
| 6   | REF.     | 1   |  | PUMP DRIVE TRANSMISSION .....                                            | EE-2        |
| 7   | 15528-EE | 20  |                                                                                   | WASHER, SAE flat - 3/8"                                                  |             |
| 8   | 15530-EE | 12  |                                                                                   | NUT, hex - 10mm (See Note #2 below)<br>(Torque to 40 ft.lbs. (53 Nm))    |             |
| 9   | 10776-EE | 8   |                                                                                   | NUT, HEX 3/4                                                             |             |
| 10  | 15550-EE | 8   |                                                                                   | WASHER, SAE 3/4                                                          |             |
| 11  | 16203-EE | 1   |                                                                                   | CLAMP, coated 3/8                                                        |             |
| 12  | 15542-EE | 8   |                                                                                   | BOLT - 3/8" x 3/4" (See Note #1 below)<br>(Torque to 40 ft.lbs. (53 Nm)) |             |



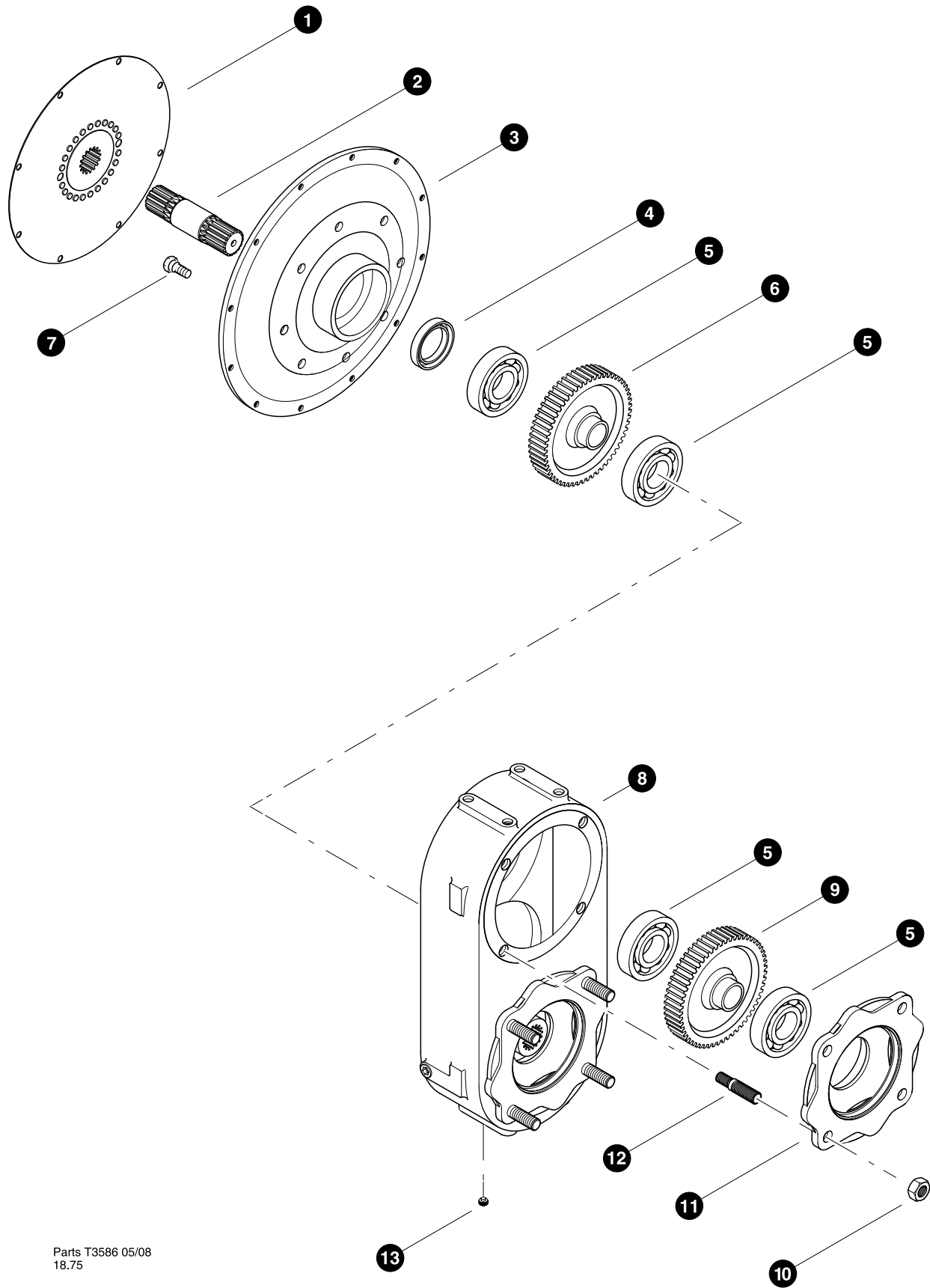
See referenced page for component or assembly breakdown.

### **Note #1:**

Use Loctite 271 (*red*) during installation.

### **Note #2:**

Use Loctite 272 (*blue*) during installation.



Parts T3586 05/08  
18.75



## PUMP DRIVE TRANSMISSION BREAKDOWN (Funk)

(Machine 840B-0383-092311 and before)

| REF | PART #   | QTY |                          | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------------------------------|-------------|
| -   | 50417-EE | 1   | <input type="checkbox"/> | DRIVE, PUMP - DUAL (FUNK .647:1) (1600 RPM MAX)         |             |
| 1   | 16258-EE | 1   |                          | DRIVE PLATE, funk                                       |             |
| 2   | ----     | 1   |                          | DRIVE SHAFT, funk pump drive (4028060)                  |             |
| 3   | ----     | 1   |                          | HOUSING, flywheel mounting (4028011)                    |             |
| 4   | ----     | 1   |                          | SEAL, shaft (F65006)                                    |             |
| 5   | ----     | 6   |                          | BEARING, funk pump drive (F40211)                       |             |
| 6   | -EE      | 1   |                          | GEAR, input (4059007) (.647:1)                          |             |
| 7   | ----     | 8   |                          | BOLT, flywheel housing addapter (4003685) (see note #1) |             |
| 8   | ----     | 1   |                          | HOUSING, 2 - pump (YZ102177)                            |             |
| 9   | -EE      | 2   |                          | GEAR, output (4028042) (.647:1)                         |             |
| 10  | ----     | 8   |                          | NUT, hex 3/4                                            |             |
| 11  | ----     | 2   |                          | PLATE, pump adapter (4028007)                           |             |
| 12  | ----     | 8   |                          | STUD, adapter (40281351) (see note #2)                  |             |
| 13  | ----     | 1   |                          | PLUG, pipe, magnetic 1/4 (444-691-00-00-08)             |             |



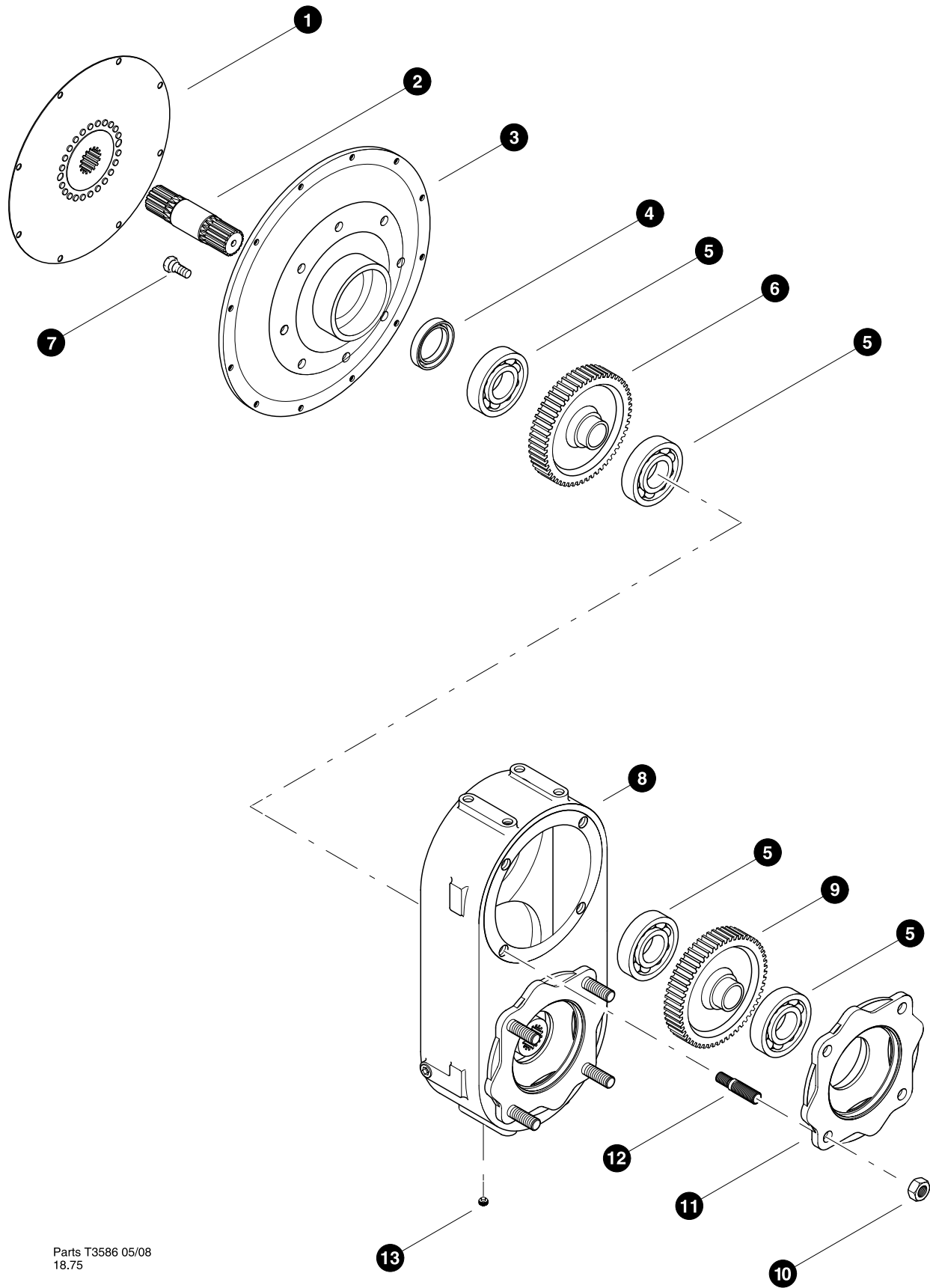
See referenced page for component or assembly breakdown.

### **Note #1:**

Use Loctite 271 (*red*) during installation.

### **Note #2:**

Use Loctite 272 (*blue*) during installation.



Parts T3586 05/08  
18.75

## PUMP DRIVE TRANSMISSION BREAKDOWN (Funk)

(machines 840B-0384-100711 and after)

| REF | PART #   | QTY |                          | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------------------------------|-------------|
| -   | -EE      | 1   | <input type="checkbox"/> | DRIVE, PUMP - DUAL (FUNK .723:1) (1800 RPM MAX)         |             |
| 1   | 16258-EE | 1   |                          | DRIVE PLATE, funk                                       |             |
| 2   | ----     | 1   |                          | DRIVE SHAFT, funk pump drive (4028060)                  |             |
| 3   | ----     | 1   |                          | HOUSING, flywheel mounting (4028011)                    |             |
| 4   | ----     | 1   |                          | SEAL, shaft (F65006)                                    |             |
| 5   | ----     | 6   |                          | BEARING, funk pump drive (F40211)                       |             |
| 6   | -EE      | 1   |                          | GEAR, input                                             |             |
| 7   | ----     | 8   |                          | BOLT, flywheel housing addapter (4003685) (see note #1) |             |
| 8   | ----     | 1   |                          | HOUSING, 2 - pump (YZ102177)                            |             |
| 9   | -EE      | 2   |                          | GEAR, output                                            |             |
| 10  | ----     | 8   |                          | NUT, hex 3/4                                            |             |
| 11  | ----     | 2   |                          | PLATE, pump adapter (4028007)                           |             |
| 12  | ----     | 8   |                          | STUD, adapter (40281351) (see note #2)                  |             |
| 13  | ----     | 1   |                          | PLUG, pipe, magnetic 1/4 (444-691-00-00-08)             |             |



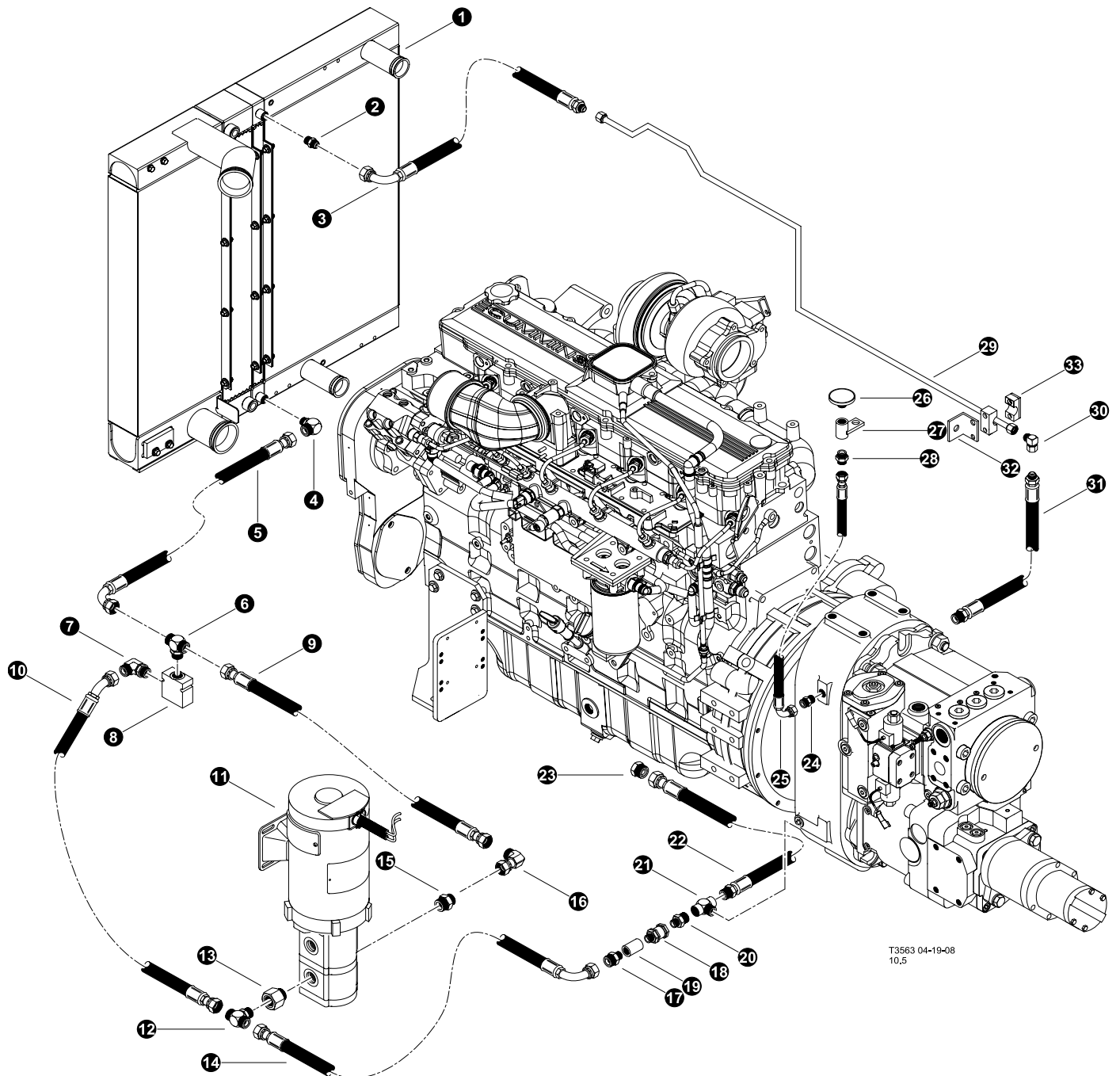
See referenced page for component or assembly breakdown.

### **Note #1:**

Use Loctite 271 (*red*) during installation.

### **Note #2:**

Use Loctite 272 (*blue*) during installation.



T3563 04-19-08  
10,5

## PUMP DRIVE COOLING SYSTEM

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.     | 1   |  | RADIATOR / AIR COOLER ASSEMBLY .....     | UP-3        |
| 2   | 15488-EE | 1   |                                                                                   | CONNECTOR, STR - 6400-6                  |             |
| 3   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2015-06-06JS-06J9        |             |
| 4   | 22405-EE | 1   |                                                                                   | ELBOW, 90 - 8-6 C5OLO-S                  |             |
| 5   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2036.5-08-08OS-08O9      |             |
| 6   | 20066-EE | 1   |                                                                                   | TEE - 8 S5OLO-S - BRANCH                 |             |
| 7   | 16669-EE | 1   |                                                                                   | ELBOW, 90 - FF2032T-0808S                |             |
| 8   | 53206-EE | 1   |                                                                                   | VALVE, CHECK - GEAR BOX COOLER LOOP      |             |
| 9   | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2008-08-08OS-08OS        |             |
| 10  | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2008-08-08OS-08OS        |             |
| 11  | REF.     | 1   |                                                                                   | FILL PUMP ASSEMBLY .....                 | UP-2        |
| 12  | 20066-EE | 1   |                                                                                   | TEE - 8 S5OLO-S - BRANCH                 |             |
| 13  | 20067-EE | 1   |                                                                                   | BUSHING, REDUCER - 6410-12-8             |             |
| 14  | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2030-08-08OS-08O9        |             |
| 15  | 15115-EE | 1   |                                                                                   | CONNECTOR, STR - 848-TTO-08X10           |             |
| 16  | 16297-EE | 1   |                                                                                   | ELBOW, 90 SWIVEL - FF2098T-0808S         |             |
| 17  | 22902-EE | 1   |                                                                                   | CONNECTOR, STR - 848-TT-08X06            |             |
| 18  | 15652-EE | 1   |                                                                                   | VALVE, CHECK - HYDRAULIC/FUEL TANK       |             |
| 19  | 53106-EE | 1   |                                                                                   | COUPLING, PIPE - 3/8"                    |             |
| 20  | 53107-EE | 1   |                                                                                   | CONNECTOR, STR - 1/2 X 3/8 FF-S          |             |
| 21  | 53074-EE | 1   |                                                                                   | TEE (1/2" MNPT BRANCH)                   |             |
| 22  | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2016-08-08PS-08OS        |             |
| 23  | 16032-EE | 1   |                                                                                   | PLUG - FF9767-08S                        |             |
| 24  | 16295-EE | 1   |                                                                                   | CONNECTOR, STR - FF2031T-0604S           |             |
| 25  | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2021-06-06OS-06O9        |             |
| 26  | -EE      | 1   |                                                                                   | VENT, (Funk - F68103)                    |             |
| 27  | 53067-EE | 1   |                                                                                   | BRACKET, VENT MOUNT .38NPT (FUNK BOX)    |             |
| 28  | 16295-EE | 1   |                                                                                   | CONNECTOR, STR - FF2031T-0604S           |             |
| 29  | 53005-EE | 1   |                                                                                   | TUBELINE, GEAR LUBE                      |             |
| 30  | 16661-EE | 1   |                                                                                   | ELBOW, 90 SWIVEL - 6500-6                |             |
| 31  | -EE      | 1   |                                                                                   | HOSE ASSEMBLY - 2028-08-08PS-08JS        |             |
| 32  | 53011-EE | 1   |                                                                                   | BRACKET, TUBE LINE CLAMP G/B COOLER LINE |             |
| 33  | 53010-EE | 1   |                                                                                   | CLAMP, STEEL TUBELINE - SINGLE 3/8" G/B  |             |

☐ Kit or Assembly - includes all items indented underneath.

### NOTE #1

Use loctite 262 when installing bolts

### NOTE #2

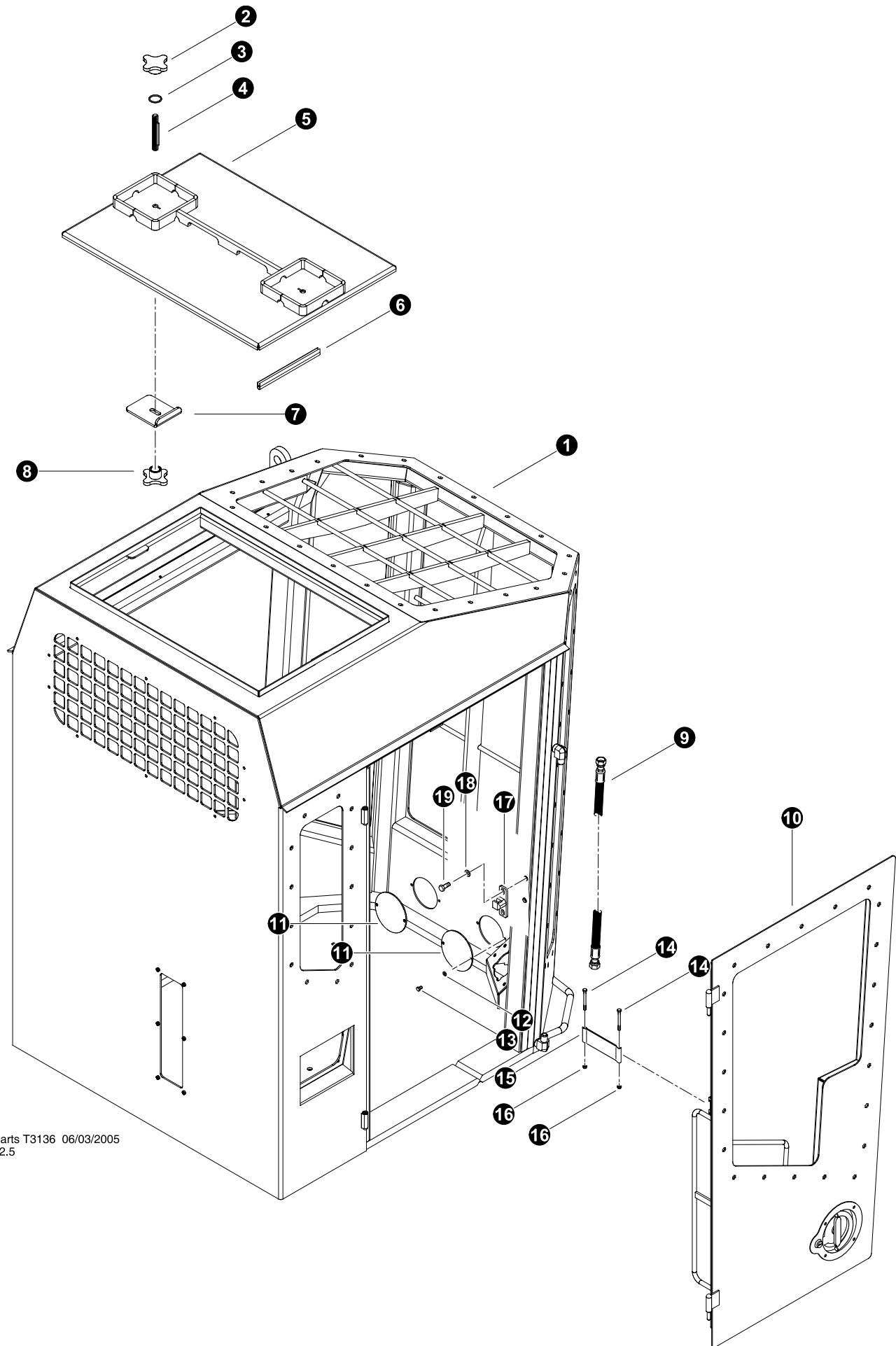
Apply loctite 271 to housing side before install

[illegible]

# OC-1

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## ***Operator's Cab - Cab Weldment and Installation***



Parts T3136 06/03/2005  
12.5

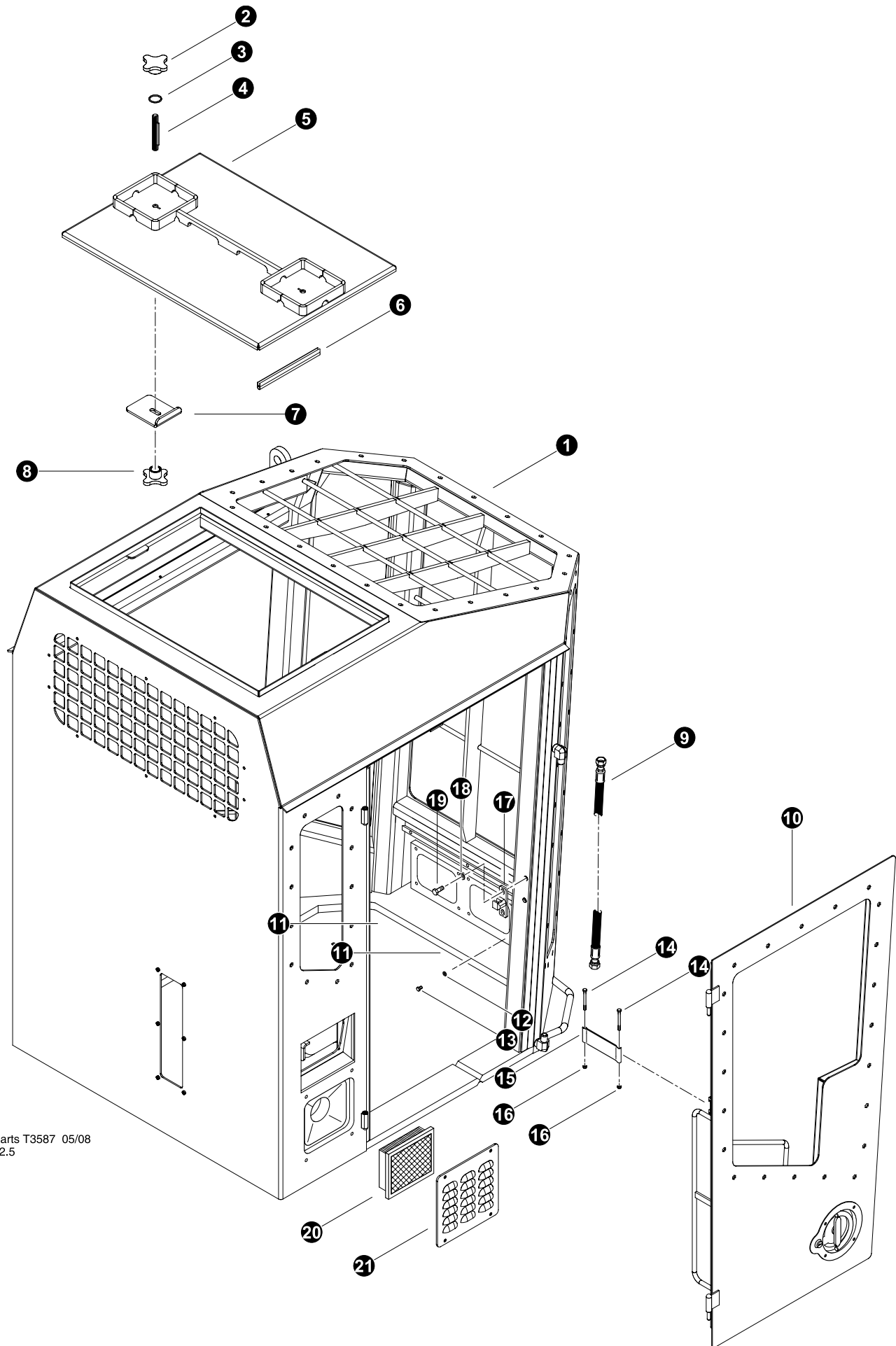


## CAB WELDMENT ASSEMBLY (Machines built 05/13/08 and before)

| REF | PART #   | QTY   |   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-------|---|---------------------------------------------|-------------|
| 1   | 51572-OC | 1     | ☐ | WELDMENT, CAB - NEW MACH                    |             |
| 2   | 52060-OC | 2     |   | KNOB, STAR - EMERGENCY ESCAPE (O-RING SEAL) |             |
| 3   | 52066-OC | 2     |   | O-RING, EMERGENCY ESCAPE                    |             |
| 4   | 16538-OC | 2     |   | STUD, 2-WAY - .5" X 3.5"                    |             |
| 5   | 52059-OC | 1     |   | HATCH, ESCAPE - ROOF 830-630                |             |
| 6   | 15694-OC | 10 ft | ✂ | WEATHERSTRIPPING - .25" X 1"                |             |
| 7   | 52062-OC | 2     |   | BRACKET, EMERGENCY ESCAPE 830               |             |
| 8   | 52061-OC | 1     |   | KNOB, STAR - EMERGENCY ESCAPE               |             |
| 9   | 52033-OC | 1     |   | HOSE, CAB HANDLE - 4037.5-08-10JS-10JS      |             |
| 10  | REF      | 1     |   | CAB DOOR ASSEMBLY.....                      | OC-1        |
| 11  | 52064-OC | 1     |   | COVER, FRONT LIGHT - 830                    |             |
| 12  | 10757-OC | 4     |   | WASHER, SAE FLAT - .25"                     |             |
| 13  | 15604-OC | 4     |   | BOLT - .25" X .75"                          |             |
| 14  | 10818-OC | 2     |   | BOLT - .25" X 3"                            |             |
| 15  | 51981-OC | 1     |   | STRAP, DOOR STOP - 830/630                  |             |
| 16  | 10811-OC | 2     |   | NUT, LOCK - .25"                            |             |
| 17  | 17896-OC | 1     |   | STRIKER, DOOR LATCH                         |             |
| 18  | 15528-OC | 2     |   | WASHER, SAE FLAT - .375"                    |             |
| 19  | 15542-OC | 2     |   | BOLT - .375" X .75"                         |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



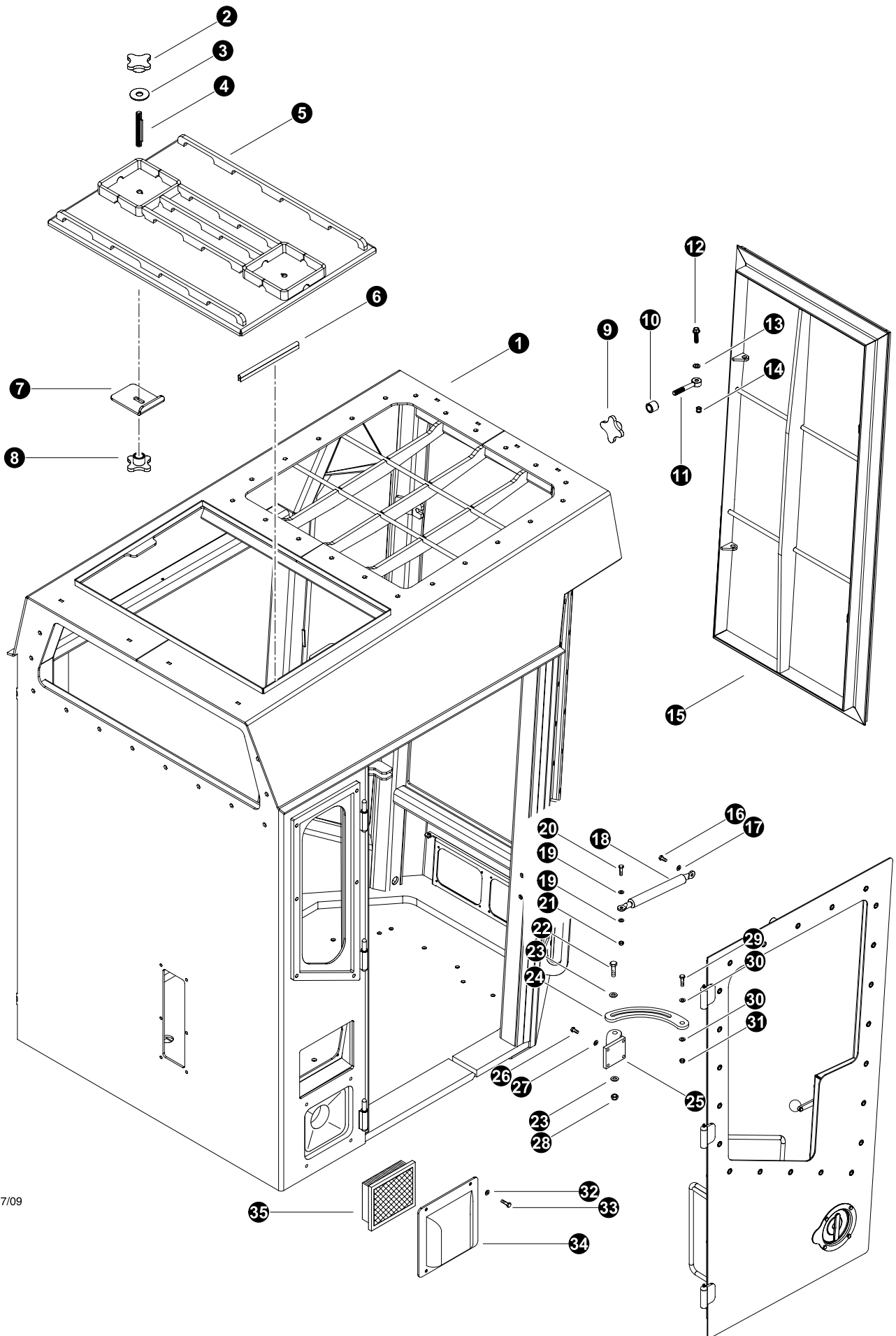
Parts T3587 05/08  
12.5

**CAB WELDMENT ASSEMBLY**  
**(Machines built after 05/13/08**  
**and built before 04/12/09)**

| REF | PART #   | QTY   |   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-------|---|---------------------------------------------|-------------|
| 1   | 53162-OC | 1     | ☐ | WELDMENT, CAB - FORWARDER EXTENDED FRONT    |             |
| 2   | 52060-OC | 2     |   | KNOB, STAR - EMERGENCY ESCAPE (O-RING SEAL) |             |
| 3   | 52066-OC | 2     |   | O-RING, EMERGENCY ESCAPE                    |             |
| 4   | 16538-OC | 2     |   | STUD, 2-WAY - .5" X 3.5"                    |             |
| 5   | 52059-OC | 1     |   | HATCH, ESCAPE - ROOF 830-630                |             |
| 6   | 15694-OC | 10 ft | ✂ | WEATHERSTRIPPING - .25" X 1"                |             |
| 7   | 52062-OC | 2     |   | BRACKET, EMERGENCY ESCAPE 830               |             |
| 8   | 52061-OC | 1     |   | KNOB, STAR - EMERGENCY ESCAPE               |             |
| 9   | 52033-OC | 1     |   | HOSE, CAB HANDLE - 4037.5-08-10JS-10JS      |             |
| 10  | REF      | 1     |   | CAB DOOR ASSEMBLY.....                      | OC-1        |
| 11  | 52064-OC | 1     |   | COVER, FRONT LIGHT - 830                    |             |
| 12  | 10757-OC | 4     |   | WASHER, SAE FLAT - .25"                     |             |
| 13  | 15604-OC | 4     |   | BOLT - .25" X .75"                          |             |
| 14  | 10818-OC | 2     |   | BOLT - .25" X 3"                            |             |
| 15  | 51981-OC | 1     |   | STRAP, DOOR STOP - 830/630                  |             |
| 16  | 10811-OC | 2     |   | NUT, LOCK - .25"                            |             |
| 17  | 17896-OC | 1     |   | STRIKER, DOOR LATCH                         |             |
| 18  | 15528-OC | 2     |   | WASHER, SAE FLAT - .375"                    |             |
| 19  | 15542-OC | 2     |   | BOLT - .375" X .75"                         |             |
| 20  | -OC      | 1     |   | FILTER, Cab Air Intake (napa 6026)          |             |
| 21  | -OC      | 1     |   | Panel, Cab Air Vent (006659-00)             |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



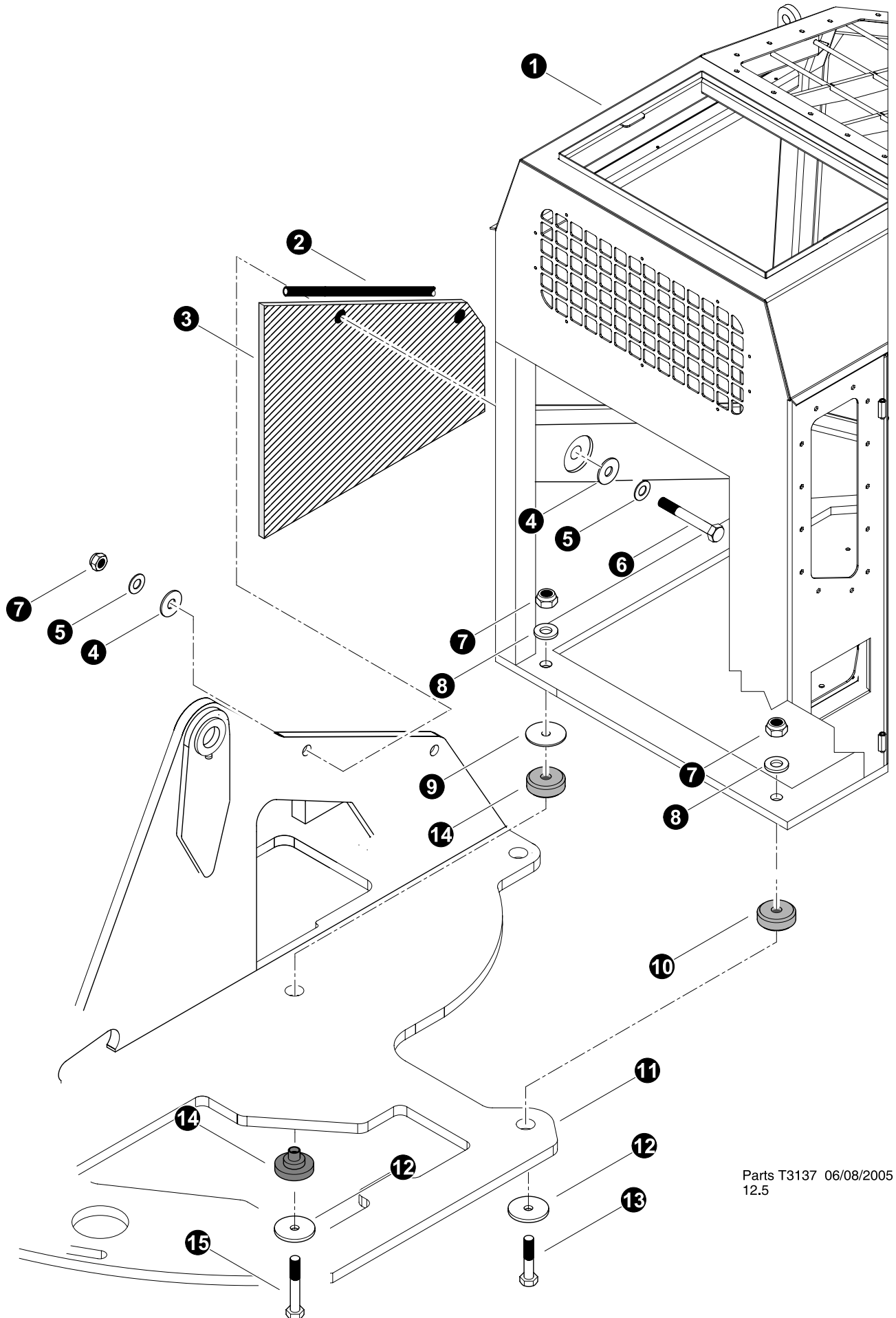
Parts T3779 07/09  
12.5

## CAB WELDMENT ASSEMBLY (Machines built after 04/12/09)

| REF | PART #      | QTY   |   | DESCRIPTION                                                       | SEE SECTION |
|-----|-------------|-------|---|-------------------------------------------------------------------|-------------|
| 1   | 53768-OC    | 1     | ☐ | WELDMENT, CAB - FLAT TOP                                          |             |
| 2   | 52060-OC    | 2     |   | KNOB, STAR - EMERGENCY ESCAPE                                     |             |
| 3   | 63246-OC    | 2     |   | SEAL, EMERGENCY ESCAPE                                            |             |
| 4   | G2319-OC    | 2     |   | STUD, 2-WAY - .5" X 3.5"                                          |             |
| 5   | 52059-OC    | 1     |   | HATCH, ESCAPE - ROOF 830-630 (06211-00)                           |             |
| 6   | 06212-OC    | 10 ft | ✂ | WEATHERSTRIPPING                                                  |             |
| 7   | 06218-00-OC | 2     |   | BRACKET, EMERGENCY ESCAPE 830                                     |             |
| 8   | 06214-00-OC | 2     |   | KNOB, STAR - EMERGENCY ESCAPE INSIDE                              |             |
| 9   | 12013-OC    | 4     |   | KNOB, STAR - EMERGENCY ESCAPE INSIDE                              |             |
| 10  | 16539-OC    | 4     |   | STANDOFF, hatch bolt                                              |             |
| 11  | 6066K45-OC  | 4     |   | SWING BOLT                                                        |             |
| 12  | 20084-OC    | 4     |   | BOLT - .375" X 1.75"                                              |             |
| 13  | 15528-OC    | 12    |   | WASHER, SAE FLAT - .375"                                          |             |
| 14  | 10813-OC    | 4     |   | NUT, LOCK - .375"                                                 |             |
| 15  | 13246-00-OC | 1     |   | WELDMENT, KICKOUT WINDOW                                          |             |
| 16  | 15605-OC    | 1     |   | BOLT - .3125" X .75"                                              |             |
| 17  | 15559-OC    | 1     |   | WASHER, SAE FLAT - .3125"                                         |             |
| 18  | 54339-OC    | 1     |   | CYLINDER, Contant Speed (machines built between 04/09 to 11/2012) |             |
| 18  | 55121-OC    | 1     |   | CYLINDER, Contant Speed (machines built after 11/2012)            |             |
| 19  | 15559-OC    | 2     |   | WASHER, SAE FLAT - .3125"                                         |             |
| 20  | 15589-OC    | 1     |   | BOLT - .3125" X 1"                                                |             |
| 21  | 10812-OC    | 1     |   | NUT, LOCK - .3125"                                                |             |
| 22  | 10736-OC    | 1     |   | BOLT - .5" X 2"                                                   |             |
| 23  | 15534-OC    | 2     |   | WASHER, SAE FLAT - .5"                                            |             |
| 24  | 13264-00    | 1     |   | LINK, Door Stop                                                   |             |
| 25  | 13260-00    | 1     |   | WELDMENT, bolt on lug - door stop                                 |             |
| 26  | 15605-OC    | 4     |   | BOLT - .3125" X .75"                                              |             |
| 27  | 15559-OC    | 4     |   | WASHER, SAE FLAT - .3125"                                         |             |
| 28  | 10815-OC    | 1     |   | NUT, LOCK - .5"                                                   |             |
| 29  | 15529-OC    | 1     |   | BOLT - .375" X 2"                                                 |             |
| 30  | 15528-OC    | 2     |   | WASHER, SAE FLAT - .375"                                          |             |
| 31  | 10813-OC    | 1     |   | NUT, LOCK - .375"                                                 |             |
| 32  | 15559-OC    | 4     |   | WASHER, SAE FLAT - .3125"                                         |             |
| 33  | 15589-OC    | 4     |   | BOLT - .3125" X 1"                                                |             |
| 34  | 13235-00-OC | 1     |   | COVER, Cab Air Vent                                               |             |
| 35  | BT8-1212-OC | 1     |   | FILTER, Cab Air Intake (BT8-1212)                                 |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



Parts T3137 06/08/2005  
12.5

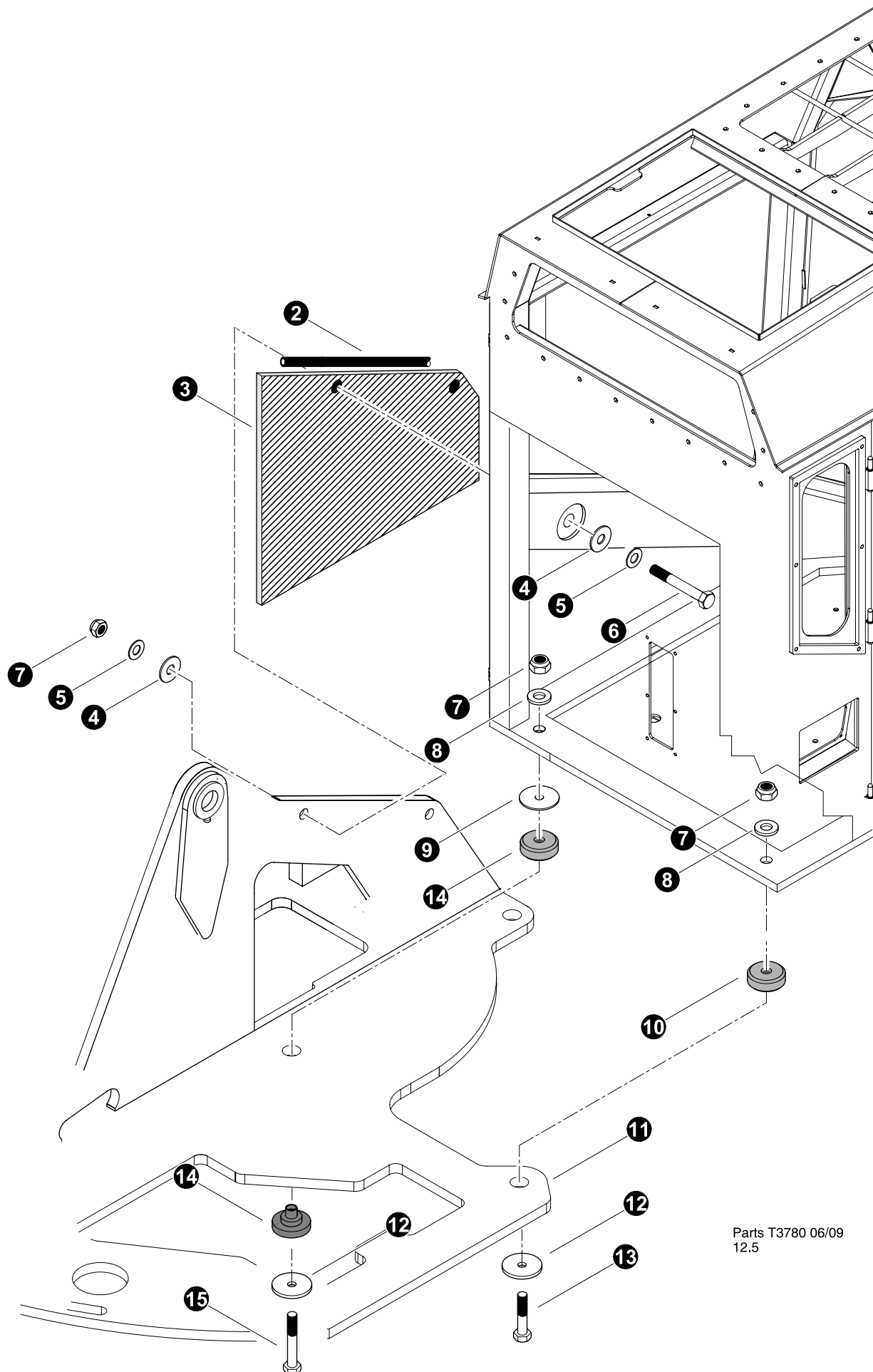
## CAB INSTALLATION (Machines built before 04/12/09)

| REF | PART #   | QTY  |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|------|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1    |  | CAB WELDMENT . . . . .                  | OC-1        |
| 2   | 16717-OC | 8 ft |                                                                                   | HOSE, HEATER - (BULK ROLL) .625" X 250' |             |
| 3   | 42739-OC | 1    |                                                                                   | INSULATION, SOUNDPROOF - CAB            |             |
| 4   | 17065-OC | 3    |                                                                                   | WASHER, rubber                          |             |
| 5   | 10808-OC | 4    |                                                                                   | WASHER, FLAT - 1"                       |             |
| 6   | 18672-OC | 2    |                                                                                   | BOLT - 1" X 7.5"                        |             |
| 7   | 18253-OC | 5    |                                                                                   | NUT, LOCK - 1"                          |             |
| 8   | 15579-OC | 3    |                                                                                   | WASHER, SAE FLAT - 1"                   |             |
| 9   | 50061-OC | 3    |                                                                                   | WASHER, cab mount isolator              |             |
| 10  | 19295-OC | 3    |                                                                                   | ISOLATOR, CAB MOUNTING - FWD            |             |
| 11  | REF.     | 1    |  | UPPER TURNTABLE ASSEMBLY . . . . .      | UP-1        |
| 12  | 19369-OC | 3    |                                                                                   | WASHER, cab mount isolator - (.5 thick) |             |
| 13  | 50263-OC | 1    |                                                                                   | BOLT, 1" x 5.5" ( see note 1 below)     |             |
| 14  | 18141-OC | 2    |                                                                                   | ISOLATOR, CAB MOUNTING                  |             |
| 15  | 23387-OC | 2    |                                                                                   | BOLT - 1" X 6.5"                        |             |

 See referenced page for component or assembly breakdown.

### Note 1

Use loctite 271 (red) on threads during installation.



Parts T3780 06/09  
12.5



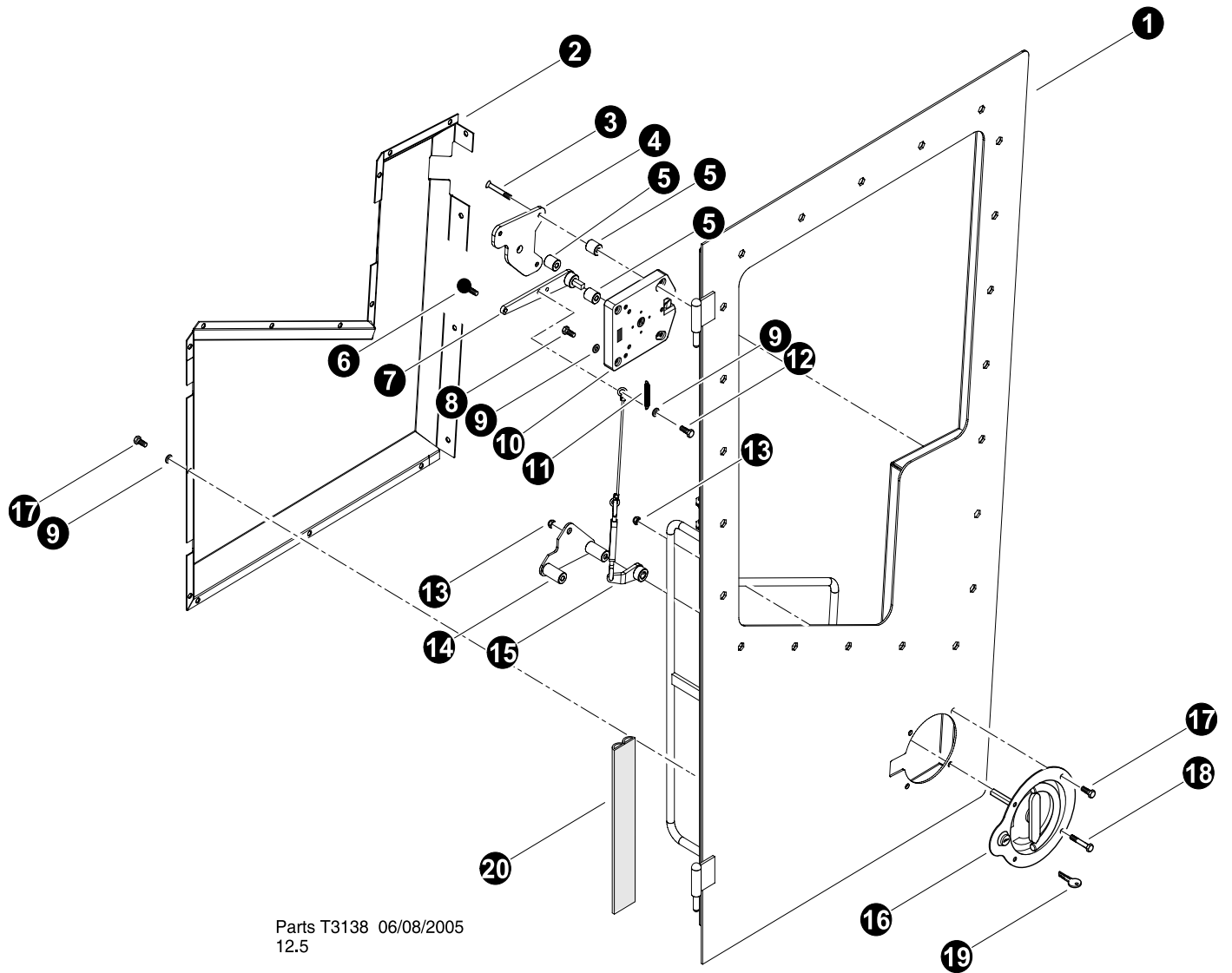
## CAB INSTALLATION (Machines built after 04/12/09)

| REF | PART #   | QTY  |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|------|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1    |  | CAB WELDMENT . . . . .                  | OC-1        |
| 2   | 16717-OC | 8 ft |                                                                                   | HOSE, HEATER - (BULK ROLL) .625" X 250' |             |
| 3   | 42739-OC | 1    |                                                                                   | INSULATION, SOUNDPROOF - CAB            |             |
| 4   | 17065-OC | 4    |                                                                                   | WASHER, rubber                          |             |
| 5   | 51320-OC | 4    |                                                                                   | WASHER, SAE FLAT - 1.125"               |             |
| 6   | 53856-OC | 2    |                                                                                   | BOLT - 1.125-12 X 6.5" (FINE THREAD)    |             |
| 7   | 53857-OC | 5    |                                                                                   | NUT, LOCK - 1.125" (FINE THREAD)        |             |
| 8   | 15579-OC | 3    |                                                                                   | WASHER, SAE FLAT - 1"                   |             |
| 9   | 50061-OC | 2    |                                                                                   | WASHER, cab mount isolator              |             |
| 10  | 19295-OC | 1    |                                                                                   | ISOLATOR, CAB MOUNTING - FWD            |             |
| 11  | REF.     | 1    |  | UPPER TURNTABLE ASSEMBLY . . . . .      | UP-1        |
| 12  | 19369-OC | 3    |                                                                                   | WASHER, cab mount isolator - (.5 thick) |             |
| 13  | 50263-OC | 1    |                                                                                   | BOLT, 1" x 5.5" ( see note 1 below)     |             |
| 14  | 18141-OC | 2    |                                                                                   | ISOLATOR, CAB MOUNTING                  |             |
| 15  | 23387-OC | 2    |                                                                                   | BOLT - 1" X 6.5"                        |             |

 See referenced page for component or assembly breakdown.

### Note 1

Use loctite 271 (red) on treads during installation.



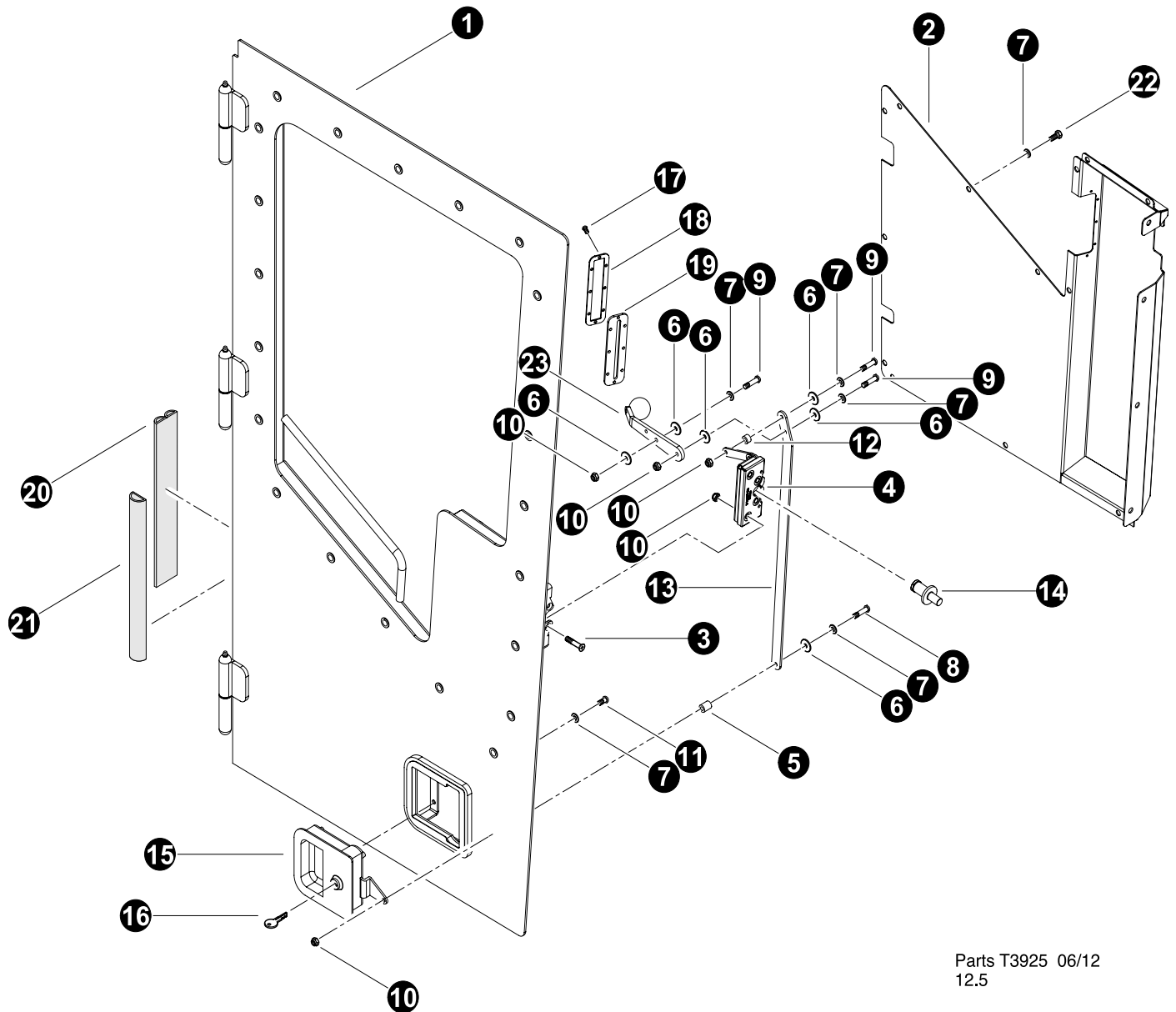
Parts T3138 06/08/2005  
12.5

## DOOR LATCH INSTALLATION (Machines Built Before 11/13/2012))

| REF | PART #   | QTY |   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|---|------------------------------------------|-------------|
| 1   | 52063-OC | 1   | ☐ | DOOR, CAB - 830 (hinges shipped loose)   |             |
| 2   | 52067-OC | 1   |   | COVER, DOOR - 830                        |             |
| 3   | 52068-OC | 1   |   | BOLT, COUNTERSUNK                        |             |
| 4   | 52069-OC | 4   | ☐ | PLATE, DOOR LATCH                        |             |
| 5   | -        | 3   |   | SPACER, DOOR LATCH (included with plate) |             |
| 6   | 52070-OC | 1   |   | KNOB, DOOR LATCH                         |             |
| 7   | 52071-OC | 1   |   | LEVER, DOOR LATCH - 830                  |             |
| 8   | 18273-OC | 4   |   | BOLT - 1/4" x 2-3/4"                     |             |
| 9   | 10757-OC | 20  |   | WASHER, SAE FLAT - .25"                  |             |
| 10  | 17895-OC | 1   |   | LATCH, DOOR                              |             |
| 11  | 52072-OC | 1   |   | SPRING, DOOR LATCH                       |             |
| 12  | 15604-OC | 1   |   | BOLT - .25" X .75"                       |             |
| 13  | 10811-OC | 4   |   | NUT, LOCK - .25"                         |             |
| 14  | -OC      | 2   |   | STANDOFF (05955-00)                      |             |
| 15  | 52073-OC | 1   |   | CABLE ASSEMBLY - DOOR LATCH              |             |
| 16  | 19248-OC | 1   |   | HANDLE, outside door                     |             |
| 17  | 15604-OC | 16  |   | BOLT - .25" X .75"                       |             |
| 18  | 15508-OC | 2   |   | BOLT - .25" X 2.5"                       |             |
| 19  | 16940-OC | 1   |   | KEY, door (Key code CH1250)              |             |
| 20  | 18126-OC | AR  | ✂ | WEATHERSTRIP, door                       |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



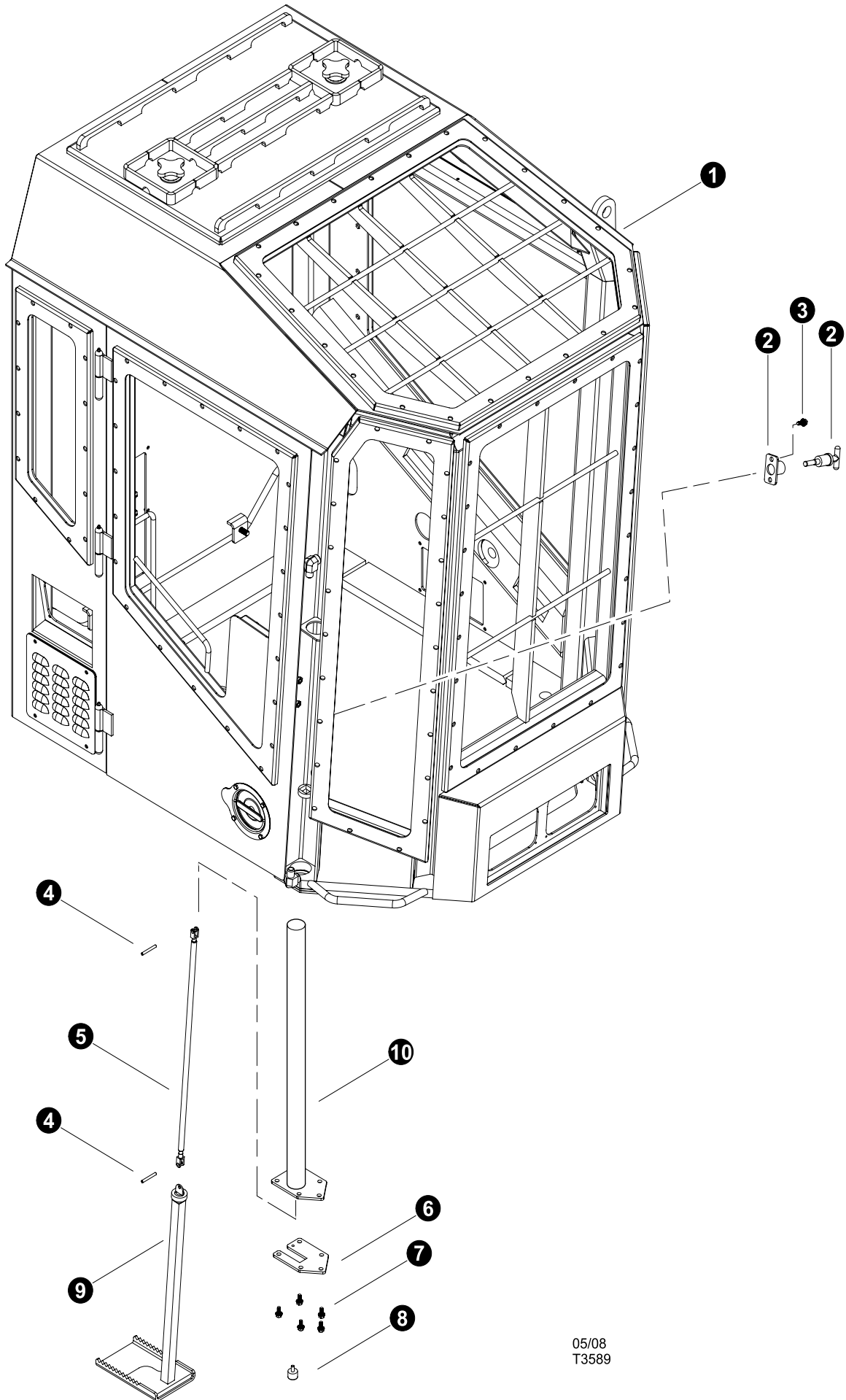
Parts T3925 06/12  
12.5

## DOOR LATCH INSTALLATION (Machines built after 11/13/2012)

| REF | PART #      | QTY |   | DESCRIPTION                                | SEE SECTION |
|-----|-------------|-----|---|--------------------------------------------|-------------|
| 1   | 13272-00-OC | 1   | ☐ | DOOR, CAB - FlatTop (hinges shipped loose) |             |
| 2   | 06142-00-OC | 1   |   | COVER, DOOR - 830B                         |             |
| 3   | 52068-OC    | 1   |   | BOLT, COUNTERSUNK                          |             |
| 4   | 63079-OC    | 1   |   | DOOR LATCH                                 |             |
| 5   | 1045877-    | 3   |   | PLASTIC SPACER,                            |             |
| 6   | 63220-OC    | 6   |   | PLASTIC WASHER 1/4" ID 5/8" LONG           |             |
| 7   | 10757-OC    | -   |   | WASHER, SAE FLAT - .25"                    |             |
| 8   | 1050412-OC  | 3   |   | BOLT - 1/4" X 1.5" Button Head             |             |
| 9   | 23226-OC    | 3   |   | BOLT - 1/4" X 1.25" Button Head            |             |
| 10  | 10811-OC    | 4   |   | NUT, LOCK - .25"                           |             |
| 11  | 24999-OC    | 1   |   | #10-24 screws                              |             |
| 12  | 1050409-OC  | 1   |   | PLASTIC WASHER 1/4" ID 5/16" LONG          |             |
| 13  | 1050227-OC  | 1   |   | LINK, DOOR LATCH                           |             |
| 14  | 1050263-OC  | 2   |   | STRIKER BOLT                               |             |
| 15  | 63100-OC    | 1   |   | HANDLE, DOOR LATCH                         |             |
| 16  | 54855-OC    | 1   |   | KEY (CH 751)                               |             |
| 17  | 83303-OC    | 8   |   | #8-32 x 1/4" screw                         |             |
| 18  | 06149-00    | 1   |   | RETAINER                                   |             |
| 19  | 06148-00-OC | 1   |   | GASKET, Paddle Handle                      |             |
| 20  | 18126-OC    | AR  | ✂ | WEATHERSTRIP, door                         |             |
| 21  | 54050-OC    | AR  | ✂ | WEATHERSTRIPPING, RUBBER-REAR DOOR SEAL    |             |
| 22  | 45040-OC    | 18  |   | BOLT, 1/4" x 1/2"                          |             |
| 23  | 1050252-OC  | 1   |   | HANDLE                                     |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



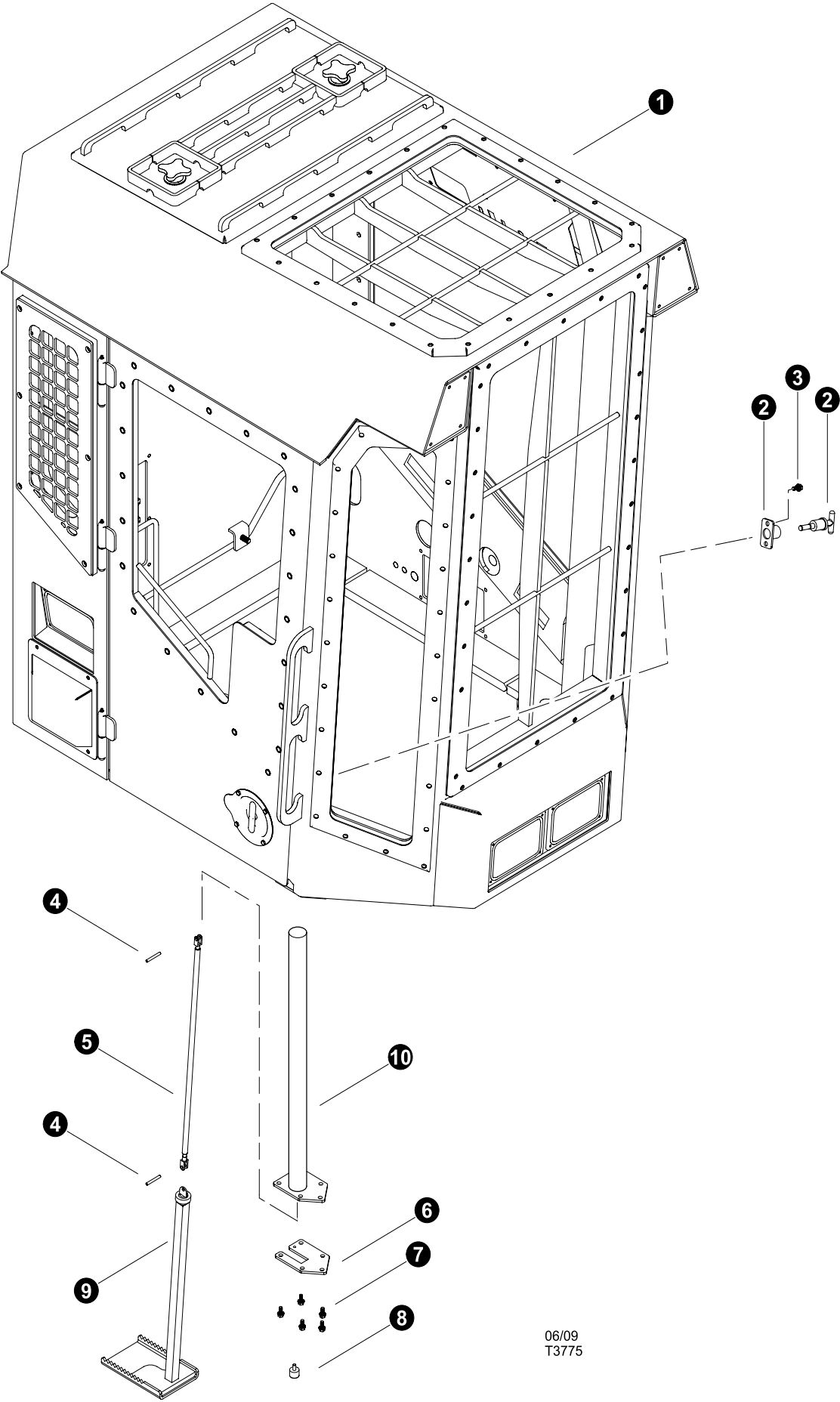
05/08  
T3589

## DOOR STEP INSTALLATION (Machines built before 04/12/09)

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   | REF      | 1   |   | OPERATOR'S CAB .....                    | OC-1        |
| 2   | 54117-OC | 1   |   | Bracket, Latch (06490-00)               |             |
| 3   | -OC      | 2   |   | BOLT, Serated 3/8" X 3/4" (18003)       |             |
| -   | 53758-OC | 1   | ☐ | ASSEMBLY, CAB STEP                      |             |
| 4   | 52781-OC | 1   |   | PIN, ROLL - CAB STEP (63187)            |             |
| 5   | 54141-OC | 1   |   | SHOCK, Bansbach (C5C5Z-43-305-746/090N) |             |
| 6   | 54116-OC | 1   |   | PLATE, Step Retainer (06496-00)         |             |
| 7   | -OC      | 3   |   | BOLT, Serated 3/8" X 3/4" (18003)       |             |
| 8   | 52780-OC | 1   |   | BUMPER, Rubber Stop - Cab Step (63185)  |             |
| 9   | 52778-OC | 1   |   | WELDMENT, Cab Step (06482-00)           |             |
| 10  | 54115-OC | 1   |   | FRAME, slide tube                       |             |

☐ Kit or Assembly - includes all items indented underneath.

✂ Bulk material - order length required in feet or meters.



06/09  
T3775



## DOOR STEP INSTALLATION (Machines built after 04/12/09)

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   | REF      | 1   |   | OPERATOR'S CAB .....                    | OC-1        |
| 2   | 54117-OC | 1   |   | Bracket, Latch (06490-00)               |             |
| 3   | -OC      | 2   |   | BOLT, Serated 3/8" X 3/4" (18003)       |             |
| -   | 53758-OC | 1   | ☐ | ASSEMBLY, CAB STEP                      |             |
| 4   | 52781-OC | 1   |   | PIN, ROLL - CAB STEP (63187)            |             |
| 5   | 54141-OC | 1   |   | SHOCK, Bansbach (C5C5Z-43-305-746/090N) |             |
| 6   | 54116-OC | 1   |   | PLATE, Step Retainer (06496-00)         |             |
| 7   | -OC      | 3   |   | BOLT, Serated 3/8" X 3/4" (18003)       |             |
| 8   | 52780-OC | 1   |   | BUMPER, Rubber Stop - Cab Step (63185)  |             |
| 9   | 52778-OC | 1   |   | WELDMENT, Cab Step (06482-00)           |             |
| 10  | 54115-OC | 1   |   | FRAME, slide tube                       |             |

- ☐ Kit or Assembly - includes all items indented underneath.  
 ✂ Bulk material - order length required in feet or meters.

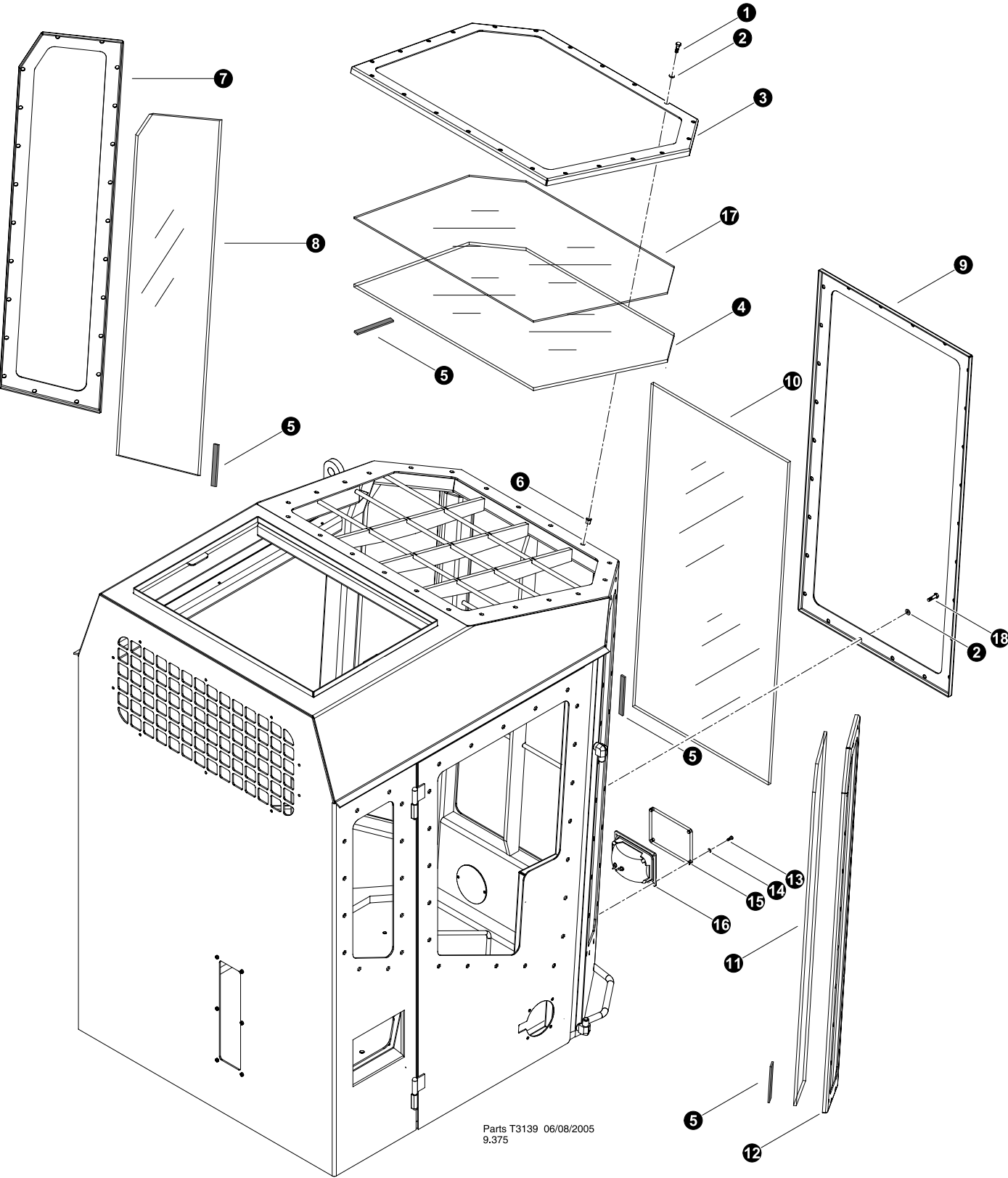
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## ***Section OC-2***

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### ***Operator's Cab - Window Installation***



Parts T3139 06/08/2005  
9.375

**WINDOW INSTALLATION**  
**(Front Window Installation)**  
**(used on machines built 05/13/08 or before)**

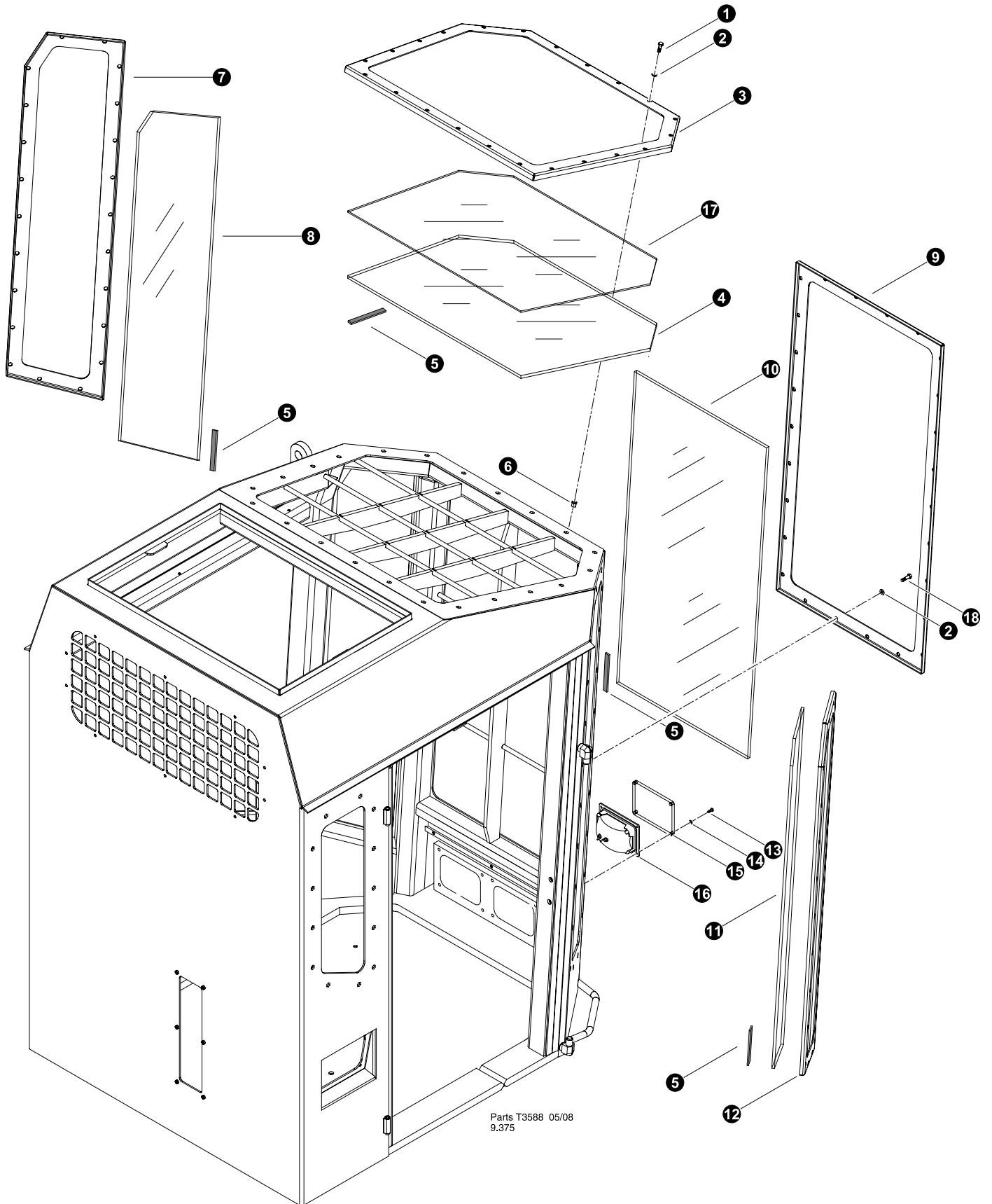
| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   | 20084-OC | 22  |   | BOLT - .375" X 1.75"                    |             |
| 2   | 15528-OC | 92  |   | WASHER, SAE FLAT - .375"                |             |
| 3   | 42377-OC | 1   |   | FRAME, TOP WINDOW                       |             |
| 4   | 51697-OC | 1   |   | LEXAN, SKYLITE - 830                    |             |
| 5   | 42378-OC | AR  | ✂ | WEATHERSTRIPPING, WINDOW 5/16 X 3/4 X 5 |             |
| 6   | 51810-OC | 92  |   | INSERT, THREADED - 3/8"-16              |             |
| 7   | 42373-OC | 1   |   | FRAME, FRONT L.H. SIDE WINDOW - 830     |             |
| 8   | 51692-OC | 1   |   | LEXAN, LH AND RH FRONT WINDOW - 830     |             |
| 9   | 42371-OC | 1   |   | FRAME, FRONT WINDOW (.5" Lexon)         |             |
| -   | 51855-OC | 1   |   | FRAME, FRONT WINDOW (1.25" Lexon)       |             |
| 10  | 51691-OC | 1   |   | LEXON, FRONT WINDOW (.5" Lexon)         |             |
| -   | 51808-OC | 1   |   | LEXON, FRONT WINDOW (1.25" Lexon)       |             |
| 11  | 51692-OC | 1   |   | LEXAN, LH AND RH FRONT WINDOW - 830     |             |
| 12  | 42372-OC | 1   |   | FRAME, FRONT R.H. SIDE WINDOW           |             |
| 13  | 15576-OC | 8   |   | BOLT - .25" X 1"                        |             |
| 14  | 10757-OC | 8   |   | WASHER, SAE FLAT - .25"                 |             |
| 15  | 16811-OC | 2   |   | LEXON, LIGHT GUARD                      |             |
| 16  | REF      | 2   | 📖 | LIGHT .....                             | ES          |
| 17  | 51698-OC | 1   |   | LEXAN, SKYLITE - SCRATCH GUARD - 830    |             |
| 18  | 10731-OC | 70  |   | BOLT - .375" X 1.5" (.5" Lexon)         |             |
| -   | 23265-OC | 26  |   | BOLT - .375" X 2.25" (1.25" Lexon)      |             |



See referenced page for component or assembly breakdown.



Bulk material - order length required in feet or meters.



**WINDOW INSTALLATION**  
**(Front Window Installation)**  
**(used on machines built after 05/13/08**  
**and before 04/12/09)**

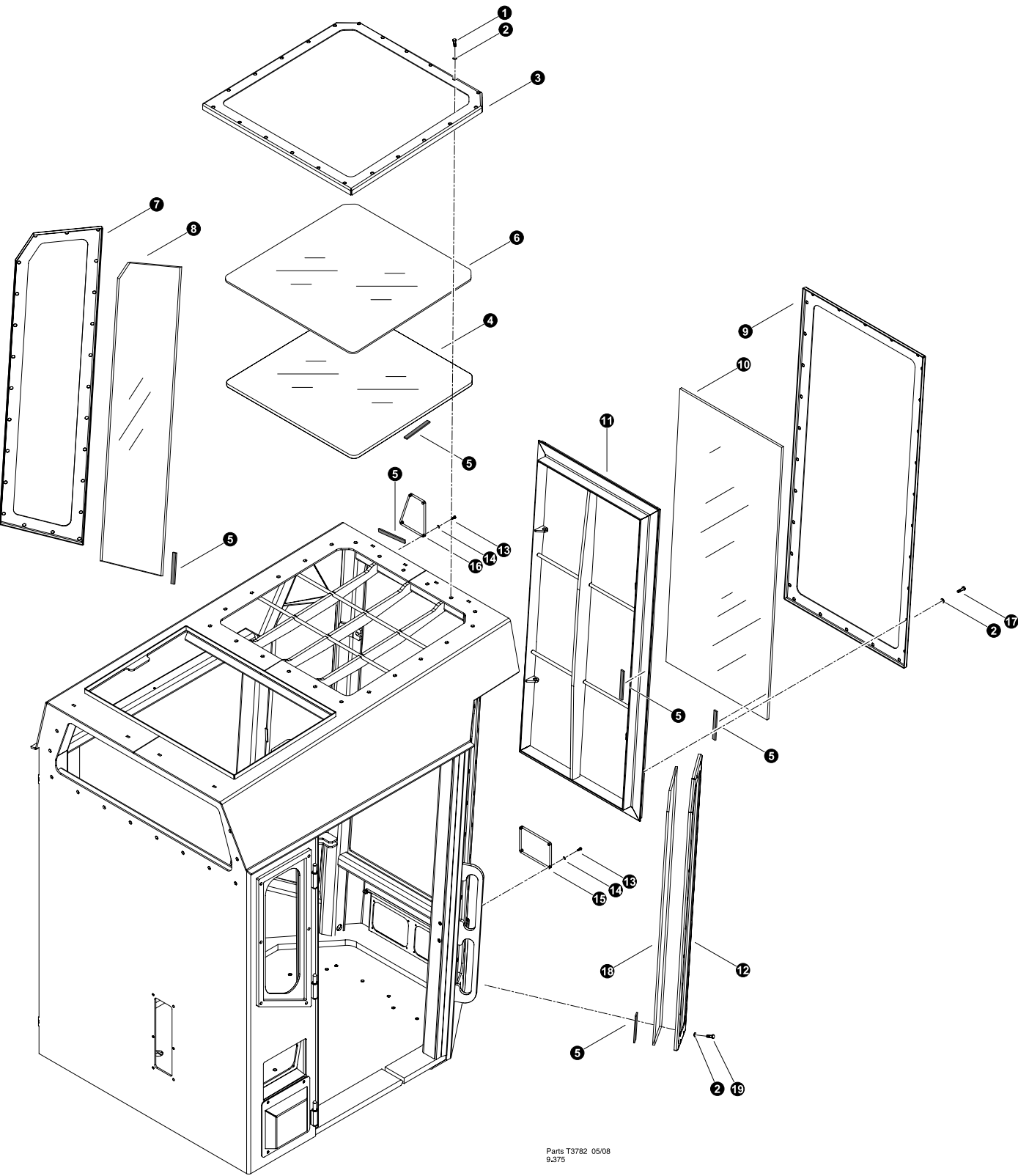
| REF | PART #   | QTY |   | DESCRIPTION                                           | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------------------|-------------|
| 1   | 20084-OC | 22  |   | BOLT - .375" X 1.75"                                  |             |
| 2   | 15528-OC | 92  |   | WASHER, SAE FLAT - .375"                              |             |
| 3   | 42377-OC | 1   |   | FRAME, TOP WINDOW                                     |             |
| 4   | 51697-OC | 1   |   | LEXAN, SKYLITE - 830                                  |             |
| 5   | 42378-OC | AR  | ✂ | WEATHERSTRIPPING, WINDOW 5/16 X 3/4 X 5               |             |
| 6   | 51810-OC | 92  |   | INSERT, THREADED - 3/8"-16                            |             |
| 7   | 42373-OC | 1   |   | FRAME, FRONT L.H. SIDE WINDOW - 830                   |             |
| 8   | 51692-OC | 1   |   | LEXAN, LH AND RH FRONT WINDOW - 830                   |             |
| 9   | 53258-OC | 1   |   | FRAME, FRONT WINDOW - B SERIES (.5" Lexon - Standard) |             |
| -   | 53226-OC | 1   |   | FRAME, FRONT WINDOW - B SERIES (1.25" Lexon)          |             |
| 10  | 53224-OC | 1   |   | LEXAN, FRONT WINDOW - STD (.5" Lexon)                 |             |
| -   | 53225-OC | 1   |   | LEXON, FRONT WINDOW (1.25" Lexon)                     |             |
| 11  | 51692-OC | 1   |   | LEXAN, LH AND RH FRONT WINDOW - 830                   |             |
| 12  | 42372-OC | 1   |   | FRAME, FRONT R.H. SIDE WINDOW                         |             |
| 13  | 15576-OC | 8   |   | BOLT - .25" X 1"                                      |             |
| 14  | 10757-OC | 8   |   | WASHER, SAE FLAT - .25"                               |             |
| 15  | 16811-OC | 2   |   | LEXON, LIGHT GUARD                                    |             |
| 16  | REF      | 2   | 📖 | LIGHT .....                                           | ES          |
| 17  | 51698-OC | 1   |   | LEXAN, SKYLITE - SCRATCH GUARD - 830                  |             |
| 18  | 10731-OC | 70  |   | BOLT - .375" X 1.5" (.5" Lexon)                       |             |
| -   | 23265-OC | 26  |   | BOLT - .375" X 2.25" (1.25" Lexon)                    |             |



See referenced page for component or assembly breakdown.



Bulk material - order length required in feet or meters.





**WINDOW INSTALLATION**  
**(Front Window Installation)**  
**(used on machines built after 04/12/09)**

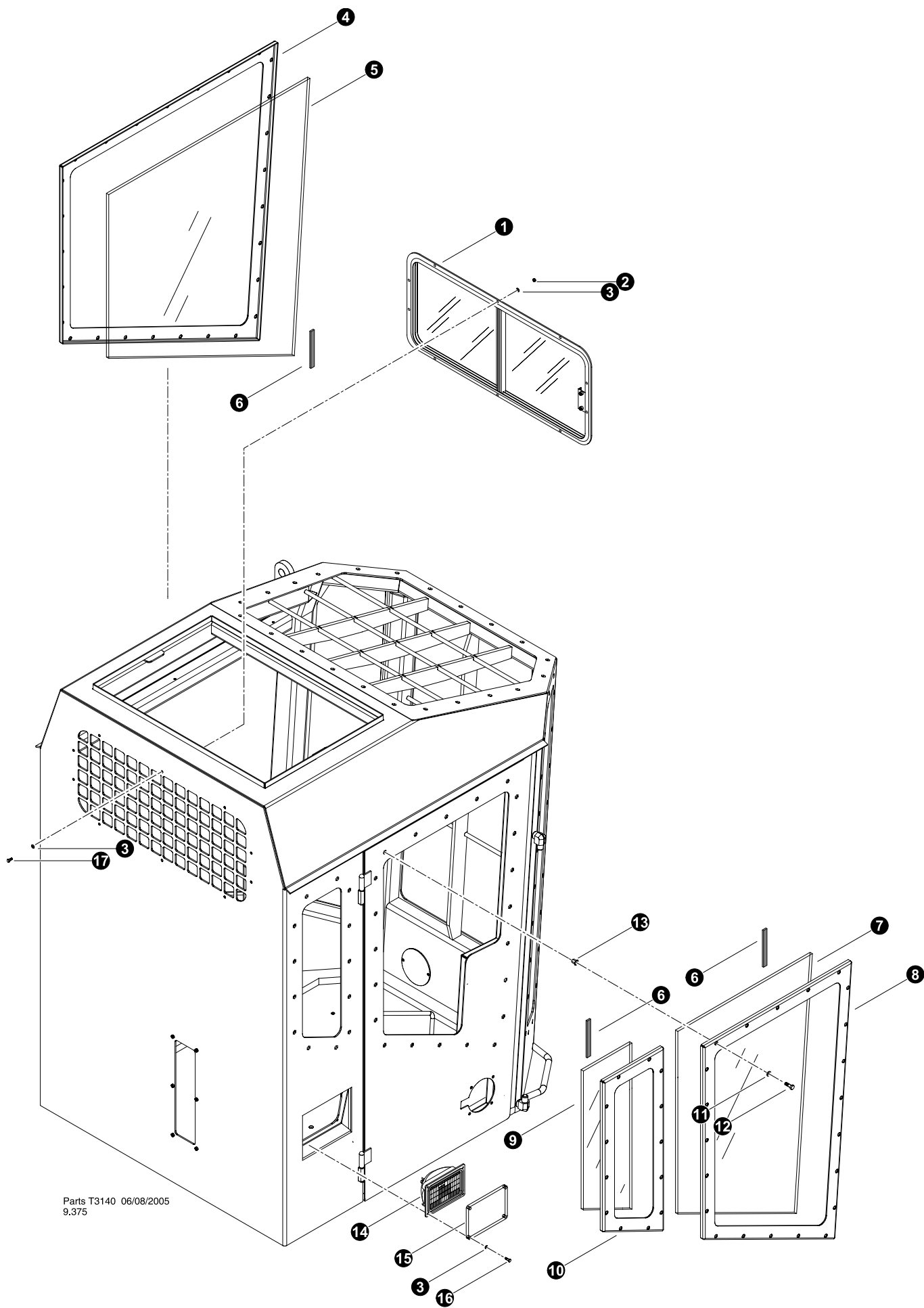
| REF | PART #      | QTY |   | DESCRIPTION                                 | SEE SECTION |
|-----|-------------|-----|---|---------------------------------------------|-------------|
| 1   | 15529-OC    | 22  |   | BOLT - .375" X 2"                           |             |
| 2   | 15528-OC    | 100 |   | WASHER, SAE FLAT - .375"                    |             |
| 3   | 13244-00-OC | 1   |   | FRAME, TOP WINDOW                           |             |
| 4   | 53810-OC    | 1   |   | LEXAN, SKYLITE - FLAT TOP (.75")            |             |
| 5   | 18126-OC    | AR  | ✂ | WEATHERSTRIPPING, WINDOW                    |             |
| 6   | 53811-OC    | 1   |   | LEXAN, SKYLITE - SCRATCH GD                 |             |
| 7   | 12238-00-OC | 1   |   | FRAME, LH ANGLED WINDOW                     |             |
| 8   | 53814-OC    | 1   |   | LEXAN, LH AND RH FRONT WINDOW - FLAT        |             |
| 9   | 53851-OC    | 1   |   | FRAME, FRONT WINDOW - Standard              |             |
| 9   | 53852-OC    | 1   |   | FRAME, FRONT WINDOW - 1.25" (Optional)      |             |
| 10  | 53812-OC    | 1   |   | LEXON, FRONT WINDOW - Standard              |             |
| 10  | 53813-OC    | 1   |   | LEXON, FRONT WINDOW - 1.25" (Optional)      |             |
| 11  | 13246-00-OC | 1   |   | WELDMENT, Kickout Front Window              |             |
| 12  | 12239-00-OC | 1   |   | FRAME, FRONT R.H. SIDE WINDOW               |             |
| 13  | 18309-OC    | 16  |   | BOLT - .25" X 1.25"                         |             |
| 14  | 10757-OC    | 16  |   | WASHER, SAE FLAT - .25"                     |             |
| 15  | 16811-OC    | 2   |   | LEXON, LIGHT GUARD                          |             |
| 16  | 53816-OC    | 2   |   | LEXAN, TOP CAB LIGHT                        |             |
| 17  | 15542-OC    | 30  |   | BOLT - .375" X .75" (standard front window) |             |
| 17  | 20084-OC    | 30  |   | BOLT - .375" X 1.75" (1.25" front window)   |             |
| 18  | 53814-OC    | 1   |   | LEXAN, LH AND RH FRONT WINDOW - 830 FLAT    |             |
| 19  | 20084-OC    | 48  |   | BOLT - .375" X 1.75" (1.25" front window)   |             |



See referenced page for component or assembly breakdown.



Bulk material - order length required in feet or meters.



Parts T3140 06/08/2005  
9.375

**WINDOW INSTALLATION**  
**(Rear and Side Window Installation)**  
**(used on machines built before 04/12/09)**

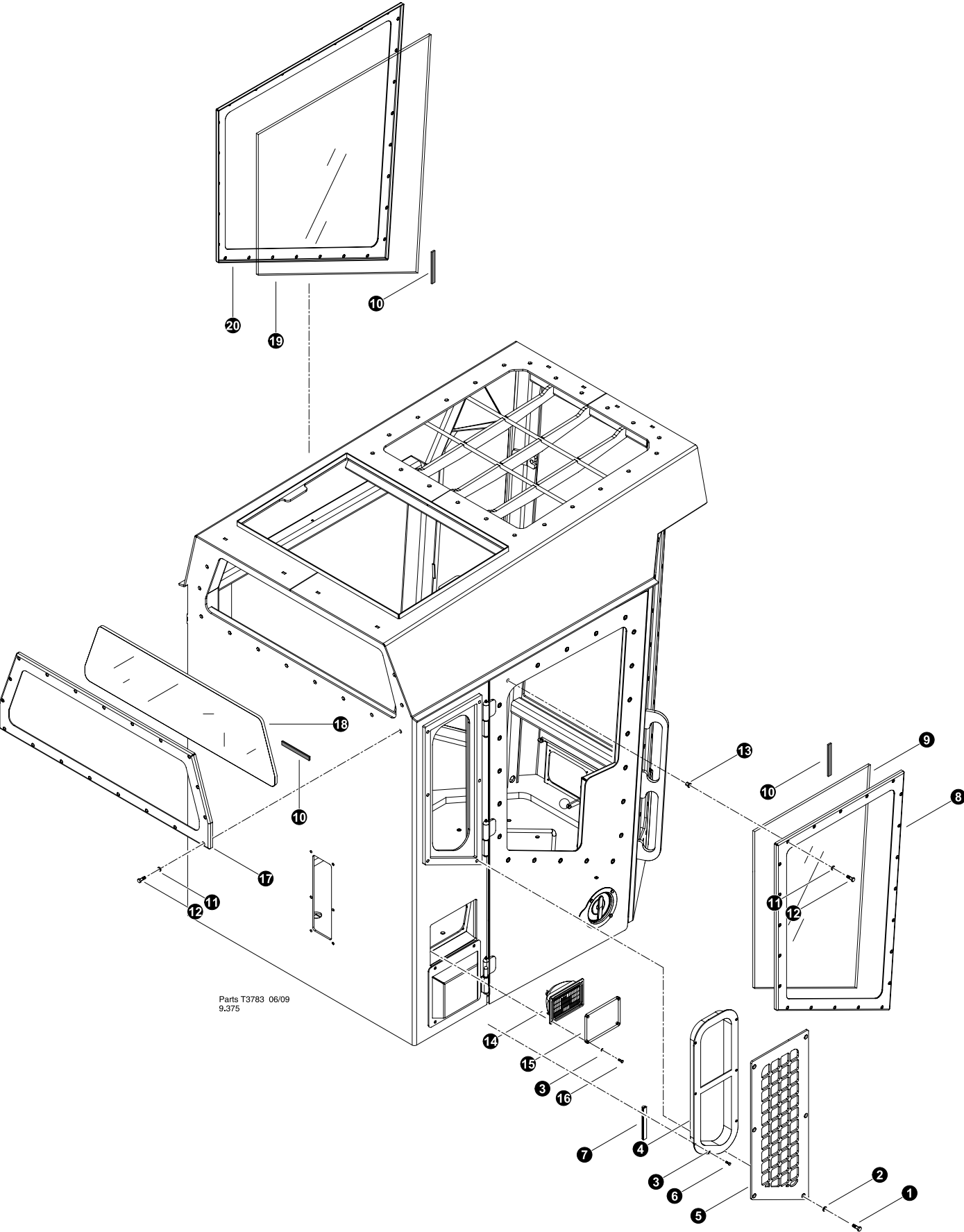
| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   | 51719-OC | 1   |   | WINDOW, SLIDING - TF830                 |             |
| 2   | 10811-OC | 10  |   | NUT, LOCK - .25"                        |             |
| 3   | 10757-OC | 20  |   | WASHER, SAE FLAT - .25"                 |             |
| 4   | 42376-OC | 1   |   | FRAME, BOOM SIDE WINDOW                 |             |
| 5   | 51694-OC | 1   |   | LEXAN, LH (BOOM SIDE) WINDOW - 830      |             |
| 6   | 42378-OC | AR  | ✂ | WEATHERSTRIPPING, WINDOW 5/16 X 3/4 X 5 |             |
| 7   | 51695-OC | 1   |   | LEXAN, DOOR WINDOW - 830                |             |
| 8   | 42374-OC | 1   |   | FRAME, DOOR WINDOW                      |             |
| 9   | 51696-OC | 1   |   | LEXAN, RH AFT DOOR SIDE WINDOW - 830    |             |
| 10  | 42375-OC | 1   |   | FRAME, OPERA WINDOW - 830               |             |
| 11  | 15528-OC | 62  |   | WASHER, SAE FLAT - .375"                |             |
| 12  | 10731-OC | 62  |   | BOLT - .375" X 1.5"                     |             |
| 13  | 51810-OC | 62  |   | INSERT, THREADED - 3/8"-16              |             |
| 14  | REF      | 1   | 📖 | LIGHT .....                             | ES          |
| 15  | 16811-OC | 1   |   | LEXON, LIGHT GUARD                      |             |
| 16  | 15576-OC | 4   |   | BOLT - .25" X 1"                        |             |
| 17  | 15604-OC | 10  |   | BOLT - .25" X .75"                      |             |



Bulk material - order length required in feet or meters.



See referenced page for component or assembly breakdown.



Parts T3783 06/09  
9.375

**WINDOW INSTALLATION**  
**(Rear and Side Window Installation)**  
**(used on machines built after 04/12/09)**

| REF | PART #      | QTY |                                                                                   | DESCRIPTION                        | SEE SECTION |
|-----|-------------|-----|-----------------------------------------------------------------------------------|------------------------------------|-------------|
| 1   | 10783-OC    | 6   |                                                                                   | BOLT - .5" X 1"                    |             |
| 2   | 15534-OC    | 6   |                                                                                   | WASHER, SAE FLAT - .5"             |             |
| 3   | 10757-OC    | 10  |                                                                                   | WASHER, SAE FLAT - .25"            |             |
| 4   | 53817-OC    | 1   |                                                                                   | WINDOW, SLIDING OPERA-FLAT TOP CAB |             |
| 5   | 13245-00-OC | 1   |                                                                                   | GUARD, Sliding Side Window         |             |
| 6   | 15604-OC    | 6   |                                                                                   | BOLT - .25" X .75"                 |             |
| 7   | 18126-OC    | AR  |  | WEATHERSTRIPPING (Door Seal)       |             |
| 8   | 42374-OC    | 1   |                                                                                   | FRAME, DOOR WINDOW                 |             |
| 9   | 51695-OC    | 1   |                                                                                   | LEXAN, DOOR WINDOW                 |             |
| 10  | 18126-OC    | AR  |  | WEATHERSTRIPPING, WINDOW           |             |
| 11  | 15528-OC    | 68  |                                                                                   | WASHER, SAE FLAT - .375"           |             |
| 12  | 20084-OC    | 68  |                                                                                   | BOLT - .375" X 1.75"               |             |
| 13  | 51810-OC    | 68  |                                                                                   | INSERT, THREADED - 3/8"-16         |             |
| 14  | REF         | 1   |  | LIGHT .....                        | ES          |
| 15  | 16811-OC    | 1   |                                                                                   | LEXON, LIGHT GUARD                 |             |
| 16  | 15576-OC    | 4   |                                                                                   | BOLT - .25" X 1"                   |             |
| 17  | 13243-00-OC | 1   |                                                                                   | FRAME, REAR WINDOW                 |             |
| 18  | 53815-OC    | 1   |                                                                                   | LEXON, REAR WINDOW                 |             |
| 19  | 51694-OC    | 1   |                                                                                   | LEXAN, LH (BOOM SIDE) WINDOW       |             |
| 20  | 42376-OC    | 1   |                                                                                   | FRAME, BOOM SIDE WINDOW            |             |



Bulk material - order length required in feet or meters.



See referenced page for component or assembly breakdown.

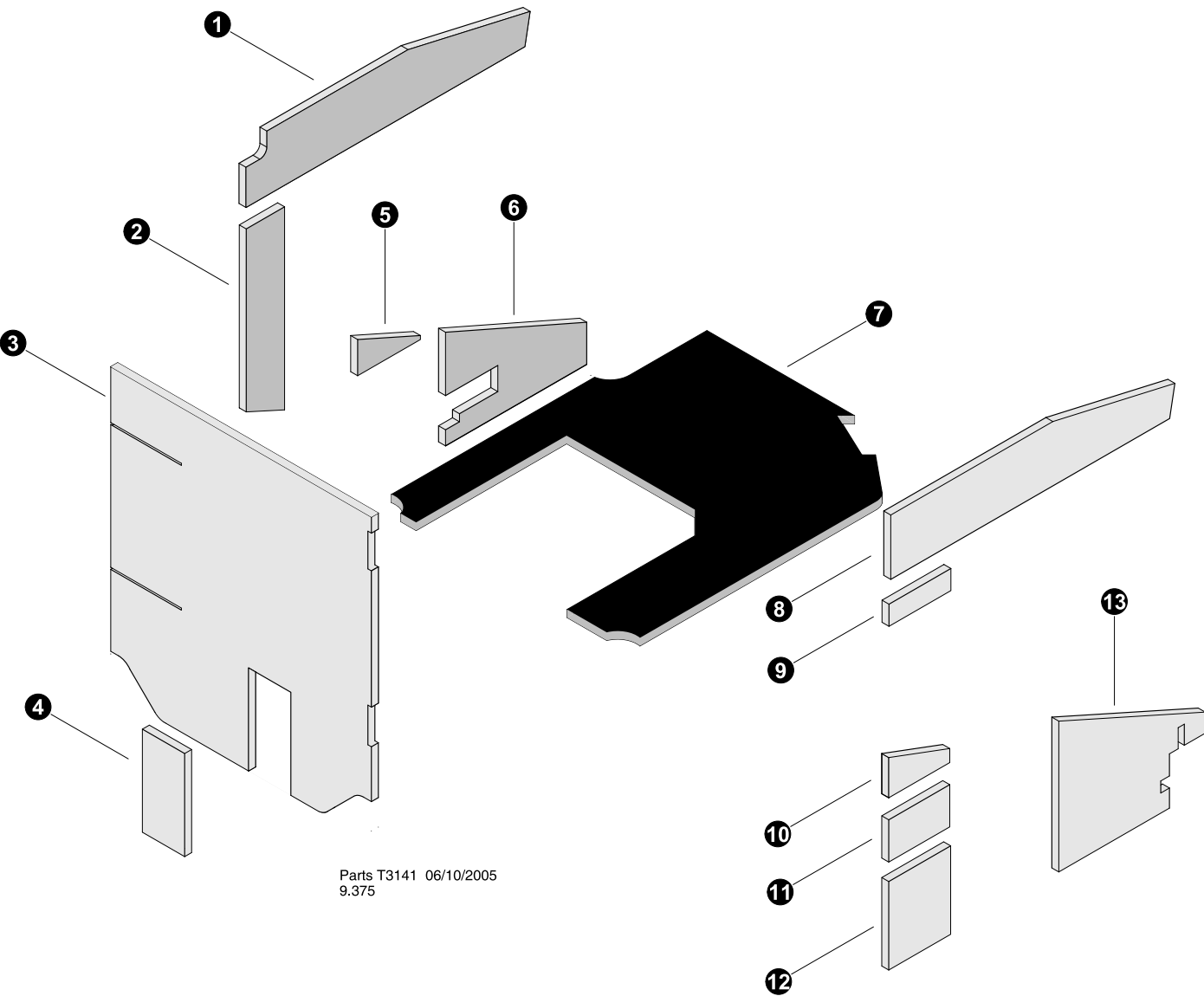
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## ***Section OC-3***

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### ***Operator's Cab - Interior Components***

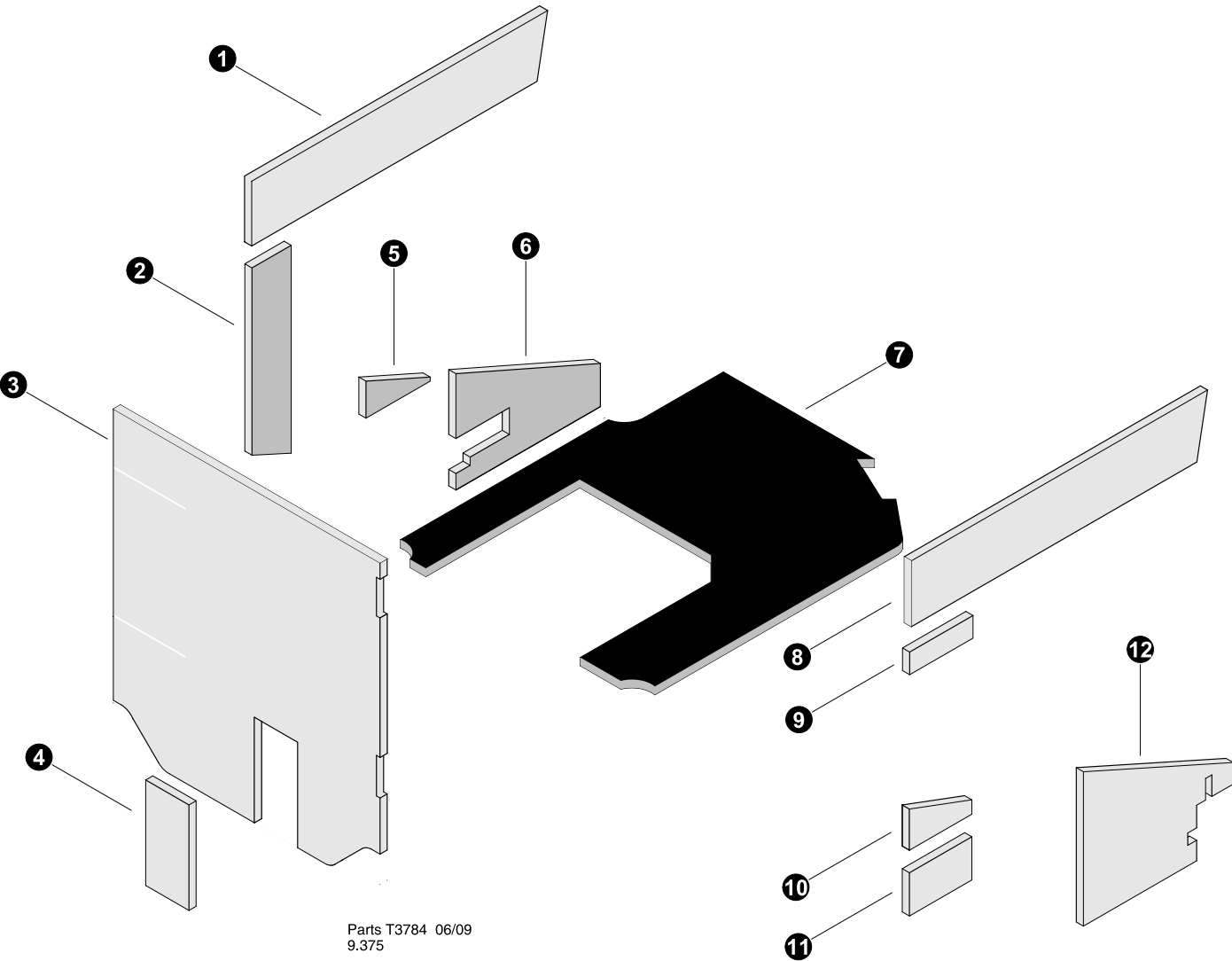




## INTERIOR TRIM & FLOORMAT (Machines built before 04-12-09)

| REF | PART #   | QTY |                          | DESCRIPTION                                                  | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------------------------------|-------------|
| -   | 51707-OC | 1   | <input type="checkbox"/> | KIT, CAB INSULATION - 630/830                                |             |
| 1   | 42681-OC | 1   |                          | TRIM, PANEL - UPPER LEFT DASH                                |             |
| 2   | 42673-OC | 1   |                          | TRIM, PANEL - LEFT REAR                                      |             |
| 3   | 42676-OC | 1   |                          | TRIM, PANEL - REAR CAB                                       |             |
| 4   | 42682-OC | 1   |                          | TRIM, PANEL - REAR BULKHEAD PLATE                            |             |
| 5   | 42675-OC | 1   |                          | TRIM, PANEL - ABOVE ELECTRICAL PANEL                         |             |
| 6   | 42679-OC | 1   |                          | TRIM, PANEL - LEFT CAB WALL                                  |             |
| 7   | 42543-OC | 1   |                          | FLOORMAT, 830/630 (1.0") Used before May 14th 2008           |             |
| 7   | 53267-OC | 1   |                          | FLOORMAT, WHEELED MACH (1.0") New CAB used after May 13 2008 |             |
| 8   | 42680-OC | 1   |                          | TRIM, PANEL - UPPER RIGHT DASH                               |             |
| 9   | 42669-OC | 1   |                          | TRIM, PANEL - UPPER RIGHT SIDE WINDOW                        |             |
| 10  | 42670-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #1                     |             |
| 11  | 42671-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #2                     |             |
| 12  | 42672-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #3                     |             |
| 13  | 42679-OC | 1   |                          | TRIM, PANEL - CAB DOOR                                       |             |

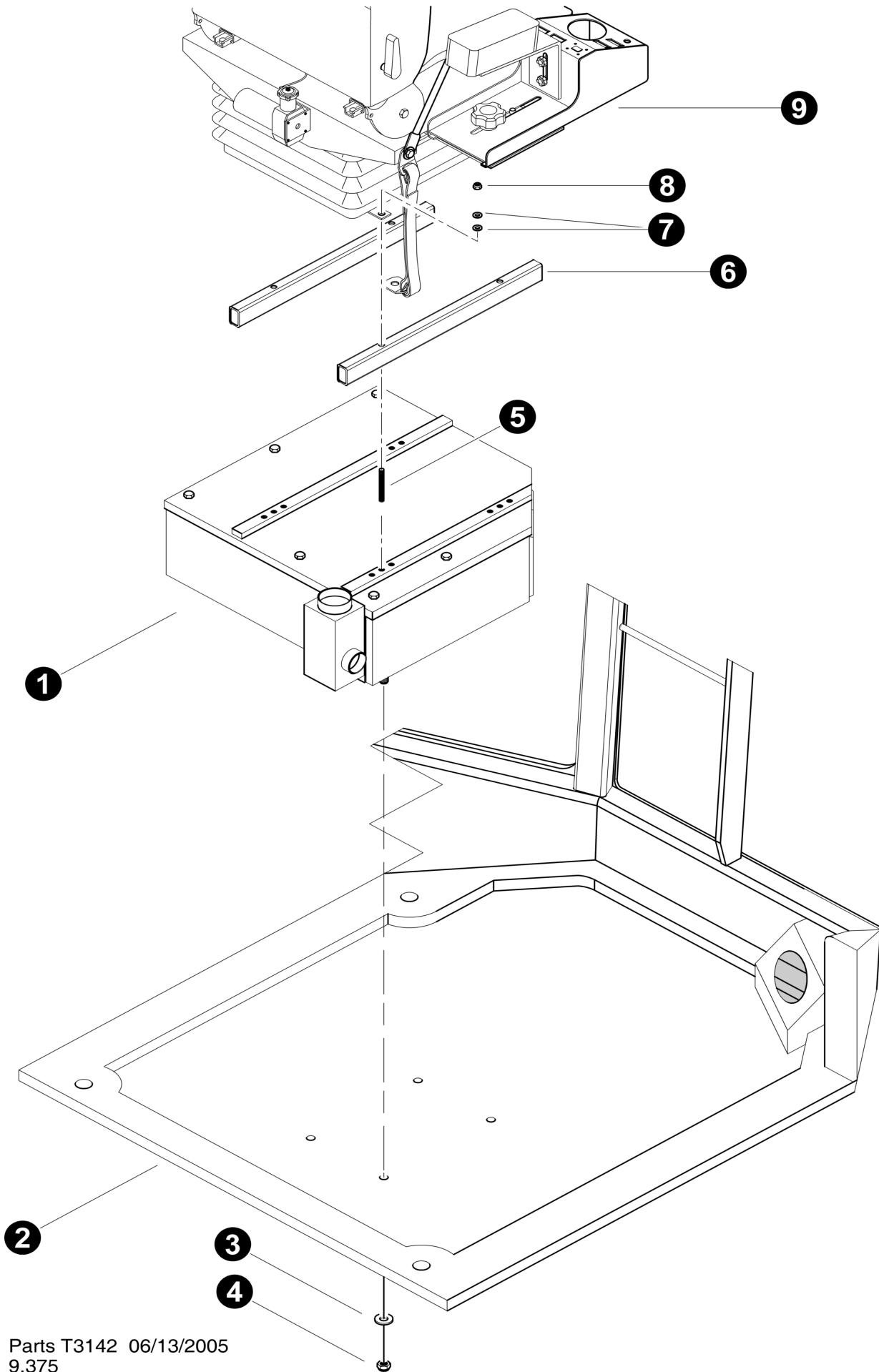
☐ Assembly or Kit - includes all items indented underneath.



## INTERIOR TRIM & FLOORMAT (Machines built after 04-12-09)

| REF | PART #   | QTY |                          | DESCRIPTION                                                  | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------------------------------|-------------|
| -   | 53833-OC | 1   | <input type="checkbox"/> | KIT, CAB INSULATION - 630/830                                |             |
| 1   | 43763-OC | 1   |                          | TRIM, PANEL - UPPER LEFT DASH                                |             |
| 2   | 42673-OC | 1   |                          | TRIM, PANEL - LEFT REAR                                      |             |
| 3   | 42676-OC | 1   |                          | TRIM, PANEL - REAR CAB                                       |             |
| 4   | 42682-OC | 1   |                          | TRIM, PANEL - REAR BULKHEAD PLATE                            |             |
| 5   | 42675-OC | 1   |                          | TRIM, PANEL - ABOVE ELECTRICAL PANEL                         |             |
| 6   | 42679-OC | 1   |                          | TRIM, PANEL - LEFT CAB WALL                                  |             |
| 7   | 53267-OC | 1   |                          | FLOORMAT, WHEELED MACH (1.0") New CAB used after May 13 2008 |             |
| 8   | 43762-OC | 1   |                          | TRIM, PANEL - UPPER RIGHT DASH                               |             |
| 9   | 42669-OC | 1   |                          | TRIM, PANEL - UPPER RIGHT SIDE WINDOW                        |             |
| 10  | 42670-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #1                     |             |
| 11  | 42671-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #2                     |             |
| 12  | 42672-OC | 1   |                          | TRIM, PANEL - LOWER RIGHT SIDE WINDOW #3                     |             |
| 13  | 42679-OC | 1   |                          | TRIM, PANEL - CAB DOOR                                       |             |

☐ Assembly or Kit - includes all items indented underneath.



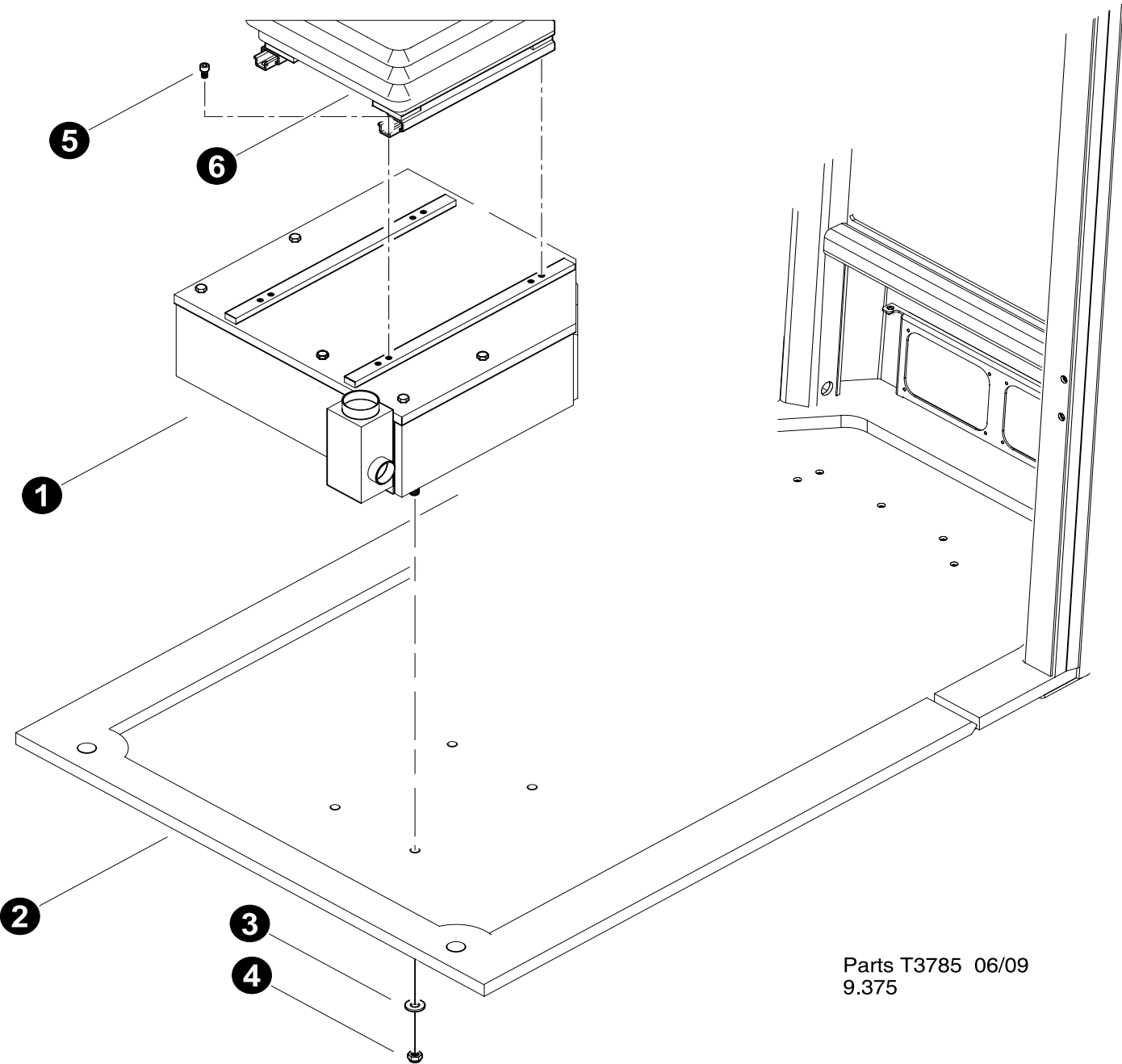
Parts T3142 06/13/2005  
9.375

**OPERATOR'S SEAT INSTALLATION****(Seats Inc seat mounting)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF.     | 1   |  | AC / HEATER UNIT ASSEMBLY .....      | OC-4        |
| 2   | REF.     | 1   |  | Operators Cab .....                  | OC-1        |
| 3   | 22666-OC | 4   |                                                                                   | WASHER, SAE FLAT - .5" (EXTRA THICK) |             |
| 4   | 10815-OC | 4   |                                                                                   | NUT, LOCK - .5"                      |             |
| 5   | 52585-OC | 4   |                                                                                   | STUD, 5/16" x 3"                     |             |
| 6   | 52503-OC | 2   |                                                                                   | SPACER, Seat riser                   |             |
| 7   | 15559-OC | 8   |                                                                                   | WASHER, SAE FLAT - .3125"            |             |
| 8   | 10812-OC | 4   |                                                                                   | NUT, LOCK - .3125"                   |             |
| 9   | REF.     | 1   |  | OPERATOR'S SEAT.....                 | OC-1        |



See referenced page for component or assembly breakdown.



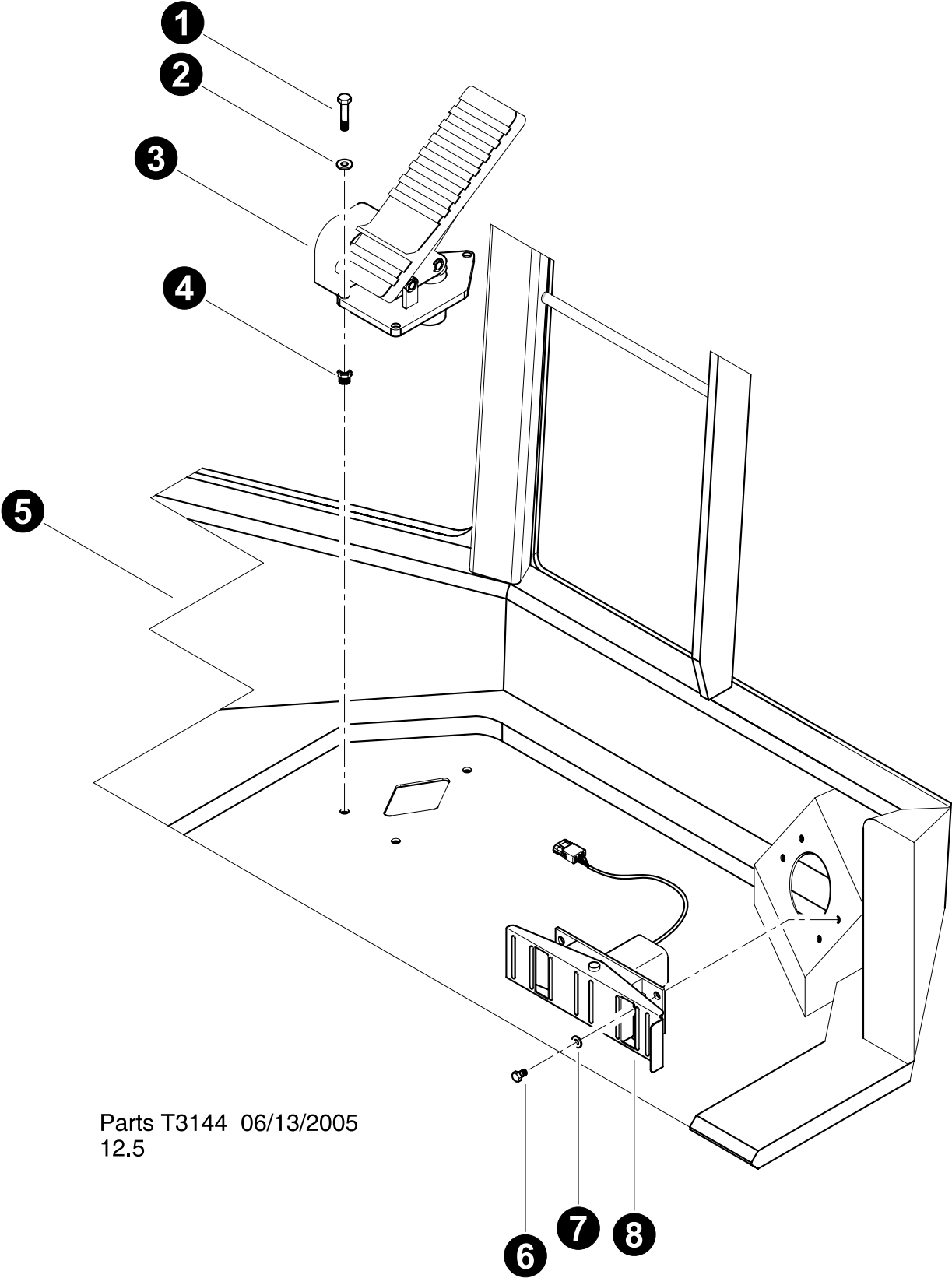
Parts T3785 06/09  
9.375

## OPERATOR'S SEAT INSTALLATION (Optional KAB seat mounting)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF.     | 1   |  | AC / HEATER UNIT ASSEMBLY .....      | OC-4        |
| 2   | REF.     | 1   |  | Operators Cab .....                  | OC-1        |
| 3   | 22666-OC | 4   |                                                                                   | WASHER, SAE FLAT - .5" (EXTRA THICK) |             |
| 4   | 10815-OC | 4   |                                                                                   | NUT, LOCK - .5"                      |             |
| 5   | 53906-OC | 4   |                                                                                   | BOLT, ALLEN HEAD - .3125" X .5"      |             |
| 6   | REF.     | 1   |  | OPERATOR'S SEAT.....                 | OC-1        |



See referenced page for component or assembly breakdown.



Parts T3144 06/13/2005  
12.5



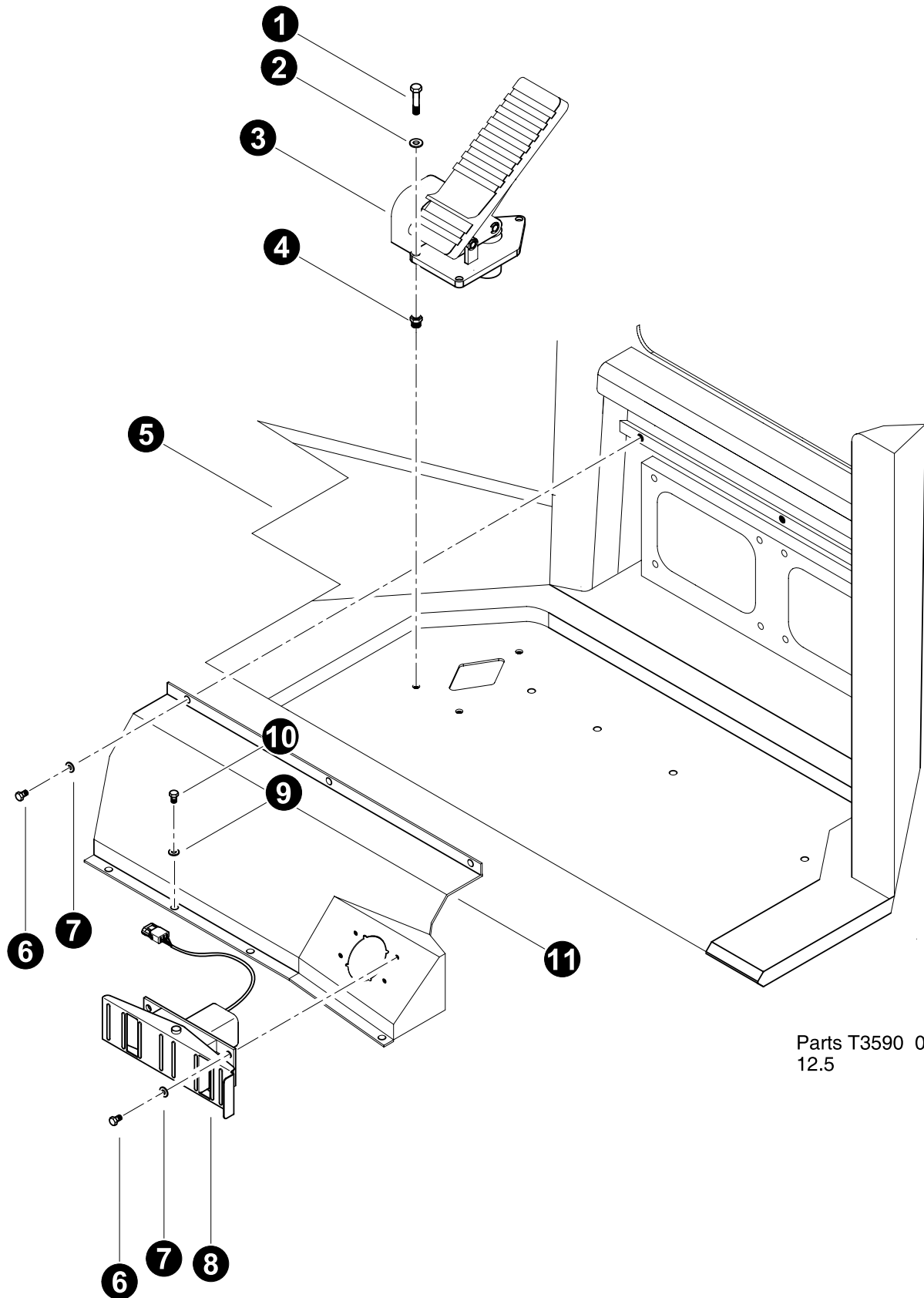
## FOOT PEDALS INSTALLATION

(used on machines built 05/13/08 and before)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------|-------------|
| 1   | 10823-OC | 3   |                                                                                   | BOLT - .3125" X 2"                 |             |
| 2   | 15559-OC | 3   |                                                                                   | WASHER, SAE FLAT - .3125"          |             |
| 3   | REF.     | 1   |  | TRAVEL BRAKE FOOT PEDAL . . . . .  | ES          |
| 4   | 16018-OC | 3   |                                                                                   | BUSHING, REDUCER - 6405-6-4        |             |
| 5   | REF.     | 1   |  | OPERATOR'S CAB . . . . .           | OC-1        |
| 6   | 15604-OC | 4   |                                                                                   | BOLT - .25" X .75"                 |             |
| 7   | 10757-OC | 4   |                                                                                   | WASHER, SAE FLAT - .25"            |             |
| 8   | REF.     | 1   |  | WHEEL DRIVE FOOT CONTROL . . . . . | ES          |



See referenced page for component or assembly breakdown.



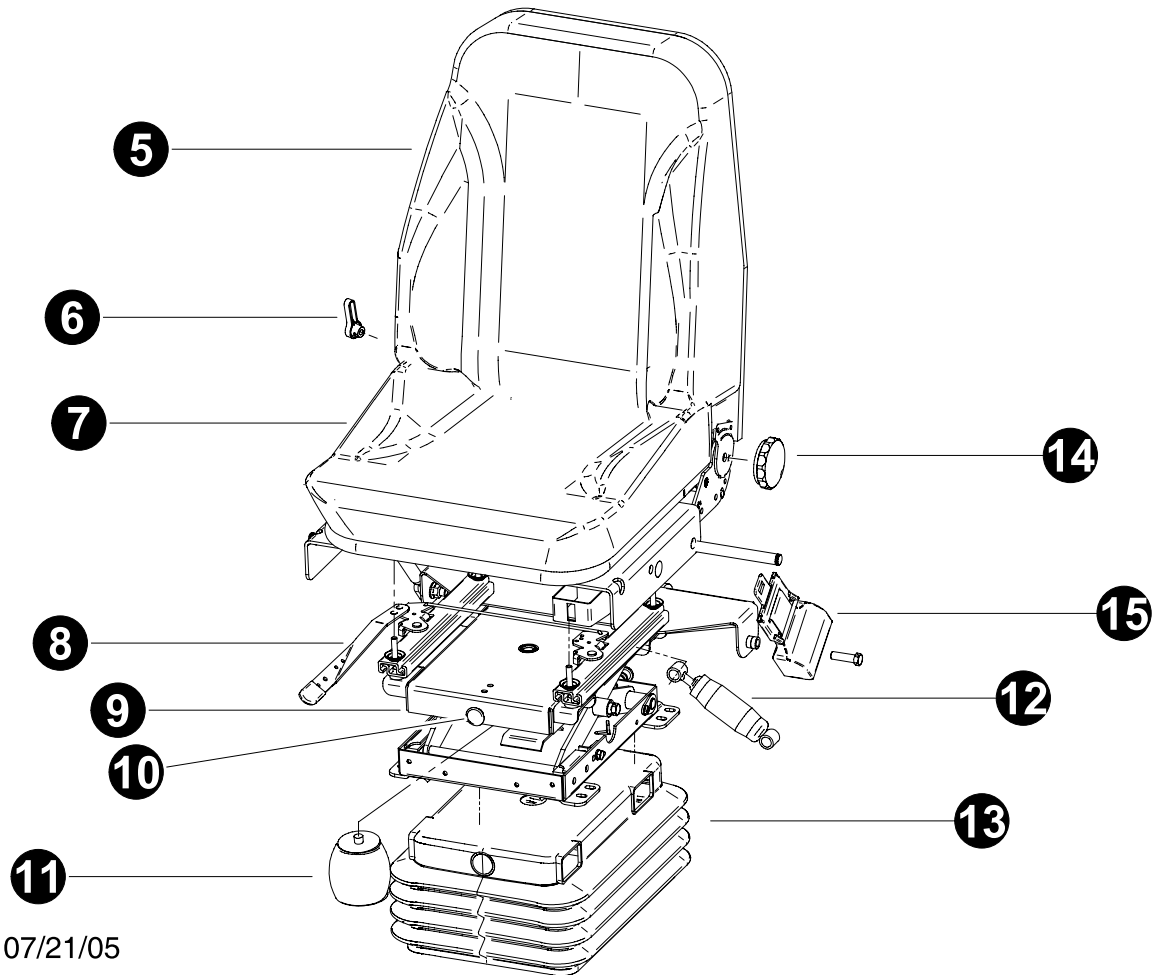
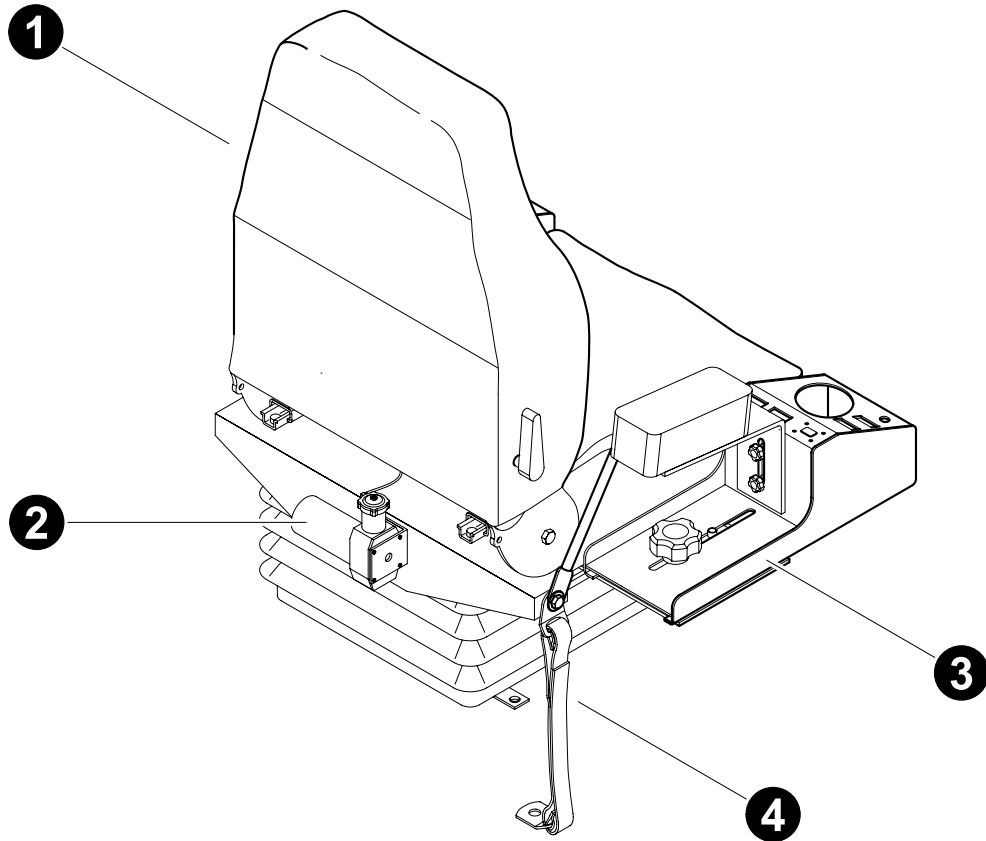
Parts T3590 05/08  
12.5

**FOOT PEDALS INSTALLATION**  
**Wheeled Machines Only**  
**(used on machines built after 05/13/08)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------|-------------|
| 1   | 10823-OC | 3   |                                                                                   | BOLT - .3125" X 2"                 |             |
| 2   | 15559-OC | 3   |                                                                                   | WASHER, SAE FLAT - .3125"          |             |
| 3   | REF.     | 1   |  | TRAVEL BRAKE FOOT PEDAL . . . . .  | ES          |
| 4   | 16018-OC | 3   |                                                                                   | BUSHING, REDUCER - 6405-6-4        |             |
| 5   | REF.     | 1   |  | OPERATOR'S CAB . . . . .           | OC-1        |
| 6   | 15605-OC | 7   |                                                                                   | BOLT - .3125" X .75"               |             |
| 7   | 15559-OC | 7   |                                                                                   | WASHER, SAE FLAT - .3125"          |             |
| 8   | REF.     | 1   |  | WHEEL DRIVE FOOT CONTROL . . . . . | ES          |
| 9   | 15559-OC | 4   |                                                                                   | WASHER, SAE FLAT - .3125"          |             |
| 10  | 15589-OC | 4   |                                                                                   | BOLT - .3125" X 1"                 |             |
| 11  | 53277-OC | 1   |                                                                                   | BRACKET, FOOT PEDAL - OTTO PEDAL   |             |



See referenced page for component or assembly breakdown.



Parts T3207 07/21/05  
18.75

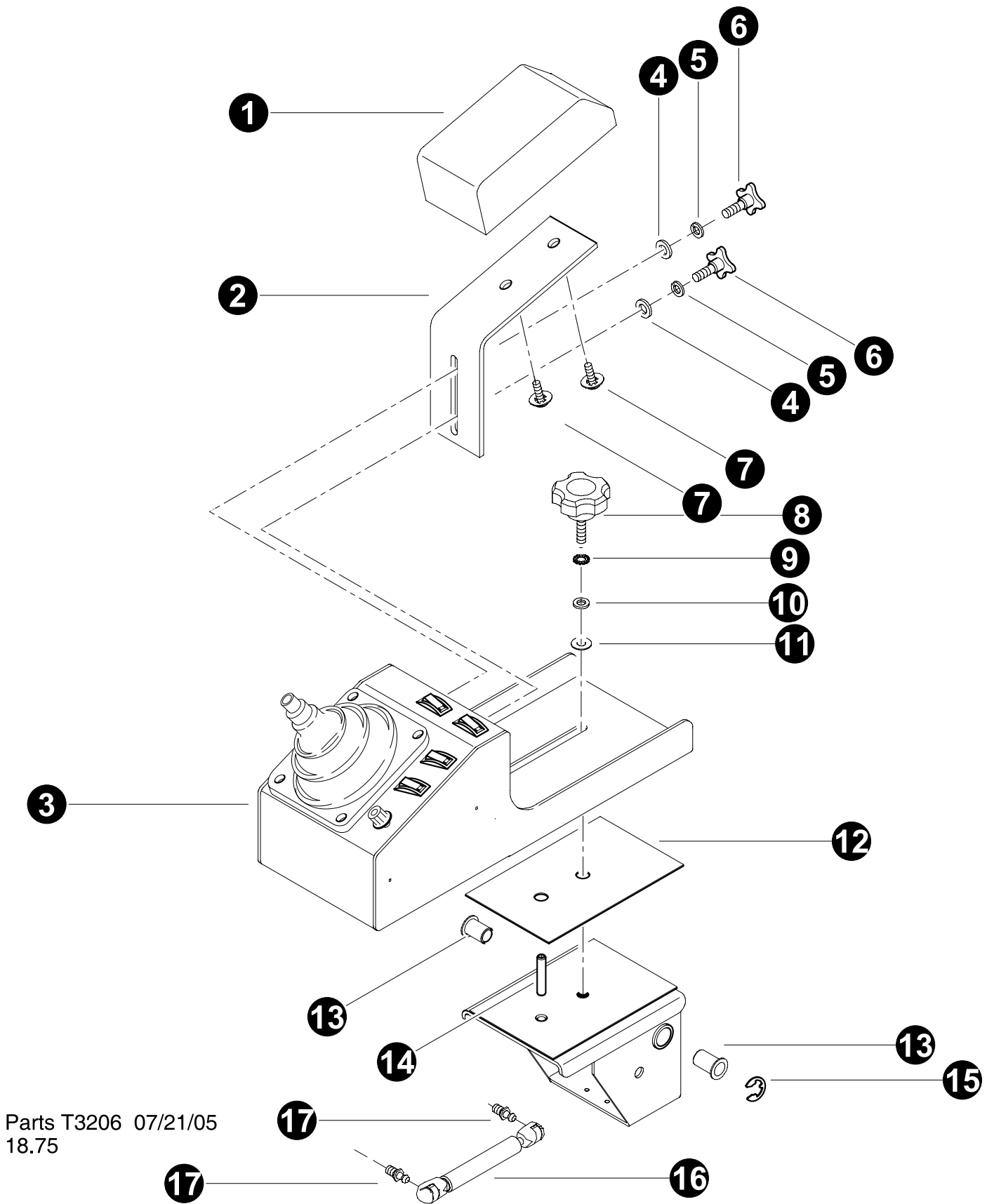
## OPERATOR'S SEAT BREAKDOWN (Seats Inc - Standard)

| REF | PART #   | QTY |   | DESCRIPTION                               | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------|-------------|
| 1   | 51633-OC | 1   | ☐ | SEAT ASSY, AIR RIDE and HEATER            |             |
| 2   | 52077-OC | 1   |   | COMPRESSOR, air ride seat (24 VOLT)       |             |
| 3   | REF.     | 1   | 📖 | JOYSTICK CONTROL ARM ASSEMBLY . . . . .   | OC-3        |
| 4   |          | 1   |   | KIT, tethers (104949 PS)                  |             |
| 5   |          | 1   |   | COVER, top seat back (308098 DN)          |             |
| 6   |          | 1   |   | LEVER, lumbar adjustment                  |             |
| 7   |          | 1   |   | COVER, bottom seat (307025 DN)            |             |
| 8   |          | 1   |   | TRACK SET, adjustable slides (179837 PS)  |             |
| 9   |          | 1   | ☐ | SUSPENSION, low profile w/air (108106 PS) |             |
| 10  |          | 1   |   | VALVE, air ride with hardware (102715 PS) |             |
| 11  |          | 1   |   | SPRING, air bag (103351 PS)               |             |
| 12  |          | 1   |   | SHOCK, heavy duty (102362 PS)             |             |
| 13  |          | 1   |   | BELLOWS, suspension cover (102805 PS)     |             |
| 14  |          | 1   |   | KNOB, recliner adjustment (101965 PS)     |             |
| 15  |          | 1   |   | SEAT BELT, retractable (103041 PS)        |             |

☐ Assembly or Kit - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.

800750 KAB



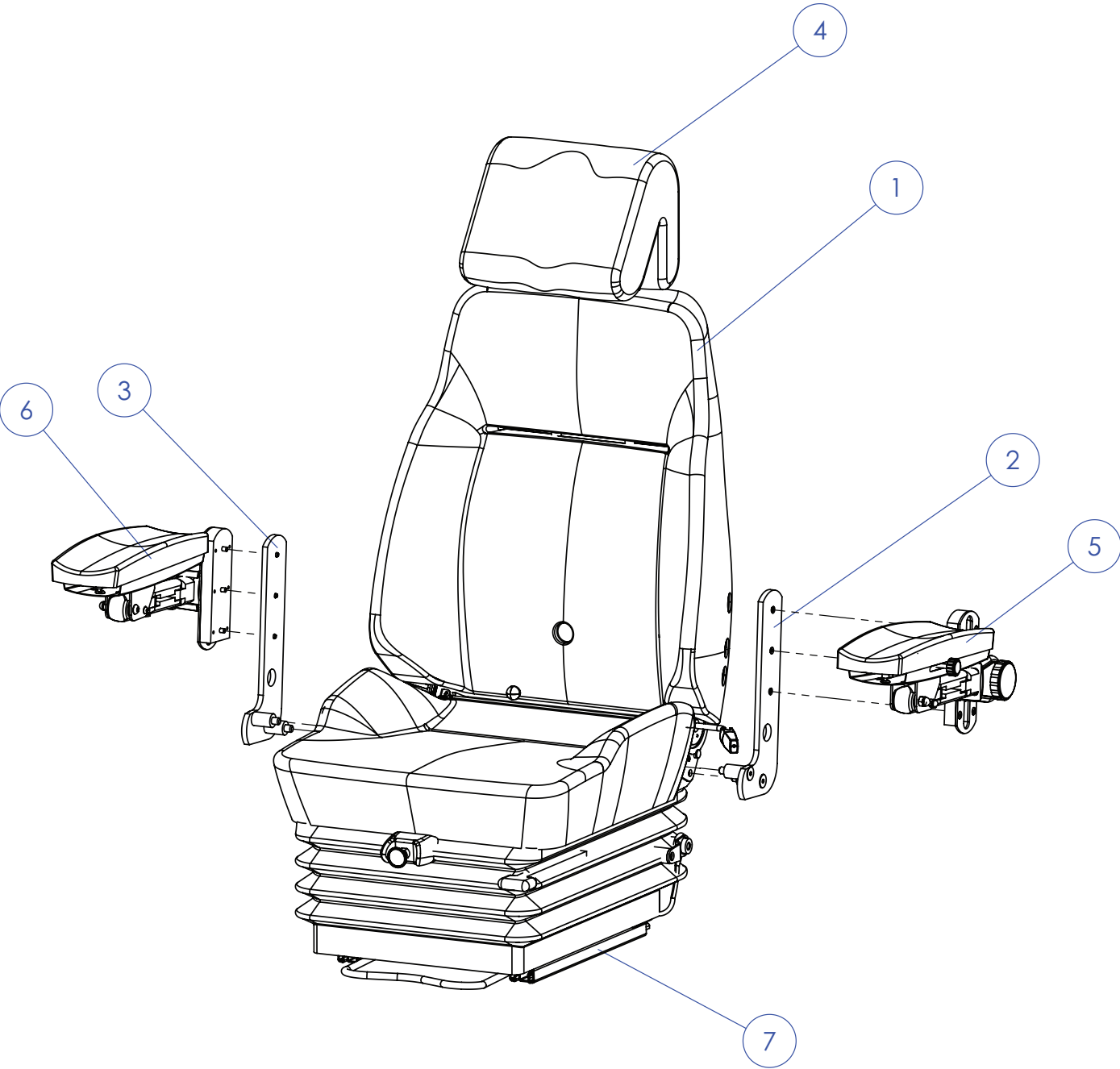
Parts T3206 07/21/05  
18.75

## OPERATOR'S CONTROL ARM BREAKDOWN (Standard Seats Inc)

| REF | PART #   | QTY | DESCRIPTION                                                       | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------|-------------|
| 1   |          | 1   | PAD, arm rest                                                     |             |
| 2   | 51942-OC | 1   | BRACKET, ARM REST                                                 |             |
| 3   | REF      | 1   | JOYSTICK BRACKET ASSEMBLY .....                                   | ES-3        |
| 4   | 15528-OC | 2   | WASHER, SAE FLAT - .375"                                          |             |
| 5   | 10701-OC | 2   | WASHER, LOCK - .375"                                              |             |
| 6   |          | 2   | KNOB, arm rest adjustment                                         |             |
| 7   |          | 2   | BOLT,                                                             |             |
| 8   |          | 1   | <input type="checkbox"/> KNOB, control arm adjustment (104089 PS) |             |
| 9   |          | 1   | WASHER, serrated lock - .375"                                     |             |
| 10  | 15528-OC | 1   | WASHER, SAE FLAT - .375"                                          |             |
| 11  |          | 1   | WASHER, plastic slide 3/8"                                        |             |
| 12  |          | 1   | SLIDER, control arm (505638 PS)                                   |             |
| 13  |          | 2   | BUSHING, plastic (707606 PS)                                      |             |
| 14  |          | 1   | PIN, roll (708325 PS)                                             |             |
| 15  |          | 1   | RING, retaining (707616 PS)                                       |             |
| 16  |          | 1   | <input type="checkbox"/> KIT, gas spring (104099 PS)              |             |
| 17  |          | 2   | BOLT, spring mounts                                               |             |

☐ Assembly or Kit - includes all items indented underneath.

 See referenced page for component or assembly breakdown.





## OPERATOR'S SEAT BREAKDOWN (KAB - Optional)

| REF | PART #         | QTY |                          | DESCRIPTION                                       | SEE SECTION |
|-----|----------------|-----|--------------------------|---------------------------------------------------|-------------|
| -   | 53692-OC       | 1   | <input type="checkbox"/> | SEAT ASSEMBLY (KAB) Air Ride/Heater and Head Rest |             |
| 1   | K197328-OC     | 1   |                          | KAB 569 Seat                                      |             |
| 2   | 1914 800188-OC | 1   |                          | Bracket LH                                        |             |
| 3   | 1914 800189-OC | 1   |                          | Bracket RH                                        |             |
| 4   | 42030201-1-OC  | 1   |                          | Headrest Comfort                                  |             |
| 5   | 8000 800170-OC | 1   |                          | Armflex E 80 Left                                 |             |
| 6   | 8000 800171-OC | 1   |                          | Armflex E 80 Right                                |             |
| 7   | K41123-OC      | 1   |                          | Slides KAB 500                                    |             |
| 8   | K82345R80-OC   | 1   |                          | Back rest cover                                   |             |
| 9   | K82345S800-OC  | 1   |                          | Seat cushion cover                                |             |
| 10  | 991609-OC      | 1   |                          | Head rest cover                                   |             |

 Assembly or Kit - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

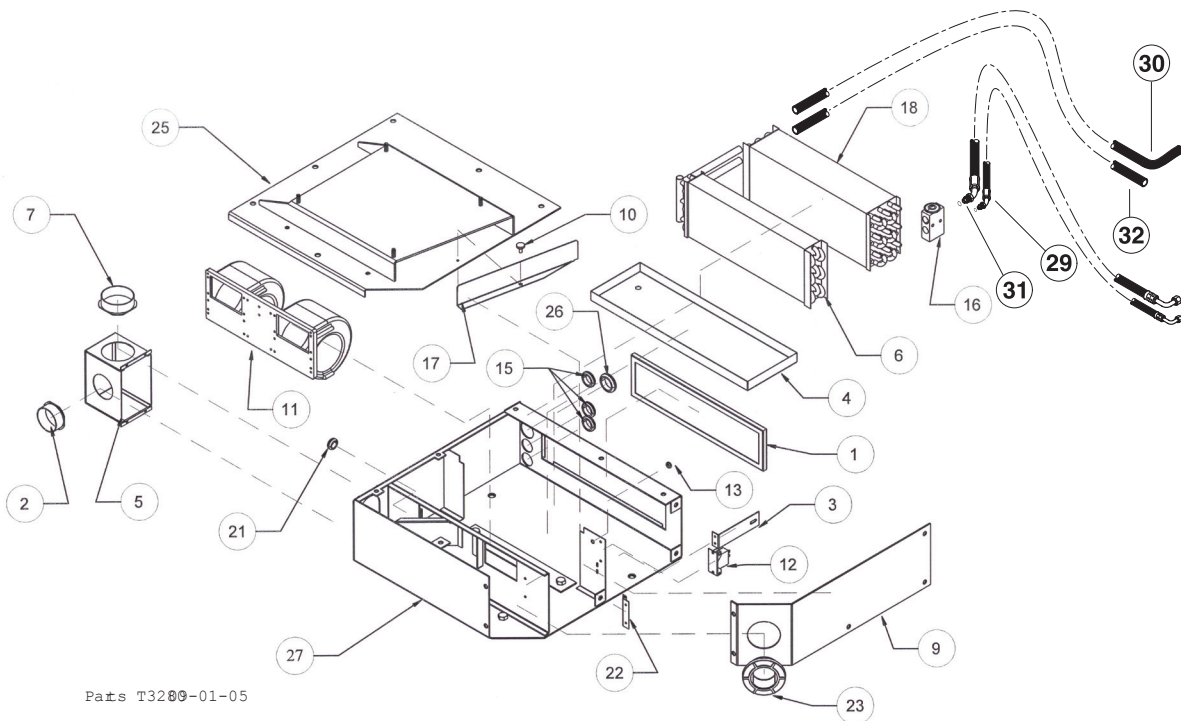
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## ***Section OC-4***

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### ***Operator's Cab - Air Conditioner / Heater Unit***



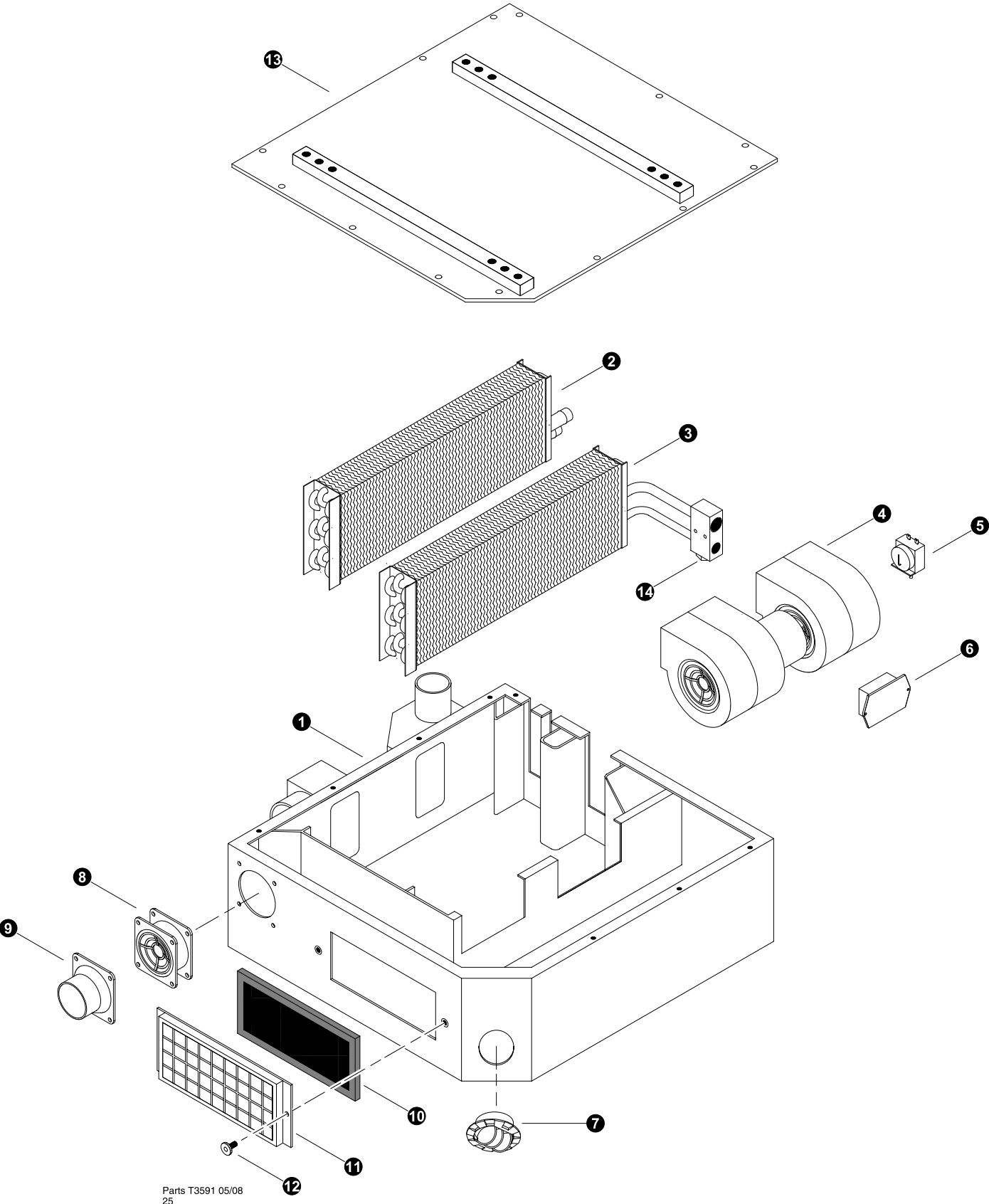
Parts T3200-01-05

## AIR CONDITIONER / HEATER UNIT

### (machines built 05/13/08 and before)

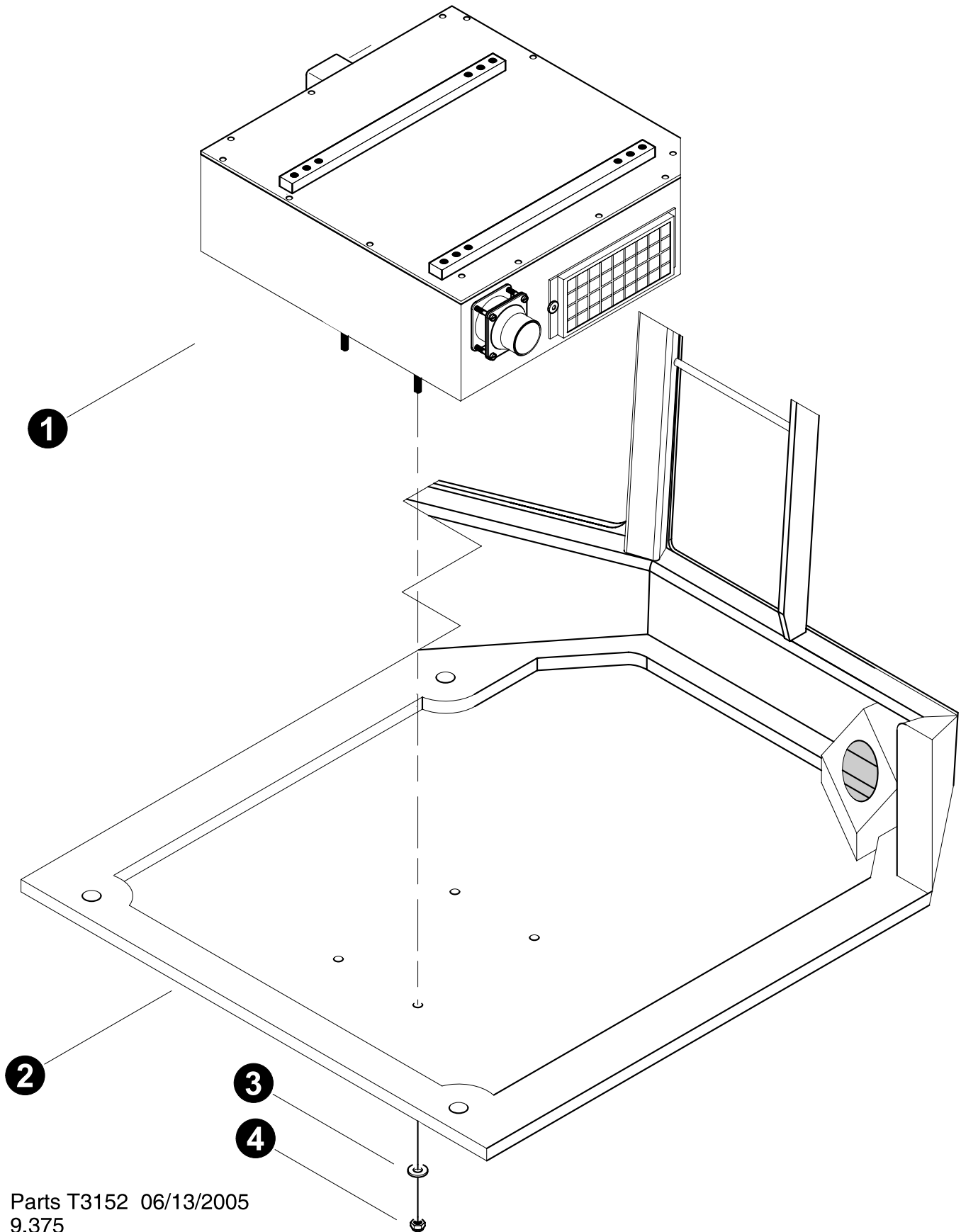
| REF | PART #   | QTY |                          | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------|-------------|
| -   | 52104-OC | 1   | <input type="checkbox"/> | KIT, HEATER/AC - BADGER (830/630)    |             |
| 1   | -OC      | 1   |                          | FILTER, (BT8-1038)                   |             |
| 2   | -OC      | 1   |                          | ADAPTER, HOSE - 2.5" (BT2-0998)      |             |
| 3   | -OC      | 1   |                          | SUPPORT, EXP VALVE (BA-765978-6)     |             |
| 4   | -OC      | 1   |                          | PAN, DRAIN (BA6-0940)                |             |
| 5   | -OC      | 1   |                          | BOX, HOSE ADAPTER (BA-765-978-28)    |             |
| 6   | -OC      | 1   |                          | HEATER CORE (BA6-1007)               |             |
| 7   | -OC      | 1   |                          | ADAPTER, HOSE -3" (BT2-1024)         |             |
| 8   | 15542-OC | 11  |                          | BOLT - .375" X .75"                  |             |
| 9   | -OC      | 1   |                          | PANEL, ACCESS (BA-765-978-27)        |             |
| 10  | -OC      | 1   |                          | KNOB (BT0-0787)                      |             |
| 11  | -OC      | 1   |                          | BLOWER ASSEMBLY - 24V (BT3-0104-4)   |             |
| 12  | -OC      | 1   |                          | THEROSTAT (R-71-3200)                |             |
| 13  | -OC      | 1   |                          | GROMMET - .25" X .375" (2074)        |             |
| 14  | 15528-OC | 11  |                          | WASHER, SAE FLAT - .375"             |             |
| 15  | -OC      | 3   |                          | GROMMET - 1" X 1.75" (BA0-1014)      |             |
| 16  | -OC      | 1   |                          | VALVE, EXPANSION (R-71-8300)         |             |
| 17  | -OC      | 1   |                          | COVER, SEAT MOUNT( BA-765-978-19)    |             |
| 18  | -OC      | 1   |                          | COIL, EVAPORATOR (BA6-1008)          |             |
| 19  | -OC      | 1   |                          | NUT, 1/4" SPN LOCK (ODV3)            |             |
| 20  | -OC      | 1   |                          | BOLT, 1/4" - 24 X 1.5" (B106)        |             |
| 21  | -OC      | 1   |                          | GROMMET - 1.125" X .625" (BA0-1000)  |             |
| 22  | -OC      | 1   |                          | BRACKET, SIDE BLOWER (BA-765-978-25) |             |
| 23  | -OC      | 1   |                          | DIFFUSER (BT2-1019)                  |             |
| 24  | -OC      | 6   |                          | BOLT, 10-24 X .50" (1XWP)            |             |
| 25  | -OC      | 1   |                          | COVER ASSEMBLY (BA-765-978-26)       |             |
| 26  | -OC      | 1   |                          | GROMMET - 1.3125" X 2" (BA0-1013)    |             |
| 27  | -OC      | 1   |                          | HOUSING PEDESTAL (BA-765-978)        |             |
| 28  | -OC      | 6   |                          | NUT, 10-24 (ODVO)                    |             |
| 29  | -OC      | 1   |                          | HOSE, AC - #6 (BA-765-H6)            |             |
| 30  | -OC      | 1   |                          | HOSE, HEATER - PRE FORMED (BA9-0800) |             |
| 31  | -OC      | 1   |                          | HOSE, AC - #10-12 (BA-765-H12)       |             |
| 32  | -OC      | 31" |                          | HOSE, HEATER - 5/8" (H-153-B)        |             |

☐ Kit or Assembly includes all items Underneath



**AIR CONDITIONER / HEATER UNIT****(machines built after 05/13/08)**

| REF | PART #   | QTY |   | DESCRIPTION                                       | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------|-------------|
| -   | 53194-OC | 1   | ☐ | KIT, HEATER/AC - WHEELED/TRACK - NEW CAB          |             |
| 1   | -OC      | 1   |   | BOX, A/C Heater                                   |             |
| 2   | -OC      | 1   |   | HEATER CORE (BA6-1035)                            |             |
| 3   | -OC      | 1   |   | COIL, EVAPORATOR (BA6-1036)                       |             |
| -   | -OC      | 1   | ☐ | EXPANSION VALVE, (BA1-2004)                       |             |
| 4   | -OC      | 1   |   | BLOWER ASSEMBLY - 24V (RD-3-7383-1)               |             |
| 5   | -OC      | 1   |   | THEROSTAT (71R3200)                               |             |
| 6   | -OC      | 1   |   | SPEED CONTROL MODULE (RD-6-5558-0)                |             |
| 7   | -OC      | 1   |   | DIFFUSER (BA2-2025)                               |             |
| 8   | -OC      | 1   |   | FAN, cab pressurizer (BT3-0130-4)                 |             |
| 9   | -OC      | 1   |   | ADAPTER, 3" HOSE                                  |             |
| 10  | -OC      | 1   |   | FILTER, A/C - HEATER (BA8-0104)                   |             |
| 11  | -OC      | 1   |   | BRACKET, A/C Filter (BA-788-0-24)                 |             |
| 12  | -OC      | 1   |   | THUMB SCREW (BT0-0787)                            |             |
| 13  | -OC      | 1   |   | COVER, A/C - Heater and Seat Mount (BA-788-016-4) |             |



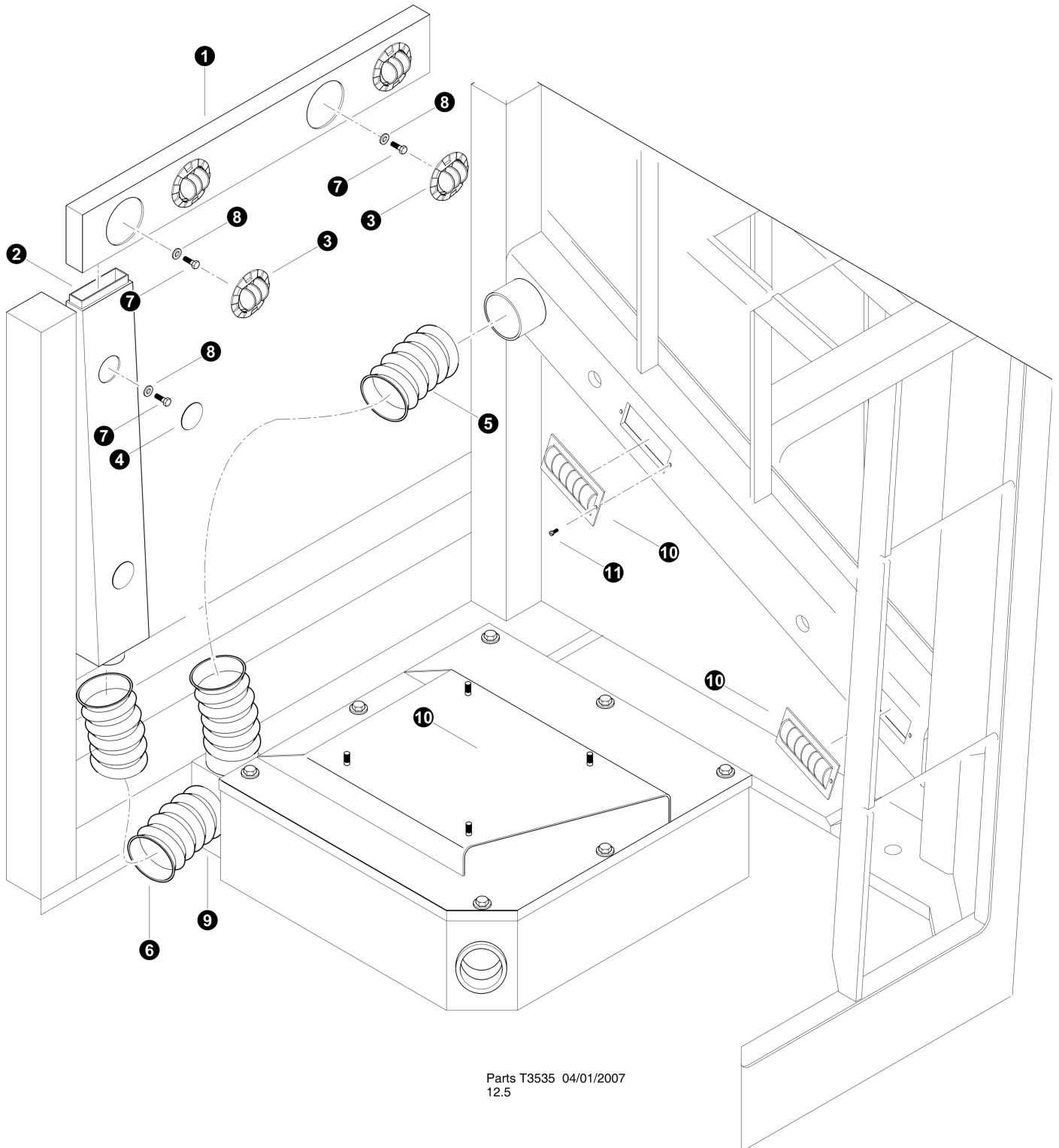


**AIR CONDITIONER / HEATER UNIT**

**(Installation)**  
**(machines - 0098 thru. 0114, 0116, 0117, & 0120)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------|-------------|
| 1   | REF.     | 1   |  | AIR CONDITIONER / HEATER UNIT..... | OC-4        |
| 2   | REF.     | 1   |  | OPERATOR'S CAB ASSEMBLY .....      | OC-1        |
| 3   | 22666-OC | 4   |                                                                                   | WASHER, SAE FLAT - .5" Thick       |             |
| 4   | 10815-OC | 4   |                                                                                   | NUT, LOCK - .5"                    |             |

☐ Kit or Assembly includes all items Underneath



Parts T3535 04/01/2007  
12.5

**AIR CONDITITIONER / HEATER DUCT INSTALLATION****(used on machines built on 05/13/08 or before)**

| REF | PART #   | QTY |   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|---|------------------------------------------|-------------|
| -   | 52731-OC | 1   | □ | DUCT ASSY. - CAB (CURRENT)               |             |
| 1   | -OC      | 1   |   | DUCT, HEATER/AC TUBE HORZ. TUBE          |             |
| 2   | -OC      | 1   |   | DUCT, HEATER/AC VERTICAL TUBE            |             |
| 3   | -OC      | 4   |   | VENT, LOUVER (COYOTE INT'L / 26-2003)    |             |
| 4   | 52499-OC | 2   |   | PLUG, HEATER A/C TUBING                  |             |
| 5   | -OC      | AR  | ✂ | HOSE, flexible - 3"                      |             |
| 6   | -OC      | AR  | ✂ | HOSE, flexible - 3"                      |             |
| 7   | 23264-OC | 4   |   | BOLT - .25" X .5"                        |             |
| 8   | 10800-OC | 4   |   | WASHER, FLAT - .25"                      |             |
| 9   | 52509-OC | 1   |   | BOX, AIR PLENUM HEATER/AC - 3"X3" OUTLET |             |
| 10  | 51640-OC | 4   |   | VENT, LOUVER - CAB HEAT (TF830)          |             |
| 11  | -OC      | 8   |   | SCREW, self-tapping - #6 x 1/2" (84933)  |             |



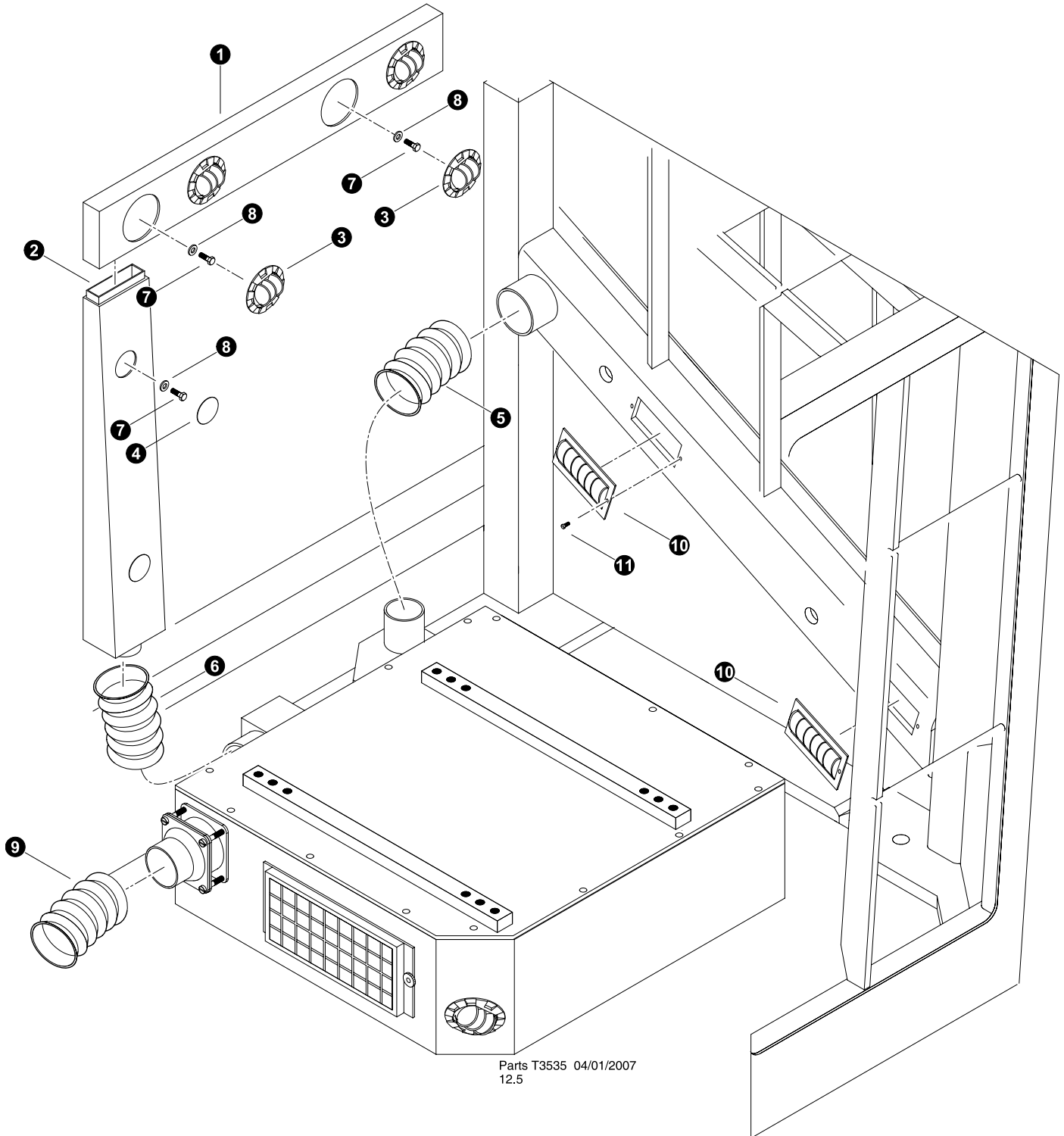
Built material - order length required in feet or meters.



Kit or Assembly - includes all items indented underneath.



See referenced page for component or assembly breakdown.



Parts T3535 04/01/2007  
12.5

**AIR CONDITITIONER / HEATER DUCT INSTALLATION****(used on machines built after 05/13/08 and before 07/01/09)**

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| -   | 52731-OC | 1   | □ | DUCT ASSY. - CAB (CURRENT)              |             |
| 1   | -OC      | 1   |   | DUCT, HEATER/AC TUBE HORZ. TUBE         |             |
| 2   | -OC      | 1   |   | DUCT, HEATER/AC VERTICAL TUBE           |             |
| 3   | 57833-OC | 4   |   | VENT, LOUVER (COYOTE INT'L / 26-2003)   |             |
| 4   | 52499-OC | 2   |   | PLUG, HEATER A/C TUBING                 |             |
| 5   | -OC      | AR  | ✂ | HOSE, flexible - 2.5" (78R0250SB)       |             |
| 6   | -OC      | AR  | ✂ | HOSE, flexible - 3" (78R0300SB)         |             |
| 7   | 23264-OC | 4   |   | BOLT - .25" X .5"                       |             |
| 8   | 10800-OC | 4   |   | WASHER, FLAT - .25"                     |             |
| 9   | -OC      | AR  | ✂ | HOSE, flexible - 3" (78R0300SB)         |             |
| 10  | 51640-OC | 4   |   | VENT, LOUVER - CAB HEAT (TF830)         |             |
| 11  | -OC      | 8   |   | SCREW, self-tapping - #6 x 1/2" (84933) |             |



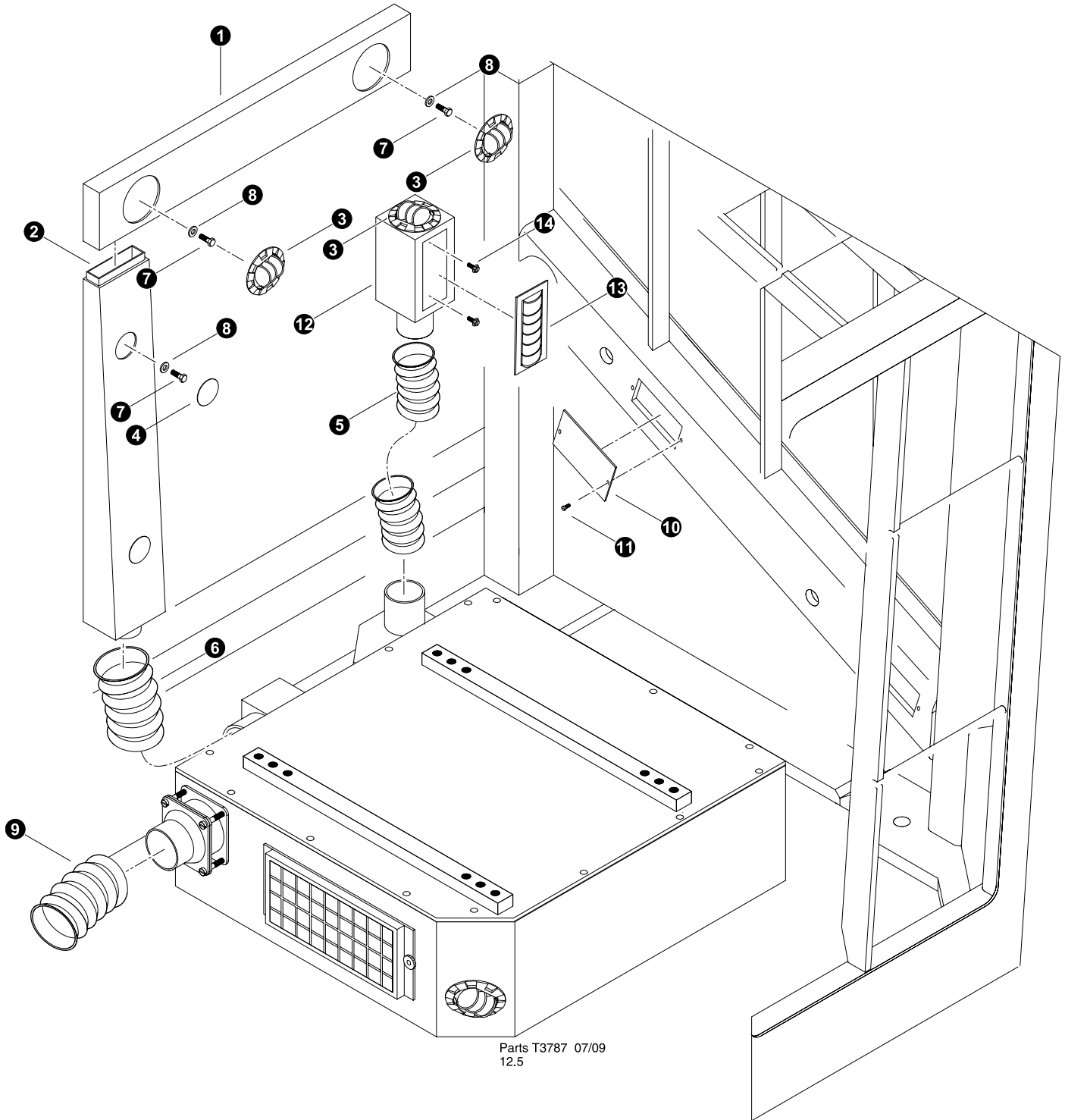
Built material - order length required in feet or meters.



Kit or Assembly - includes all items indented underneath.



See referenced page for component or assembly breakdown.



Parts T3787 07/09  
12.5

**AIR CONDITONER / HEATER DUCT INSTALLATION****(used on machines built after 07/01/09)**

| REF | PART #     | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|------------|-----|---|-----------------------------------------|-------------|
| -   | 52731-OC   | 1   | □ | DUCT ASSY. - CAB (CURRENT)              |             |
| 1   | -OC        | 1   |   | DUCT, HEATER/AC TUBE HORZ. TUBE         |             |
| 2   | -OC        | 1   |   | DUCT, HEATER/AC VERTICAL TUBE           |             |
| 3   | 57833-OC   | 4   |   | VENT, LOUVER (COYOTE INT'L / 26-2003)   |             |
| 4   | 52499-OC   | 2   |   | PLUG, HEATER A/C TUBING                 |             |
| 5   | -OC        | AR  | ✂ | HOSE, flexible - 2.5" (78R0250SB)       |             |
| 6   | -OC 23264- | AR  | ✂ | HOSE, flexible - 3" (78R0300SB)         |             |
| 7   | OC 10800-  | 4   |   | BOLT - .25" X .5"                       |             |
| 8   | OC         | 4   |   | WASHER, FLAT - .25"                     |             |
| 9   | -OC        | AR  | ✂ | HOSE, flexible - 3" (78R0300SB)         |             |
| 10  | -OC        | 2   |   | PLATE, vent cover                       |             |
| 11  | -OC        | 8   |   | SCREW, self-tapping - #6 x 1/2" (84933) |             |
| 12  | 72r3600-OC | 1   | □ | BOX, A/C Heater Vent (72r3600)          |             |
| 13  | -OC 17255- | 1   |   | VENT, LOUVER - CAB                      |             |
| 14  | OC         | 2   |   | SCREW, SELF TAPPING - #10-24 X .75"     |             |



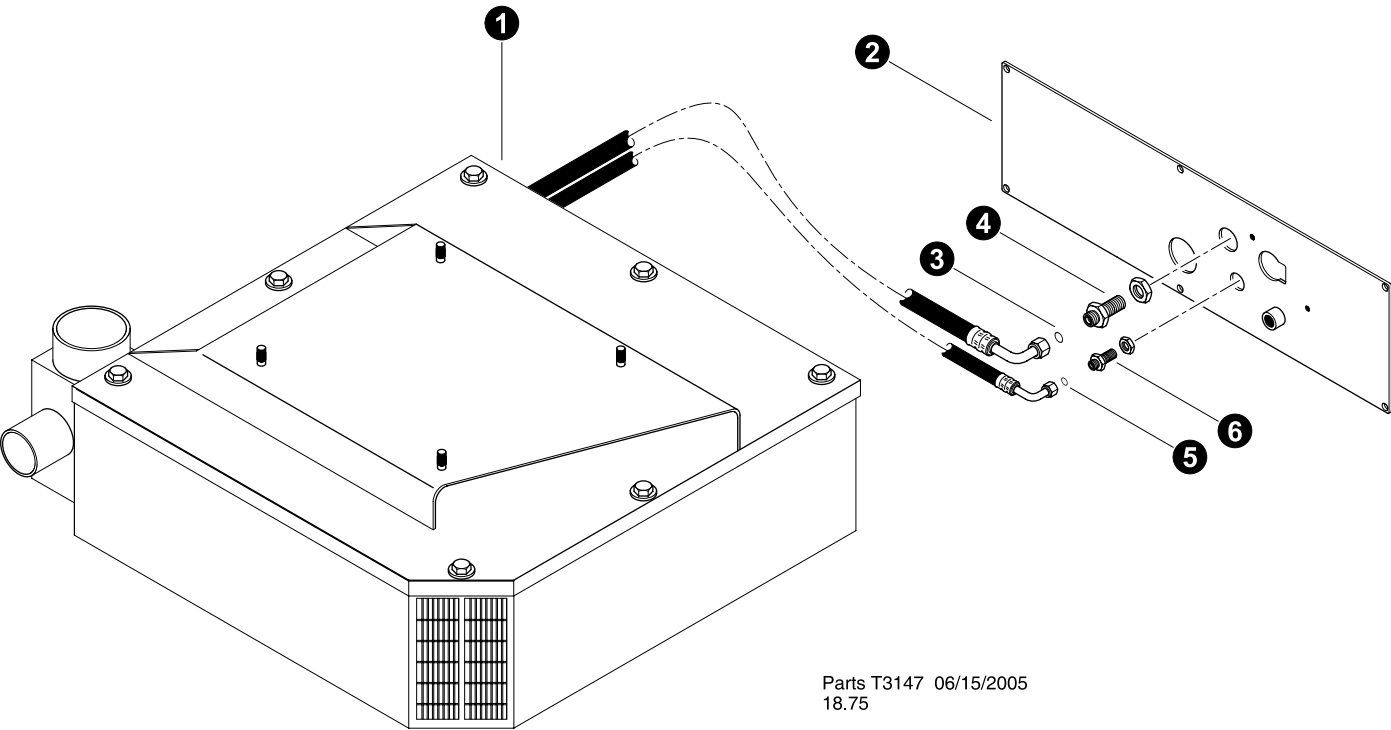
Built material - order length required in feet or meters.



Kit or Assembly - includes all items indented underneath.



See referenced page for component or assembly breakdown.

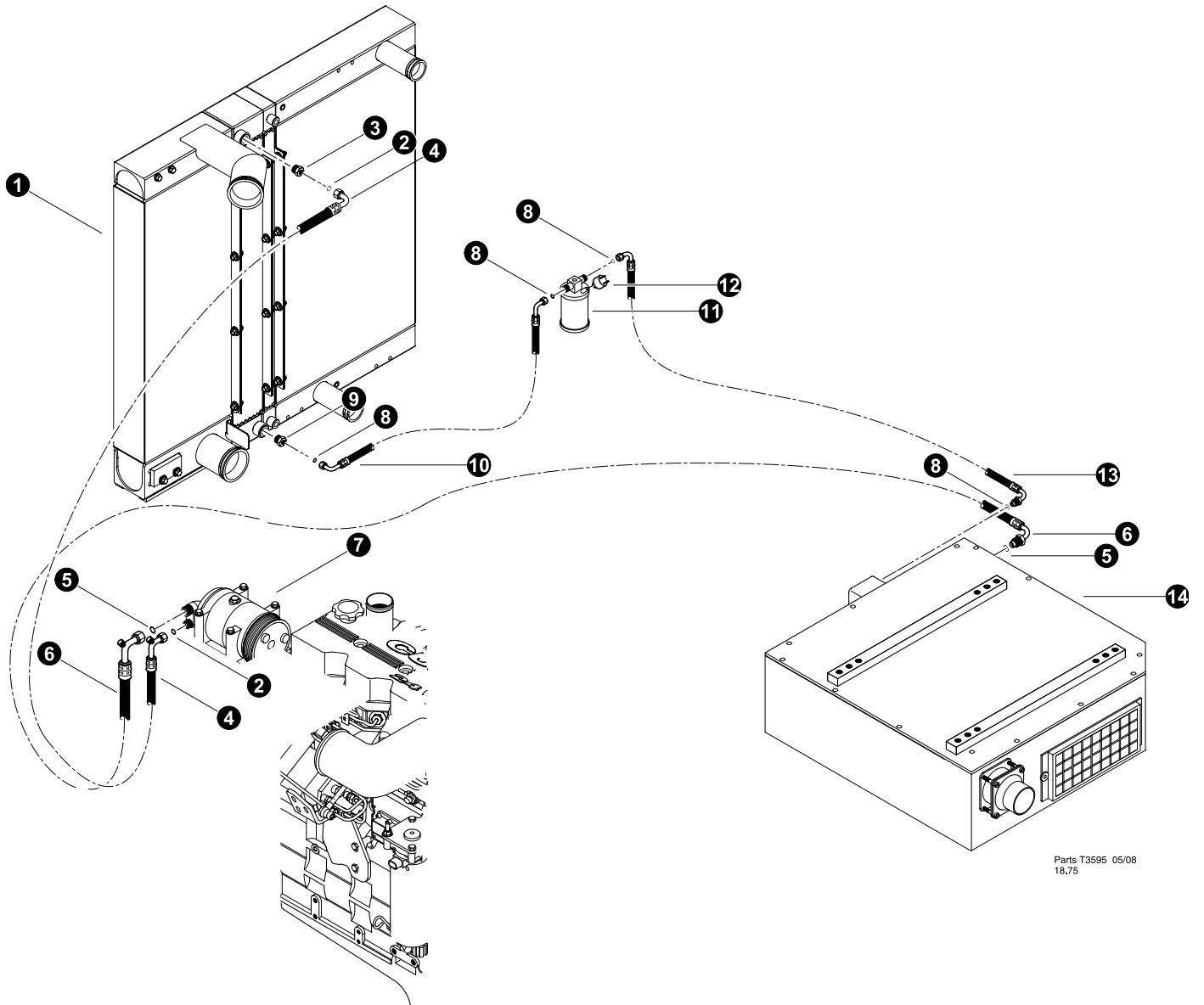




**AIR CONDITIONER LINES**  
**(Cab Interior)**  
**(used on machines built on 05/13/08 or before)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------|-------------|
| 1   | REF.     | 1   |  | AIR CONDITIONER / HEATER UNIT. .... | OC-4        |
| 2   | 51949-OC | 1   |                                                                                   | BULKHEAD PLATE, CAB SIDE            |             |
| 3   |          | 1   |                                                                                   | O-RING #10 (405864)                 |             |
| 4   | 50944-OC | 1   |                                                                                   | CONNECTOR, straight bulkhead - #10  |             |
| 5   |          | 1   |                                                                                   | O-RING #06 (405862)                 |             |
| 6   | 50943-OC | 1   |                                                                                   | CONNECTOR, straight bulkhead - #6   |             |

☐ See referenced page for component or assembly breakdown.

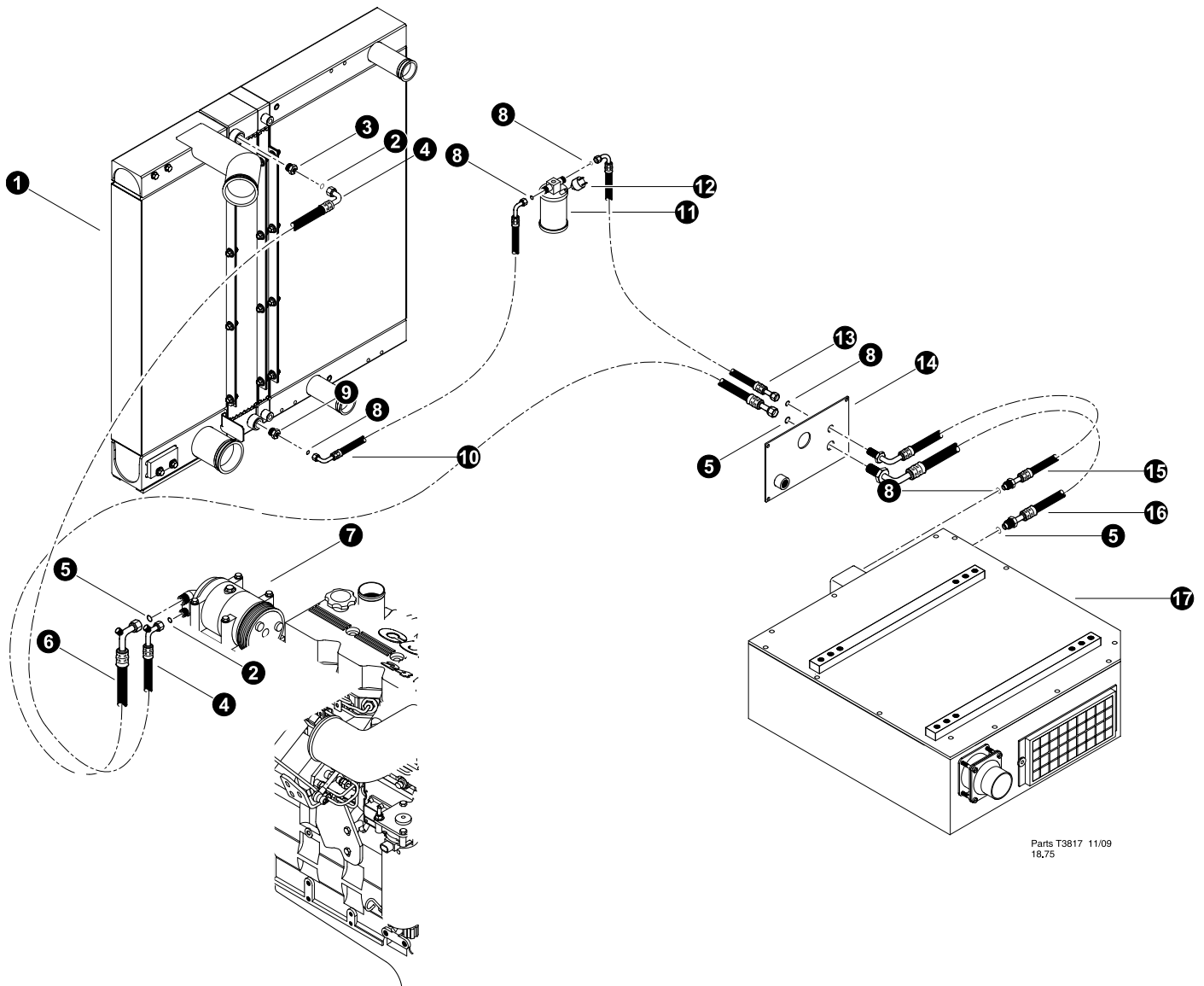


Parts T3595 05/08  
18.75

**AIR CONDITIONER LINES**  
**(Cab Interior and Exterior)**  
**(used on machines built 05/13/08 to 10/21/09)**

| REF | PART #   | QTY | DESCRIPTION                                                                                                   | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | RADIATOR / AC / OIL COOLER ASSEMBLY. . . . .                                                                  | UP-3        |
| 2   | -UP      | 1   | O-RING #08 (405863)                                                                                           |             |
| 3   | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                           |             |
| 4   | -OC      | 1   | HOSE, air conditioner - #8 x 41 " (Female 90°/Female 90°) (TP-100)<br>(Compressor to Condensor tubing inlet)  |             |
| 5   |          | 2   | O-RING #10 (405864)                                                                                           |             |
| 6   | -OC      | 1   | HOSE, air conditioner - #12 x 118" (Female 90°/Female 90°) (TP-101 B)<br>(Compressor to Cab Bulkhead)         |             |
| 7   | REF      | 1   | CUMMINS QSC ENGINE ASSEMBLY. . . . .                                                                          | EE-1        |
| 8   |          | 5   | O-RING #06 (405862)                                                                                           |             |
| 9   | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                           |             |
| 10  | -OC      | 1   | HOSE, air conditioner - #6 x 24" (Female 90°/Female 90°) (TP-102)<br>(Condensor tubing outlet to Drier inlet) |             |
| 11  | 50937-OC | 1   | DRIER, A/C                                                                                                    |             |
| 12  | 50951-OC | 1   | SWITCH, binary                                                                                                |             |
| 13  | -OC      | 1   | HOSE, air conditioner - #6 x 76" (Female 90°/Female 90°R) (TP-103B)<br>(Drier outlet to Cab Bulkhead)         |             |
| 14  | REF      | 1   | AC / HEATER ASSEMBLY . . . . .                                                                                | OC-3        |

☐ See referenced page for component or assembly breakdown.

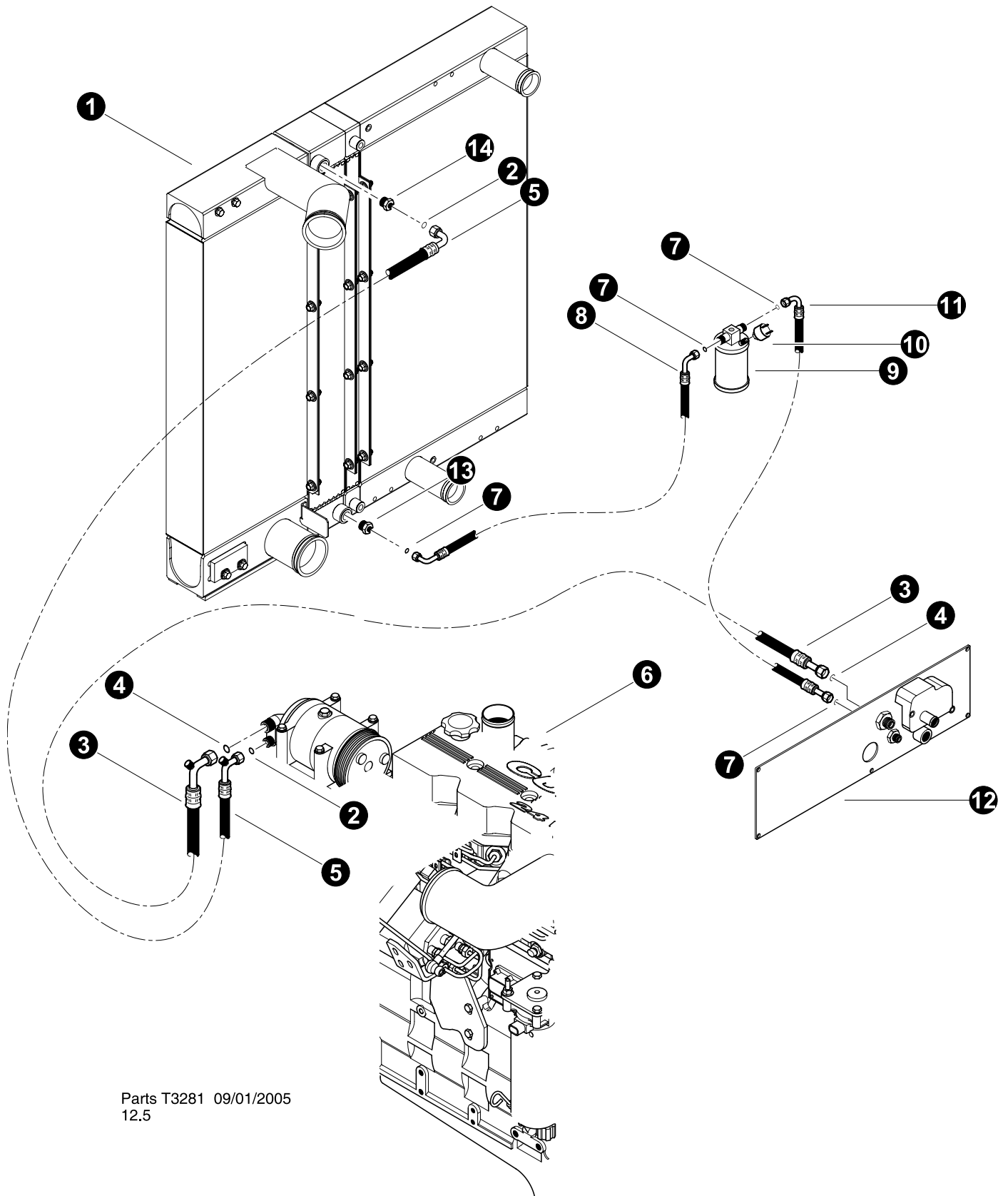


Parts T3817 11/09  
18,75

**AIR CONDITIONER LINES**  
**(Cab Interior and Exterior)**  
**(used on machines built after 10/21/09)**

| REF | PART #   | QTY | DESCRIPTION                                                                                                   | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | RADIATOR / AC / OIL COOLER ASSEMBLY. . . . .                                                                  | UP-3        |
| 2   | -UP      | 1   | O-RING #08 (405863)                                                                                           |             |
| 3   | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                           |             |
| 4   | -OC      | 1   | HOSE, air conditioner - #8 x 41" (Female 90°/Female 90°) (TP-100)<br>(Compressor to Condensor tubing inlet)   |             |
| 5   |          | 2   | O-RING #10 (405864)                                                                                           |             |
| 6   | -OC      | 1   | HOSE, air conditioner - #12 x 113" (Female 90°/Female 90°) (BH-167)<br>(Compressor to Cab Bulkhead)           |             |
| 7   | REF      | 1   | CUMMINS QSC ENGINE ASSEMBLY. . . . .                                                                          | EE-1        |
| 8   |          | 5   | O-RING #06 (405862)                                                                                           |             |
| 9   | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                           |             |
| 10  | -OC      | 1   | HOSE, air conditioner - #6 x 24" (Female 90°/Female 90°) (TP-102)<br>(Condensor tubing outlet to Drier inlet) |             |
| 11  | 50937-OC | 1   | DRIER, A/C                                                                                                    |             |
| 12  | 50951-OC | 1   | SWITCH, binary                                                                                                |             |
| 13  | -OC      | 1   | HOSE, air conditioner - #6 x 87" (Female 90°/Female 90°R) (BH-168)<br>(Drier outlet to Cab Bulkhead)          |             |
| 14  | 53961-OC | 1   | BULKHEAD PLATE, CAB SIDE - CURRENT                                                                            |             |
| 15  | -OC      | 1   | HOSE, air conditioner - #6 x 15.5" (Bulkhead 90° to male STR) (BH-166)<br>(EXPANSION Valve to Cab Bulkhead)   |             |
| 16  | -OC      | 1   | HOSE, air conditioner - #12 x 14.5" (Bulkhead 90° to male STR) (BH-165)<br>(EXPANSION Valve to Cab Bulkhead)  |             |
| 17  | REF      | 1   | AC / HEATER ASSEMBLY. . . . .                                                                                 | OC-4-1      |

☐ See referenced page for component or assembly breakdown.



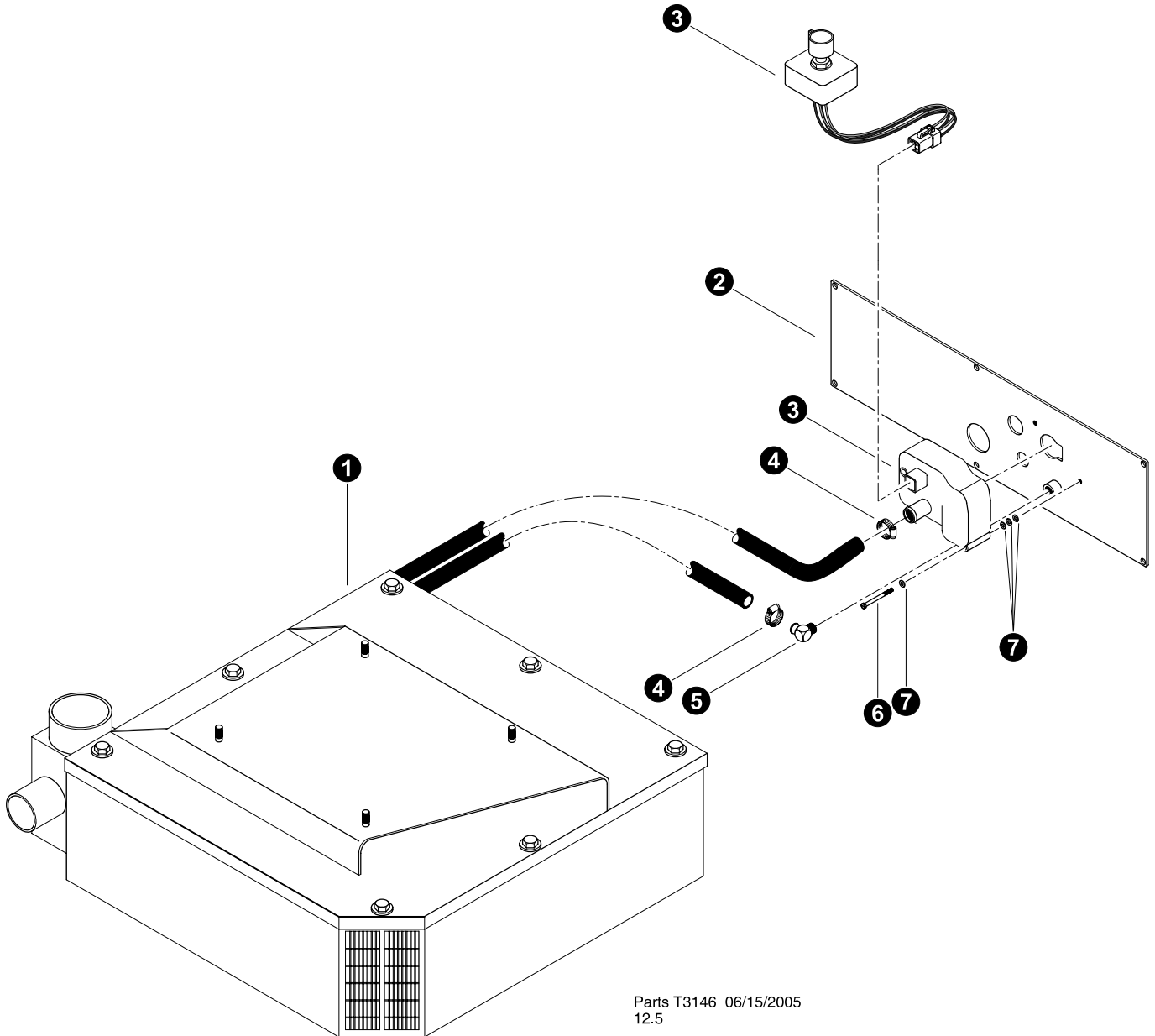
Parts T3281 09/01/2005  
12.5

## AIR CONDITIONER LINES (Cab Exterior)

**(used on machines built on 05/13/08 or before)**

| REF | PART #   | QTY | DESCRIPTION                                                                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | RADIATOR / AC / OIL COOLER ASSEMBLY.....                                                                        | UP-3        |
| 2   | -OC      | 3   | O-RING #08 (405863)                                                                                             |             |
| 3   | -OC      | 1   | HOSE, air conditioner - #12 x 114" (Female 90°/Female STR) (TP-101)<br>(Compressor to Cab Bulkhead)             |             |
| 4   |          | 2   | O-RING #10 (405864)                                                                                             |             |
| 5   | -OC      | 1   | HOSE, air conditioner - #8 x 41 " (Female 90°/Female 90°) (TP-100)<br>(Compressor to Condensor tubing inlet)    |             |
| 6   | REF      | 1   | CUMMINS QSC ENGINE ASSEMBLY.....                                                                                | EE-1        |
| 7   |          | 5   | O-RING #06 (405862)                                                                                             |             |
| 8   | -OC      | 1   | HOSE, air conditioner - #6 x 24" (Female 90°/Female 90°) (TP-102)<br>(Condensor tubing outlet to Drier inlet)   |             |
| 9   | 50937-OC | 1   | DRIER, A/C - (EAGLE 24V SYSTEM)                                                                                 |             |
| 10  | 50951-OC | 1   | SWITCH, binary (Eagle unit)                                                                                     |             |
| 11  | -OC      | 1   | HOSE, air conditioner - #6 x 68" (Female 90°/Female STR) (TP-103)<br>(Drier outlet to Cab Bulkhead)             |             |
| 12  | REF.     | 1   |  BULKHEAD PLATE ASSEMBLY ..... | OC-4        |
| 13  | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                             |             |
| 14  | -OC      | 1   | Fitting 7/8" -14 X #8 ORB (BT0-770)                                                                             |             |

 See referenced page for component or assembly breakdown.



Parts T3146 06/15/2005  
12.5

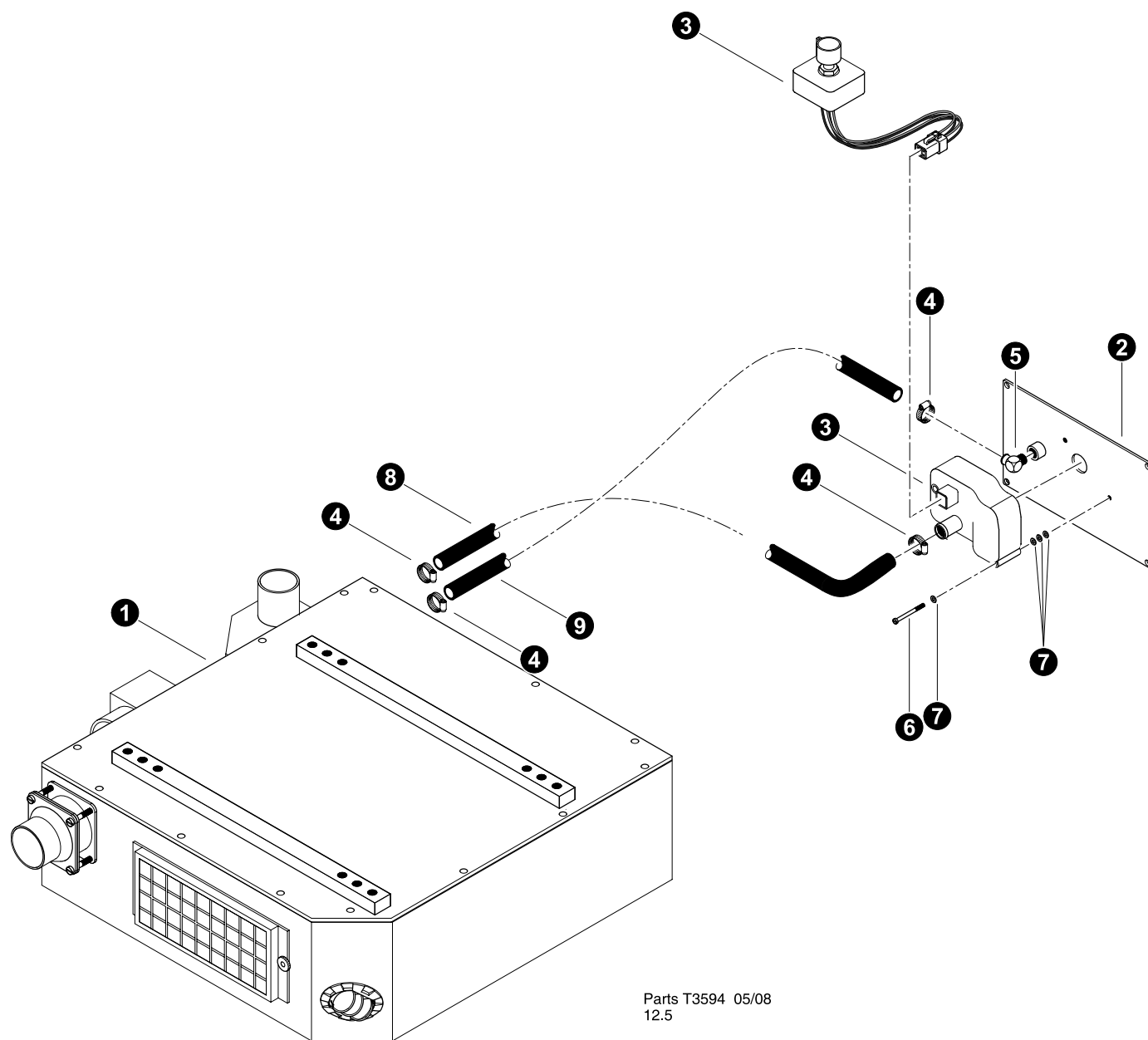


**HEATER LINES**  
**(Cab Interior)**  
**(used on machines built on 05/13/08 or before)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | AIR CONDITIONER / HEATER UNIT.....                                | OC-4        |
| 2   | 51949-OC | 1   |                                                                                   | BULKHEAD PLATE, CAB SIDE                                          |             |
| 3   | 50936-OC | 1   |                                                                                   | VALVE, WATER - KIT (24v Eagle with Electronic Thermostat control) |             |
| 4   | 10759-OC | 2   |                                                                                   | CLAMP, hose - worm style - 7/8"                                   |             |
| 5   | 52081-OC | 1   |                                                                                   | ELBOW, 90 BRASS - NIPPLE #6 npt x 5/8                             |             |
| 6   | 16127-OC | 2   |                                                                                   | SCREW, MACHINE - #10-24 X 1.25"                                   |             |
| 7   | 10800-OC | 8   |                                                                                   | WASHER, FLAT - .25"                                               |             |



Bulk material - order length required in feet or meters.  
 See referenced page for component or assembly breakdown.

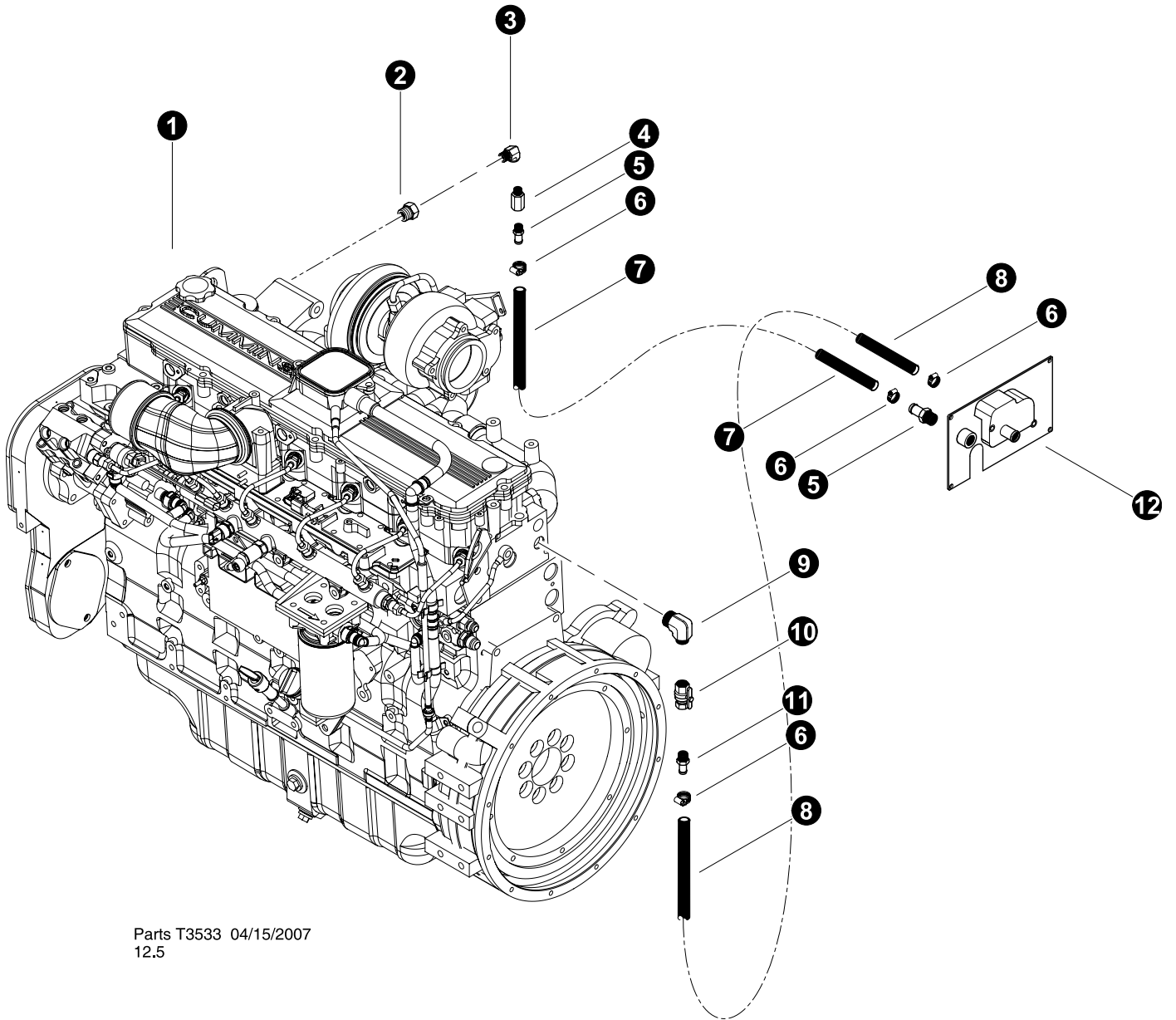


**HEATER LINES**  
**(Cab Interior)**  
**(used on machines built after 05/13/08)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | AIR CONDITIONER / HEATER UNIT.....                                | OC-4        |
| 2   | 52957-OC | 1   |                                                                                   | BULKHEAD PLATE, CAB SIDE                                          |             |
| 3   | 50936-OC | 1   |                                                                                   | VALVE, WATER - KIT (24v Eagle with Electronic Thermostat control) |             |
| 4   | 10759-OC | 2   |                                                                                   | CLAMP, hose - worm style - 7/8"                                   |             |
| 5   | 52081-OC | 1   |                                                                                   | ELBOW, 90 BRASS - NIPPLE #6 npt x 5/8                             |             |
| 6   | 16127-OC | 2   |                                                                                   | SCREW, MACHINE - #10-24 X 1.25"                                   |             |
| 7   | 10800-OC | 8   |                                                                                   | WASHER, FLAT - .25"                                               |             |
| 8   | 16717-OC | 1   |  | HOSE, heater - 5/8" ( <i>Bulkhead to Heater Coil</i> )            |             |
| 9   | 16717-OC | 1   |  | HOSE, heater - 5/8" ( <i>Bulkhead to Heater Coil</i> )            |             |



Bulk material - order length required in feet or meters.  
 See referenced page for component or assembly breakdown.



Parts T3533 04/15/2007  
12.5

## HEATER LINES

### (Cab Exterior - Cummins QSC Tier 3)

| REF | PART #   | QTY |   | DESCRIPTION                                       | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------|-------------|
| 1   | REF      | 1   |   | CUMMINS QSC ENGINE ASSEMBLY . . . . .             | EE-1        |
| 2   | 15513-OC | 2   |   | BUSHING, REDUCER - 5406-12-8                      |             |
| 3   | -OC      | 2   |   | ELBOW, 1/2" X 3/8" CD-S                           |             |
| 4   | 15652-OC | 2   |   | VALVE, CHECK                                      |             |
| 5   | 51502-OC | 3   |   | NIPPLE, KING - 3/8" NPT X 5/8" HOSE               |             |
| 6   | 10759-OC | 4   |   | CLAMP, hose - worm style - 7/8"                   |             |
| 7   | 16717-OC | 1   | ✂ | HOSE, heater - 5/8" ( <i>Bulkhead to engine</i> ) |             |
| 8   | 16717-OC | 1   | ✂ | HOSE, heater - 5/8" ( <i>Bulkhead to engine</i> ) |             |
| 9   | -OC      | 1   |   | ELBOW, 3/4" X 1/2" CR-S                           |             |
| 10  | 51714-OC | 1   |   | VALVE, BALL - WATER SHUT OFF HEATER 1/2"          |             |
| 11  | -OC      | 1   |   | NIPPLE, KING - 1/2" NPT X 5/8" HOSE               |             |
| 12  | REF.     | 1   | 📖 | BULKHEAD PLATE ASSEMBLY . . . . .                 | OC-4        |



Bulk material - order length required in feet or meters.



See referenced page for component or assembly breakdown.

[illegible]

## ***Section OC-5***

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### ***Operator's Cab - Optional Fire Suppression System***

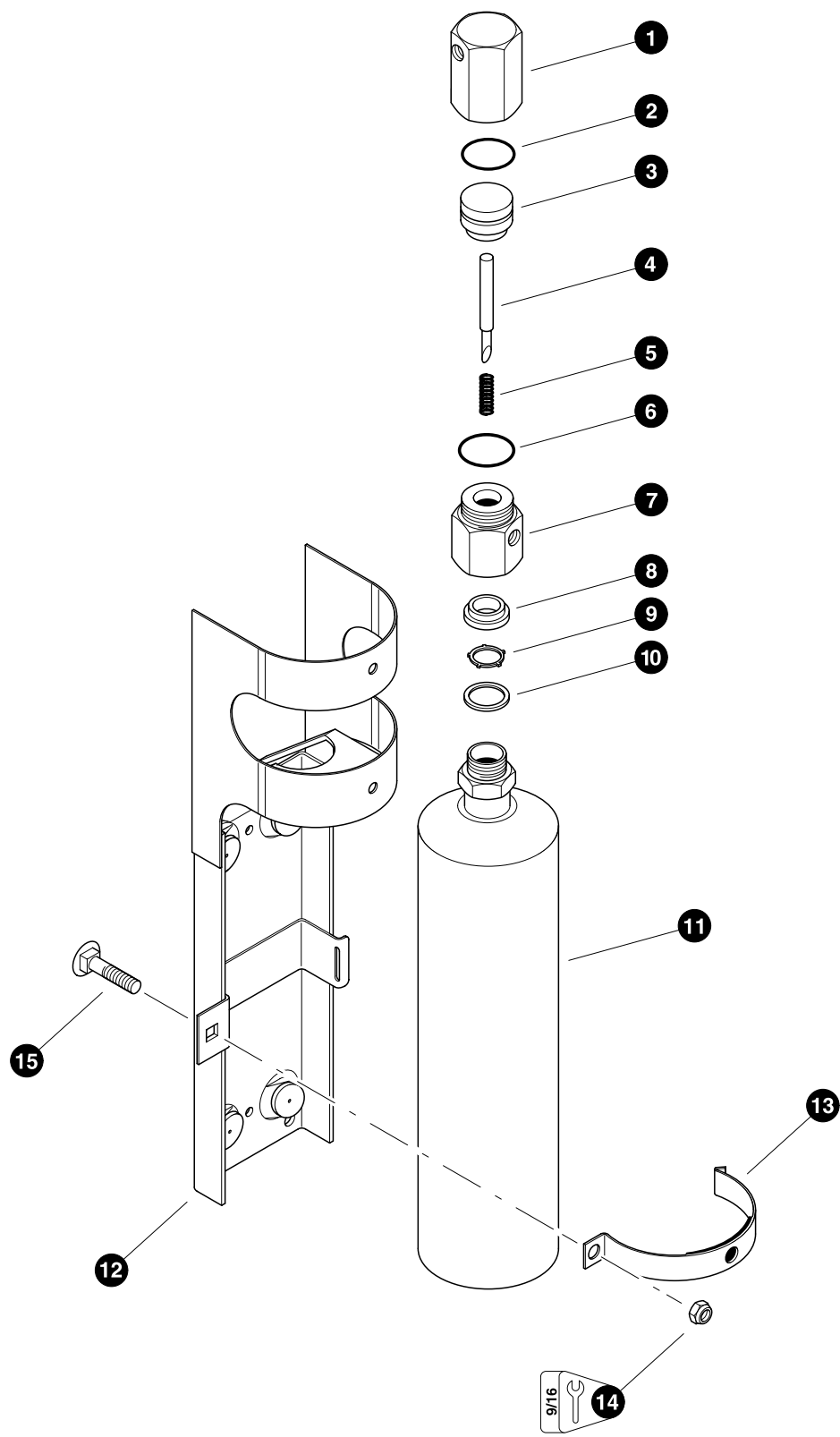




## DRY CHEMICAL TANK (50 lbs systems)

| REF | PART #   | QTY |                          | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------|-------------|
| --  | 52239-OC | 1   | <input type="checkbox"/> | FIRE PROTECTION SYSTEM - ANSUL (50 lbs) |             |
| 1   | -OC      | 1   |                          | DRY CHEMICAL TANK ASSEMBLY (A12107)     |             |
| -   | 21235-OC | 1   | <input type="checkbox"/> | FILL CAP ASSEMBLY                       |             |
| 2   | NSS      | 1   |                          | CAP, fill                               |             |
| 3   | 21233-OC | 1   |                          | GASKET                                  |             |
| 4   | 21234-OC | 1   |                          | RING, quad                              |             |
| 5   | 24290-OC | 1   |                          | BUSHING, REDUCER - 5406-12-4            |             |
| -   | 21237-OC | 1   | <input type="checkbox"/> | BURSTING DISC UNION                     |             |
| 6   | 21238-OC | 1   |                          | ADAPTER                                 |             |
| 7   | 21239-OC | 1   |                          | DISC, bursting                          |             |
| 8   | 21240-OC | 1   |                          | RING, union tail piece                  |             |
| -   | 21241-OC | 1   | <input type="checkbox"/> | DRY CHEMICAL TANK BRACKET               |             |
| 9   | NSS      | 1   |                          | BRACKET, dry chemical tank              |             |
| 10  | -OC      | 1   |                          | CLAMP. band                             |             |
| 11  | 10731-OC | 2   |                          | BOLT - .375" X 1.5"                     |             |
| 12  | 15528-OC | 4   |                          | WASHER, SAE flat - 3/8"                 |             |
| 13  | 15507-OC | 2   |                          | NUT, nylock - 3/8"                      |             |

☐ Kit or Assembly - includes all items indented underneath.

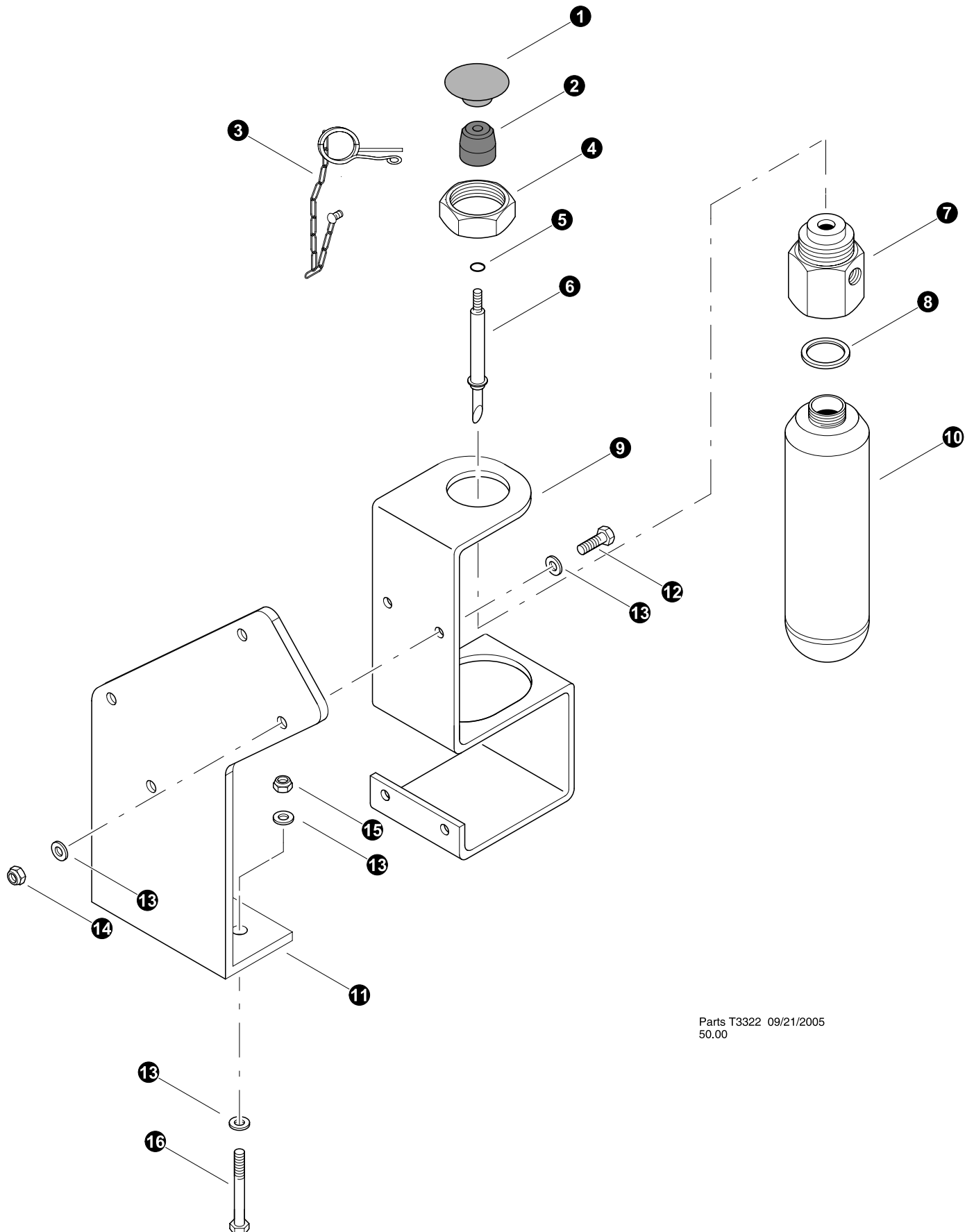


Parts 00596 10/17/2000  
37.50

## NITROGEN CYLINDER

| REF | PART #   | QTY |                          | DESCRIPTION                                        | SEE SECTION |
|-----|----------|-----|--------------------------|----------------------------------------------------|-------------|
| --  | 24616-OC | 1   | <input type="checkbox"/> | FIRE PROTECTION SYSTEM - ANSUL (SC-N)              |             |
| --  | 21248-OC | 1   | <input type="checkbox"/> | PNEUMATIC ACTUATOR ASSEMBLY                        |             |
| 1   | 21249-OC | 1   |                          | BODY, actuator - upper                             |             |
| 2   | 21250-OC | 1   |                          | O-RING, slave piston                               |             |
| 3   | 21251-OC | 1   |                          | PISTON, pneumatic slave                            |             |
| 4   | 21252-OC | 1   |                          | PIN, puncture                                      |             |
| 5   | 21253-OC | 1   |                          | SPRING                                             |             |
| 6   | 21254-OC | 1   |                          | O-RING, actuator body                              |             |
| 7   | 21255-OC | 1   |                          | BODY, actuator - lower                             |             |
| 8   | 21256-OC | 1   |                          | WASHER                                             |             |
| 9   | 21257-OC | 1   |                          | RING, retaining                                    |             |
| 10  | 21258-OC | 1   |                          | GASKET                                             |             |
| 11  | 21276-OC | 1   |                          | CARTRIDGE, nitrogen <i>(Includes shipping cap)</i> |             |
| --  | 21260-OC | 1   | <input type="checkbox"/> | BRACKET ASSEMBLY, nitrogen tank                    |             |
| 12  | NSS      | 1   |                          | BRACKET, nitrogen cylinder                         |             |
| 13  | 21261-OC | 1   |                          | ARM, clamp                                         |             |
|     | 21262-OC | 1   |                          | PAD, clamp arm                                     |             |
| 14  | 15507-OC | 1   |                          | NUT, nylock - 3/8"                                 |             |
| 15  | 21263-OC | 1   |                          | BOLT, carriage - 3/8" x 1"                         |             |

☐ Kit or Assembly - includes all items indented underneath.

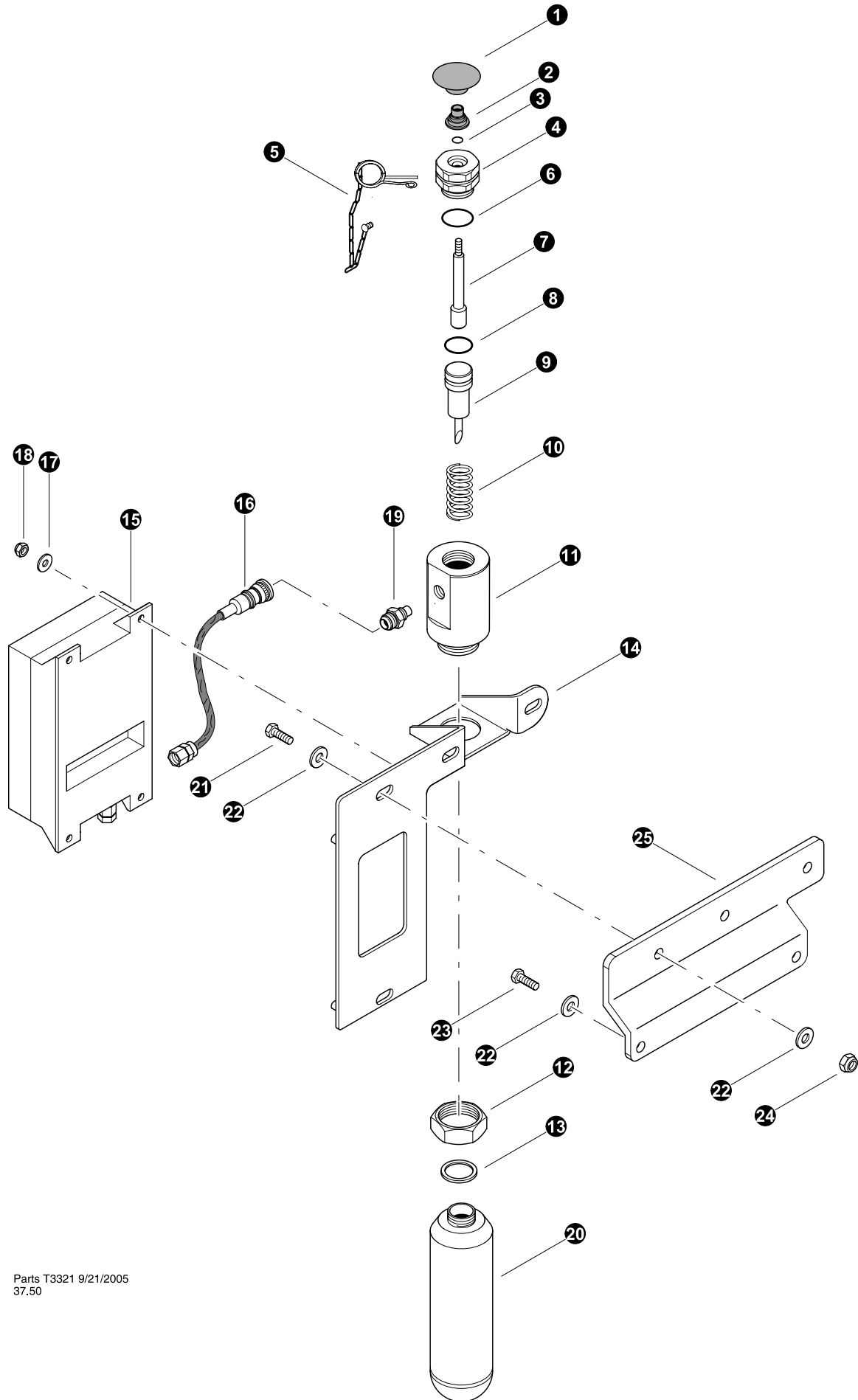


Parts T3322 09/21/2005  
50.00

## MANUAL ACTUATOR (Exterior Mount)

| REF | PART #   | QTY |                          | DESCRIPTION                                               | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------------------------|-------------|
| --  | 24616-OC | 1   | <input type="checkbox"/> | FIRE PROTECTION SYSTEM - ANSUL (SC-N)                     |             |
| --  | 21264-OC | 1   | <input type="checkbox"/> | MANUAL ACTUATOR ASSEMBLY                                  |             |
| 1   | 21265-OC | 1   |                          | KNOB                                                      |             |
| 2   | 21266-OC | 1   |                          | BOOT                                                      |             |
| 3   | 21272-OC | 1   |                          | PIN, safety ring                                          |             |
|     | 21273-OC | 1   |                          | CHAIN                                                     |             |
|     | 21274-OC | 1   |                          | SCREW, drive                                              |             |
|     | 21275-OC | 1   |                          | WIRE, lead seal <i>(Not shown)</i>                        |             |
| 4   | 21267-OC | 1   |                          | NUT, jam                                                  |             |
| 5   | 21270-OC | 1   |                          | O-RING, puncture pin                                      |             |
| 6   | 21271-OC | 1   |                          | PIN, puncture                                             |             |
| 7   | 21269-OC | 1   |                          | BODY, actuator                                            |             |
| 8   | 21258-OC | 1   |                          | GASKET                                                    |             |
| 9   | 21268-OC | 1   |                          | BRACKET, manual actuator                                  |             |
| 10  | 21259-OC | 1   |                          | CARTRIDGE, manual actuator <i>(Includes shipping cap)</i> |             |
| 11  | 51937-OC | 1   |                          | BRACKET, FIRE SUPPRESSION MANUAL ACTUATOR                 |             |
| 12  | 15576-OC | 2   |                          | BOLT - .25" X 1"                                          |             |
| 13  | 10757-OC | 6   |                          | WASHER, SAE FLAT - .25"                                   |             |
| 14  | 15509-OC | 2   |                          | NUT, NYLOCK - .25"                                        |             |
| 15  | 15509-OC | 2   |                          | NUT, NYLOCK - .25"                                        |             |
| 16  | 15568-OC | 2   |                          | BOLT - .25" X 2"                                          |             |

☐ Kit or Assembly - includes all items indented underneath.

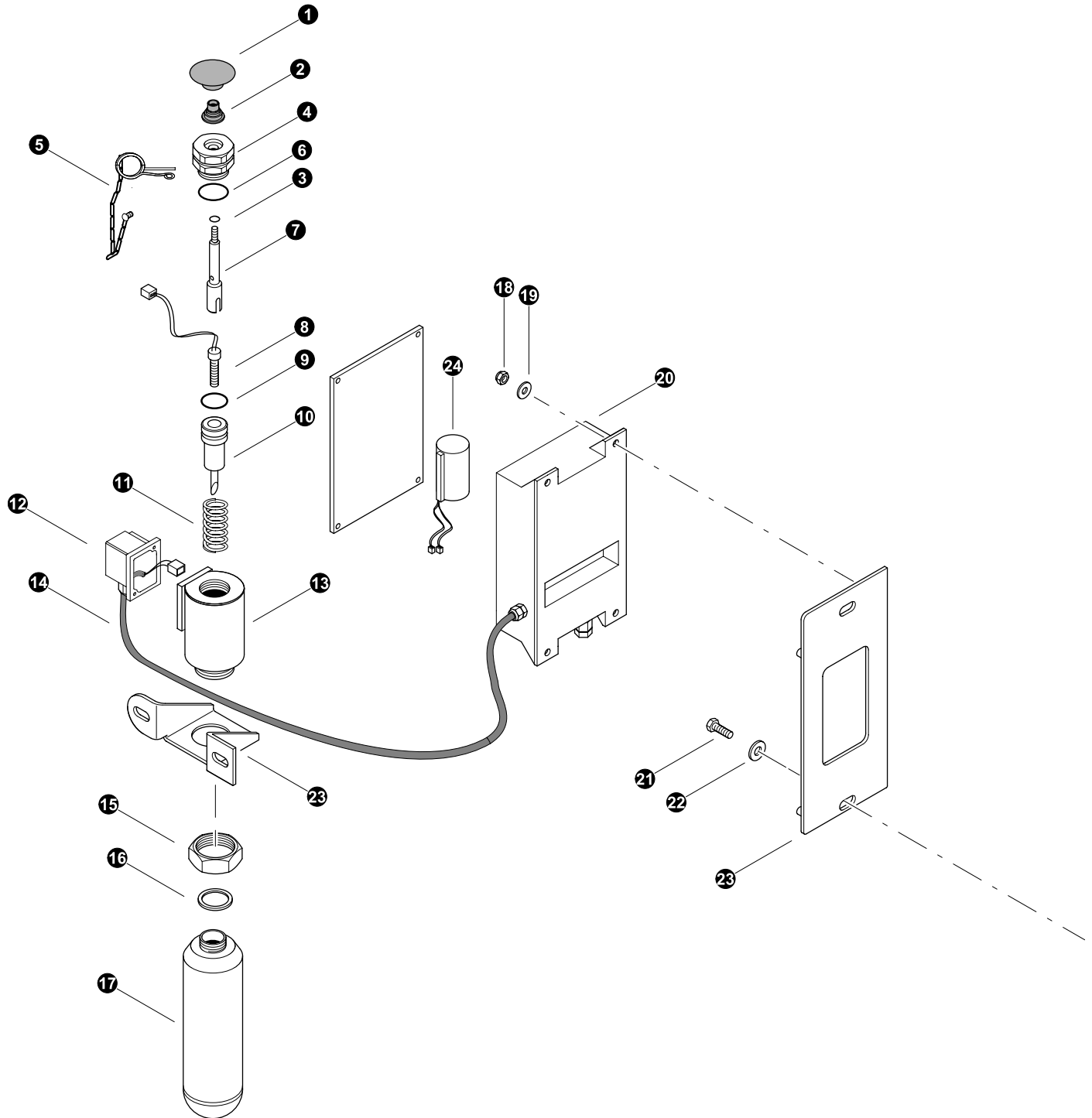


Parts T3321 9/21/2005  
37.50

**AUTO / MANUAL ACTUATOR**  
**(Interior Mount)**  
**(machines built before 09-24-09)**

| REF | PART #   | QTY |                          | DESCRIPTION                                               | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------------------------|-------------|
| --  | 52239-OC | 1   | <input type="checkbox"/> | FIRE PROTECTION SYSTEM - ANSUL (SC-N)                     |             |
| --  | 21294-OC | 1   | <input type="checkbox"/> | AUTO / MANUAL ACTUATOR ASSEMBLY                           |             |
| 1   | 21265-OC | 1   |                          | KNOB                                                      |             |
| 2   | 21277-OC | 1   |                          | BOOT                                                      |             |
| 3   | 21279-OC | 1   |                          | O-RING, stem                                              |             |
| 4   | 21278-OC | 1   |                          | ADAPTER, boot                                             |             |
| 5   | 21272-OC | 1   |                          | PIN, safety ring                                          |             |
|     | 21273-OC | 1   |                          | CHAIN                                                     |             |
|     | 21274-OC | 1   |                          | SCREW, drive                                              |             |
|     | 21275-OC | 1   |                          | WIRE, lead seal <i>(Not shown)</i>                        |             |
| 6   | 21280-OC | 1   |                          | O-RING, adapter boot                                      |             |
| 7   | 21281-OC | 1   |                          | STEM                                                      |             |
| 8   | 21282-OC | 1   |                          | O-RING, puncture pin                                      |             |
| 9   | 21283-OC | 1   |                          | PIN, puncture                                             |             |
| 10  | 21284-OC | 1   |                          | SPRING                                                    |             |
| 11  | 21285-OC | 1   |                          | BODY, adapter                                             |             |
| 12  | 21286-OC | 1   |                          | NUT, jam                                                  |             |
| 13  | 21258-OC | 1   |                          | GASKET                                                    |             |
| 14  | ----     | 1   |                          | BRACKET, auto / manual actuator                           |             |
| 15  | NSS      | 1   |                          | CONTROL BOX ASSEMBLY                                      |             |
| 16  | 24626-OC | 1   |                          | CABLE, signal                                             |             |
| 17  | 10810-OC | 4   |                          | WASHER, SAE flat - 1/4"                                   |             |
| 18  | 15509-OC | 4   |                          | BOLT, nylock - 1/4"                                       |             |
| 19  | 16515-OC | 1   |                          | SQUIB                                                     |             |
| 20  | 21288-OC | 1   |                          | CARTRIDGE, manual actuator <i>(Includes shipping cap)</i> |             |
| 21  | 15576-OC | 2   |                          | BOLT - .25" X 1"                                          |             |
| 22  | 10757-OC | 6   |                          | WASHER, SAE FLAT - .25"                                   |             |
| 23  | 15604-OC | 2   |                          | BOLT - .25" X .75"                                        |             |
| 24  | 15509-OC | 2   |                          | NUT, NYLOCK - .25"                                        |             |
| 25  | 52012-OC | 1   |                          | BRACKET, FIRE SUPP AUTO / MANUAL ACT.                     |             |

☐ Kit or Assembly - includes all items indented underneath.



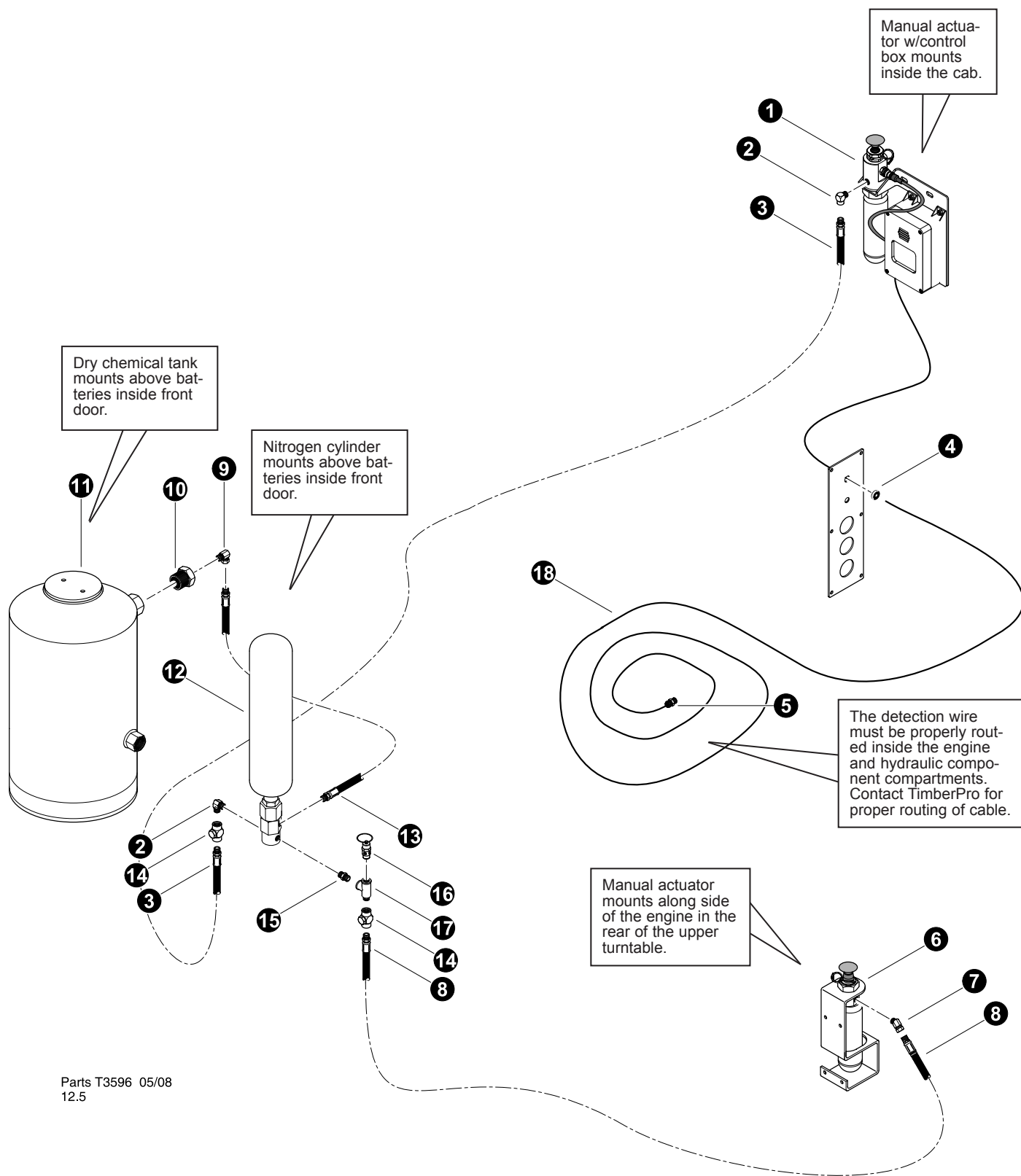
Parts T3808 09/09  
37.50



**AUTO / MANUAL ACTUATOR (PAD System)**  
**(Interior Mount)**  
**(machines built after 09-24-09)**

| REF | PART #   | QTY |                          | DESCRIPTION                                        | SEE SECTION |
|-----|----------|-----|--------------------------|----------------------------------------------------|-------------|
| --  | 52239-OC | 1   | <input type="checkbox"/> | FIRE PROTECTION SYSTEM - ANSUL (SC-N)              |             |
| --  | 53957-OC | 1   | <input type="checkbox"/> | AUTO / MANUAL ACTUATOR ASSEMBLY                    |             |
| 1   | 21265-OC | 1   |                          | KNOB                                               |             |
| 2   | 21277-OC | 1   |                          | BOOT                                               |             |
| 3   | 21279-OC | 1   |                          | O-RING, stem                                       |             |
| 4   | -OC      | 1   |                          | ADAPTER, boot (21964)                              |             |
| 5   | 21272-OC | 1   |                          | PIN, safety ring                                   |             |
|     | 21273-OC | 1   |                          | CHAIN                                              |             |
|     | 21274-OC | 1   |                          | SCREW, drive                                       |             |
|     | 21275-OC | 1   |                          | WIRE, lead seal <i>(Not shown)</i>                 |             |
| 6   | 21280-OC | 1   |                          | O-RING, adapter boot                               |             |
| 7   | -OC      | 1   |                          | STEM (436876)                                      |             |
| 8   | 53958-OC | 1   |                          | ACTUATION DEVICE, (PAD)                            |             |
| 9   | 21282-OC | 1   |                          | O-RING, puncture pin (3469)                        |             |
| 10  | -OC      | 1   |                          | PIN, puncture (435474)                             |             |
| 11  | -OC      | 1   |                          | SPRING (24421)                                     |             |
| 12  | -OC      | 1   |                          | COVER, Connector Housing                           |             |
| 13  | 21285-OC | 1   |                          | BODY, adapter                                      |             |
| 14  | -OC      | 1   |                          | CABLE, (PAD) (436114)                              |             |
| 15  | 21286-OC | 1   |                          | NUT, jam                                           |             |
| 16  | 21258-OC | 1   |                          | GASKET (181)                                       |             |
| 17  | 21288-OC | 1   |                          | CARTRIDGE, actuator <i>(Includes shipping cap)</i> |             |
| 18  | 15509-OC | 4   |                          | NUT, NYLOCK - .25"                                 |             |
| 19  | 10757-OC | 4   |                          | WASHER, SAE FLAT - .25"                            |             |
| 20  | NSS      | 1   |                          | CONTROL BOX ASSEMBLY                               |             |
| 21  | 15509-OC | 1   |                          | BOLT, nylock - 1/4"                                |             |
| 22  | 10810-OC | 1   |                          | WASHER, SAE flat - 1/4"                            |             |
| 23  | - - - -  | 1   |                          | BRACKET, auto / manual actuator                    |             |
| 24  |          | 1   |                          | BATTERY MODULE, (427308)                           |             |

☐ Kit or Assembly - includes all items indented underneath.



**ACTUATION SYSTEM INSTALLATION**

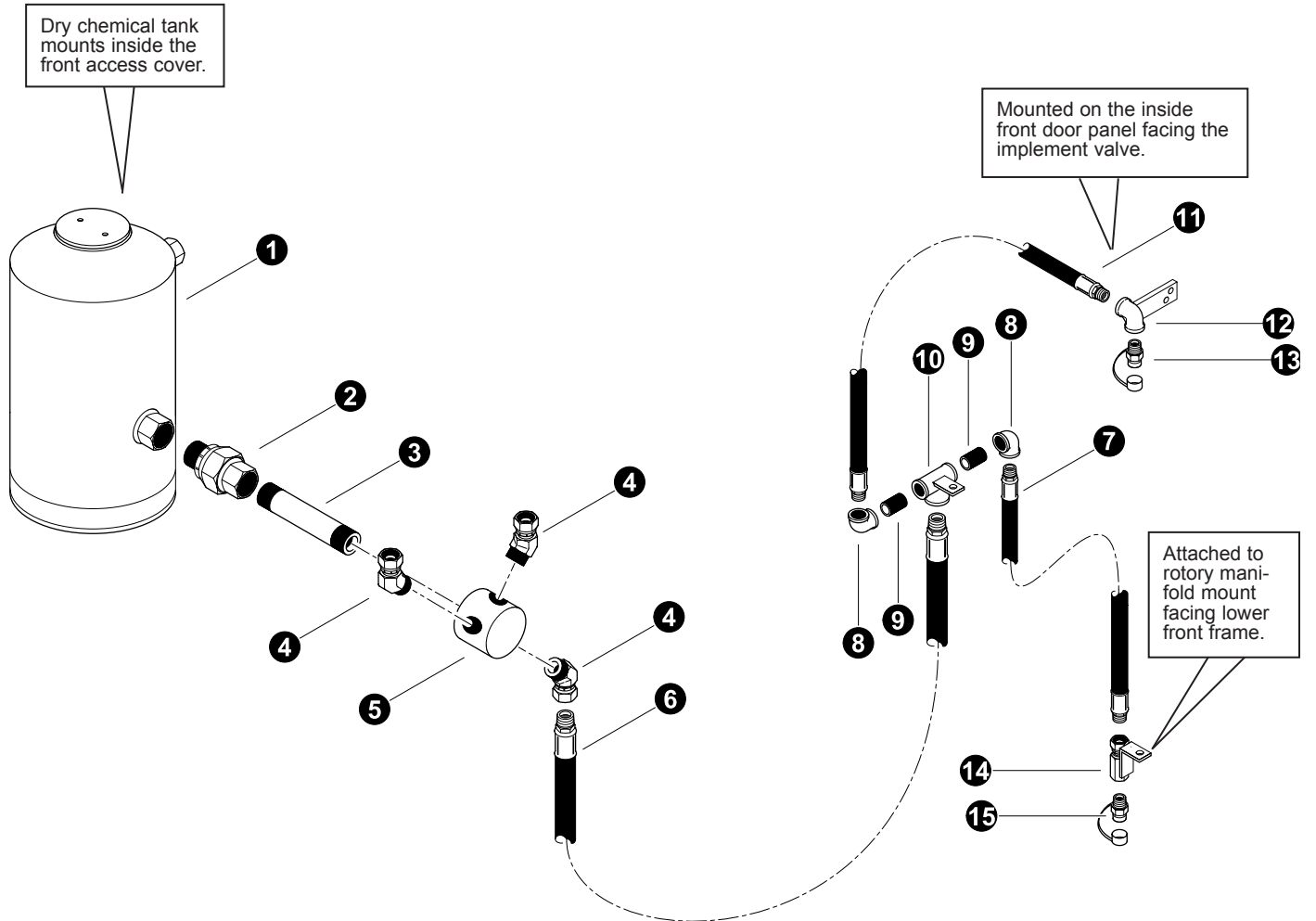
| REF | PART #   | QTY  |                                                                                   | DESCRIPTION                                                                                        | SEE SECTION |
|-----|----------|------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1    |  | AUTO / MANUAL ACTUATOR ASSEMBLY.....                                                               | OC-5        |
| 2   | 21147-OC | 1    |                                                                                   | ELBOW, 90 STREET .25" NPT - BRASS                                                                  |             |
| 3   | -OC      | 1    |                                                                                   | HOSE ASSEMBLY - 2160 -04-04MP-04MS ( <i>Interior auto / manual actuator to nitrogen cylinder</i> ) |             |
| 4   | 42513-OC | 1    |                                                                                   | GROMMET, .375 I.D.                                                                                 |             |
| 5   | -OC      | 1    |                                                                                   | SQUIB, ELECTRICAL CONNECTOR (A12129)                                                               |             |
| 6   | REF.     | 1    |  | MANUAL ACTUATOR ASSEMBLY .....                                                                     | OC-5        |
| 7   | 11372-OC | 1    |                                                                                   | ELBOW, 45 SWIVEL - 1503-4-4                                                                        |             |
| 8   | -OC      | 1    |                                                                                   | HOSE ASSEMBLY - 2099 -04-04MP-04MS ( <i>Exterior manual actuator to nitrogen cylinder</i> )        |             |
| 9   | 10320-OC | 3    |                                                                                   | ELBOW, 90 SWIVEL - 1501-4-4                                                                        |             |
| 10  | 24290-OC | 1    |                                                                                   | BUSHING, REDUCER - 5406-12-4                                                                       |             |
| 11  | REF      | 1    |  | DRY CHEMICAL TANK ASSEMBLY .....                                                                   | OC-5        |
| 12  | REF.     | 1    |  | NITROGEN CYLINDER ASSEMBLY .....                                                                   | OC-5        |
| 13  | -OC      |      |                                                                                   | HOSE ASSEMBLY - 2011 -04-04MP-04MS ( <i>Dry chemical tank to Nitrogen cylinder</i> )               |             |
| 14  | 16778-OC | 2    |                                                                                   | VALVE, check                                                                                       |             |
| 15  | 15567-OC | 1    |                                                                                   | CONNECTOR, STR - 5404-4                                                                            |             |
| 16  | 21299-OC | 1    |                                                                                   | VALVE, safety relief                                                                               |             |
| 17  | 16310-OC | 1    |                                                                                   | TEE, BLACK - .25"                                                                                  |             |
| 18  | 50504-OC | 40ft |                                                                                   | WIRE, DETECTION - LINEAR                                                                           |             |



See reference page for component or assembly breakdown.

**IMPORTANT NOTE !**

Detection wire needs to be properly routed and isolated away from high temperature items (turbo & exhaust). Improper routing of the detection wire could cause system to not detect fire and to not operate properly. Wire also needs to be properly isolated away from items that could cause damage and wear to the wire. Contact TimberPro if you have any question on the routing of the detection wire.



Parts T3597 05/08  
12.5

## FIRE SUPPRESSION LINES

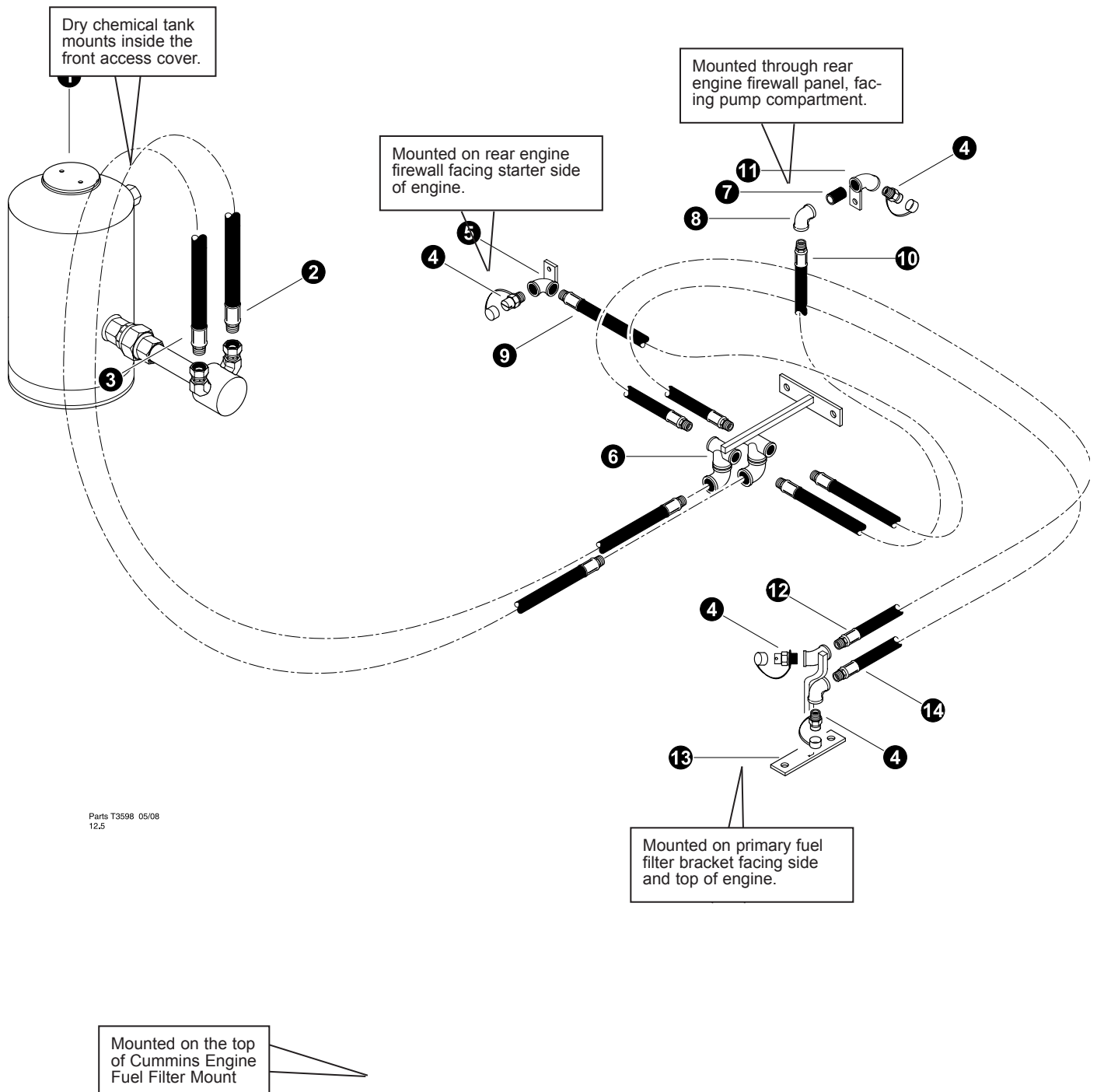
### (Dry Chemical Tank To Distributions Tee)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | DRY CHEMICAL TANK ASSEMBLY. . . . .                                                     | OC-5        |
| 2   | 21237-OC | 1   |                                                                                   | UNION                                                                                   |             |
| 3   | 53123-OC | 1   |                                                                                   | NIPPLE, BLACK PIPE - 1" x 4" FIRE SUP.                                                  |             |
| 4   | 53184-OC | 3   |                                                                                   | FITTING, ELBOW - 45DEG MALE PIPE                                                        |             |
| 5   | -OC      | 1   |                                                                                   | Distribution Block                                                                      |             |
| 6   | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2066-12-12MP-12MS (Dry Chemical Tank distribution block to tee)         |             |
| 7   | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2031-08-08MP-08MS (Dry Chemical Tank distribution block to tee)         |             |
| 8   | 15660-OC | 1   |                                                                                   | ELBOW, BLACK 90 STREET - .5"                                                            |             |
| 9   | 16126-OC | 1   |                                                                                   | NIPPLE, CLOSE .5"                                                                       |             |
| 10  | 53591-OC | 1   |                                                                                   | TEE, FIRE SUPPRESSION - Valve Area                                                      |             |
| 11  | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2066 -08-08MS-08MP (Valve compartment tee to main control valve nozzle) |             |
| 12  | 53592-OC | 1   |                                                                                   | BRACKET, FIRE NOZZEL - Valve Area                                                       |             |
| 13  | 17838-OC | 3   |                                                                                   | NOZZLE, V pattern - .5"                                                                 |             |
| 14  | 53593-OC | 1   |                                                                                   | BRACKET, FIRE NOZZEL - Rotory Man                                                       |             |
| 15  | 16776-OC | 1   |                                                                                   | NOZZLE, Cone pattern - .5"                                                              |             |

 See reference page for component or assembly breakdown.

### IMPORTANT NOTE !

Proper routing of fire suppression hoses, nozzle placement and direction of nozzle pattern are very important in the proper operation of the fire suppression system. Please contact TimberPro for any questions you have on proper installation of fire suppression components.



## FIRE SUPPRESSION LINES

### (Distribution Tee To Engine & Pump Compartments)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | DRY CHEMICAL TANK ASSEMBLY. . . . .                                                              | OC-5        |
| 2   | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2087-12-12MP-12MS (Dry Chemical Tank distribution block to engine tee)           |             |
| 3   | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2090-12-12MP-12MS (Dry Chemical Tank distribution block to engine tee)           |             |
| 4   | 17838-OC | 1   |                                                                                   | NOZZLE, V pattern - .5"                                                                          |             |
| 5   | 53597-OC | 1   |                                                                                   | BRACKET, FIRE NOZZEL - Starter                                                                   |             |
| 6   | 53594-OC | 1   |                                                                                   | TEE, FIRE SUPPRESSION - Engine                                                                   |             |
| 7   | 16126-OC | 1   |                                                                                   | NIPPLE, CLOSE .5"                                                                                |             |
| 8   | 15660-OC | 1   |                                                                                   | ELBOW, BLACK 90 STREET - .5"                                                                     |             |
| 9   | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2035 -08-08MS-08MP (Engine Compartment tee to starter side engine nozzle)        |             |
| 10  | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2038 -08-08MS-08MP (Engine Compartment tee to pump compartment nozzle)           |             |
| 11  | 53595-OC | 1   |                                                                                   | BRACKET, FIRE NOZZEL - pump compartment                                                          |             |
| 12  | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2050 -08-08MS-08MP (Engine Compartment tee to turbo nozzle)                      |             |
| 13  | 53596-OC | 1   |                                                                                   | BRACKET, FIRE NOZZEL - Fuel Filter                                                               |             |
| 14  | -OC      | 1   |                                                                                   | HOSE ASSEMBLY - 2052 -08-08MS-08MP (Engine Compartment tee to fuel filter side of engine nozzle) |             |

 See reference page for component or assembly breakdown.

### IMPORTANT NOTE !

Proper routing of fire suppression hoses, nozzle placement and direction of nozzle pattern are very important in the proper operation of the fire suppression system. Please contact TimberPro for any questions you have on proper installation of fire suppression components.

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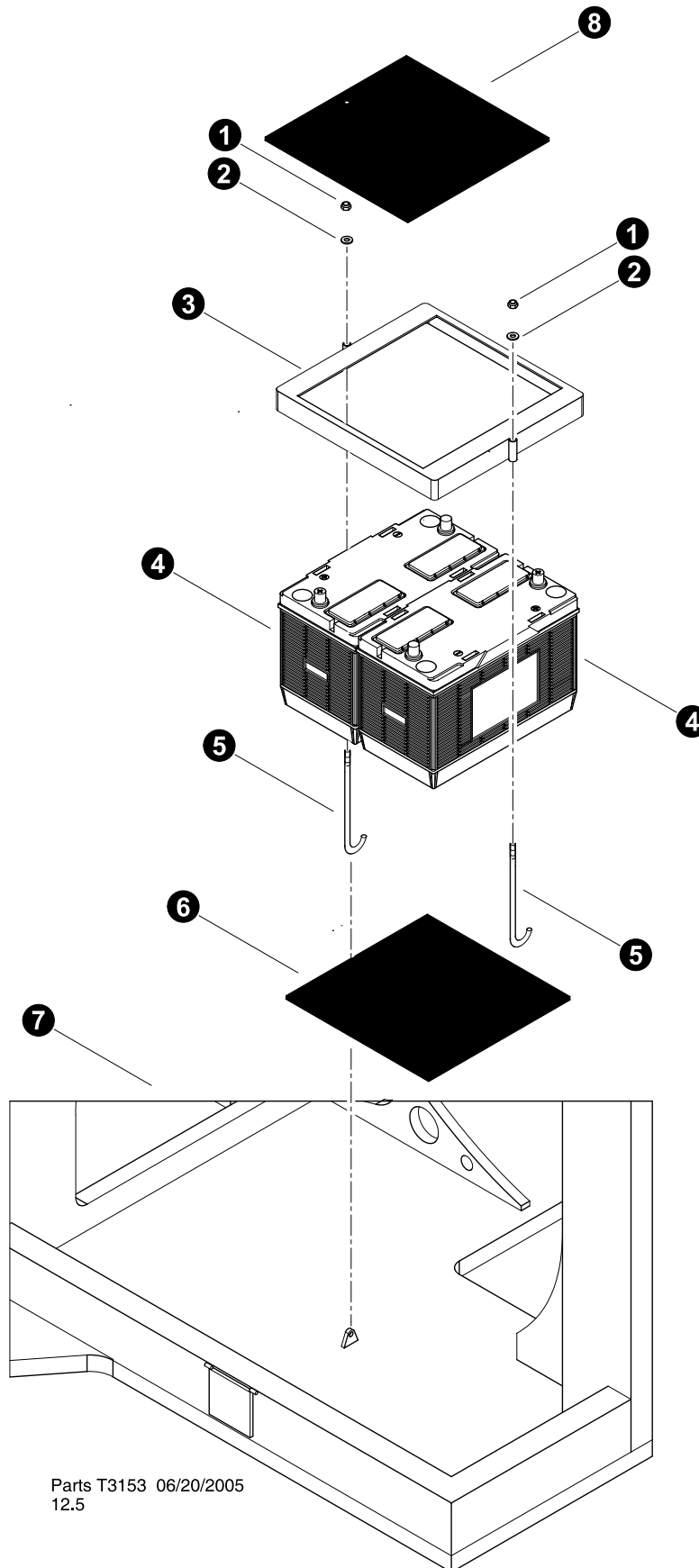
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# ***Section ES-1***

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## ***Electrical System - Engine Compartment***



Parts T3153 06/20/2005  
12.5

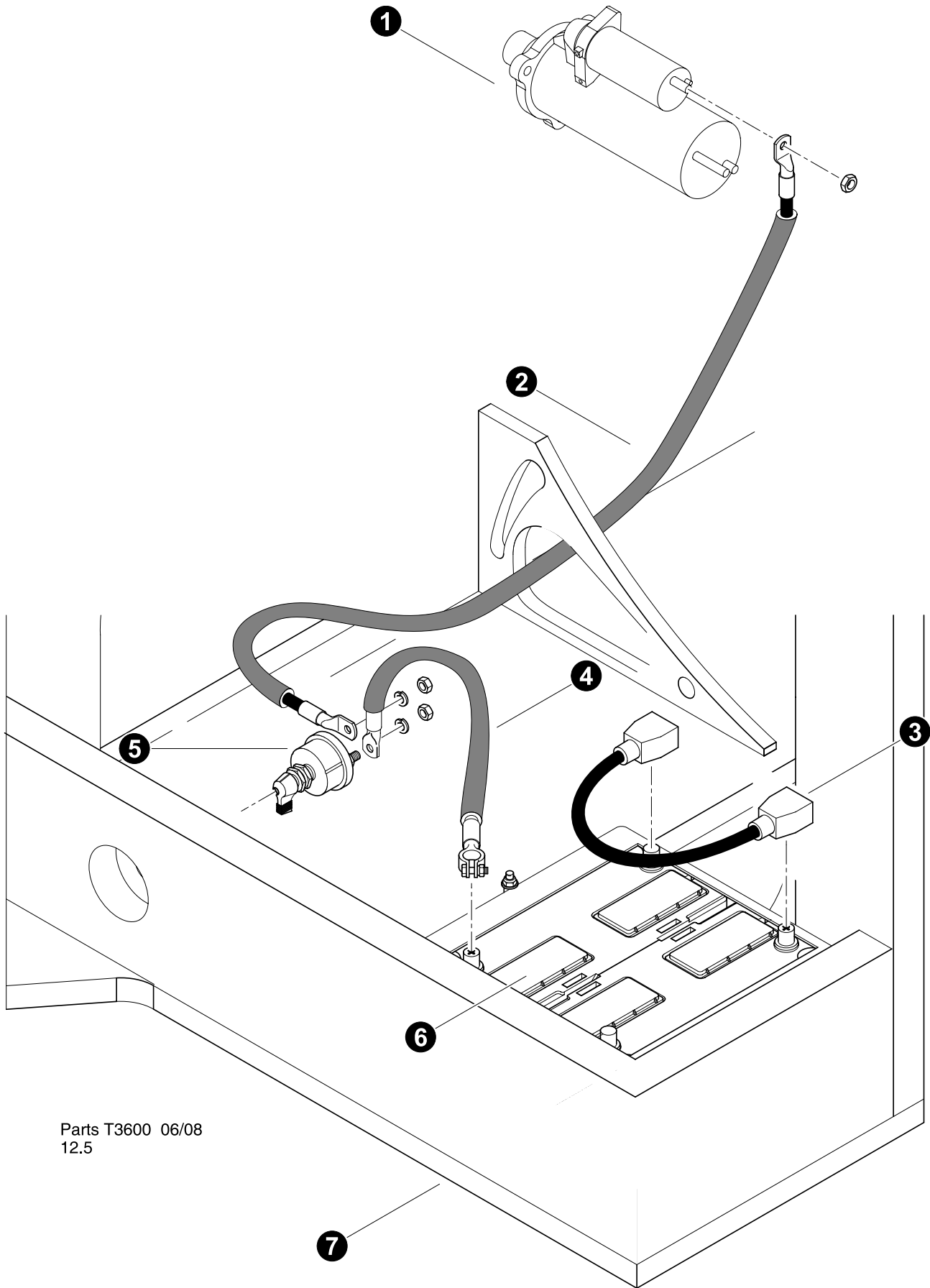
## ENGINE ELECTRICAL SYSTEM

### Battery Installation

| REF | PART #   | QTY | DESCRIPTION                                                                                                          | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 10788-ES | 2   | NUT, NYLOCK - .3125"                                                                                                 |             |
| 2   | 15559-ES | 2   | WASHER, SAE FLAT - .3125"                                                                                            |             |
| 3   | 51759-ES | 1   | BRACKET, BATTERY HOLD DOWN                                                                                           |             |
| 4   | 17150-ES | 2   | BATTERY, HEAVY DUTY                                                                                                  |             |
| 5   | 51722-ES | 1   | HOLD DOWN, BATTERY - 830/630 (2 PER PACK)                                                                            |             |
| 6   | 51861-ES | 1   | RUBBER PAD, 1/4"                                                                                                     |             |
| 7   | REF.     | 1   |  UPPER TURNTABLE ASSEMBLY . . . . . | UP-1        |
| 8   | 51861-ES | 1   | RUBBER PAD, 1/4"                                                                                                     |             |



See referenced page for component or assembly breakdown.



Parts T3600 06/08  
12.5

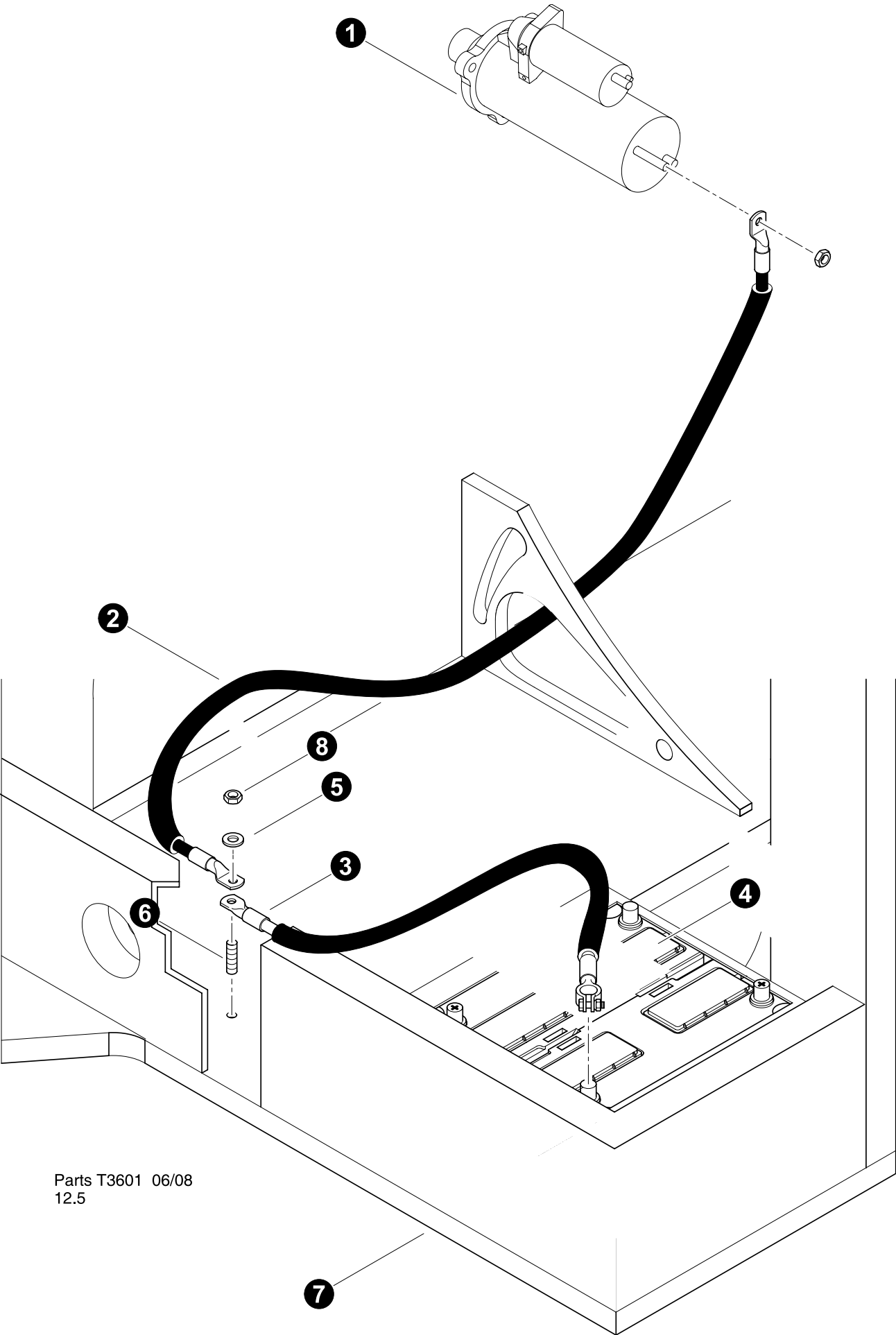
## ENGINE ELECTRICAL SYSTEM

### Battery Positive to Starter

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.     | 1   |  | STARTER .....                            | EE          |
| 2   | 52988-ES | 1   |                                                                                   | CABLE, MASTER DISC. TO STARTER POS       |             |
| 3   | 24300-ES | 1   |                                                                                   | CABLE, BATTERY POS/NEG JUMPER            |             |
| 4   | 52990-ES | 1   |                                                                                   | CABLE, BAT. POSITIVE TO MAST. DISCONNECT |             |
| 5   | 25200-ES | 1   |                                                                                   | SWITCH, MASTER SHUT-OFF(1/2" STUD)       |             |
| 6   | REF      | 1   |  | BATTERY ASSEMBLY .....                   | ES-1        |
| 7   | REF.     | 1   |  | UPPER TURNTABLE ASSEMBLY .....           | UP-1        |



See referenced page for component or assembly breakdown.



Parts T3601 06/08  
12.5

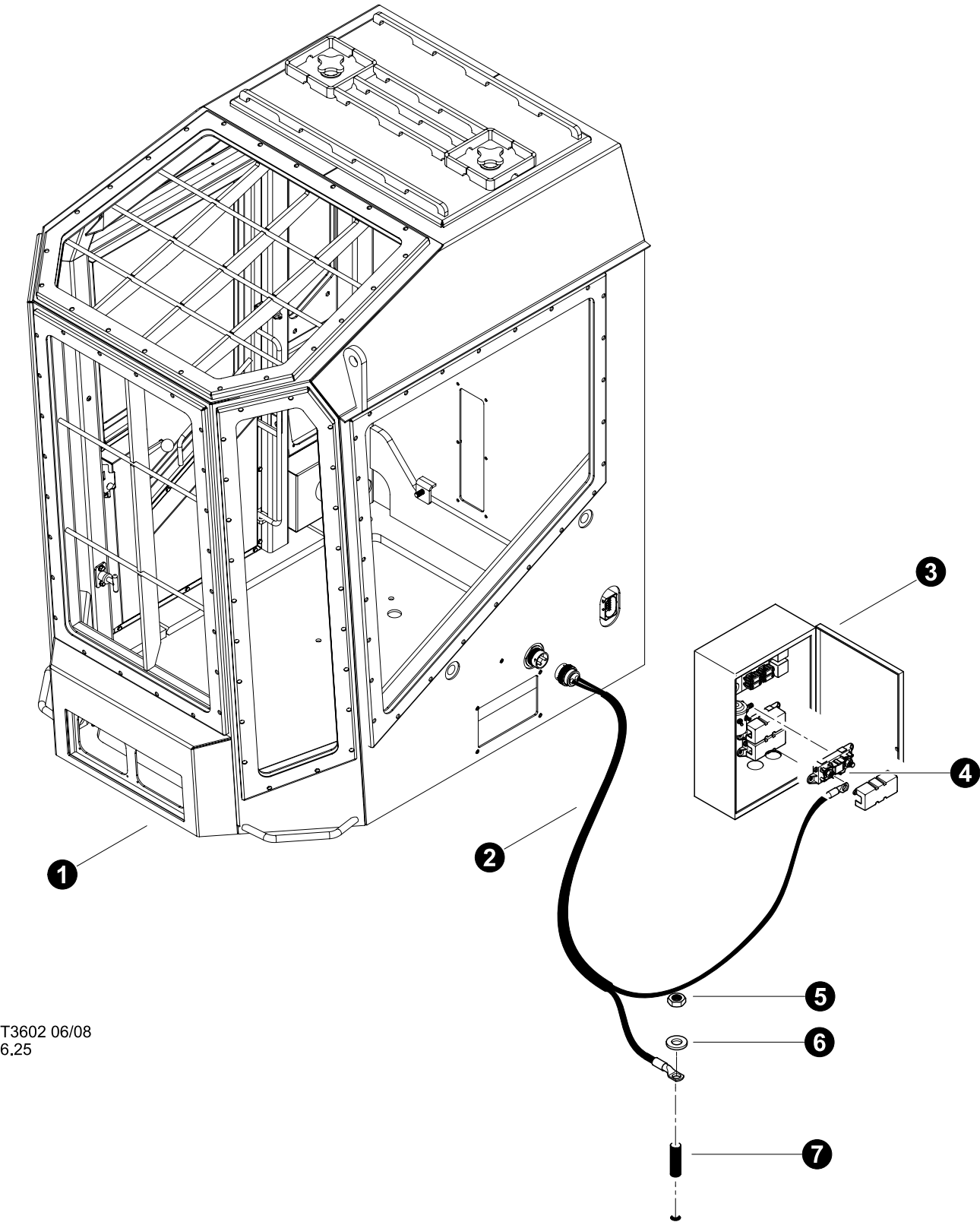
## ENGINE ELECTRICAL SYSTEM

### Battery Negative to Main Grounding Stud

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | REF.     | 1   |  | UPPER TURNTABLE ASSEMBLY . . . . .      | UP-1        |
| 2   | 52987-ES | 1   |                                                                                   | CABLE, GROUND TO STARTER NEG. (830/630) |             |
| 3   | 52989-ES | 1   |                                                                                   | CABLE, BATTERY NEG. TO GROUND STUD      |             |
| 4   | REF      | 1   |  | BATTERY ASSEMBLY . . . . .              | ES-1        |
| 5   | 15534-ES | 2   |                                                                                   | WASHER, SAE FLAT - .5"                  |             |
| 6   | 53082-ES | 1   |                                                                                   | STUD, MAIN GROUND (NEW 830 UPPER)       |             |
| 7   | REF.     | 1   |  | UPPER TURNTABLE ASSEMBLY . . . . .      | UP-1        |



See referenced page for component or assembly breakdown.



T3602 06/08  
6.25



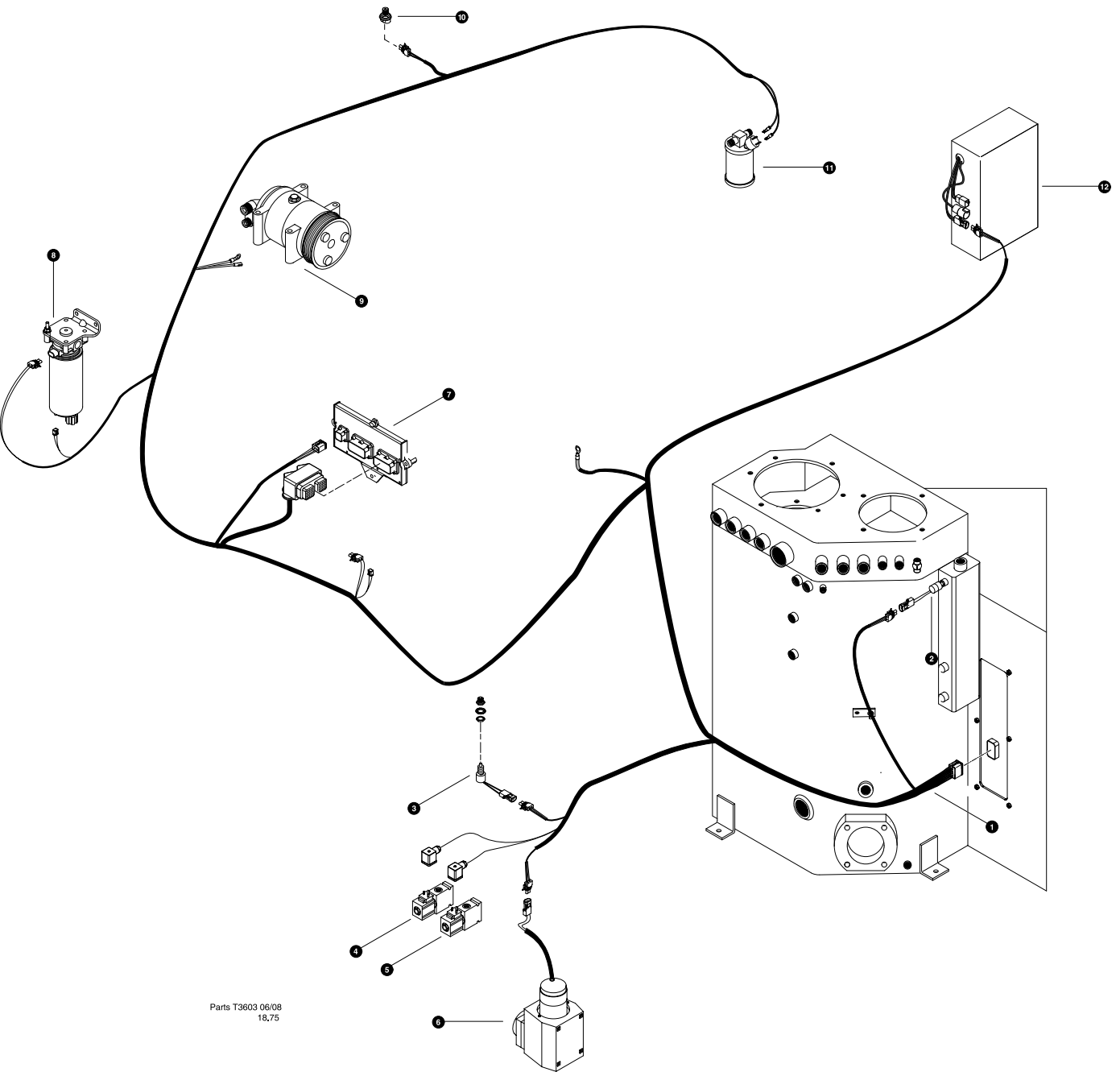
## ENGINE ELECTRICAL SYSTEM

### Cab Load Center Power Harness

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   | REF      | 1   |  | CAB ASSEMBLY. ....                          | OC-1        |
| 2   | 52963-ES | 1   |                                                                                   | HARNESS, CAB LOAD CENTER FEED (830/630)     |             |
| 3   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY. ....     | ES-1        |
| 4   | 23619-ES | 1   |                                                                                   | FUSE, MAIN CAB LOAD CENTER - 100 AMP (MEGA) |             |



See referenced page for component or assembly breakdown.



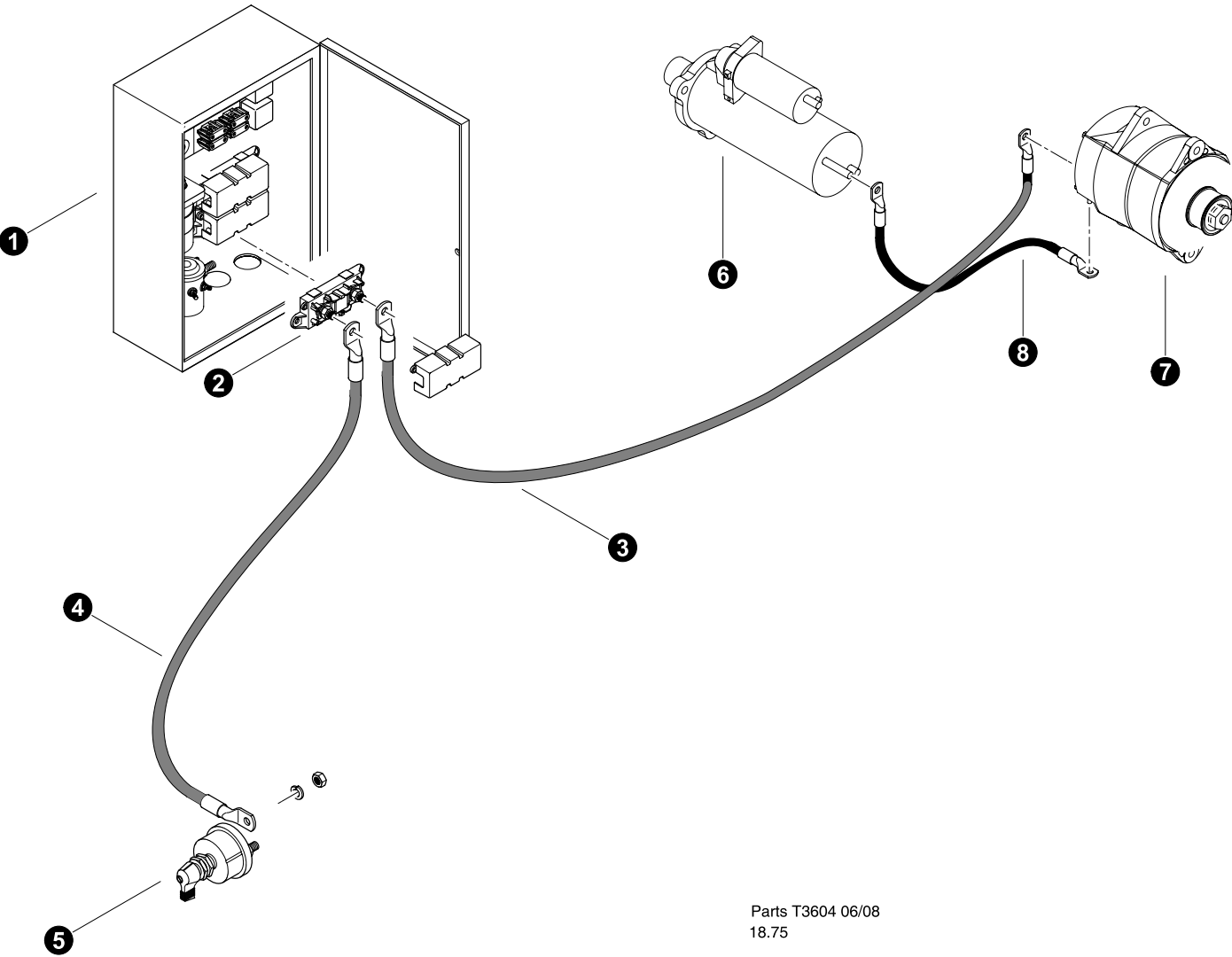
## ENGINE ELECTRICAL SYSTEM

### Main Engine Electrical Harness (Cummins QSC Tier3)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------|-------------|
| 1   | 52932-ES | 1   |                                                                                   | HARNESS, ENGINE COMP - 830/630 (MDL)             |             |
|     | REF      | 1   |  | LIGHT ASSEMBLY . . . . .                         | ES-1        |
| 2   | REF      | 1   |  | VACUUM PRESSURE SWITCH (tank assembly) . . . . . | UP-2        |
| 3   | 25104-ES | 1   |                                                                                   | SWITCH, FILL PUMP                                |             |
| 4   | REF.     | 1   |  | VENT VALVE . . . . .                             | UP-2        |
| 5   | REF.     | 1   |  | VACUUM VALVE . . . . .                           | UP-2        |
| 6   | REF.     | 1   |  | VACUUM PUMP . . . . .                            | UP-2        |
| 7   | REF.     | 1   |  | ENGINE ECU . . . . .                             | EE-1        |
| 8   | REF      | 1   |  | FUEL HEATER / FILTER ASSEMBLY . . . . .          | EE-1        |
| 9   | REF.     | 1   |  | AC COMPRESSOR . . . . .                          | EE-1        |
| 10  | 52661-ES | 1   |                                                                                   | SENSOR, LOW COOLANT - TIER 3                     |             |
| 11  | REF      | 1   |                                                                                   | DRIER, AC System . . . . .                       | OC-3        |
| 12  | REF      | 1   |  | ENGINE ELECTRICAL CENTER . . . . .               | ES-1        |



See referenced page for component or assembly breakdown.



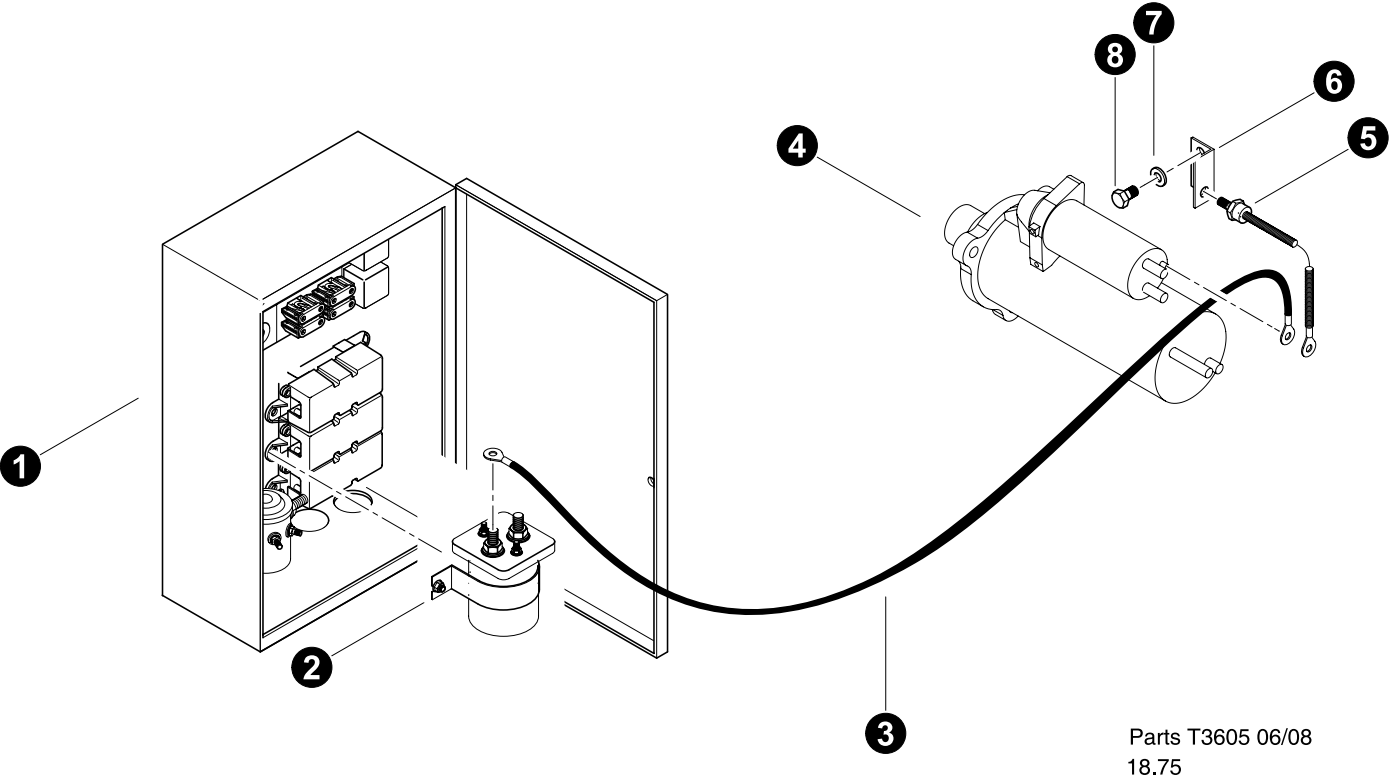
## ENGINE ELECTRICAL SYSTEM

### Alternator Electrical (Cummins QSC)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY . . . . . | ES-1        |
| 2   | 23619-ES | 1   |                                                                                   | FUSE, 100 AMP (MEGA)                        |             |
| 3   | 53020-ES | 1   |                                                                                   | CABLE, STARTER TO FUSE (830-630)            |             |
| 4   | 52388-ES |     |                                                                                   | CABLE, FUSE to Disconnect Switch (830-630)  |             |
| 5   | 25200-ES | 1   |                                                                                   | SWITCH, MASTER SHUT-OFF(1/2" STUD)          |             |
| 6   | REF.     | 1   |  | STARTER . . . . .                           | EE          |
| 7   | REF.     | 1   |  | ALTERNATOR . . . . .                        | EE          |
| 8   | 24304-ES | 1   |                                                                                   | CABLE, ALTERNATOR GROUND                    |             |



See referenced page for component or assembly breakdown.

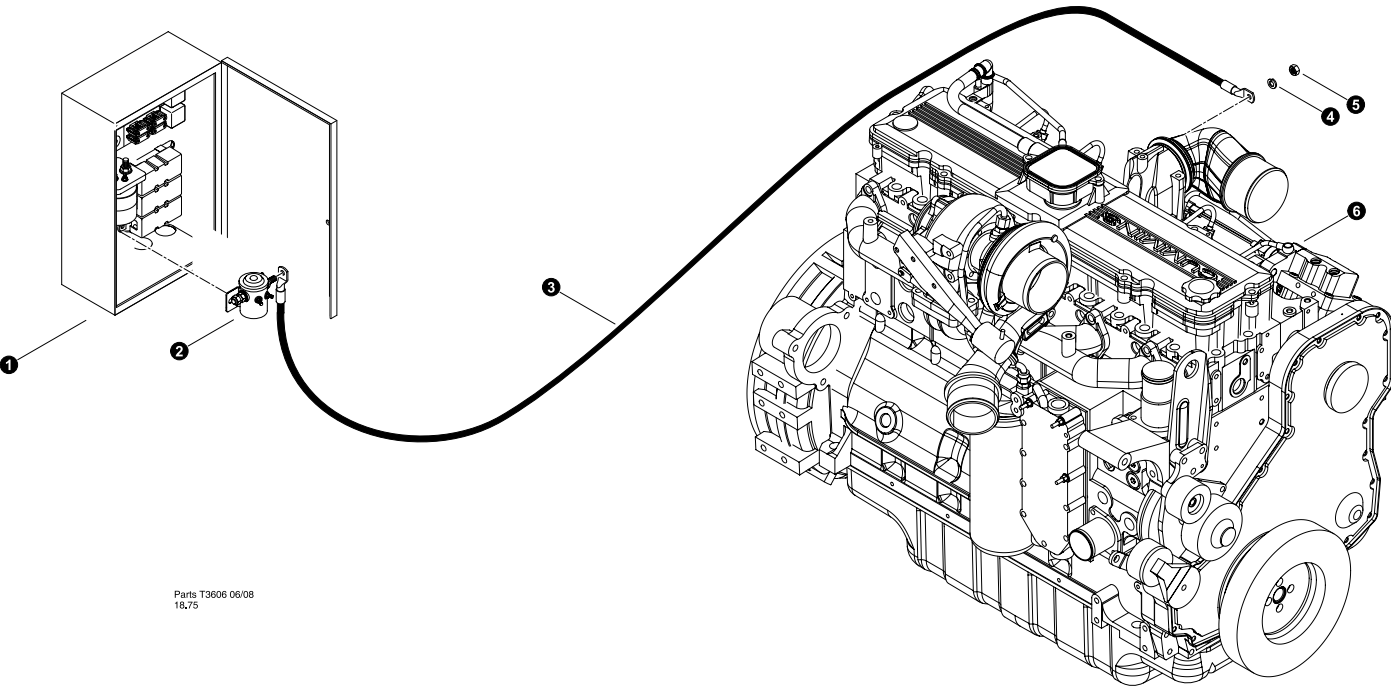


**ENGINE ELECTRICAL SYSTEM****Starter Electrical  
(Cummins QSC)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY . . . . . | ES-1        |
| 2   | REF.     | 1   |  | STARTER RELAY . . . . .                     | ES-1        |
| 3   | 51750-ES | 1   |                                                                                   | CABLE, START RELAY TO STARTER SOL.          |             |
| 4   | REF.     | 1   |  | STARTER . . . . .                           | EE          |
| 5   | 25052-ES | 1   |                                                                                   | DIODE, assembly engine start relay          |             |
| 6   | 25058-ES | 1   |                                                                                   | BRACKET, DIODE MOUNTING (CUM. C ENG.)       |             |
| 7   | 15528-ES | 1   |                                                                                   | WASHER, SAE FLAT - .375"                    |             |
| 8   | 18416-ES | 1   |                                                                                   | BOLT - 10MM-1.5P X 25MM                     |             |



See referenced page for component or assembly breakdown.



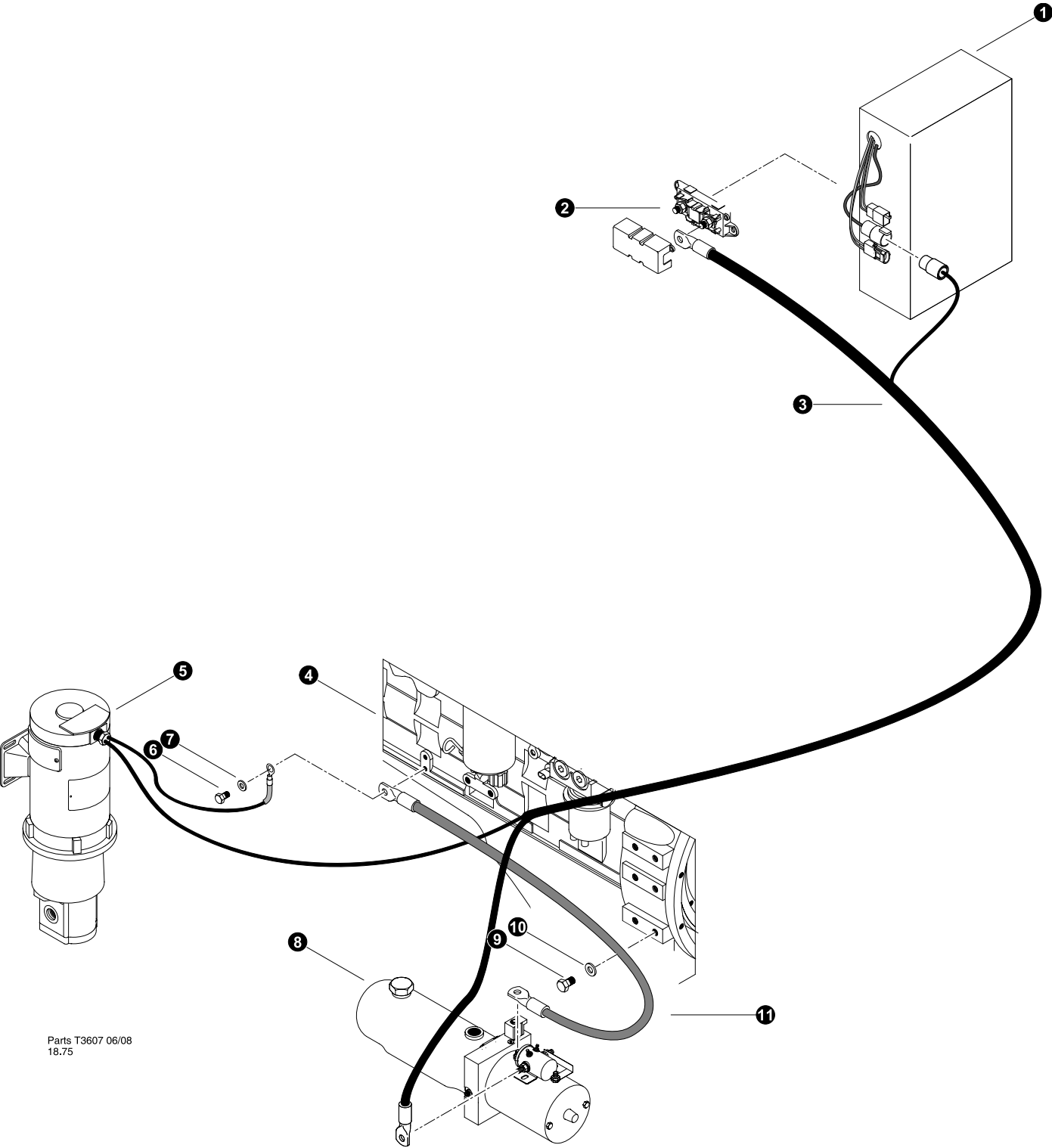


**ENGINE ELECTRICAL SYSTEM****Grid Heater Cable  
(Cummins QSC)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY . . . . . | ES-1        |
| 2   | 25199-ES | 1   |                                                                                   | RELAY, GRID HEATER - 24 volt (COLE HERSEE)  |             |
| 3   | 53018-ES | 1   |                                                                                   | CABLE, GRID HEATER (830/630)                |             |
| 4   | 10756-ES | 1   |                                                                                   | WASHER, LOCK - .25"                         |             |
| 5   | 16117    | 1   |                                                                                   | NUT, HEX - 6MM                              |             |
| 6   | REF.     | 1   |  | ENGINE . . . . .                            | EE-1        |



See referenced page for component or assembly breakdown.



Parts T3607 06/08  
18.75

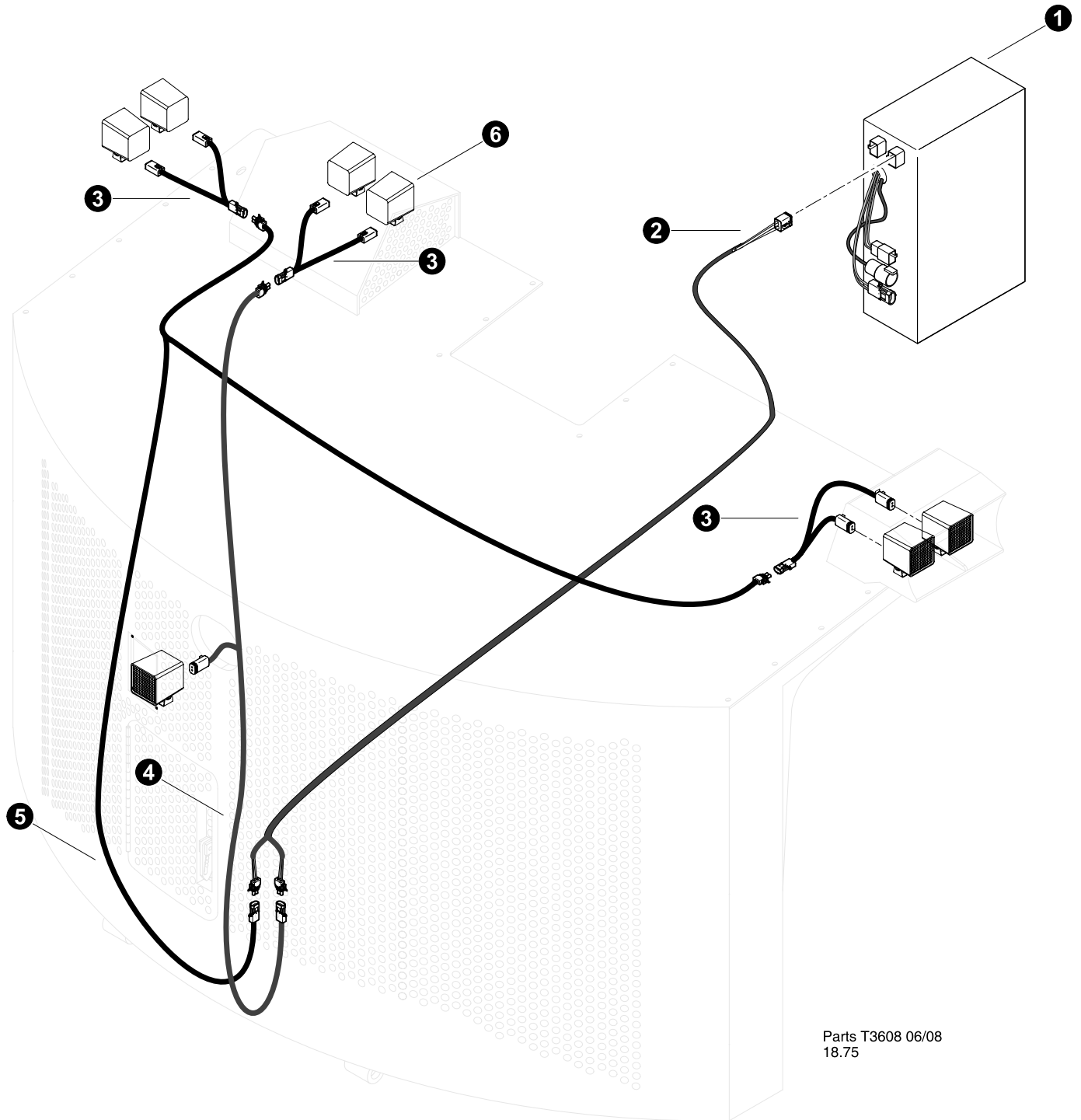
## ENGINE ELECTRICAL SYSTEM

### Fill Pump and Gull Wing Lift Pump Harness

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY . . . . . | ES-1        |
| 2   | 23619-ES | 1   |                                                                                   | FUSE, 100 AMP (MEGA)                        |             |
| 3   | 53019-ES | 1   |                                                                                   | CABLE, FILL PUMP/DOOR PUMP                  |             |
| 4   | REF.     | 1   |  | ENGINE ASSEMBLY . . . . .                   | EE          |
| 5   | REF.     | 1   |  | FILL PUMP ASSEMBLY . . . . .                | UP-2        |
| 6   | 15556-ES | 1   |                                                                                   | BOLT - 12MM-1.75P X 20MM                    |             |
| 7   | 15534-ES | 1   |                                                                                   | WASHER, SAE FLAT - .5"                      |             |
| 8   | REF      | 1   |  | GULL WING DOOR LIFT PUMP ASSEMBLY . . . . . | UP-3        |
| 9   | 15556-ES | 1   |                                                                                   | BOLT - 12MM-1.75P X 20MM                    |             |
| 10  | 15534-ES | 1   |                                                                                   | WASHER, SAE FLAT - .5"                      |             |
| 11  | 51875-ES | 1   |                                                                                   | CABLE, GROUND - LIFT PUMP 830/630           |             |



See referenced page for component or assembly breakdown.

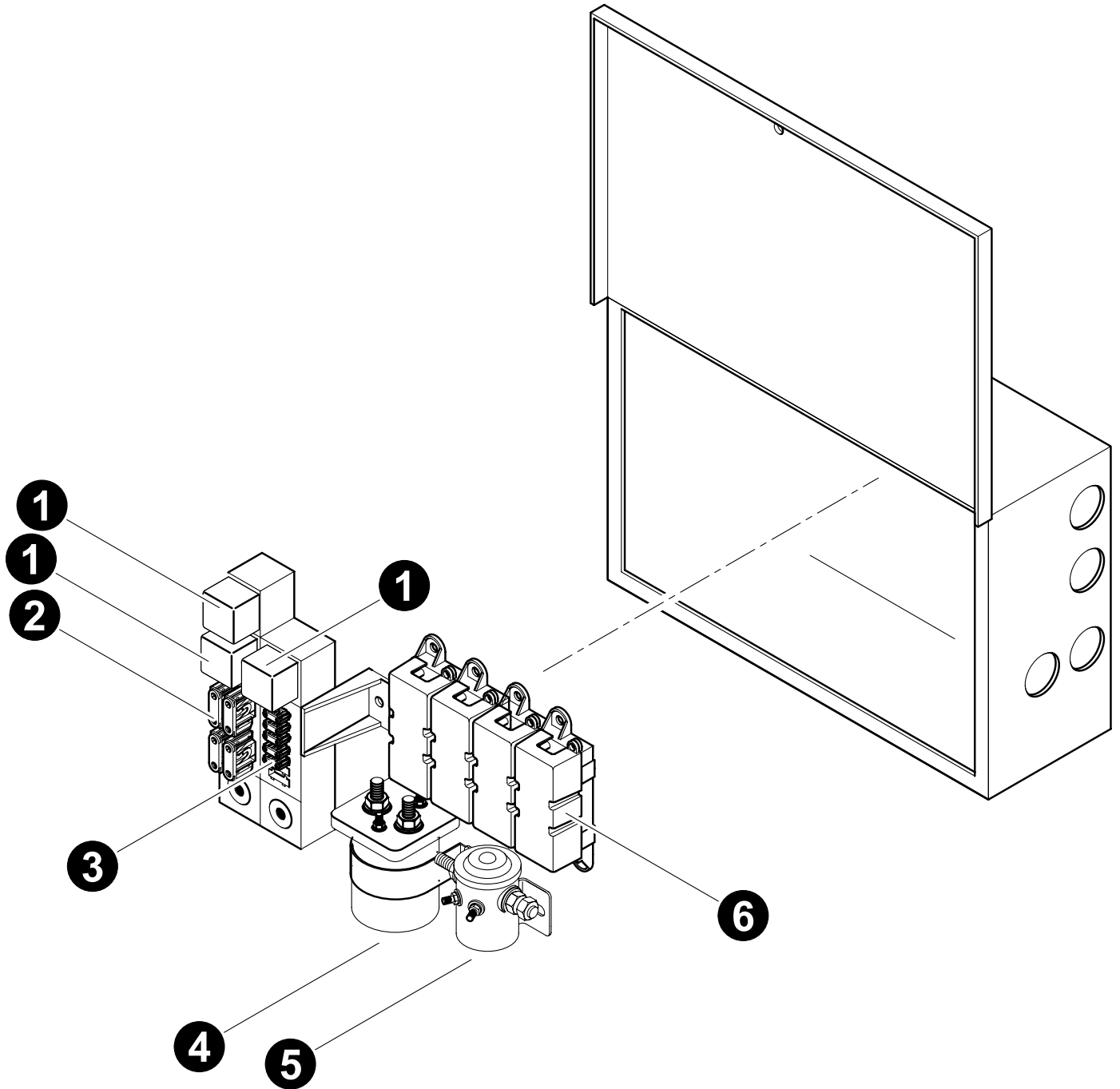


## GULLWING LIGHT HARNESSES

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ENGINE ELECTRICAL CENTER ASSEMBLY . . . . .    | ES-1        |
| 2   | 53125-ES | 1   |                                                                                   | HARNESS, LIGHT - Electrical Center to Canopy   |             |
| 3   | 53211-ES | 3   |                                                                                   | HARNESS, LIGHT - Y Adapter                     |             |
| 4   | 53209-ES | 1   |                                                                                   | HARNESS, LIGHT - Canopy Lights                 |             |
| 5   | 53210-ES | 1   |                                                                                   | HARNESS, LIGHT - "Optional" Side Canopy Lights |             |
| 6   | REF.     | 1   |  | LIGHTS . . . . .                               | ES-1        |



See referenced page for component or assembly breakdown.



Parts T3161 06/21/2005

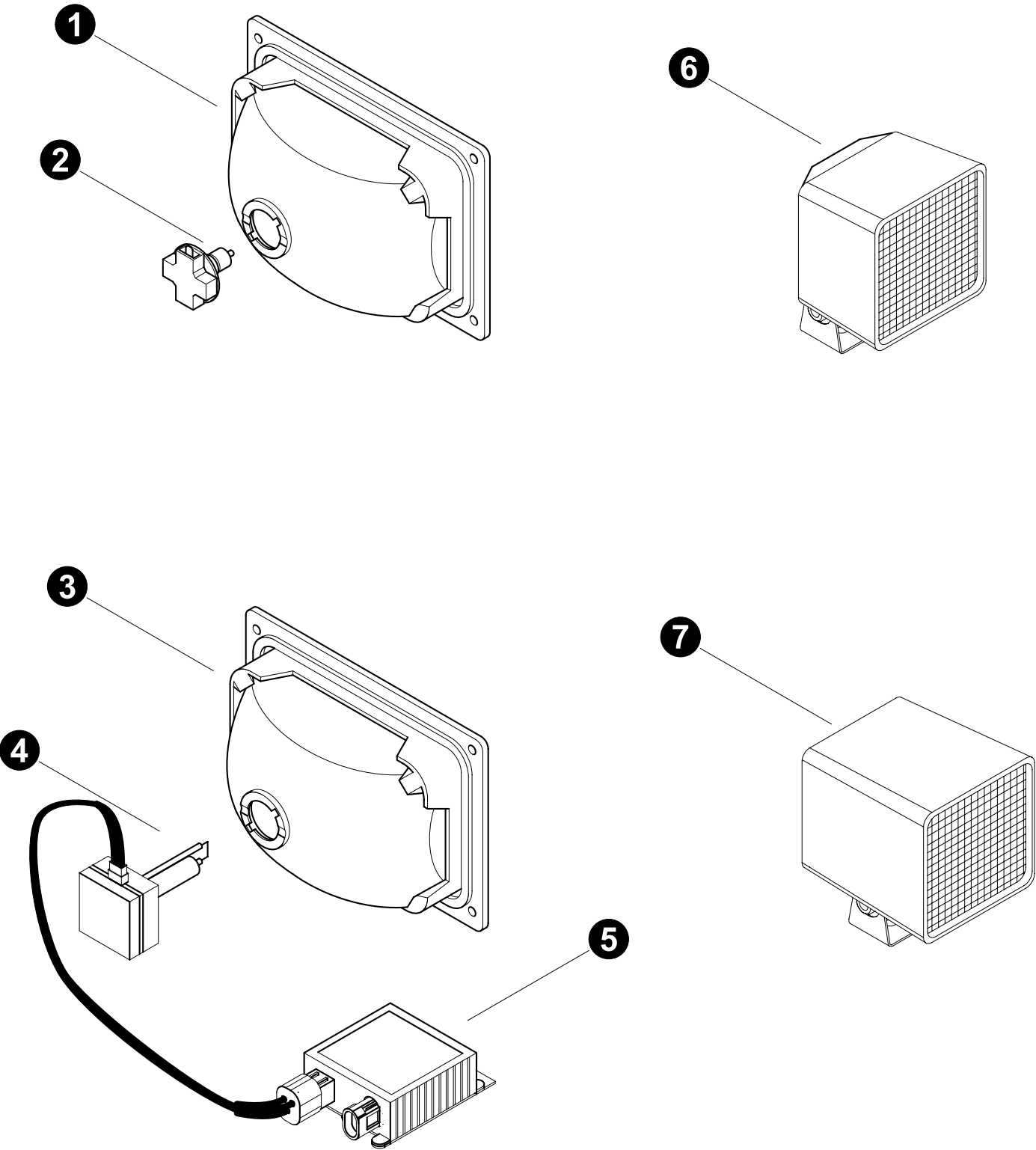
## ENGINE ELECTRICAL SYSTEM

### Engine Electrical Center Breakdown

| REF | PART #   | QTY | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|-----|---------------------------------------------------------------------------------------|-------------|
| -   | 51765-ES | 1   | LOAD CENTER - ENGINE COMPARTMENT(830/630)                                             |             |
| 1   | 51755-ES | 3   | RELAY, 70 AMP - LIGHTS / IGNITION / ACCESORY / Fill Pump                              |             |
| 2   | 21892-ES | 1   | FUSE, MAXI - 30 AMP (Engine)                                                          |             |
|     | 21894-ES | 1   | FUSE, MAXI - 40 AMP (lights)                                                          |             |
|     | 21893-ES | 1   | FUSE, MAXI - 50 AMP (starter)                                                         |             |
|     | 53142-ES | 1   | FUSE, MAXI - 60 AMP (fill pump)                                                       |             |
| 3   | 24512-ES | 4   | FUSE, ATO - 10 AMP (lights)                                                           |             |
|     | 51754-ES | 1   | FUSE, ATO - 10 AMP (Espar Pre Heater)                                                 |             |
| 4   | 25117-ES | 1   | RELAY, STARTER - 24 volt (WHITE/ROGERS)                                               |             |
| 5   | 25199-ES | 1   | RELAY, GRID HEATER - 24 volt (COLE HERSEE)                                            |             |
| 6   | 23619-ES | 4   | FUSE, 100 AMP - MEGA (cab power supply, gull wing lift pump, grid heater, alternator) |             |



See referenced page for component or assembly breakdown.



Parts T3162 06/21/2005



## ENGINE ELECTRICAL SYSTEM

### Lights

| REF | PART #   | QTY |                          | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------------|-------------|
| 1   | 23604-ES | 1   | <input type="checkbox"/> | LIGHT, FLUSH MOUNT - 24V (ABL)             |             |
| 2   | 24819-ES | 1   |                          | BULB, FLUSH MOUNT LIGHT - 24V              |             |
| 3   | 51324-ES | 1   | <input type="checkbox"/> | LIGHT, FLUSH MOUNT - 24V (XENON) ABL       |             |
| 4   | 26858-ES | 1   |                          | BULB, HID (all HID Lights)                 |             |
| 5   | 51396-ES | 1   |                          | BALLAST, assembly 24 volt HID (ABL-21.577) |             |
| 6   | 53208-ES | 1   | <input type="checkbox"/> | LIGHT, FLOOD - NON-XENON (ABL)             |             |
| -   | 24819-ES | 1   |                          | BULB                                       |             |
| 7   | 52653-ES | 1   | <input type="checkbox"/> | LIGHT, XENON TRAP - ABL                    |             |
| -   | -ES      | 1   |                          | BULB - XENON                               |             |
| -   | -ES      | 1   |                          | BALLAST                                    |             |



See referenced page for component or assembly breakdown.



Assembly that includes all items indented below.

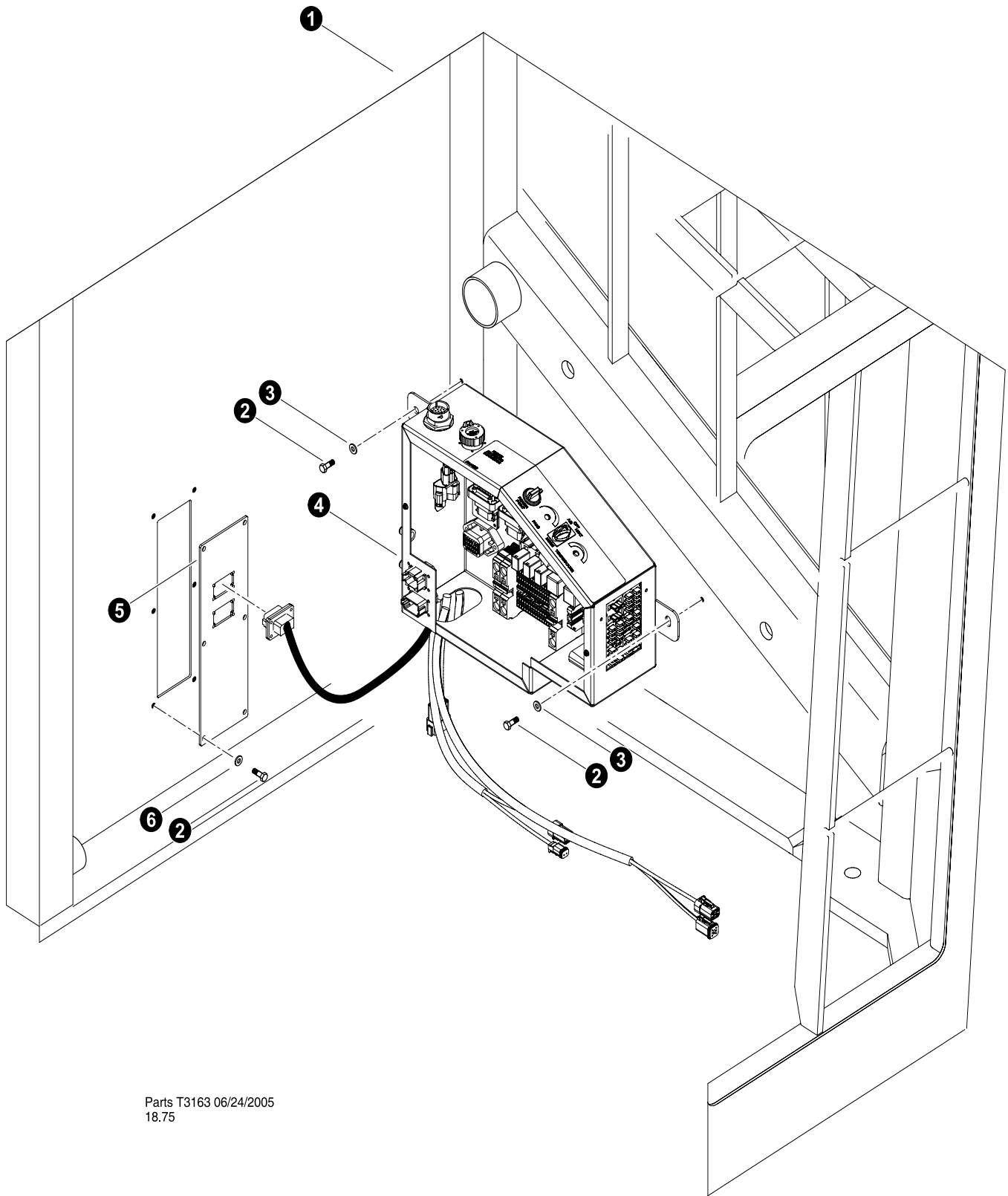
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## ***Section ES-2***

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### ***Electrical System - Operator's Cab***

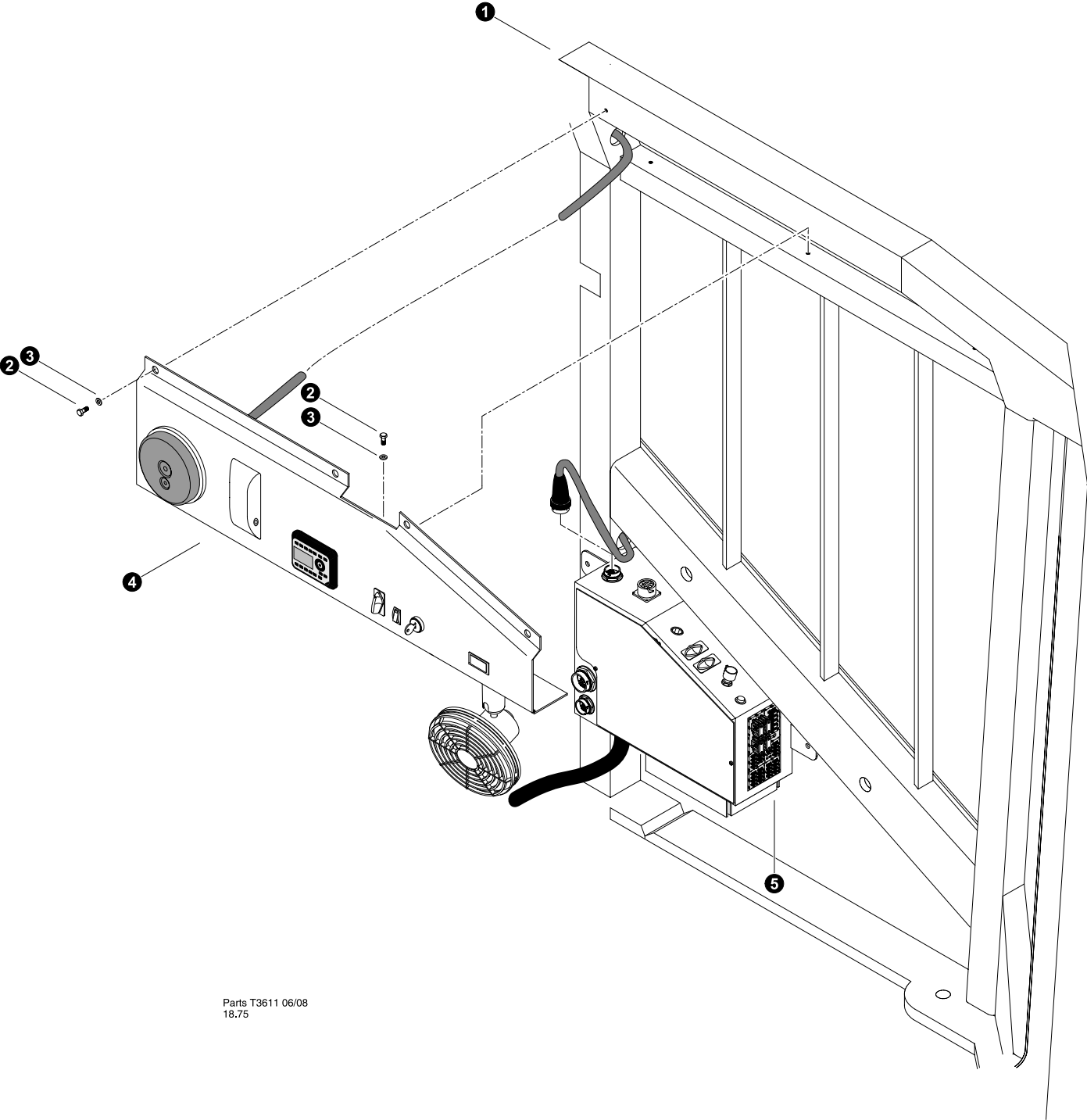


Parts T3163 06/24/2005  
18.75

## MAIN ELECTRICAL CENTER INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------|-------------|
| 1   | REF      | 1   |  | OPERATOR'S CAB ASSEMBLY .....         | OC-1        |
| 2   | 15604-ES | 8   |                                                                                   | BOLT - .25" X .75"                    |             |
| 3   | 10800-ES | 8   |                                                                                   | WASHER, FLAT - .25"                   |             |
| 4   | REF      | 1   |  | MAIN ELECTRICAL CENTER ASSEMBLY ..... | ES-2        |
| 5   | 52755-ES | 1   |                                                                                   | BULKHEAD PLATE, CAB REAR - MDL        |             |
| 6   | 10757-ES | 8   |                                                                                   | WASHER, SAE FLAT - .25"               |             |

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



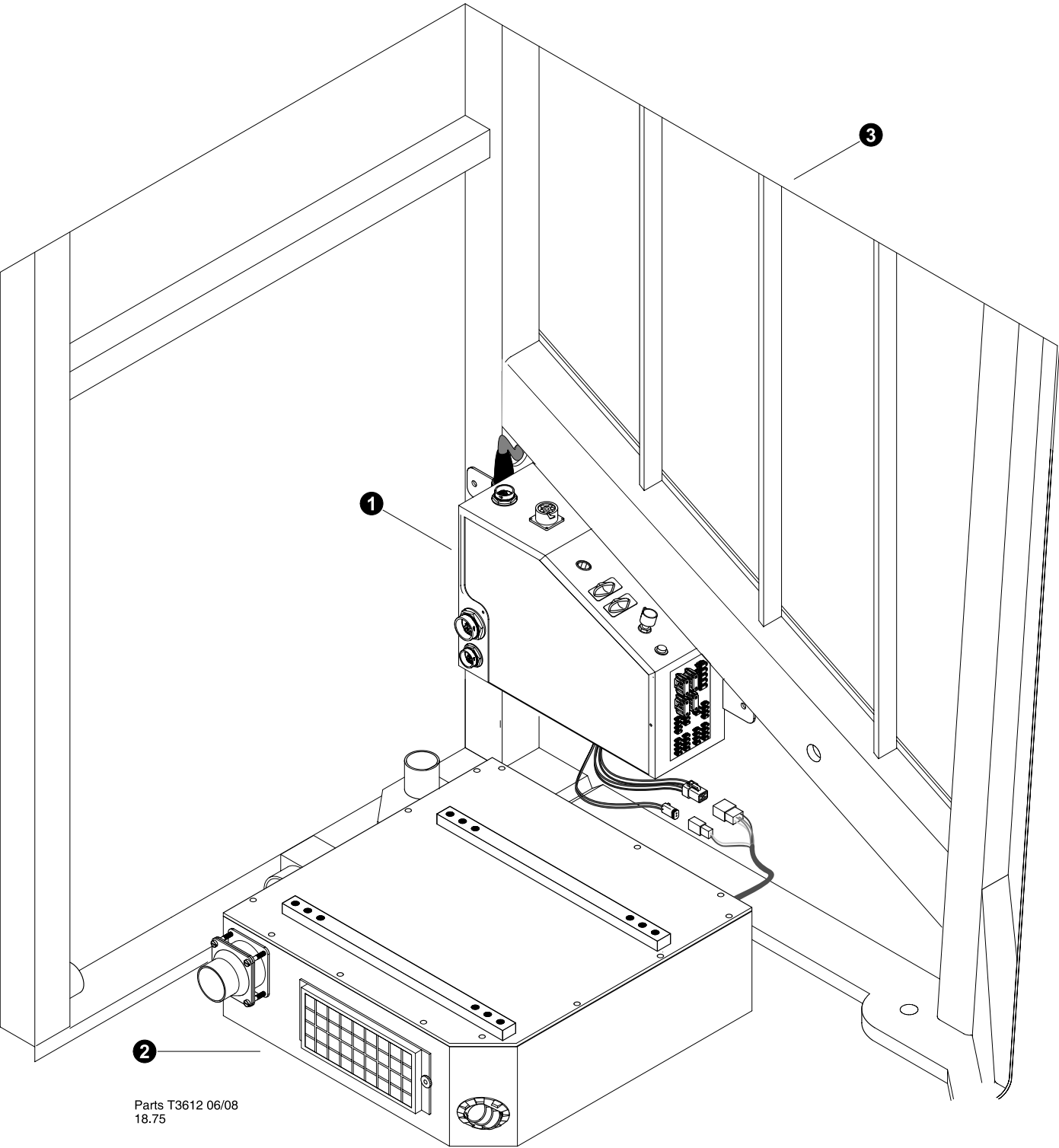
Parts T3611 06/08  
18.75

## UPPER DASH INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------|-------------|
| 1   | REF      | 1   |  | OPERATOR'S CAB ASSEMBLY .....         | OC-1        |
| 2   | 15604-ES | 7   |                                                                                   | BOLT - .25" X .75"                    |             |
| 3   | 10757-ES | 7   |                                                                                   | WASHER, SAE FLAT - .25"               |             |
| 4   | REF      | 1   |  | UPPER DASH ASSEMBLY.....              | ES-2        |
| 5   | REF      | 1   |  | MAIN ELECTRICAL CENTER ASSEMBLY ..... | ES-2        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.





## A/C AND HEATER CONNECTIONS

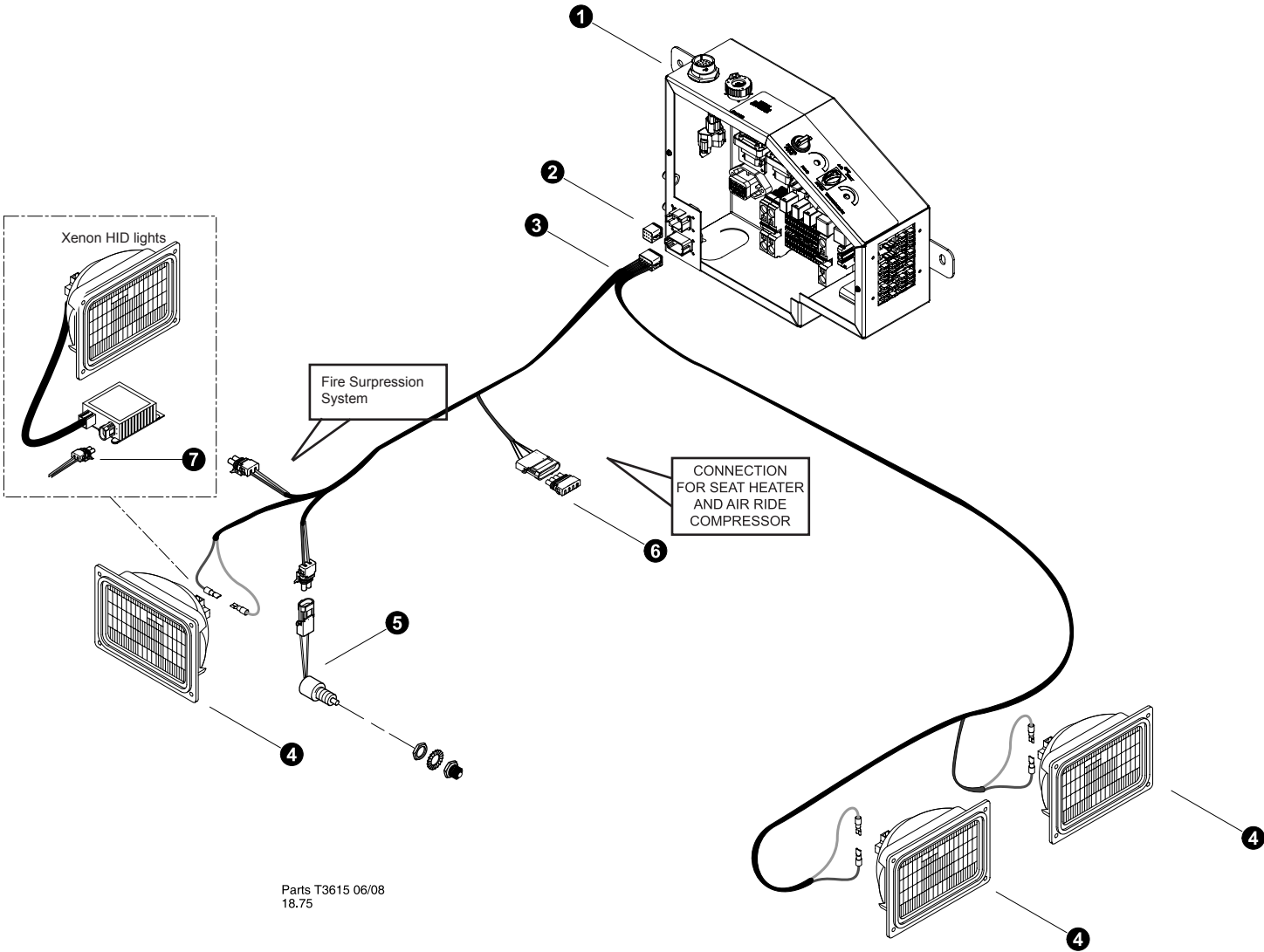
| REF | PART # | QTY |                                                                                   | DESCRIPTION                           | SEE SECTION |
|-----|--------|-----|-----------------------------------------------------------------------------------|---------------------------------------|-------------|
| 1   | REF    | 1   |  | MAIN ELECTRICAL CENTER ASSEMBLY ..... | ES-2        |
| 2   | REF    | 1   |  | HEATER A/C UNIT ASSEMBLY .....        | OC-2        |
| 3   | REF    | 1   |  | OPERATORS CAB .....                   | OC-1        |



Kit or Assembly - includes all items indented underneath.



See referenced page for component or assembly breakdown.

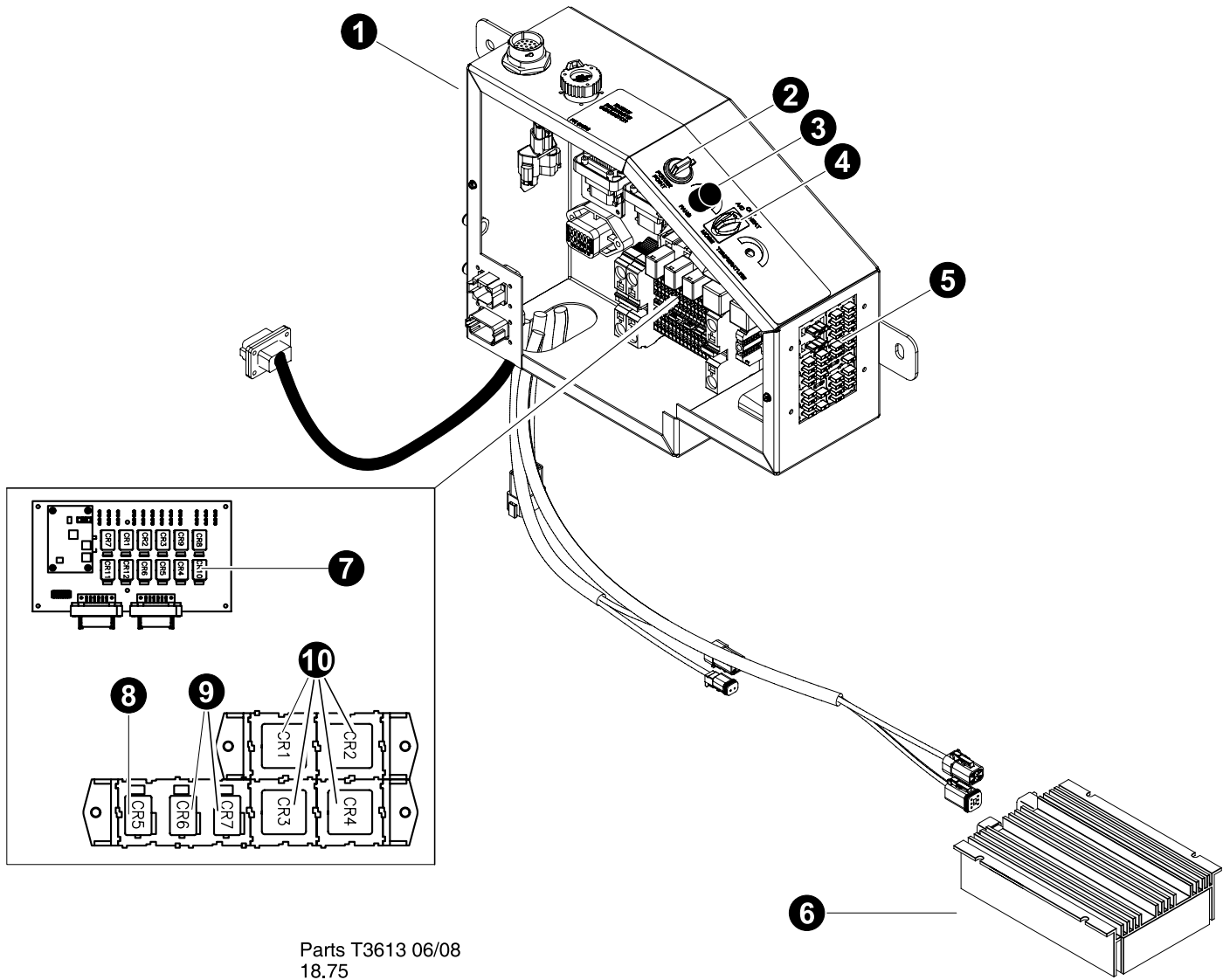


## OPERATOR'S CAB ELECTRICAL HARNESS (Lights and Radio)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF      | 1   |  | MAIN ELECTRICAL CENTER ASSEMBLY .....    | ES-2        |
| 2   | 53260-ES | 1   |                                                                                   | CONNECTOR, DEUTCH DT06-08                |             |
| 3   | 52933-ES | 1   |                                                                                   | HARNESS, CAB - Lower MDL                 |             |
| 4   | REF      | 3   |                                                                                   | LIGHT ASSEMBLIES .....                   | ES-2        |
| 5   | 25104-ES | 1   |                                                                                   | SWITCH, FILL PUMP                        |             |
| 6   | 23132-ES | 1   |                                                                                   | PLUG, MALE - 4 CONTACT (WEATHER PACK)    |             |
| -   | 23135-ES | 4   |                                                                                   | TERMINAL, FEMALE (WEATHER PACK)          |             |
| -   | 22225-ES | 4   |                                                                                   | SEAL, WIRE END (WEATHER PACK)            |             |
| 7   | 53171-ES | 1   |                                                                                   | CONNECTOR, SEALED - GT150 3F - FLUSH HID |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



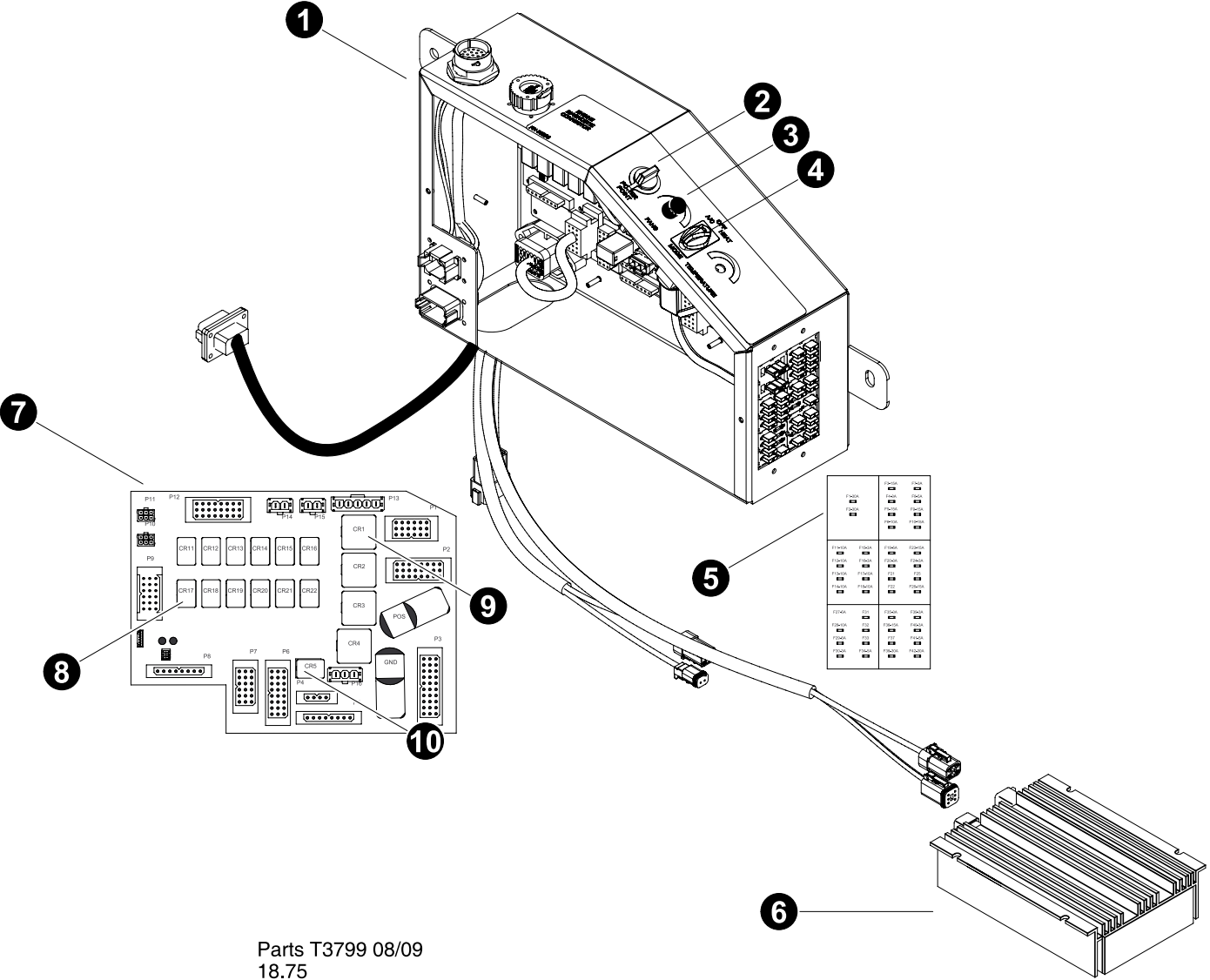
## MAIN ELECTRICAL CENTER BREAKDOWN

(830B-0316-081309 and before)  
(735B-0030-090309 and before)

| REF | PART #   | QTY |   | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------|-------------|
| 1   | 52551-ES | 1   | ☐ | MAIN ELECTRICAL LOAD CENTER-MDL (830/630)  |             |
| 2   | -ES      | 1   |   | Power Supply Connector                     |             |
| 3   | -ES      | 1   |   | FAN CONTROL (BT1-0147)                     |             |
| 4   | 51671-ES | 1   |   | SWITCH, AC/HEAT MODE - OTTO                |             |
| 5   | 21892-ES | 1   |   | FUSE, maxi - 30 amp ( <i>Green</i> )       |             |
|     | 21894-ES | 1   |   | FUSE, maxi - 40 amp ( <i>Orange</i> )      |             |
|     | 24321-ES | 5   |   | FUSE, MINI - 3 AMP ( <i>Purple</i> )       |             |
|     | 21890-ES | 5   |   | FUSE, mini - 5 amp ( <i>Light brown</i> )  |             |
|     | 21888-ES | 2   |   | FUSE, mini - 7.5 amp ( <i>Dark Brown</i> ) |             |
|     | 22658-ES | 12  |   | FUSE, mini - 10 amp ( <i>Red</i> )         |             |
|     | 21887-ES | 7   |   | FUSE, mini - 15 amp ( <i>Blue</i> )        |             |
|     | 53607-ES | 1   |   | FUSE, MINI - 30 AMP                        |             |
| 6   | 23324-ES | 1   |   | CONVERTER, 24V TO 12V - CURRENT 25AMP      |             |
| 7   | -ES      | 12  |   | RELAY, AZ988-1C-24DE-C1 / American Zettler |             |
| 8   | -ES      | 1   |   | RELAY, AZ988-1A-12DS-C1 / American Zettler |             |
| 9   | -ES      | 2   |   | RELAY, AZ988-1C-24DE-C1 / American Zettler |             |
| 10  | -ES      | 4   |   | RELAY, 897-1AH-C-001 / Song Chuan          |             |
| -   | 51753-ES | 1   |   | KIT, ELECTRICAL- FUSE/RELAY- 830/630 24V   |             |

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.



Parts T3799 08/09  
18.75

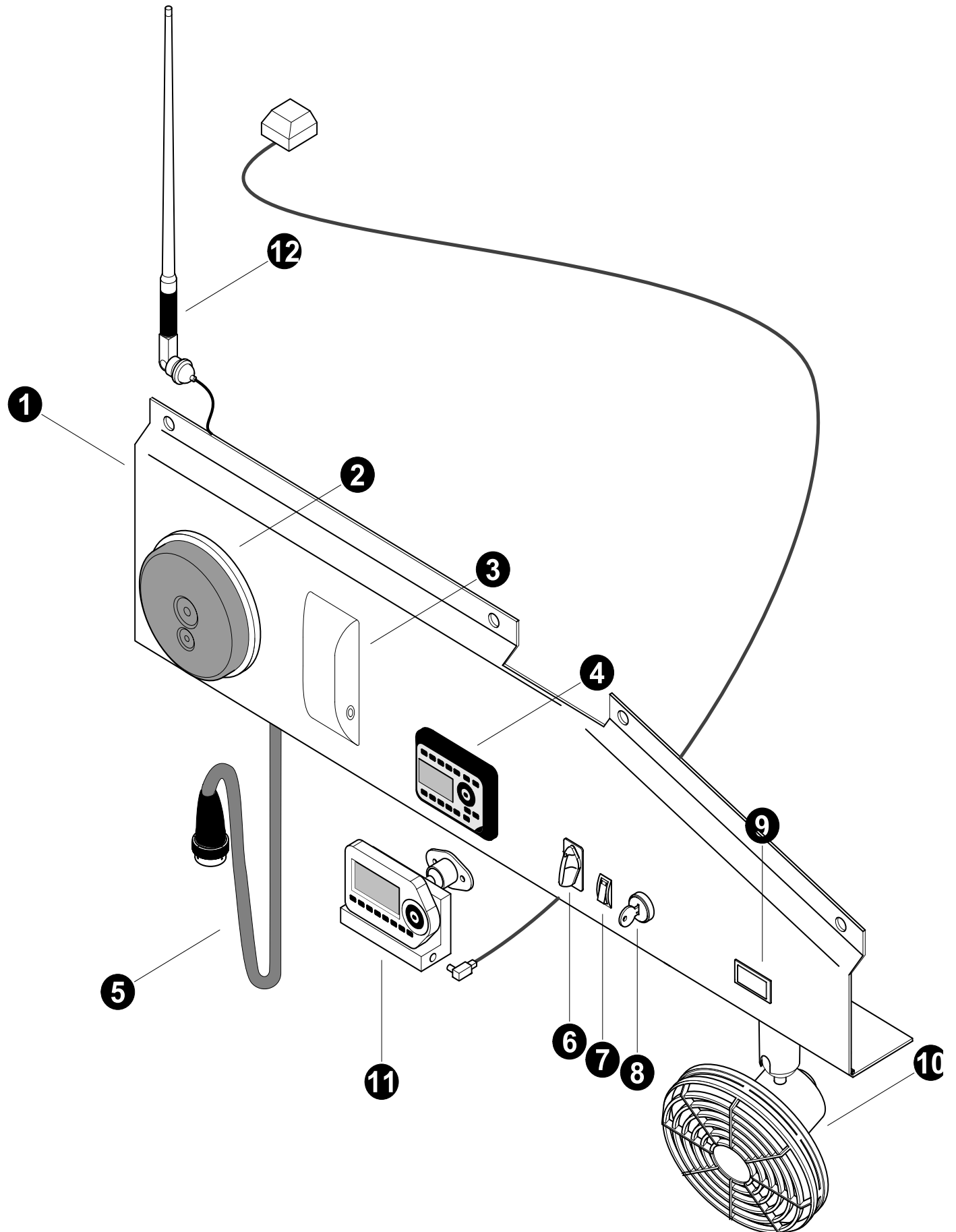
## MAIN ELECTRICAL CENTER BREAKDOWN

(830B-0317-082509 and after)  
(735B-0031-and after)

| REF | PART #   | QTY |   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------|-------------|
| 1   | 52551-ES | 1   | ☐ | MAIN ELECTRICAL LOAD CENTER-MDL (830/630)   |             |
| 2   | -ES      | 1   |   | Power Supply Connector                      |             |
| 3   | -ES      | 1   |   | FAN SPEED CONTROL (BT1-0147)                |             |
| 4   | 51671-ES | 1   |   | SWITCH, AC/HEAT MODE - OTTO                 |             |
| 5   | 21892-ES | 2   |   | FUSE, maxi - 30 amp ( <i>Green</i> )        |             |
|     | 24321-ES | 10  |   | FUSE, mini - 3 amp ( <i>Purple</i> )        |             |
|     | 21890-ES | 6   |   | FUSE, mini - 5 amp ( <i>Light brown</i> )   |             |
|     | 22658-ES | 8   |   | FUSE, mini - 10 amp ( <i>Red</i> )          |             |
|     | 21887-ES | 6   |   | FUSE, mini - 15 amp ( <i>Blue</i> )         |             |
|     | 53607-ES | 2   |   | FUSE, mini - 30 amp ( <i>Green</i> )        |             |
| 6   | 23324-ES | 1   |   | CONVERTER, 24V TO 12V - CURRENT 25AMP       |             |
| 7   | -ES      | 1   |   | CIRCUIT BOARD, Load Center                  |             |
| 8   | 53645-ES | 12  |   | RELAY, AZ988-1CT-24DE-C1 (SPDT 30A 24VDC)   |             |
| 9   | 24323-ES | 3   |   | RELAY, 896H-1CH-D-24VDC (SPDT 30/50A 24VDC) |             |
| 10  | 53645-ES | 1   |   | RELAY, AZ988-1CT-24DE-C1 (SPDT 30A 24VDC)   |             |
| -   | 51753-ES | 1   |   | KIT, ELECTRICAL- FUSE/RELAY- 830/630 24V    |             |

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.



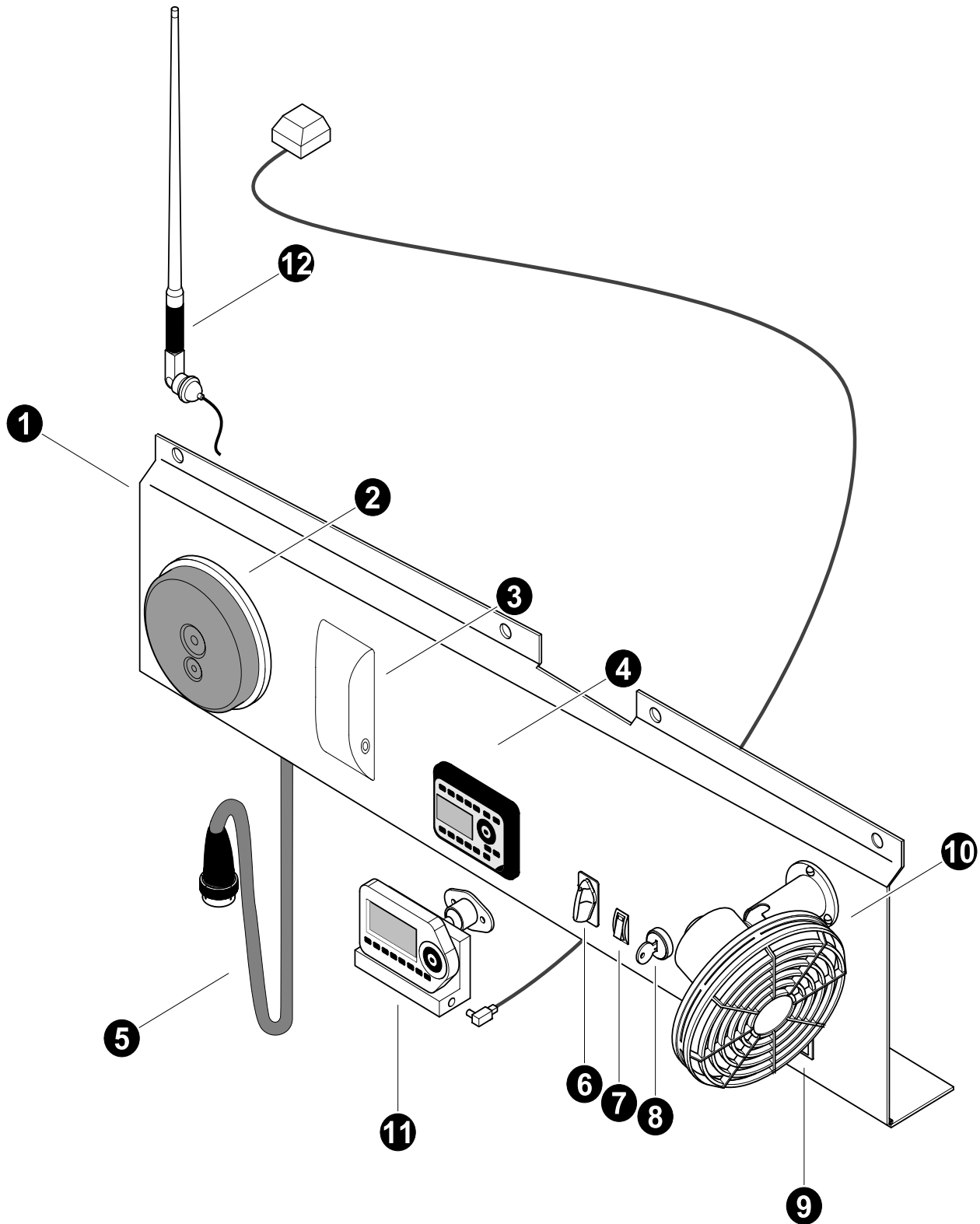


**UPPER DASH BREAKDOWN**  
 (830B-0302-041609 and before)  
 (725B-0024-040709 and before)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | 52654-ES | 1   |                                                                                   | DASH, ASSEMBLY - UPPER LH (MDL CONTROL) |             |
| -   | 52530-ES | 1   |                                                                                   | PANEL, DASH L.H. MDL SYSTEM             |             |
| -   | 53009-ES | 1   |                                                                                   | DECAL, CAB Upper Left Dash MDL (ALL)    |             |
| 2   | 24710-ES | 1   |                                                                                   | SPEAKER                                 |             |
| 3   | 23614-ES | 1   |                                                                                   | LIGHT, DOME - 24V                       |             |
| 4   | 52640-ES | 1   |                                                                                   | RADIO, HEAVY DUTY - AM/FM/WB (ASA)      |             |
| 5   | 52931-ES | 1   |                                                                                   | HARNESS, DASH - UPPER (MDL STYLE)       |             |
| 6   | 51673-ES | 1   |                                                                                   | SWITCH, VENT/ VACUUM                    |             |
| 7   | 51664-ES | 1   |                                                                                   | SWITCH, LIGHT                           |             |
| 8   | 52414-ES | 1   |  | SWITCH, IGNITION                        |             |
| -   | 52417-ES | 2   |                                                                                   | KEY, IGNITION                           |             |
| 9   | 15025-ES | 1   |                                                                                   | GAUGE, HOURMETER                        |             |
| 10  | 23279-ES | 1   |  | FAN, WINDSHIELD DEFROST - 24V           |             |
| 11  | 52680-ES | 1   |                                                                                   | RADIO KIT, XM - ASA                     |             |
| 12  | 24583-ES | 1   |                                                                                   | ANTENNA, radio 1" hole                  |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



Parts T3801 08/09  
18.75

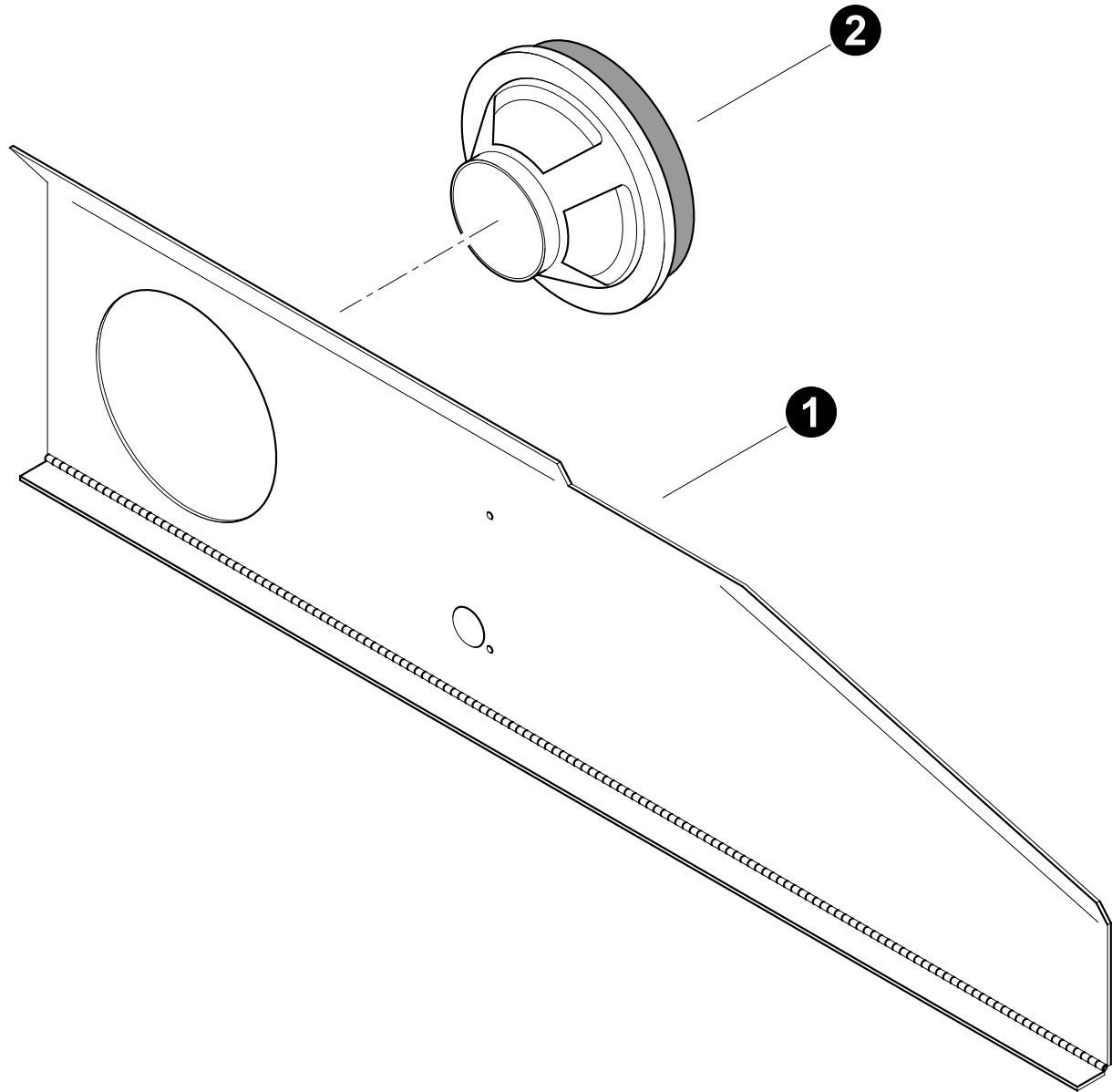
## UPPER DASH BREAKDOWN

(830B-0303-041609 and after)  
(725B-0025-041309 and after)

| REF | PART #   | QTY | DESCRIPTION                                                                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 53840-ES | 1   | DASH ASSEMBLY UPPER LH 830 MDL FLAT TOP                                                                         |             |
| -   | REF      | 1   | DECAL, Dash . . . . .                                                                                           | UP-4        |
| 2   | 24710-ES | 1   | SPEAKER                                                                                                         |             |
| 3   | 23614-ES | 1   | LIGHT, DOME - 24V                                                                                               |             |
| 4   | 52640-ES | 1   | RADIO, HEAVY DUTY - AM/FM/WB (ASA)                                                                              |             |
| 5   | 52931-ES | 1   | HARNESS, DASH - UPPER (MDL STYLE)                                                                               |             |
| 6   | 51673-ES | 1   | SWITCH, VENT/ VACUUM                                                                                            |             |
| 7   | 51664-ES | 1   | SWITCH, LIGHT                                                                                                   |             |
| 8   | 52414-ES | 1   |  SWITCH, IGNITION              |             |
| -   | 52417-ES | 2   | KEY, IGNITION                                                                                                   |             |
| 9   | 15025-ES | 1   | GAUGE, HOURMETER                                                                                                |             |
| 10  | 23279-ES | 1   |  FAN, WINDSHIELD DEFROST - 24V |             |
| 11  | 52680-ES | 1   | RADIO KIT, XM - ASA                                                                                             |             |
| 12  | 24583-ES | 1   | ANTENNA, radio 1" hole                                                                                          |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

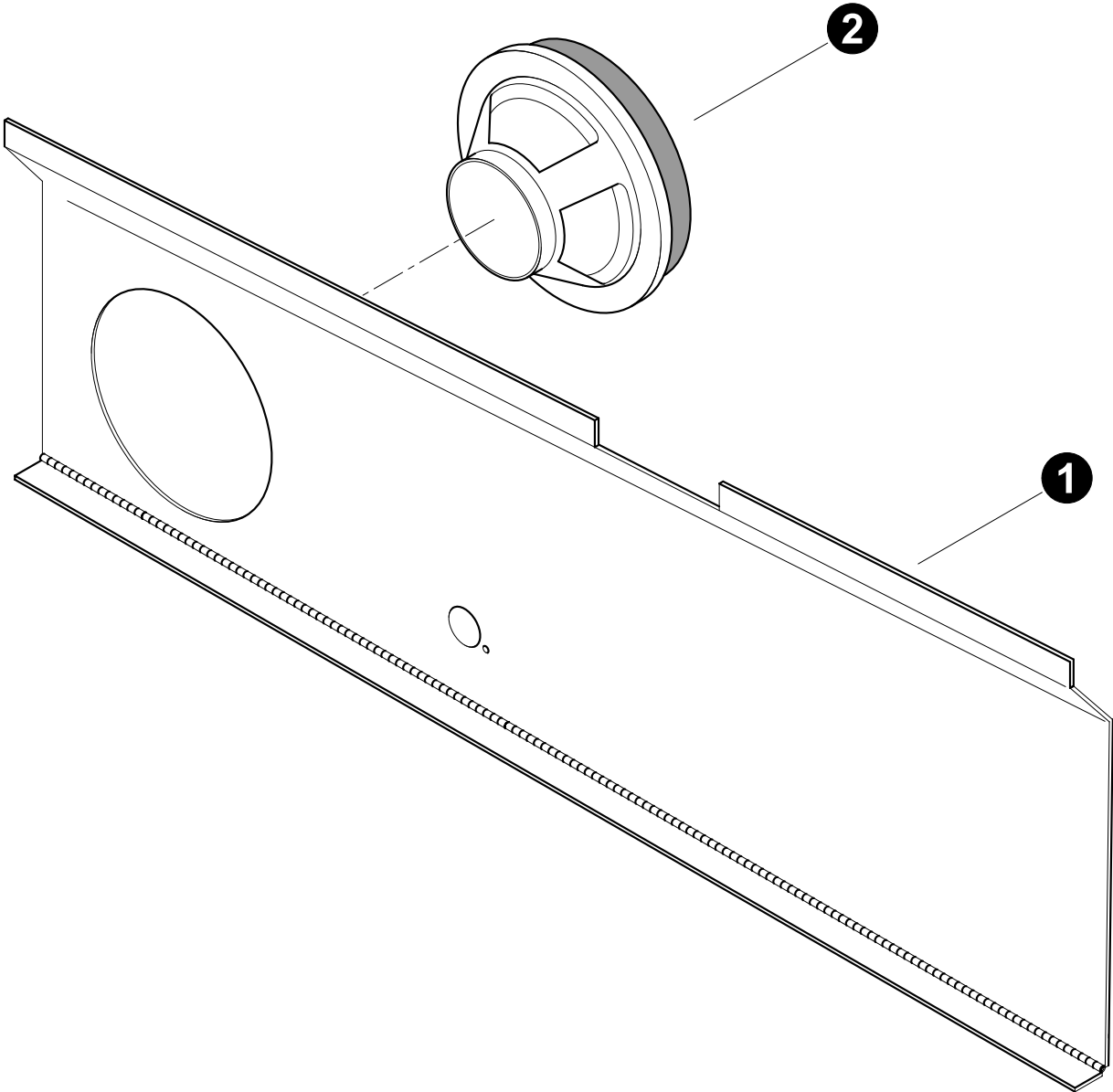


Parts T3614 06/08  
18.75

**UPPER DASH BREAKDOWN**  
(830B-0302-041609 and before)  
(725B-0024-040709 and before)

| REF | PART #   | QTY |                          | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|--------------------------|-------------------------------------|-------------|
| 1   | 53022-ES | 1   | <input type="checkbox"/> | DASH ASSEMBLY - UPPER RH (830)      |             |
| -   | 51686-ES | 1   |                          | PANEL, DASH R.H.                    |             |
| -   | 52717-ES | 1   |                          | DECAL, CAB Upper Right Dash 830 MDL |             |
| 2   | 24710-ES | 1   |                          | SPEAKER                             |             |

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



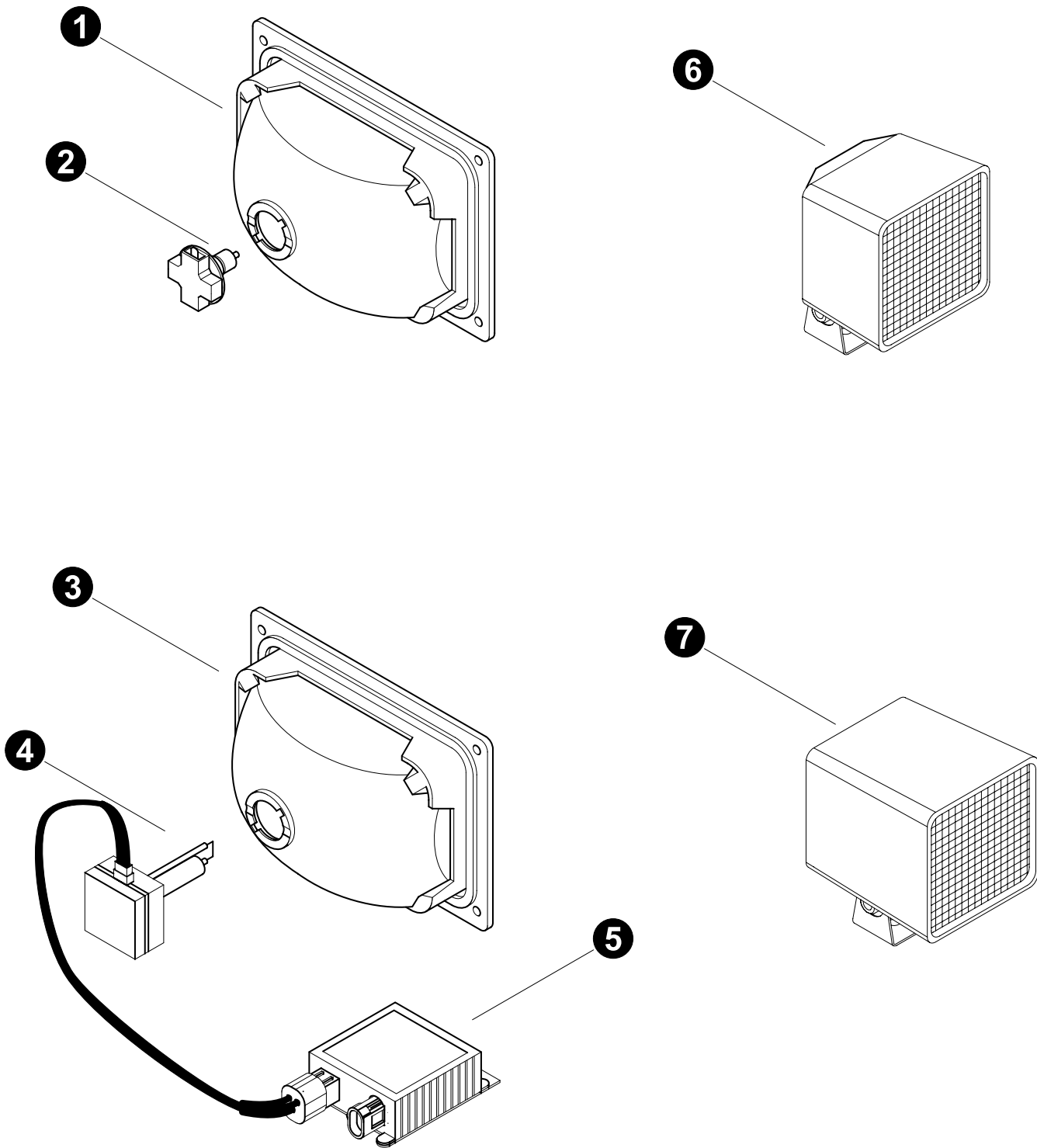
Parts T3614 06/08  
18.75

**UPPER DASH BREAKDOWN**  
 (830B-0303-041609 and after)  
 (725B-0025-041309 and after)

| REF | PART #   | QTY | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------|-------------|
| 1   | 53806-ES | 1   | DASH ASSEMBLY - RH 830 MDL-FLAT TOP CAB |             |
| -   | REF      | 1   | DECAL, Dash .....                       | UP-4        |
| 2   | 24710-ES | 1   | SPEAKER                                 |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



Parts T3162 06/21/2005



## CAB LIGHTS BREAKDOWN

| REF | PART #   | QTY |                          | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------------|-------------|
| 1   | 23604-ES | 1   | <input type="checkbox"/> | LIGHT, FLUSH MOUNT - 24V (ABL)             |             |
| 2   | 24819-ES | 1   |                          | BULB, FLUSH MOUNT LIGHT - 24V              |             |
| 3   | 51324-ES | 1   | <input type="checkbox"/> | LIGHT, FLUSH MOUNT - 24V (XENON) ABL       |             |
| 4   | 26858-ES | 1   |                          | BULB, HID (all HID Lights)                 |             |
| 5   | 51396-ES | 1   |                          | BALLAST, assembly 24 volt HID (ABL-21.577) |             |
| 6   | 53208-ES | 1   | <input type="checkbox"/> | LIGHT, FLOOD - NON-XENON (ABL)             |             |
| -   | 24819-ES | 1   |                          | BULB                                       |             |
| 7   | 52653-ES | 1   | <input type="checkbox"/> | LIGHT, XENON TRAP - ABL                    |             |
| -   | -ES      | 1   |                          | BULB - XENON                               |             |
| -   | -ES      | 1   |                          | BALLAST                                    |             |



See referenced page for component or assembly breakdown.



Assembly that includes all items indented below.

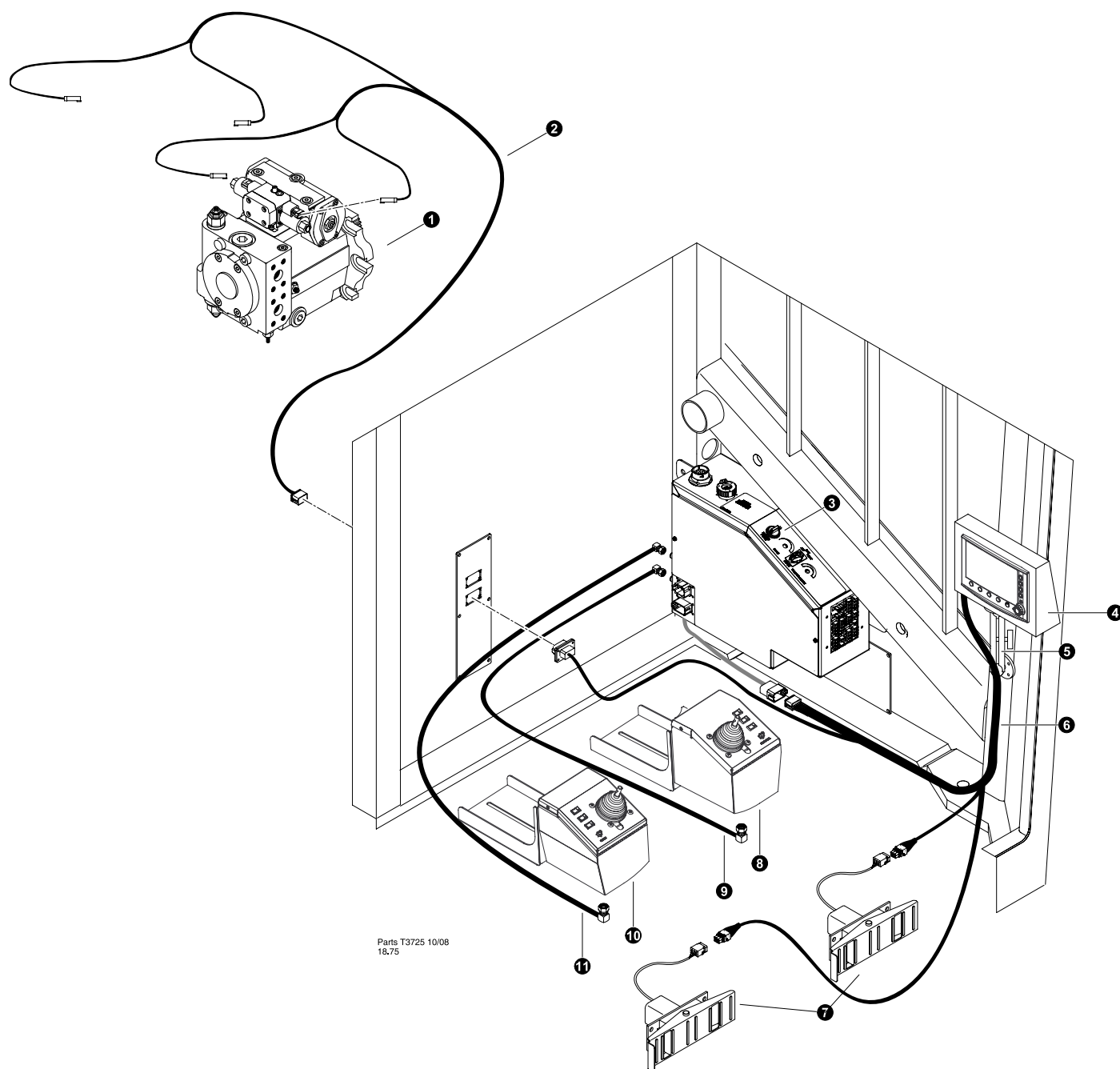
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## ***Section ES-3***

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### ***Electrical System - IQAN Control System***

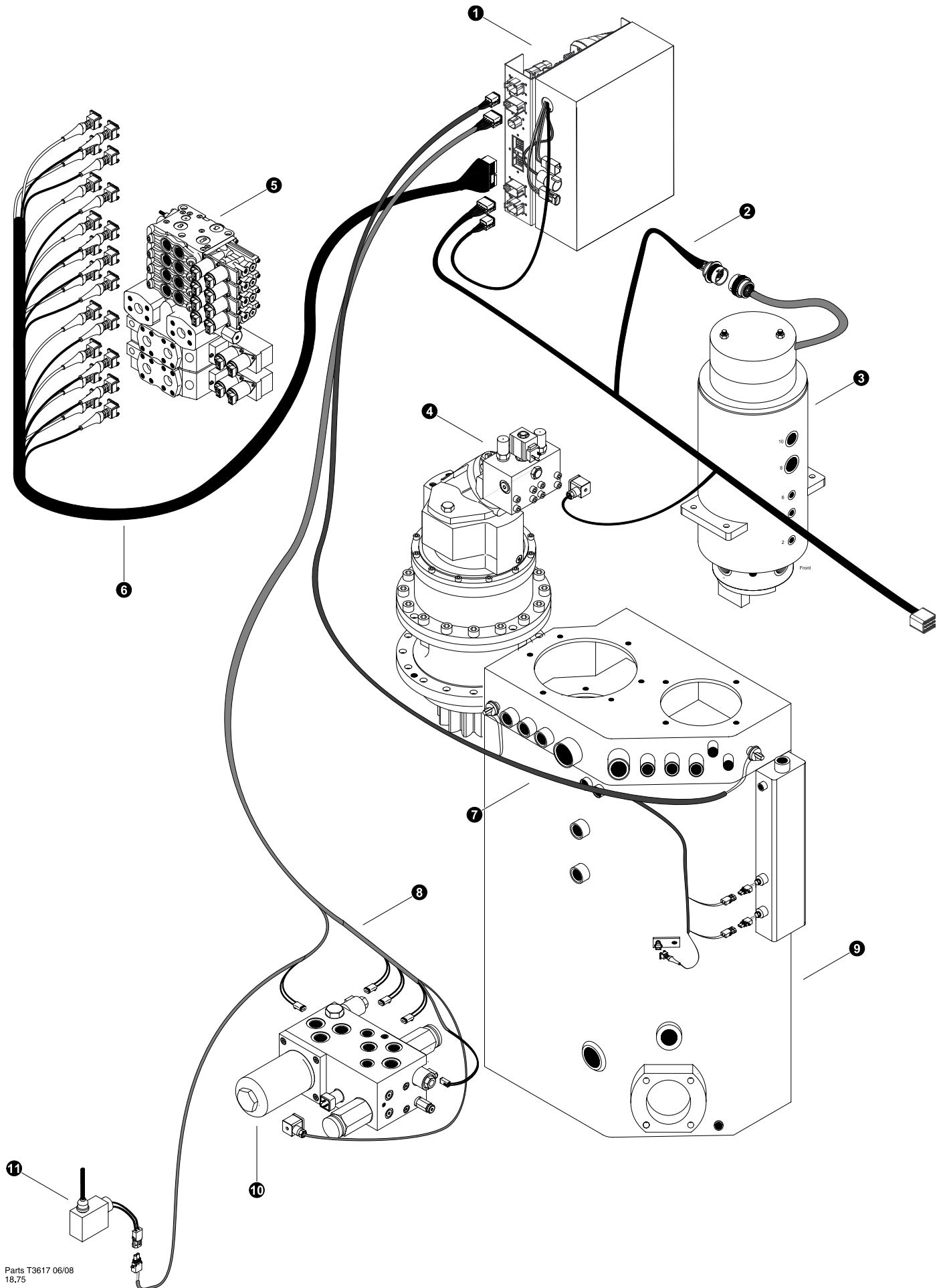


**IQAN - CAB CONTROL HARNESS**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------|-------------|
| 1   | REF.     | 1   |  | WHEEL DRIVE PUMP . . . . .                 | WD-1        |
| 2   | 52948-ES | 1   |                                                                                   | HARNESS, Hydro Pumps (MDL)                 |             |
| 3   | REF.     | 1   |  | CAB ELECTRICAL CENTER . . . . .            | ES-2        |
| 4   | REF.     | 1   |  | MDL PANEL ASSEMBLY . . . . .               | ES-3        |
| 5   | 53092-ES | 1   |                                                                                   | MOUNT, RAM - MDL SCREEN                    |             |
| 6   | 52951-ES | 1   |                                                                                   | HARNESS, MDL Harness - MDL                 |             |
| 7   | REF.     | 1   |  | DRIVE PEDAL CONTROL . . . . .              | ES-3        |
| 8   | REF.     | 1   |  | LEFT JOYSTICK CONTROL POD . . . . .        | ES-3        |
| 9   | 53619-ES | 1   |                                                                                   | CABLE, Joystick pod - 1 meter (M06288-001) |             |
| 10  | REF.     | 1   |  | RIGHT JOYSTICK CONTROL POD . . . . .       | ES-3        |
| 11  | 53620-ES | 1   |                                                                                   | CABLE, Joystick pod - 2 meter (M06288-002) |             |



See referenced page for component or assembly breakdown.



Parts T3617 06/08  
18.75

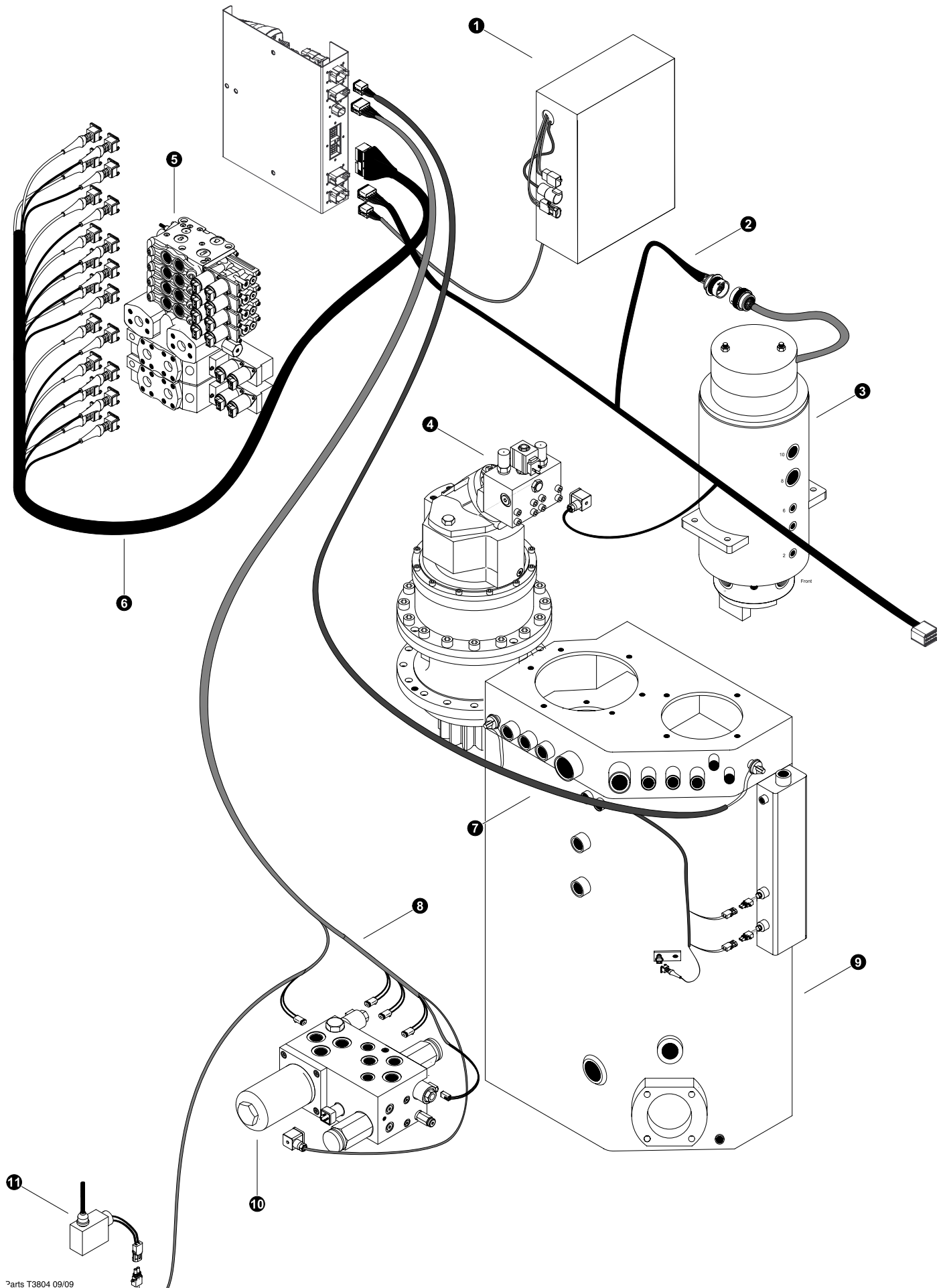
**IQAN - ENGINE COMPARTMENT HARNESS**

(Machine 830B-0314-071609 and before)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   |          |     |                                                                                   |                                             |             |
| 2   | 52950-ES | 1   |                                                                                   | HARNESS, Cab to XA2 Panel - 830/630 MDL     |             |
| 3   | REF      | 1   |  | ROTARY MANIFOLD . . . . .                   | UP-1        |
| 4   | REF      | 1   |  | SWING MOTOR ASSEMBLY . . . . .              | LH//HH      |
| 5   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                | LH/HH       |
| 6   | 52953-ES | 1   |                                                                                   | HARNESS, control valve - 830/630 MDL        |             |
| 7   | 52954-ES | 1   |                                                                                   | HARNESS, Hyd Tank - 830/630 MDL             |             |
| 8   | 52955-ES | 1   |                                                                                   | HARNESS, Charge/Fan Valve - 830/630 MDL     |             |
| 9   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY . . . . .           | UP-2        |
| 10  | REF.     | 1   |  | WHEEL DRIVE CHARGE VALVE ASSEMBLY . . . . . | WD          |
| 11  | 51933-ES | 1   |                                                                                   | SWITCH, LIMIT-GULLWING DOOR SAFETY          |             |



See referenced page for component or assembly breakdown.



Parts T3804 09/09



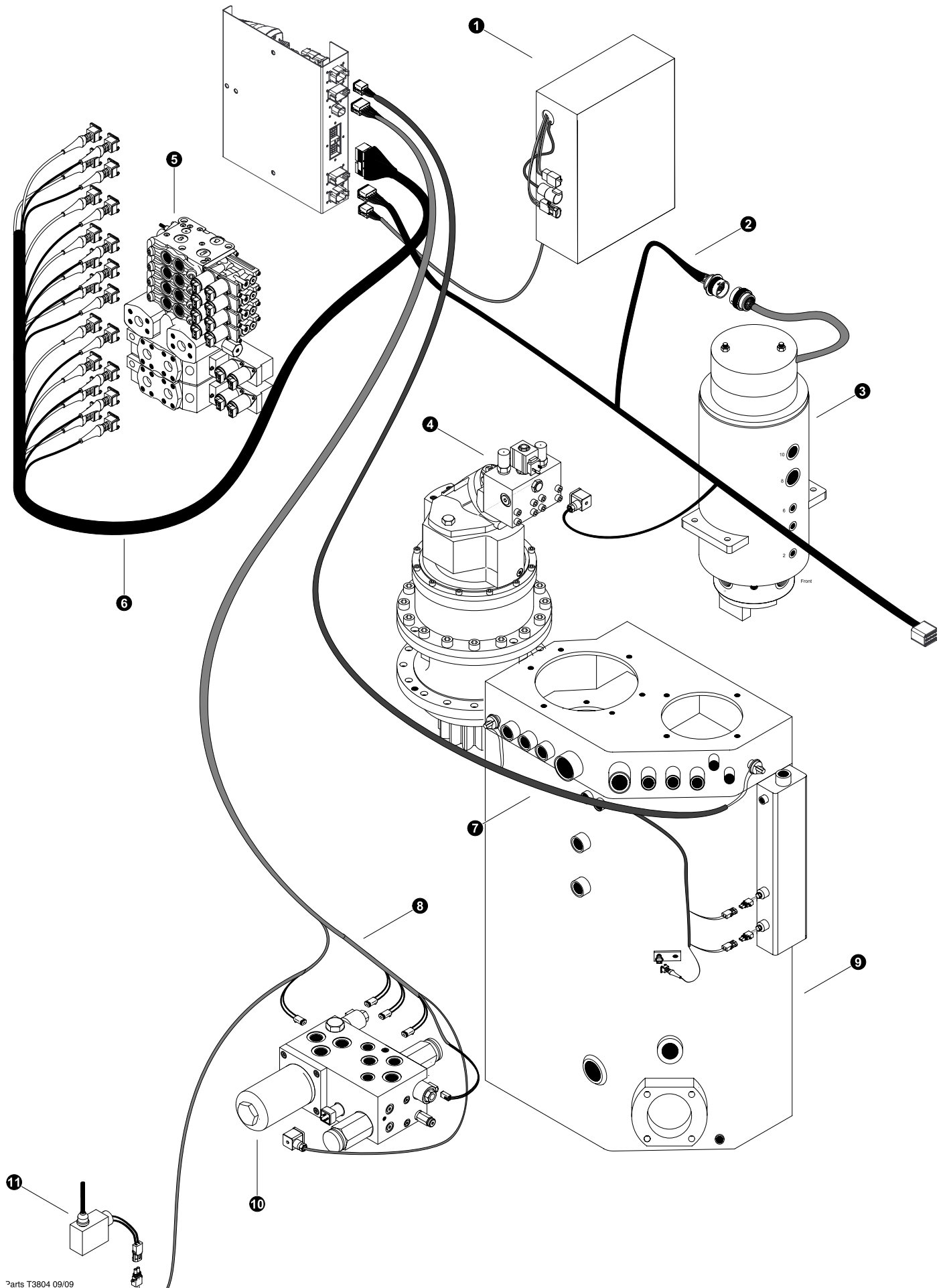
**IQAN - ENGINE COMPARTMENT HARNESS**

(Machine 830B-0315-080609 to Machine 830B-0325-121509)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   |          |     |                                                                                   |                                             |             |
| 2   | 52950-ES | 1   |                                                                                   | HARNESS, Cab to XA2 Panel - 830/630 MDL     |             |
| 3   | REF      | 1   |  | ROTORY MANIFOLD . . . . .                   | UP-1        |
| 4   | REF      | 1   |  | SWING MOTOR ASSEMBLY . . . . .              | LH//HH      |
| 5   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                | LH/HH       |
| 6   | 52953-ES | 1   |                                                                                   | HARNESS, control valve - 830/630 MDL        |             |
| 7   | 52954-ES | 1   |                                                                                   | HARNESS, Hyd Tank - 830/630 MDL             |             |
| 8   | 52955-ES | 1   |                                                                                   | HARNESS, Charge/Fan Valve - 830/630 MDL     |             |
| 9   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY . . . . .           | UP-2        |
| 10  | REF.     | 1   |  | WHEEL DRIVE CHARGE VALVE ASSEMBLY . . . . . | WD          |
| 11  | 51933-ES | 1   |                                                                                   | SWITCH, LIMIT-GULLWING DOOR SAFETY          |             |



See referenced page for component or assembly breakdown.



Parts T3804 09/09

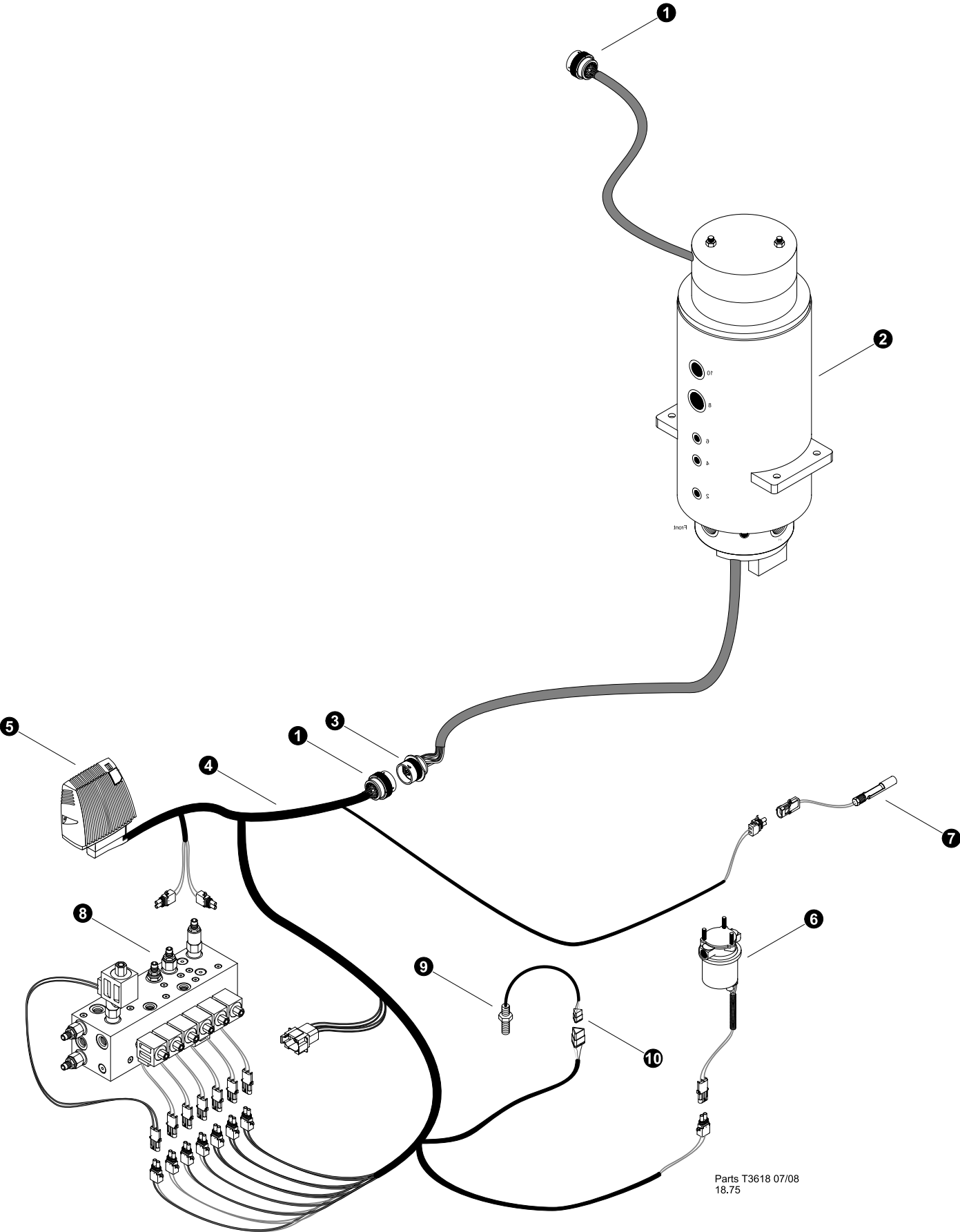
**IQAN - ENGINE COMPARTMENT HARNESS**

(Machine 0326-123009 and after)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------|-------------|
| 1   |          |     |                                                                                   |                                             |             |
| 2   | 52950-ES | 1   |                                                                                   | HARNESS, Cab to XA2 Panel - 830/630 MDL     |             |
| 3   | REF      | 1   |  | ROTARY MANIFOLD . . . . .                   | UP-1        |
| 4   | REF      | 1   |  | SWING MOTOR ASSEMBLY . . . . .              | LH//HH      |
| 5   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                | LH/HH       |
| 6   | 52953-ES | 1   |                                                                                   | HARNESS, control valve - 830/630 MDL        |             |
| 7   | 52954-ES | 1   |                                                                                   | HARNESS, Hyd Tank - 830/630 MDL             |             |
| 8   | 52955-ES | 1   |                                                                                   | HARNESS, Charge/Fan Valve - 830/630 MDL     |             |
| 9   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY . . . . .           | UP-2        |
| 10  | REF.     | 1   |  | WHEEL DRIVE CHARGE VALVE ASSEMBLY . . . . . | WD          |
| 11  | 51933-ES | 1   |                                                                                   | SWITCH, LIMIT-GULLWING DOOR SAFETY          |             |



See referenced page for component or assembly breakdown.

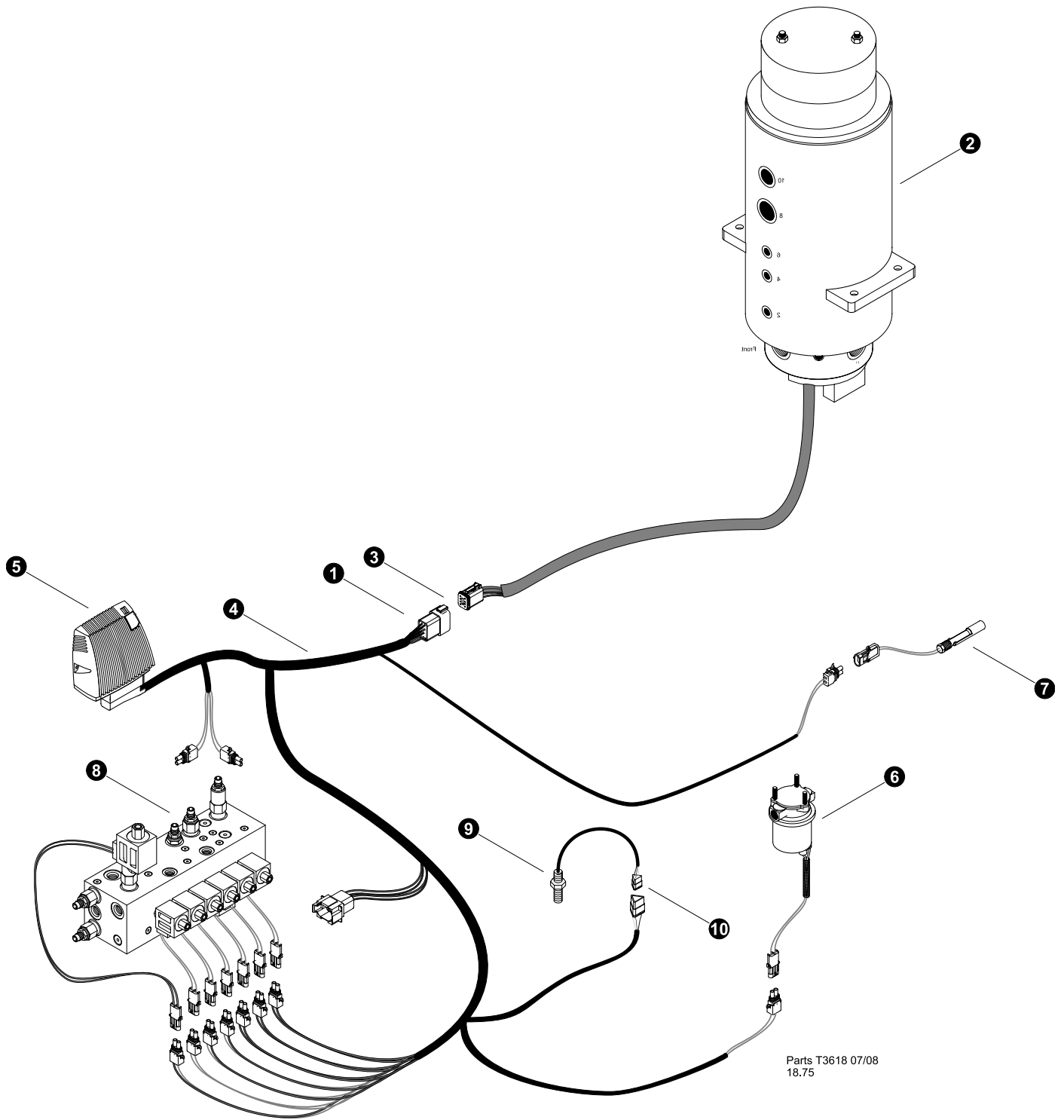


**IQAN - LOWER FRAME HARNESS**  
**(TF 830,840 - Nonleveling)**  
Machine 830B-0325-121509 and Before

| REF | PART #   | QTY | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|------------------------------------------------|-------------|
| 1   | 51749-ES | 2   | CONNECTOR, DEUTCH, 8 PIN - MALE                |             |
| 2   | REF      | 1   | ROTARY MANIFOLD ASSEMBLY . . . . .             | UP-1        |
| 3   | 51793-ES | 1   | CONNECTOR, DEUTCH, 8 PIN - FEMALE              |             |
| 4   | 52952-ES | 1   | HARNESS, Lower Frame - 810/830/840 MDL         |             |
| 5   | 53095-ES | 1   | MODULE, XA2 - IQAN                             |             |
| 6   | REF      | 1   | FUEL PUMP ASSEMBLY . . . . .                   | FF          |
| 7   | 51379-ES | 1   | SWITCH, Fuel OIL LEVEL                         |             |
| 8   | REF      | 1   | LOWER CONTROL MANIFOLD. . . . .                | FF          |
| 9   | REF      | 1   | SPEED SENSOR ASSEMBLY . . . . .                | FF          |
| 10  | -ES      | 1   | CONNECTOR, Deutsch DT04-3P / W3P / 0462-201-16 |             |



See referenced page for component or assembly breakdown.

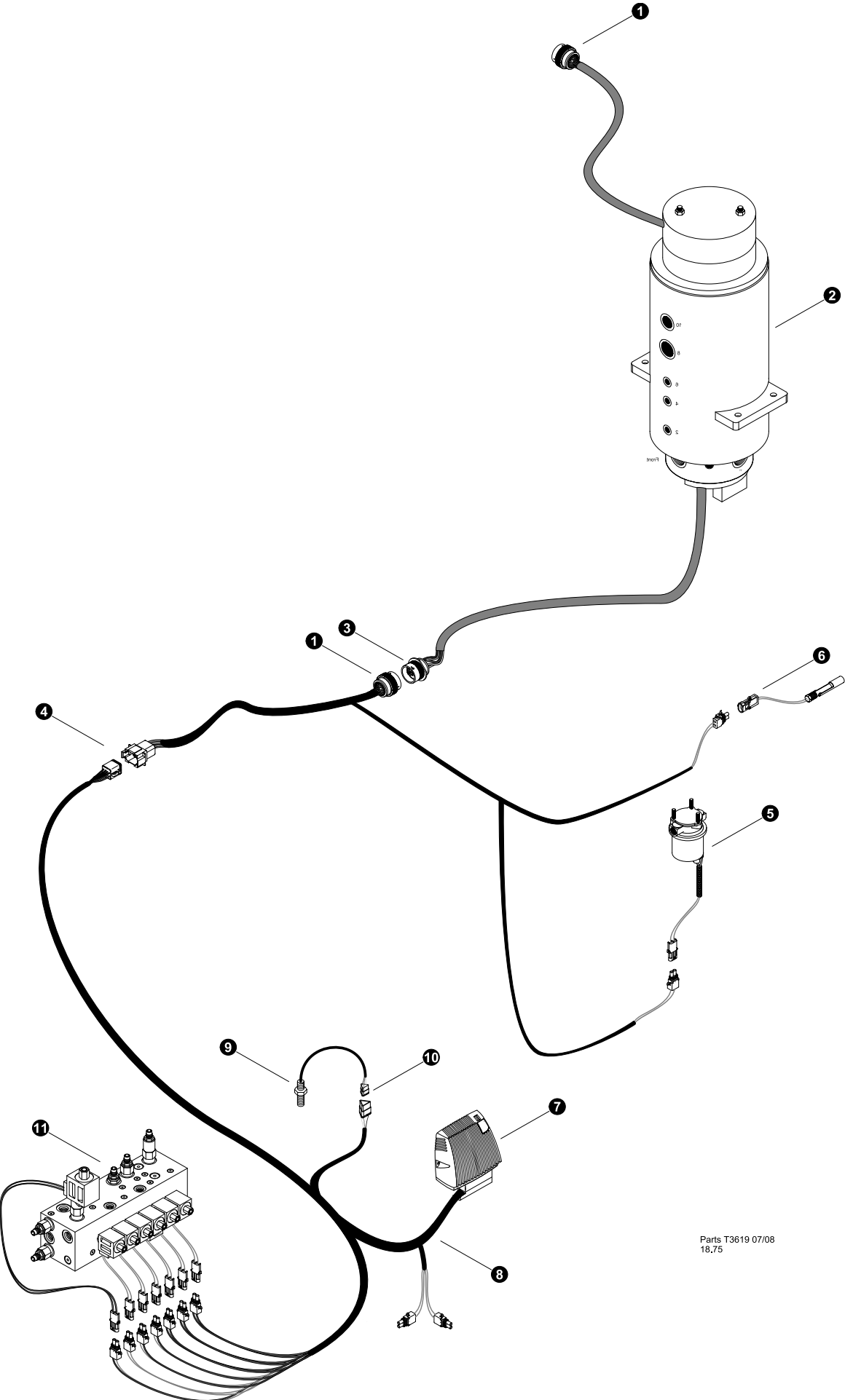


**IQAN - LOWER FRAME HARNESS**  
**(TF 830,840 - Nonleveling)**  
(Machine 0326-123009 and after)

| REF | PART #   | QTY | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|------------------------------------------------|-------------|
| 1   | AD13093  | 1   | Receptacle, DT04-8PA                           |             |
| -   | AD13096  | 1   | Wedge Lock, W8P                                |             |
| -   | AD13003  | 8   | PIN, solid gold plated - size 16               |             |
| 2   | REF      | 1   | ROTORY MANIFOLD ASSEMBLY . . . . .             | UP-1        |
| 3   | AD13092  | 1   | PLUG, DT06-8SA                                 |             |
| -   | AD13097  | 1   | Wedge Lock, W8S                                |             |
| -   | AD13005  | 8   | SOCKET, solid gold plated - size 16            |             |
| 4   | 52952-ES | 1   | HARNESS, Lower Frame - 810/830/840 MDL         |             |
| 5   | 53095-ES | 1   | MODULE, XA2 - IQAN                             |             |
| 6   | REF      | 1   | FUEL PUMP ASSEMBLY . . . . .                   | FF          |
| 7   | 51379-ES | 1   | SWITCH, Fuel OIL LEVEL                         |             |
| 8   | REF      | 1   | LOWER CONTROL MANIFOLD. . . . .                | FF          |
| 9   | REF      | 1   | SPEED SENSOR ASSEMBLY . . . . .                | FF          |
| 10  | -ES      | 1   | CONNECTOR, Deutsch DT04-3P / W3P / 0462-201-16 |             |



See referenced page for component or assembly breakdown.



Parts T3619 07/08  
18.75

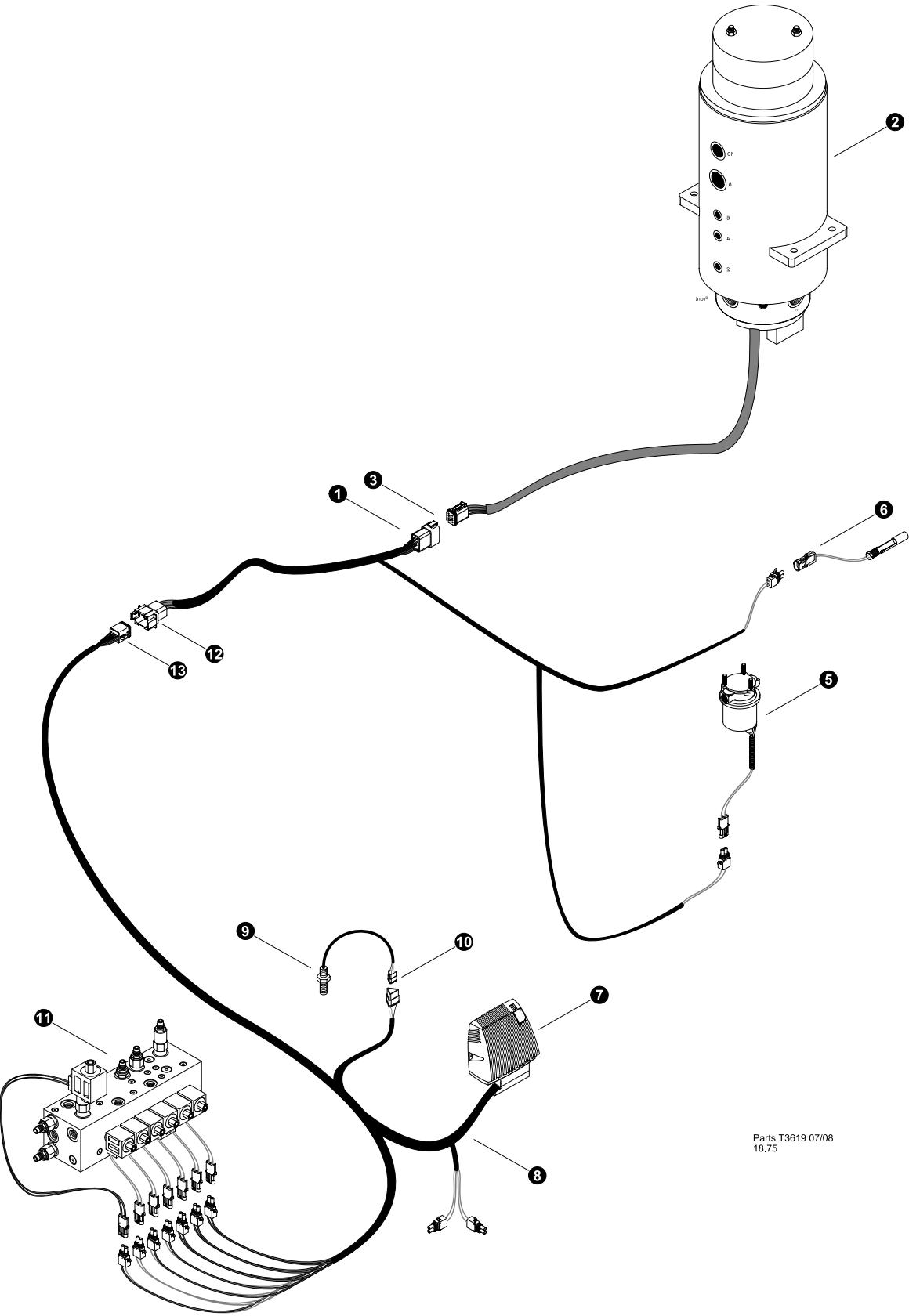


**IQAN - LOWER FRAME HARNESS**  
**(TB 630 or TF 830,840 - leveling)**  
Machine 830B-0325-121509 and Before

| REF | PART #   | QTY | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|------------------------------------------------|-------------|
| 1   | 51749-ES | 2   | CONNECTOR, DEUTCH, 8 PIN - MALE                |             |
| 2   | REF      | 1   | ROTARY MANIFOLD ASSEMBLY . . . . .             | UP-1        |
| 3   | 51793-ES | 1   | CONNECTOR, DEUTCH, 8 PIN - FEMALE              |             |
| 4   | -ES      | 1   | CONNECTOR, Deutsch DT04-6PA                    |             |
| 5   | REF      | 1   | FUEL PUMP ASSEMBLY . . . . .                   | FF          |
| 6   | 51379-ES | 1   | SWITCH, Fuel OIL LEVEL                         |             |
| 7   | 53095-ES | 1   | MODULE, XA2 - IQAN                             |             |
| 8   | 52956-ES | 1   | HARNESS, Lower Frame - 630 or 830 leveling MDL |             |
| 9   | REF      | 1   | SPEED SENSOR ASSEMBLY . . . . .                | FF          |
| 10  | -ES      | 1   | CONNECTOR, Deutsch DT04-3P / W3P / 0462-201-16 |             |
| 11  | REF      | 1   | LOWER CONTROL MANIFOLD. . . . .                | FF          |



See referenced page for component or assembly breakdown.



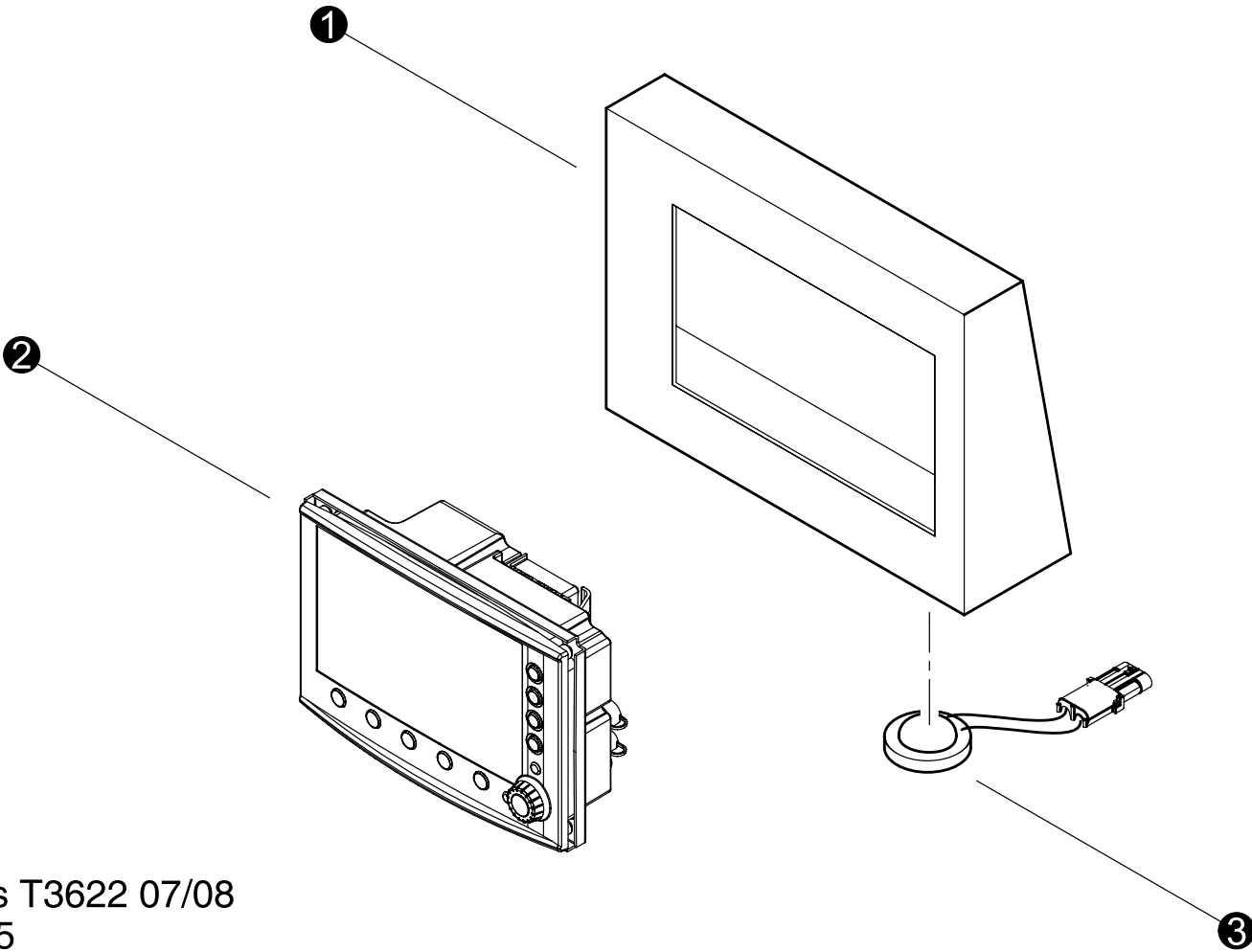
Parts T3619 07/08  
18.75

**IQAN - LOWER FRAME HARNESS**  
**(TB 630 or TF 830,840 - leveling)**  
 (Machine 0326-123009 and after)

| REF | PART #    | QTY | DESCRIPTION                                    | SEE SECTION |
|-----|-----------|-----|------------------------------------------------|-------------|
| 1   | AD13093   | 1   | Receptacle, DT04-8PA                           |             |
| -   | AD13096   | 1   | Wedge Lock, W8P                                |             |
| -   | AD13003   | 8   | PIN, solid gold plated - size 16               |             |
| 2   | REF       | 1   | ROTARY MANIFOLD ASSEMBLY . . . . .             | UP-1        |
| 3   | AD13092   | 1   | PLUG, DT06-8SA                                 |             |
| -   | AD13097   | 1   | Wedge Lock, W8S                                |             |
| -   | AD13005   | 8   | SOCKET, solid gold plated - size 16            |             |
| 4   | -ES       | 1   | CONNECTOR, Deutsch DT04-6PA                    |             |
| 5   | REF       | 1   | FUEL PUMP ASSEMBLY . . . . .                   | FF          |
| 6   | 51379-ES  | 1   | SWITCH, Fuel OIL LEVEL                         |             |
| 7   | 53095-ES  | 1   | MODULE, XA2 - IQAN                             |             |
| 8   | 52956-ES  | 1   | HARNESS, Lower Frame - 630 or 830 leveling MDL |             |
| 9   | REF       | 1   | SPEED SENSOR ASSEMBLY . . . . .                | FF          |
| 10  | -ES       | 1   | CONNECTOR, Deutsch DT04-3P / W3P / 0462-201-16 |             |
| 11  | REF       | 1   | LOWER CONTROL MANIFOLD. . . . .                | FF          |
| 12  | AD13069-3 | 1   | Receptacle, DT04-6P                            |             |
| -   | AD13071-6 | 1   | Wedge Lock, W6P                                |             |
| -   | AD13003   | 8   | PIN, solid gold plated - size 16               |             |
| 13  | AD13070-3 | 1   | PLUG, DT06-6S                                  |             |
| -   | AD13071-7 | 1   | Wedge Lock W6S                                 |             |
| -   | AD13005   | 8   | SOCKET, solid gold plated - size 16            |             |



See referenced page for component or assembly breakdown.



Parts T3622 07/08  
18.75

**IQAN - MDL panel**

| REF | PART #   | QTY | DESCRIPTION                               | SEE SECTION |
|-----|----------|-----|-------------------------------------------|-------------|
| 1   | 53002-ES | 1   | ENCLOSURE, MDL                            |             |
| -   | 53112-ES | 1   | Software, Dealer MDL (IQAN Active Studio) |             |
| 2   | 52783-ES | 1   | MODULE, MDL SCREEN                        |             |
| 3   | 53025-ES | 1   | SIREN, WARNING MDL Panel                  |             |



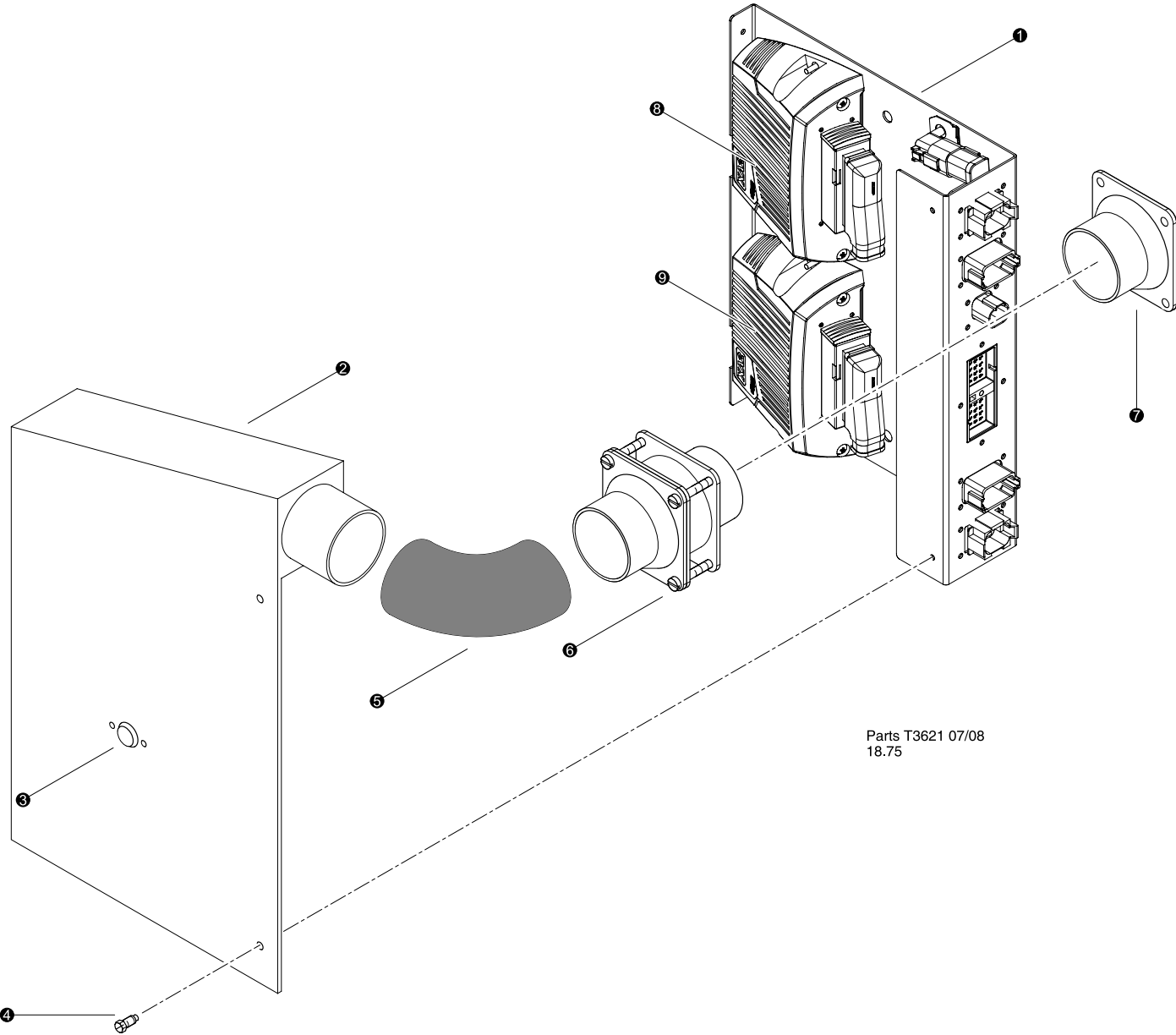
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



**IQAN - XA2 Panel**  
**(Machine 830B-0314-071609 and before)**

| REF | PART #   | QTY |   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|---|------------------------------------------|-------------|
| 1   | 53621-ES | 1   | ☐ | PANEL, XA2 MDL SYSTEM                    |             |
| -   | 53095-ES | 2   |   | MODULE, XA2 - IQAN                       |             |
| 2   | 53147-ES | 1   |   | COVER, FAN MOUNT XA2 PANEL               |             |
| 3   | 53166-ES | 1   |   | SWITCH, THERMO SNAP - 130 F IQAN COOLER  |             |
| 4   | 17254-ES | 4   |   | SCREW, SELF TAPPING - #10-24 X .5"       |             |
| 5   | 53165-ES | 1   |   | ELBOW, RUBBER 90 - 3" IQAN COOLER SYSTEM |             |
| 6   | 53164-ES | 1   |   | FAN, BOOSTER - IQAN COOLING / CAB PRESSU |             |
| 7   | 53160-ES | 1   |   | FLANGE, AIR INLET XA2 PANEL              |             |
| -   | 53161-ES | 1   |   | SCREEN, AIR INLET XA2 PANEL              |             |



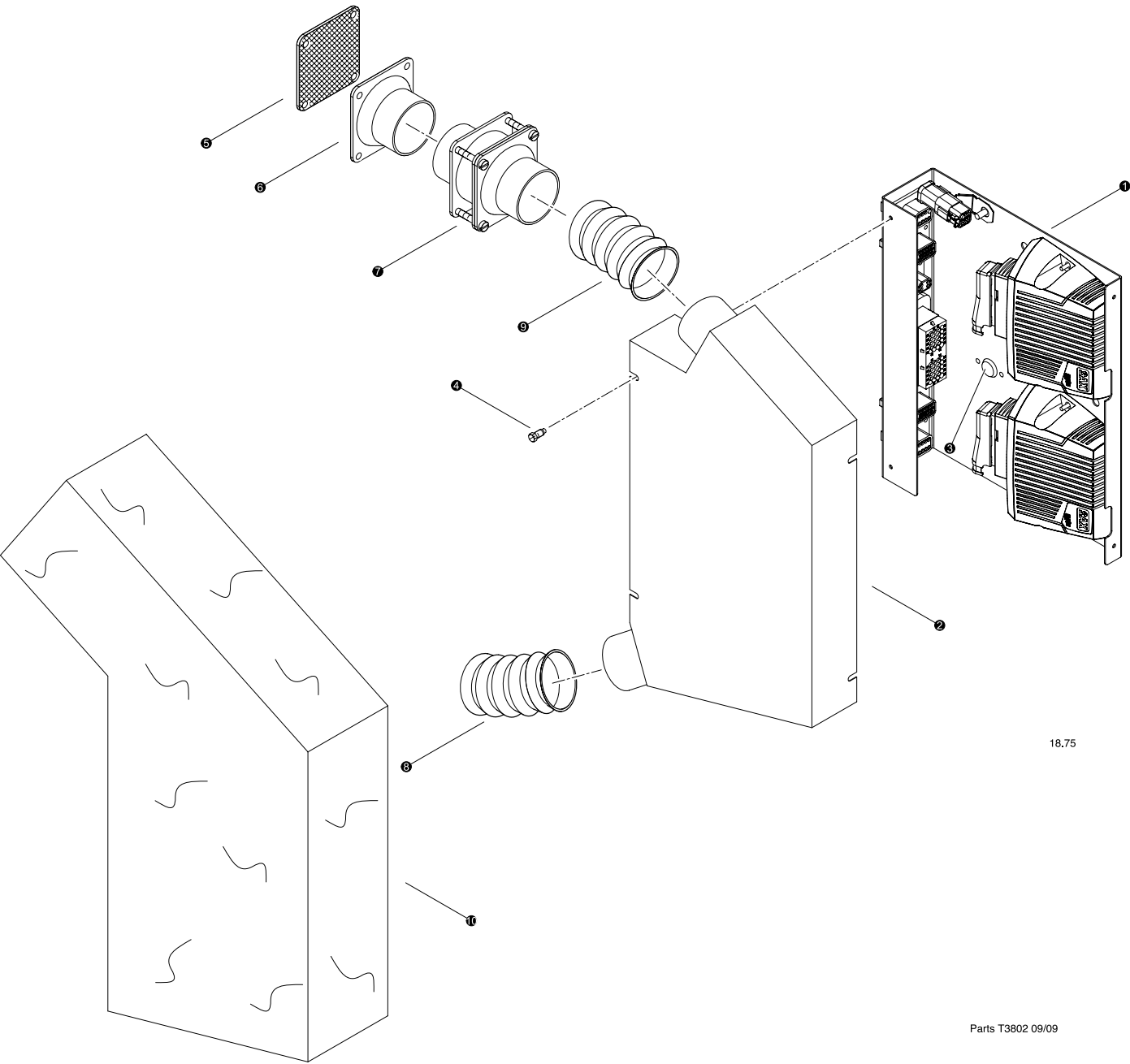
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit





**IQAN - XA2 Panel**  
**(Machine 830B-0315-080609 and after)**

| REF | PART #   | QTY |   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|---|------------------------------------------|-------------|
| 1   | 53621-ES | 1   | ☐ | PANEL, XA2 MDL SYSTEM                    |             |
| -   | 53095-ES | 2   |   | MODULE, XA2 - IQAN                       |             |
| 2   | 53147-ES | 1   |   | COVER, FAN MOUNT XA2 PANEL               |             |
| 3   | 53166-ES | 1   |   | SWITCH, THERMO SNAP - 130 F IQAN COOLER  |             |
| 4   | 17254-ES | 4   |   | SCREW, SELF TAPPING - #10-24 X .5"       |             |
| 5   | 53161-ES | 1   |   | SCREEN, AIR INLET XA2 PANEL              |             |
| 6   | 53160-ES | 1   |   | FLANGE, AIR INLET XA2 PANEL              |             |
| 7   | 53164-ES | 1   |   | FAN, BOOSTER - IQAN COOLING / CAB PRESSU |             |
| 8   | 53939-ES | 1   |   | DUCT, Cooling - Iqan Modules             |             |
| 9   | 53939-ES | 1   |   | DUCT, Cooling - Iqan Modules             |             |
| 10  | 54153-ES | 1   |   | INSULATION, IQAN MODULE BOX XA2 CURRENT  |             |



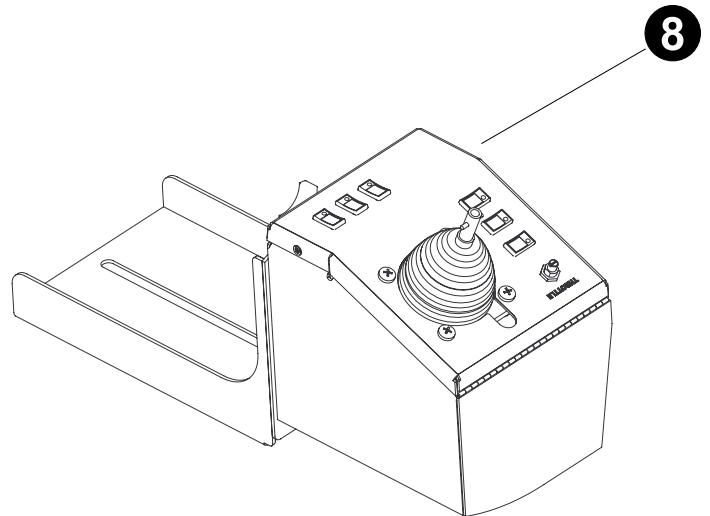
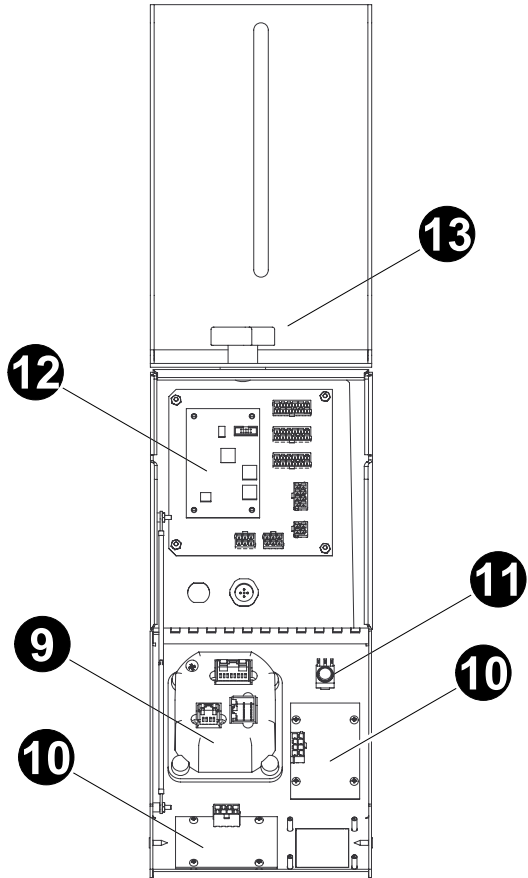
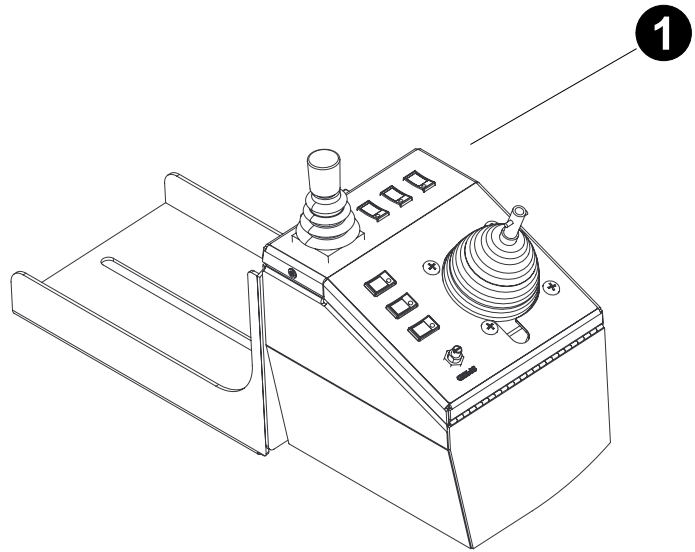
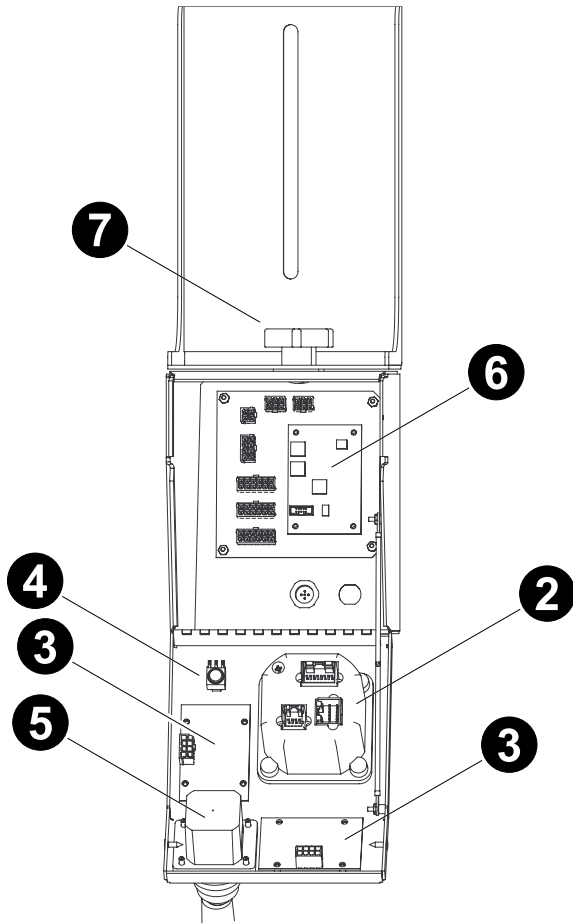
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



Parts T3620 07/08  
18.75

## IQAN - LEFT AND RIGHT CONTROL PANELS (830B-0316-081309 and before)

| REF | PART #   | QTY |   | DESCRIPTION                                                  | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------------------------|-------------|
| 1   | -ES      | 1   | ☐ | POD, ASSEMBLY - Right Joystick (GS09351-220)                 |             |
| 2   | 52905-ES | 1   |   | JOYSTICK, (JC6000-GEN0028)                                   |             |
| -   | -ES      | 1   |   | HARNESS, Joystick (M06220035RevA)                            |             |
| -   | -ES      | 1   |   | HARNESS, control handle (M06220032RevB)                      |             |
| 3   | -ES      | 2   |   | Panel, 3-Switch (26030-24)                                   |             |
| -   | -ES      | 1   |   | HARNESS, 3-Switch panel (M06220031RevB)                      |             |
| 4   | -ES      | 1   |   | POT, Detented (GS06220036REVB)                               |             |
| 5   | 53269-ES | 1   |   | JOYSTICK, Steer (GS07207-037REVA) (optional)                 |             |
| 6   | 53676-ES | 1   |   | BOARD, CAN Driver (GS06464-041REVC) "Dip Switches set 0 & 1" |             |
| -   | -ES      | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)                    |             |
| 7   | -ES      | 1   |   | KNOB, 4 prong plastic (DK-57)                                |             |
| 8   | -ES      | 1   | ☐ | POD, ASSEMBLY - Left Joystick (GS09351-210)                  |             |
| 9   | 52905-ES | 1   |   | JOYSTICK, (JC6000-GEN0028)                                   |             |
| -   | -ES      | 1   |   | HARNESS, Joystick (M06220035RevA)                            |             |
| -   | -ES      | 1   |   | HARNESS, control handle (M06220032RevB)                      |             |
| 10  | -ES      | 2   |   | Panel, 3-Switch (26030-24)                                   |             |
| -   | -ES      | 1   |   | HARNESS, 3-Switch panel (M06220031RevB)                      |             |
| 11  | -ES      | 1   |   | POT, Detented (GS06220036REVB)                               |             |
| 12  | 53676-ES | 1   |   | BOARD, CAN Driver (GS06464-041REVC) "Dip Switches set 0 & 0" |             |
| -   | -ES      | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)                    |             |
| 13  | -ES      | 1   |   | KNOB, 4 prong plastic (DK-57)                                |             |



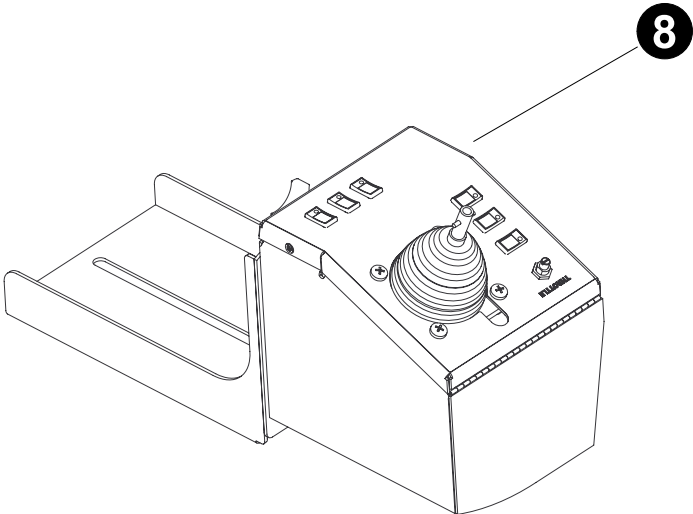
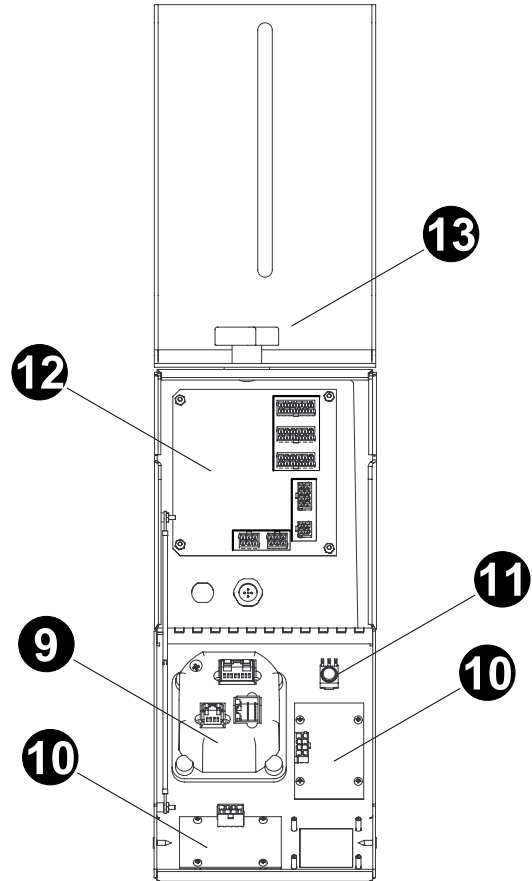
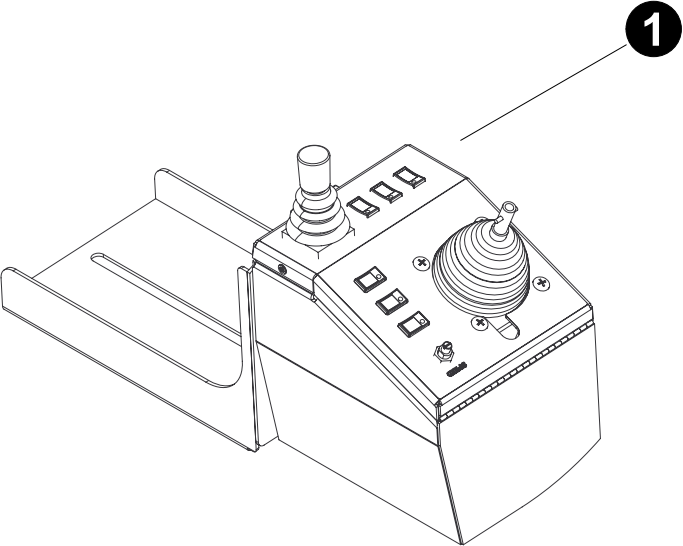
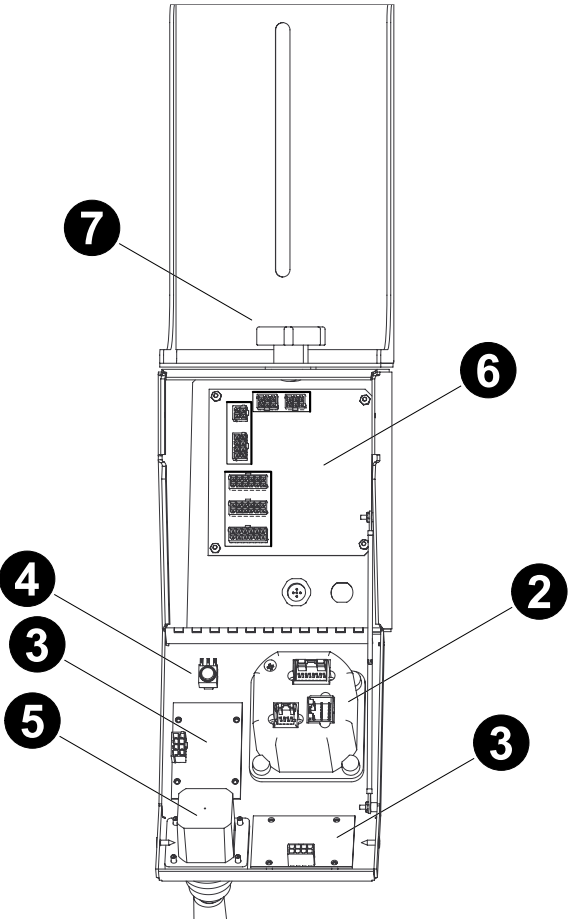
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



Parts T3803 09/09  
18.75

## IQAN - LEFT AND RIGHT CONTROL PANELS

(830B-0317-082509 TO 830B-0340-052810)

| REF | PART #      | QTY |   | DESCRIPTION                                      | SEE SECTION |
|-----|-------------|-----|---|--------------------------------------------------|-------------|
| 1   | 53898-Rev C | 1   | ☐ | POD, ASSEMBLY - Right Joystick GS09351-220 Rev C |             |
| 2   | 52905-ES    | 1   |   | JOYSTICK, (JC6000-GEN0028)                       |             |
| -   | -ES         | 1   |   | HARNESS, Joystick (M06220035RevA)                |             |
| -   | -ES         | 1   |   | HARNESS, control handle (M06220032RevB)          |             |
| 3   | 53818-ES    | 2   |   | Panel, 3-Switch (M09312-200 Rev A)               |             |
| -   | -ES         | 1   |   | HARNESS, 3-Switch panel (M09351-331 Rev A)       |             |
| 4   | -ES         | 1   |   | POT, Detented (GS06220036REVB)                   |             |
| 5   | 53269-ES    | 1   |   | JOYSTICK, Steer (GS07207-037REVA) (optional)     |             |
| 6   | 53931-ES    | 1   |   | BOARD, CAN Driver (jumper wire installed)        |             |
| -   | -ES         | 4   |   | SPACER, non-treaded (67714451)                   |             |
| -   | -ES         | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)        |             |
| -   | -ES         | 4   |   | SPACERS, threaded (6738484)                      |             |
| -   | -ES         | 1   |   | PLATE, CAN Board protection (M09351213REVA)      |             |
| -   | -ES         | 4   |   | NUT, nylock                                      |             |
| 7   | -ES         | 1   |   | KNOB, 4 prong plastic (DK-57)                    |             |
| 8   | 53899-Rev C | 1   | ☐ | POD, ASSEMBLY - Left Joystick GS09351-210 Rev C  |             |
| 9   | 52905-ES    | 1   |   | JOYSTICK, (JC6000-GEN0028)                       |             |
| -   | -ES         | 1   |   | HARNESS, Joystick (M06220035RevA)                |             |
| -   | -ES         | 1   |   | HARNESS, control handle (M06220032RevB)          |             |
| 10  | 53818-ES    | 2   |   | Panel, 3-Switch (M09312-200 Rev A)               |             |
| -   | -ES         | 1   |   | HARNESS, 3-Switch panel (M09351-331 Rev A)       |             |
| 11  | -ES         | 1   |   | POT, Detented (GS06220036REVB)                   |             |
| 12  | 53932-ES    | 1   |   | BOARD, CAN Driver (jumper wire removed)          |             |
| -   | -ES         | 4   |   | SPACER, non-treaded (67714451)                   |             |
| -   | -ES         | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)        |             |
| -   | -ES         | 4   |   | SPACERS, threaded (6738484)                      |             |
| -   | -ES         | 1   |   | PLATE, CAN Board protection (M09351213REVA)      |             |
| -   | -ES         | 4   |   | NUT, nylock                                      |             |
| 13  | -ES         | 1   |   | KNOB, 4 prong plastic (DK-57)                    |             |



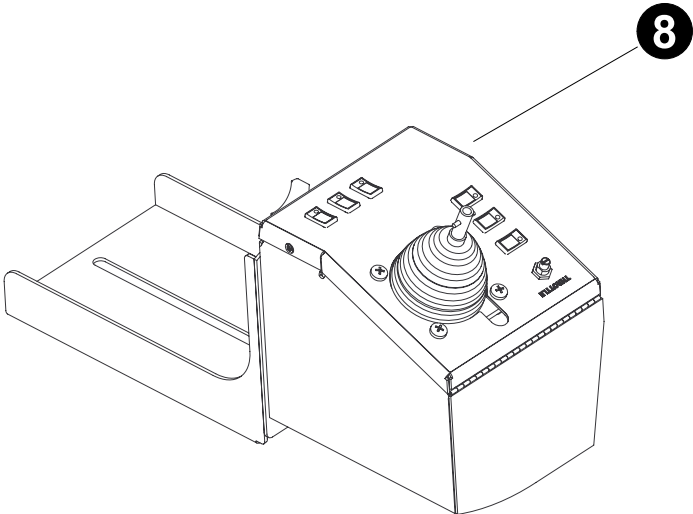
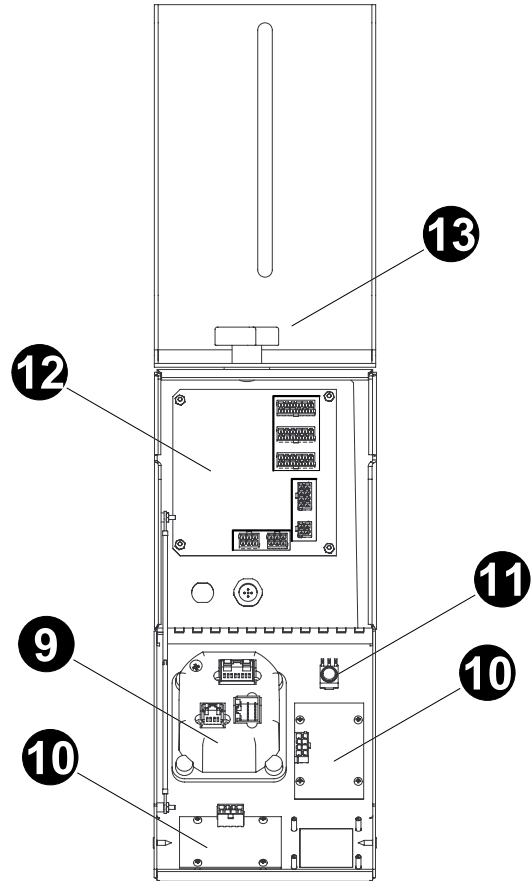
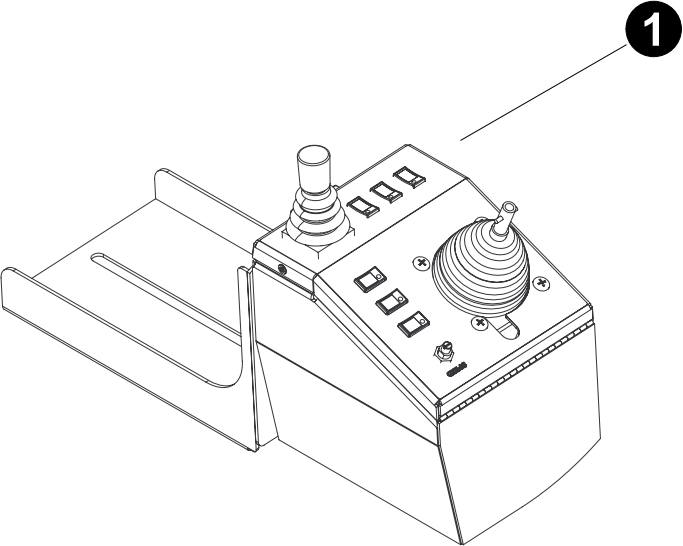
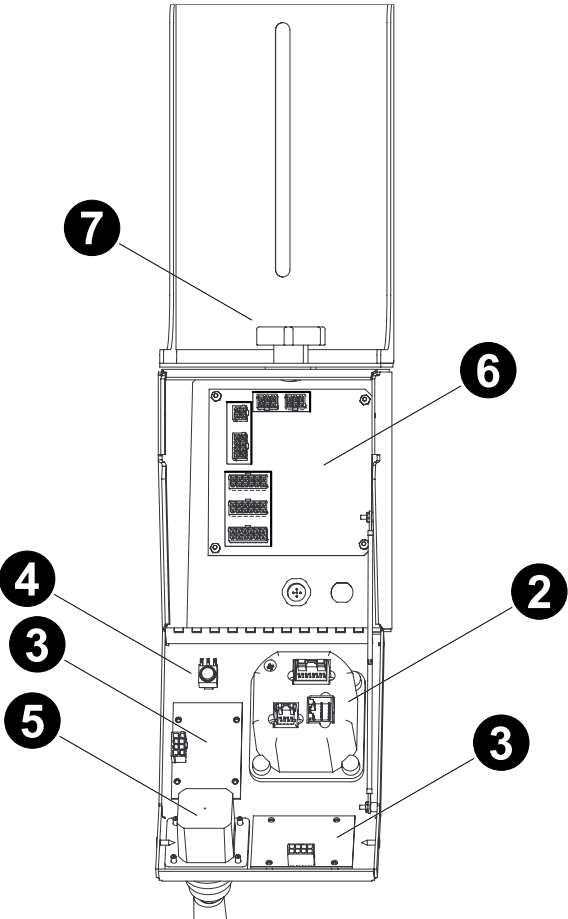
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



Parts T3803 09/09  
18.75

## IQAN - LEFT AND RIGHT CONTROL PANELS

(840B-0341-050410 and after)

| REF | PART #      | QTY |   | DESCRIPTION                                            | SEE SECTION |
|-----|-------------|-----|---|--------------------------------------------------------|-------------|
| 1   | 53898-Rev D | 1   | ☐ | POD, ASSEMBLY - Right Joystick (CAN) GS09351-220 Rev D |             |
| 2   | 54126-ES    | 1   |   | JOYSTICK, MDL (P&G) CAN RIGHT                          |             |
| -   | 54124-ES    | 1   |   | HARNESS, JOYSTICK - MDL CAN                            |             |
| -   | -ES         | 1   |   | HARNESS, control handle (M06220032RevB)                |             |
| 3   | 53818-ES    | 2   |   | Panel, 3-Switch (M09312-200 Rev A)                     |             |
| -   | -ES         | 1   |   | HARNESS, 3-Switch panel (M09351-331 Rev A)             |             |
| 4   | -ES         | 1   |   | POT, Detented (GS06220036REVB)                         |             |
| 5   | 53269-ES    | 1   |   | JOYSTICK, Steer (GS07207-037REVA) (optional)           |             |
| 6   | 53931-ES    | 1   |   | BOARD, CAN Driver (jumper wire installed)              |             |
| -   | -ES         | 4   |   | SPACER, non-treaded (67714451)                         |             |
| -   | -ES         | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)              |             |
| -   | -ES         | 4   |   | SPACERS, threaded (6738484)                            |             |
| -   | -ES         | 1   |   | PLATE, CAN Board protection (M09351213REVA)            |             |
| -   | -ES         | 4   |   | NUT, nylock                                            |             |
| 7   | -ES         | 1   |   | KNOB, 4 prong plastic (DK-57)                          |             |
| 8   | 53899-Rev E | 1   | ☐ | POD, ASSEMBLY - Left Joystick (CAN) GS09351-210 Rev E  |             |
| 9   | 54125-ES    | 1   |   | JOYSTICK, MDL (P&G) CAN LEFT                           |             |
| -   | 54124-ES    | 1   |   | HARNESS, JOYSTICK - MDL CAN                            |             |
| -   | -ES         | 1   |   | HARNESS, control handle (M06220032RevB)                |             |
| 10  | 53818-ES    | 2   |   | Panel, 3-Switch (M09312-200 Rev A)                     |             |
| -   | -ES         | 1   |   | HARNESS, 3-Switch panel (M09351-331 Rev A)             |             |
| 11  | -ES         | 1   |   | POT, Detented (GS06220036REVB)                         |             |
| 12  | 53932-ES    | 1   |   | BOARD, CAN Driver (jumper wire removed)                |             |
| -   | -ES         | 4   |   | SPACER, non-treaded (67714451)                         |             |
| -   | -ES         | 1   |   | HARNESS, CAN Driver Board (M06220030RevB)              |             |
| -   | -ES         | 4   |   | SPACERS, threaded (6738484)                            |             |
| -   | -ES         | 1   |   | PLATE, CAN Board protection (M09351213REVA)            |             |
| -   | -ES         | 4   |   | NUT, nylock                                            |             |
| 13  | -ES         | 1   |   | KNOB, 4 prong plastic (DK-57)                          |             |



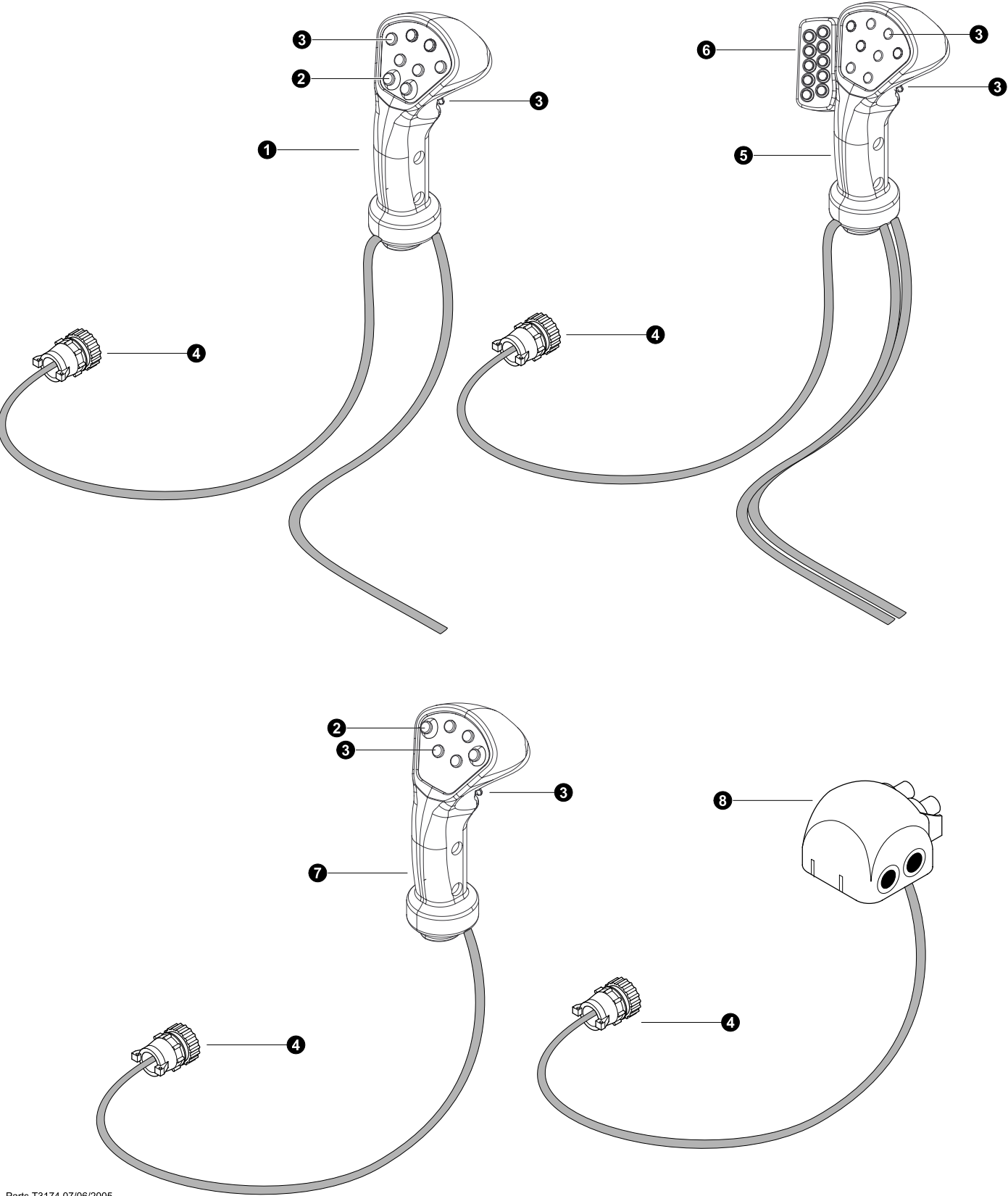
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



Parts T3174 07/06/2005  
50.00



## HANDCONTROL BREAKDOWN

| REF | PART #   | QTY | DESCRIPTION                                                | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------|-------------|
| 1   | 51567-ES | 1   | HAND CONTROL, SURE GRIP - LH (LOGMAX)                      |             |
| 2   | 51947-ES | -   | SWITCH, PUSH BUTTON REPAIR KIT (PROPORTIONAL)              |             |
| -   | 52094-ES | -   | KIT, REPAIR - PROPORTIONAL BUTTON COVER                    |             |
| 3   | 20961-ES | -   | SWITCH, PUSH BUTTON (DIGITAL)                              |             |
| 4   | 50372-ES | 1   | CONNECTOR, PLUG - 14 POS AMP                               |             |
| 5   | 51566-ES | 1   | HAND CONTROL, SURE GRIP - RH W/KEYPAD (LOGMAX)             |             |
| 6   | 52095-ES | 10  | SWITCH, PUSH BUTTON (SURE GRIP KEYPAD)                     |             |
| 7   | 51809-ES | 1   | HAND CONTROL, UPPER - SURE GRIP - Digital and Proportional |             |
| 8   | 50505-ES | 1   | HAND CONTROL, UPPER - P&G (FORWARDER OPTION)               |             |



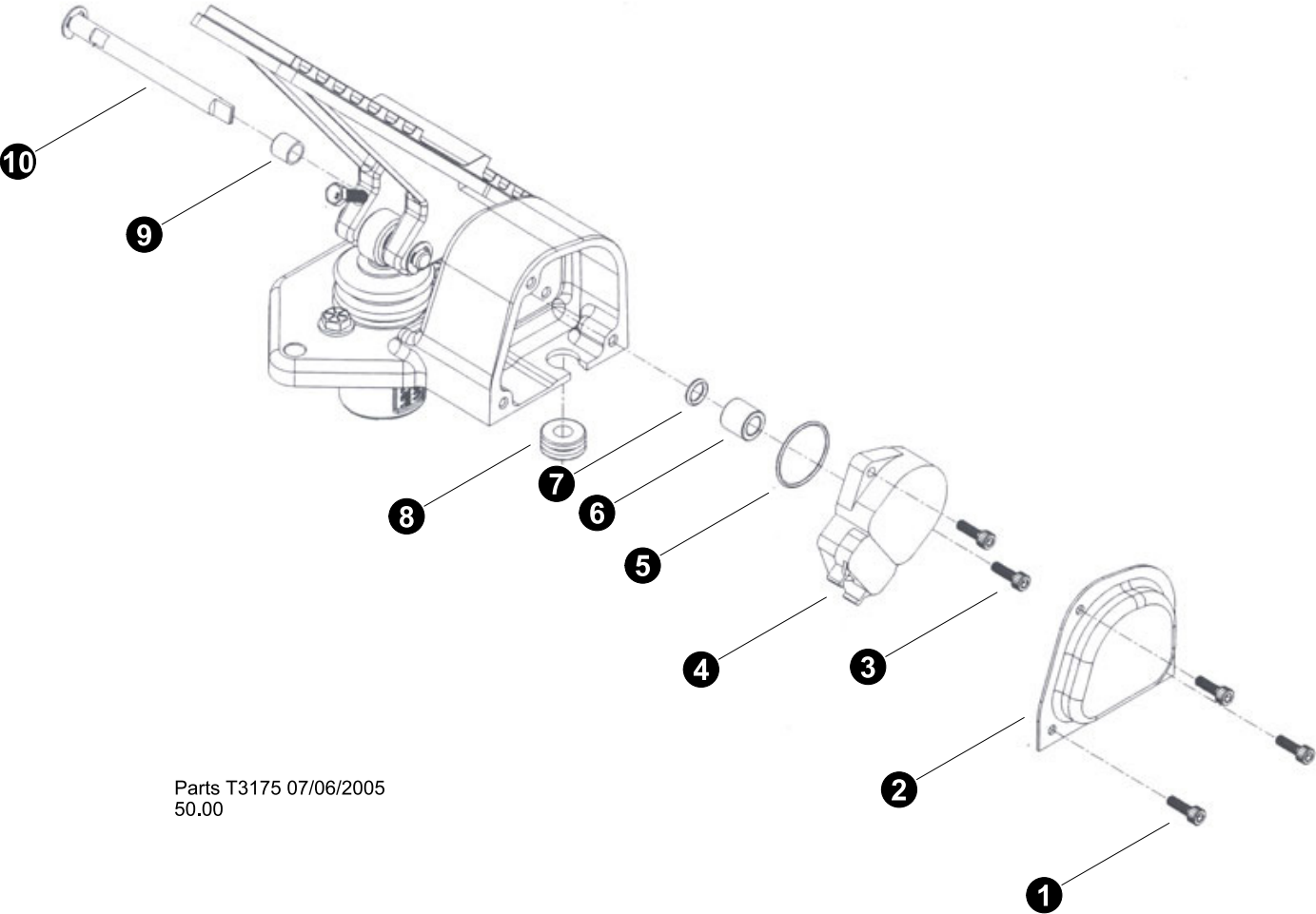
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



**BRAKE PEDAL CONTROL**

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| -   | 51626-ES | 1   | ☐ | PEDAL, BRAKE CONTROL - ELECTRONIC TF830 |             |
| 1   | -        | 3   |   | SCREW                                   |             |
| 2   | -        | 1   |   | COVER                                   |             |
| 3   | -        | 2   | ⌘ | SCREW                                   |             |
| 4   | -        | 1   | ⌘ | POSITION SENSOR                         |             |
| 5   | -        | 1   | ⌘ | O-RING                                  |             |
| 6   | -        | 1   | ⌘ | BEARING                                 |             |
| 7   | -        | 1   | ⌘ | ORING                                   |             |
| 8   | -        | 1   | ⌘ | GROMMET                                 |             |
| 9   | -        | 1   |   | BEARING                                 |             |
| 10  | -        | 1   |   | PIN                                     |             |
| -   | 52096-ES | 1   | ⌘ | KIT, REPAIR - MICO BRAKE PEDAL          |             |



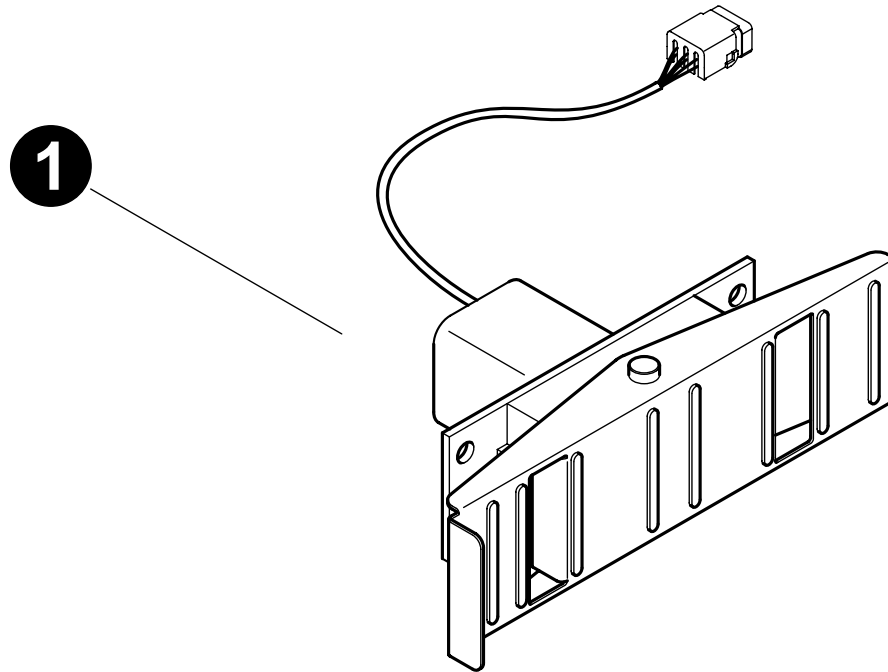
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in repair kit



Parts T3176 07/06/2005  
50.00

**WHEEL DRIVE CONTROL PEDAL**

| REF | PART #   | QTY | DESCRIPTION                                              | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------|-------------|
| 1   | 51491-ES | 1   | PEDAL, FOOT CONTROL - DUAL AXIS , OTTO CONTROLS (SEALED) |             |

***Disassembly of these components is not recommended.***



See referenced page for component or assembly breakdown.

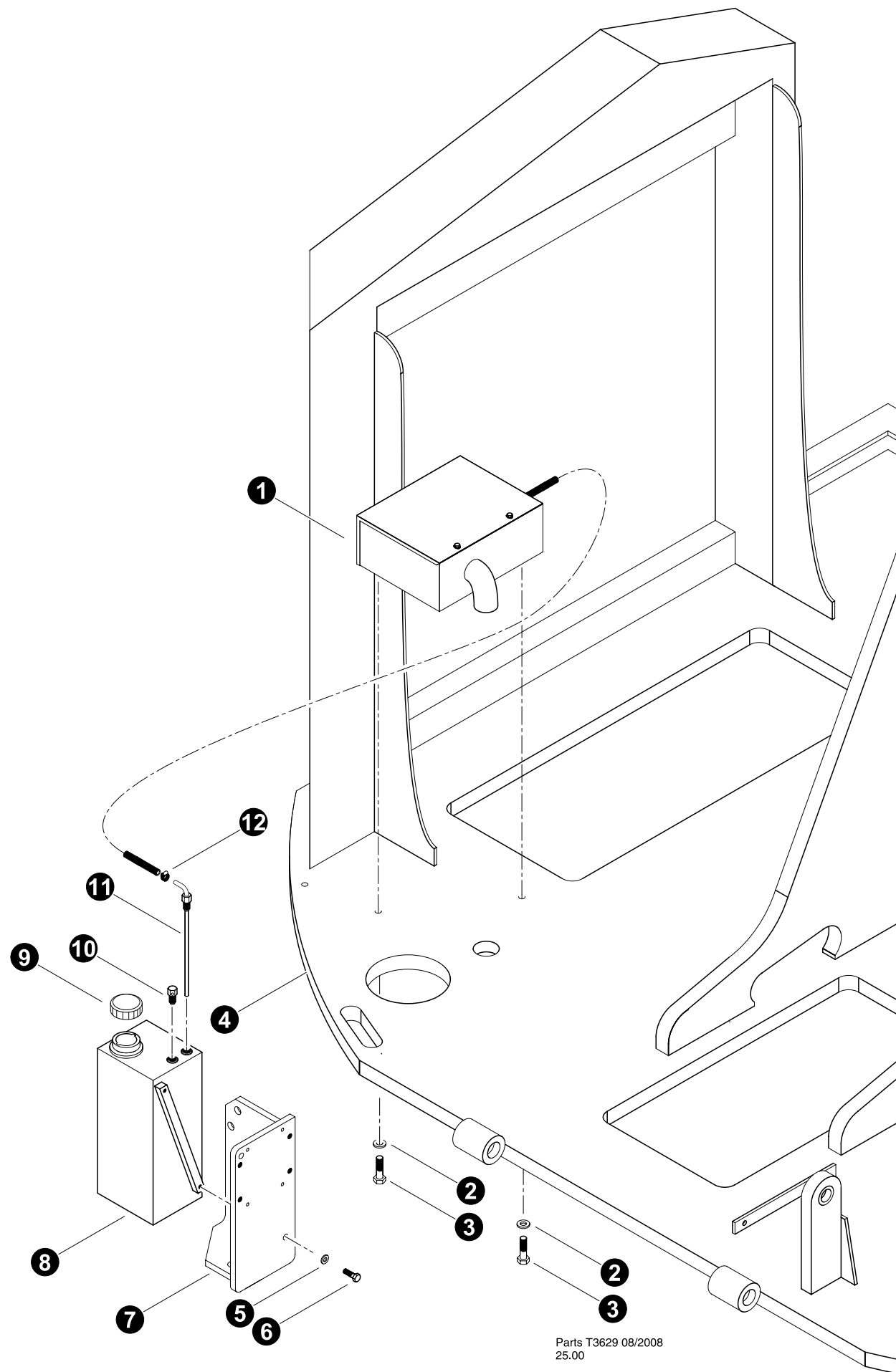
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# ***Section OH-1***

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## ***Optional Heaters- Espar Heater Installation***



Parts T3629 08/2008  
25.00

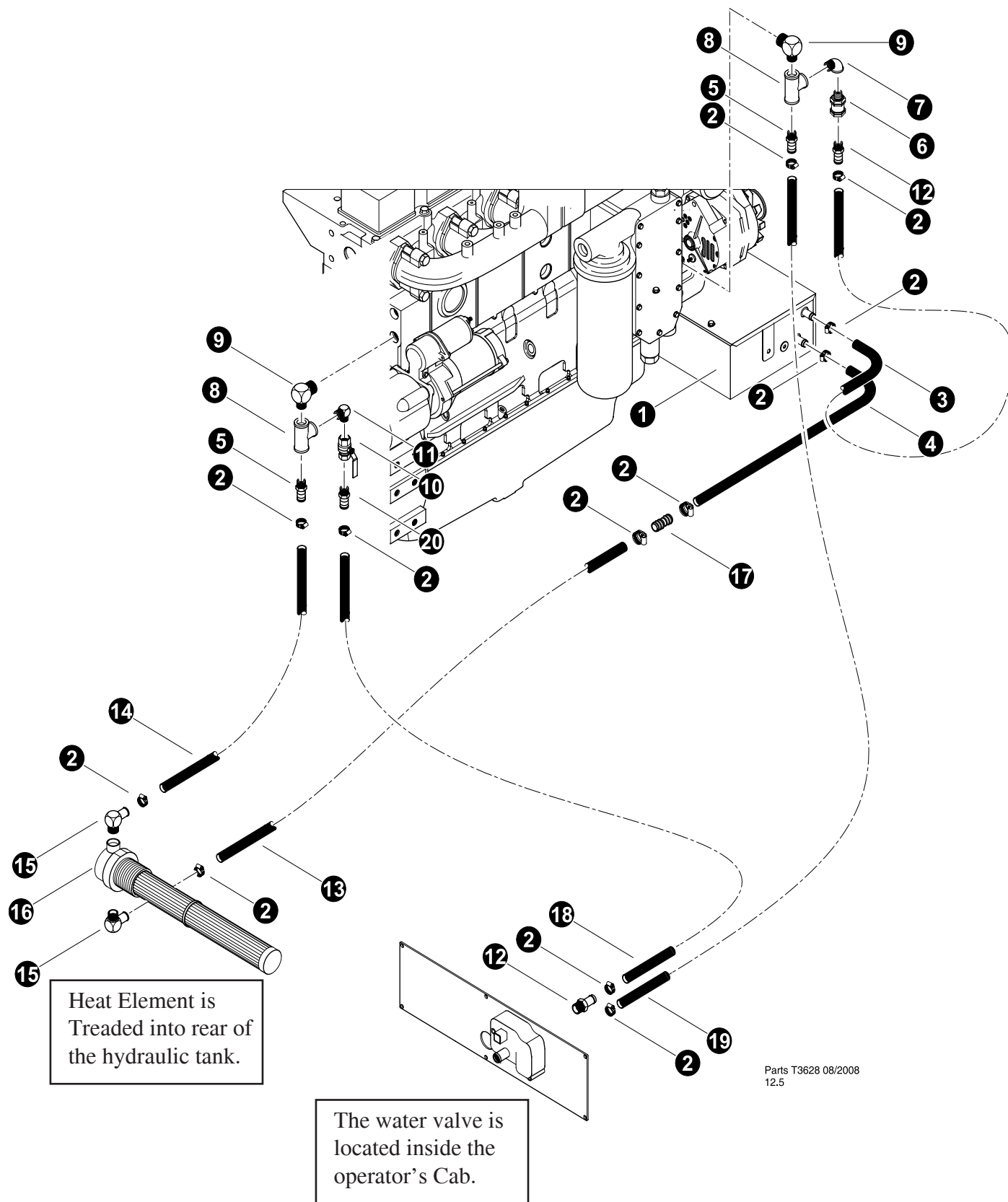


## Espar Heater (Heater Installation)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                        |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------|
| 1   | REF      | 1   |  | ESPAR PRE-HEATER SYSTEM ..... OH-2 |
| 2   | 15528-OH | 2   |                                                                                   | WASHER, SAE FLAT - .375"           |
| 3   | 15529-OH | 2   |                                                                                   | BOLT - .375" X 2"                  |
| 4   | REF      | 1   |  | UPPER TURNTABLE ..... UP-1         |
| 5   | 10801-OH | 2   |                                                                                   | WASHER, FLAT - .3125"              |
| 6   | 15589-OH | 2   |                                                                                   | BOLT - .3125" X 1"                 |
| 7   | REF      | 1   |  | MOUNT, FRONT ENGINE ..... EE-1     |
| 8   | 52930-OH | 1   |                                                                                   | TANK, PROHEAT FUEL                 |
| 9   | 52965-OH | 1   |                                                                                   | CAP, ESPAR FUEL TANK               |
| 10  | 22906-OH | 1   |                                                                                   | BEATHER, fuel vent                 |
| 11  | -OH      | 1   |                                                                                   | SUCTION TUBE, ESPAR FUEL TANK      |
| 12  | 10759-OH | 1   |                                                                                   | CLAMP, HOSE - WORM STYLE - .875"   |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



## Espar Heater (Heater Installation) Cummins QSC 8.3L

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              |      |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|------|
| 1   | REF      | 1   |  | ESPAR PRE-HEATER SYSTEM .....            | OH-2 |
| 2   | 16256-OH | 12  |                                                                                   | CLAMP, HOSE - WORM STYLE - 1"            |      |
| 3   | 52035-OH | 1   |                                                                                   | HOSE, 90 degree (18075)                  |      |
| 4   | 52036-OH | 1   |                                                                                   | HOSE, 90 degree (28470)                  |      |
| 5   | 51774-OH | 2   |                                                                                   | NIPPLE, KING - .38NPT X .63 HOSE         |      |
| 6   | 15652-OH | 1   |                                                                                   | VALVE, CHECK - HYDRAULIC/FUEL TANK       |      |
| 7   | 52786-OH | 1   |                                                                                   | ELBOW, 90° STREET -1/2 X 3/8 CD-S        |      |
| 8   | 16125-OH | 2   |                                                                                   | TEE, BLACK - .5"                         |      |
| 9   | 52785-OH | 2   |                                                                                   | ELBOW, MALE PIPE - 3/4 X 1/2 CR-S        |      |
| 10  | 51714-OH | 1   |                                                                                   | VALVE, BALL - WATER SHUT OFF HEATER 1/2" |      |
| 11  | 16305-OH | 1   |                                                                                   | ELBOW, BLACK 90 - .5"                    |      |
| 12  | 51502-OH | 2   |                                                                                   | NIPPLE, KING - .38NPT X .63 HOSE         |      |
| 13  | 16717-OH | 33" |  | HOSE, HEATER - (BULK ROLL) .625" X 250'  |      |
| 14  | 52736-OH | 35" |                                                                                   | HOSE, HEATER - 5/8" X 35" - WRAPPED      |      |
| 15  | 51974-OH | 1   |                                                                                   | ELBOW, 90 - 4501-10-12                   |      |
| 16  | 51437-OH | 1   |                                                                                   | HEATER, element - Artic Fox              |      |
| 17  | 52578-OH | 1   |                                                                                   | HOSE BARB 5/8" BRASS SPLICER             |      |
| 18  | 52739-OH | 1   |                                                                                   | HOSE, HEATER - 3/4" X 110" WRAPPED       |      |
| 19  | 16717-OH | 80" |  | HOSE, HEATER - (BULK ROLL) .625" X 250'  |      |
| 20  | 53075-OH | 1   |                                                                                   | NIPPLE - 125HBL12-8                      |      |



Bulk material - order length required in feet or meters.



Kit or Assembly - includes all items indented underneath.



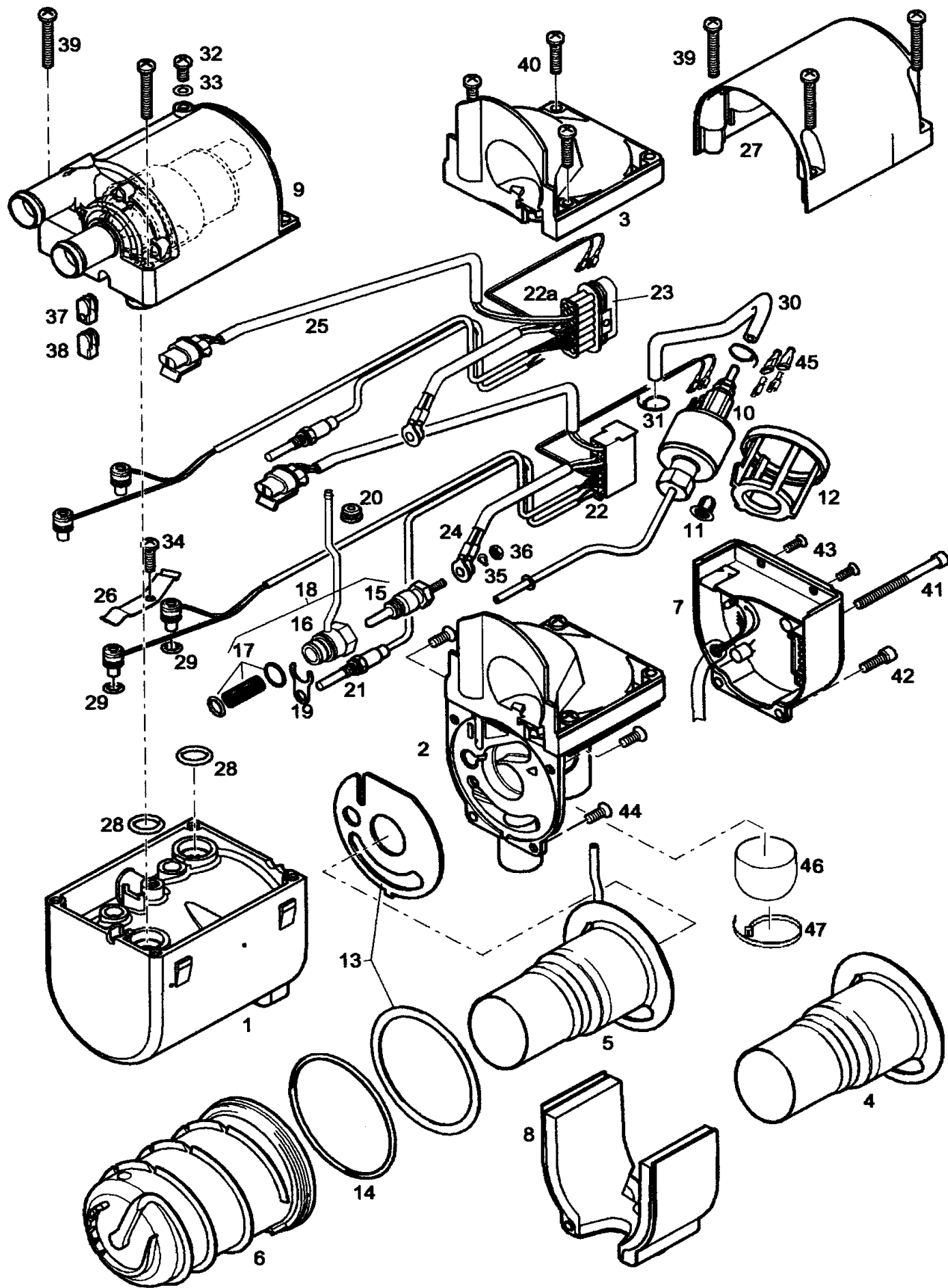
See referenced page for component or assembly breakdown.

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## ***Section OH-2***

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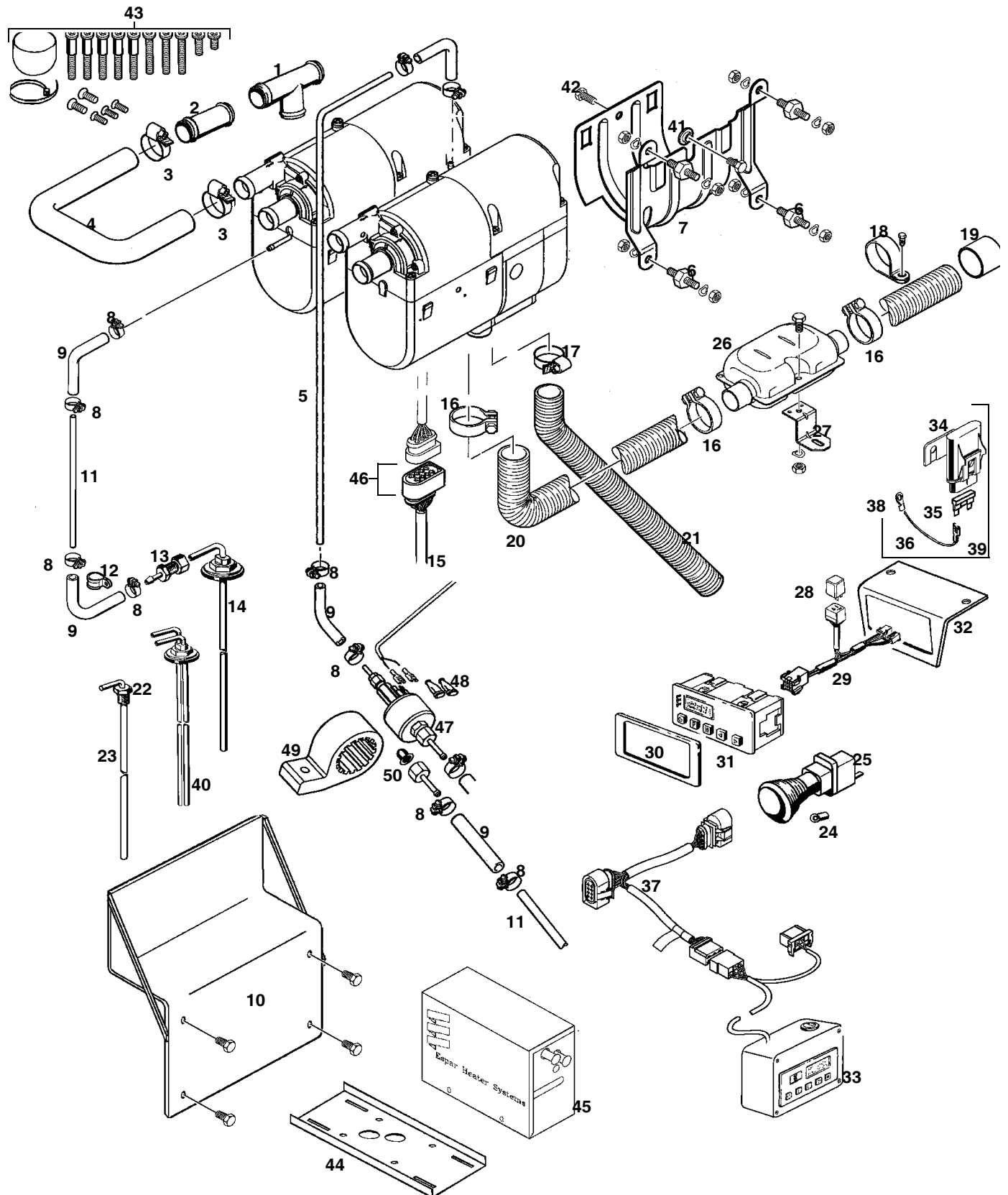
### ***Optional Heaters- Espar Parts Breakdown***



## Espar hydronic - Pre Heater (heater breakdown)

| REF | PART #   | QTY | DESCRIPTION                                                    |
|-----|----------|-----|----------------------------------------------------------------|
| -   | 51578-OH | 1   | <input type="checkbox"/> KIT, PREHEATER - ESPAR (24V)          |
| 1   |          | 1   | OUTER CASING (251922010101)                                    |
| 2   |          | 1   | CUMBUSTION AIR BLOWER with COVER (252146991500) .              |
| 3   |          | 1   | COVER (252137010002)                                           |
| 4   |          | 1   | BURNER                                                         |
| 5   |          | 1   | BURNER (252146100000)                                          |
| 6   |          | 1   | HEAT EXCHANGER (251922060001)                                  |
| 7   |          | 1   | CONTROL UNIT (225202001003)                                    |
| 8   |          | 1   | COVER                                                          |
| 9   |          | 1   | WATER PUMP (252118250000)                                      |
| 10  |          | 1   | FUEL METERING PUMP (251942450000)                              |
| 11  |          | 1   | STRAINER                                                       |
| 12  |          | 1   | PUMP HOLDER (251864990021)                                     |
| 13  |          | 1   | SEAL & GASKET (251864990021)                                   |
| 14  |          | 1   | O-RING (32075104)                                              |
| 15  |          | 1   | GLOW PIN (252107011000)                                        |
| 16  |          | 1   | GLOW PIN CONNECTION                                            |
| 17  |          | 1   | LINING AND 2 O-RINGS                                           |
| 18  |          | 1   | PLUG CONNECTION COMPLETE (252147011300)                        |
| 19  |          | 1   | HOLDER (201752010004)                                          |
| 20  |          | 1   | SLEEVE (201752010002)                                          |
| 21  |          | 1   | FLAME SENSOR (251920350000)                                    |
| 22  |          | 1   | OVERHEAT & TEMP SENSORS \ CABLE & CONNECTORS<br>(252147012000) |
| 23  |          | 1   | CONTROL UNIT PLUG - COMPLETE (221000301010)                    |
| 24  |          | 1   | CABLE SECTION, GLOW PLUG (251920011800)                        |
| 25  |          | 1   | CABLE, WATER PUMP (201753011800)                               |
| 26  |          | 1   | SPRING LEAF (251922010005)                                     |
| 27  |          | 1   | COVER FUEL METERING PUMP (251917010003)                        |
| 28  |          | 1   | ORING (32075119)                                               |
| 29  |          | 1   | ORING, SENSOR (32075111)                                       |
| 30  |          | 1   | FUEL HOSE (251917010011)                                       |
| 31  |          | 1   | HOSE CLIP (20931071)                                           |
| 32  |          | 1   | BLEED SCREW (251917250012)                                     |
| 33  |          | 1   | BLEED SCREW WASHER                                             |
| 34  |          | 1   | TAPITE SCREW (10910104)                                        |
| 35  |          | 1   | SPRING WASHER (17122112)                                       |
| 36  |          | 1   | NUT (11010024)                                                 |
| 37  |          | 1   | SLEEVE (251917010005)                                          |
| 38  |          | 1   | GROMMET                                                        |
| 39  |          | 1   | BOLT M5X35 (10910027)                                          |
| 40  |          | 1   | BOLT M5X25 (10910102)                                          |
| 41  |          | 1   | BOLT (10010300)                                                |
| 42  |          | 1   | BOLT M5X16 (10910101)                                          |
| 43  |          | 1   | SCREW M4X10 (10910100)                                         |
| 44  |          | 1   | SCREW (10210400)                                               |
| 45  |          | 1   | BOOT (32031120)                                                |
| 46  |          | 1   | DUST COVER (CA000073)                                          |

☐ Kit or Assembly - includes all items indented underneath.





## Espar hydronic - Pre Heater (heater breakdown)

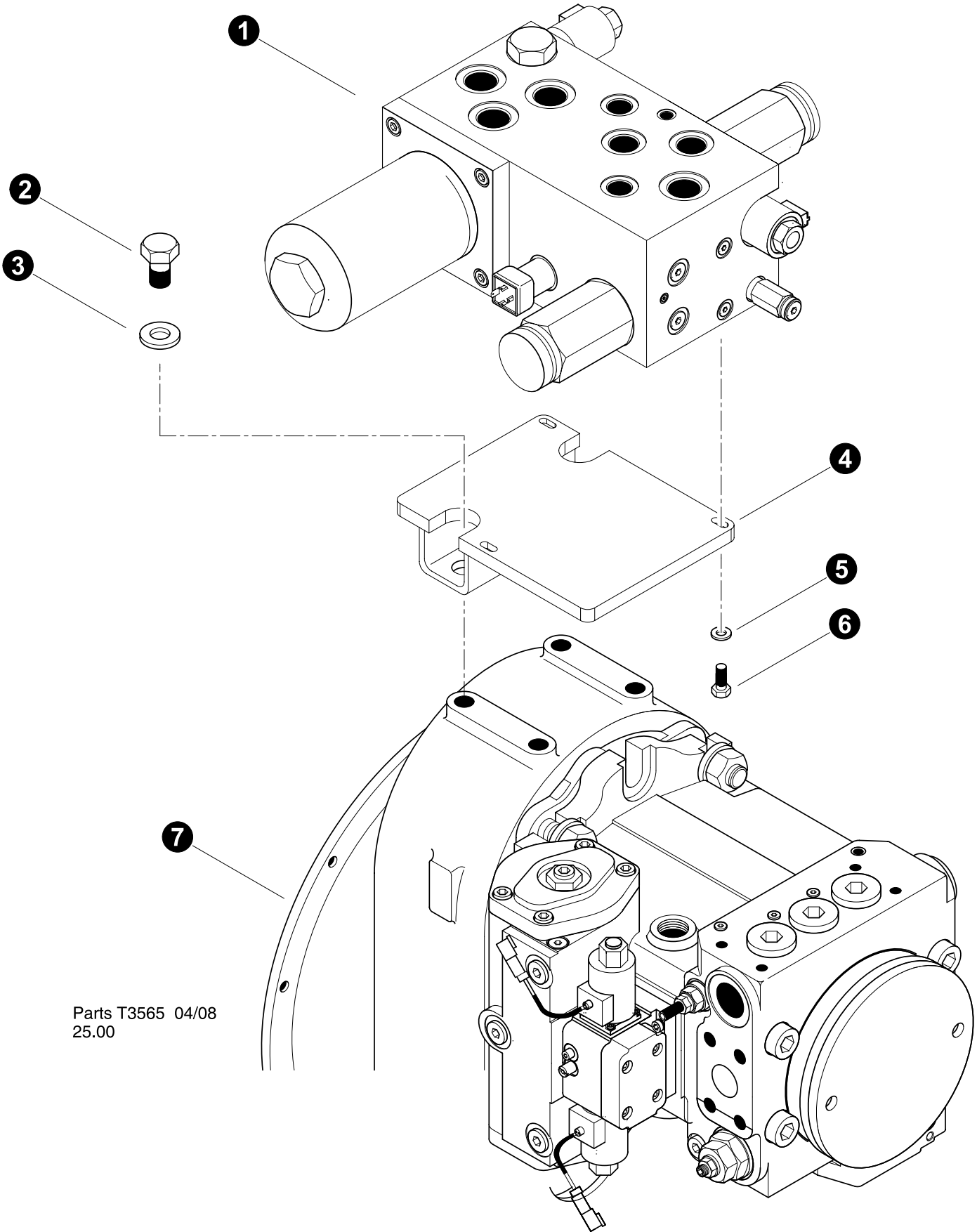
| REF | PART #   | QTY | DESCRIPTION                                          |
|-----|----------|-----|------------------------------------------------------|
| -   | 51578-OH | 1   | <input type="checkbox"/> KIT, PREHEATER - ESPAR (24V |
| 1   |          | 1   | T-PIECE 20MM (201673801100)                          |
| 2   |          | 1   | CONNECTING PIPE (201534880001)                       |
| 3   |          | 1   | CLAMP 20MM-32MM (102065020032)                       |
| 4   |          | 1   | HOSE (251917800001)                                  |
| 5   |          | 1   | 1.5M PLASTIC FUEL LINE (09031118)                    |
| 6   |          | 1   | MOUNT (201185000001)                                 |
| 7   |          | 1   | HEATER BRACKET (251864800001)                        |
| 8   |          | 1   | HOSE CLAMP 9 MM (102063009098)                       |
| 9   |          | 1   | HOSE, FUEL (36075300)                                |
| 10  |          | 1   | BRACKET (CA010085)                                   |
| 11  |          | 1   | FUEL LINE 2MM (09031117)                             |
| 12  |          | 1   | CLAMP, PIPE 10MM (15200147)                          |
| 13  |          | 1   | FUEL PIPE REDUCER (CA012092)                         |
| 14  |          | 1   | FUEL PICK UP (CA012056)                              |
| 15  |          | 1   | MAIN HEATER HARNESS (CA160502-001)                   |
| 16  |          | 1   | EXHAUST CLAMP 27-30MM (15261102)                     |
| 17  |          | 1   | INTAKE HOSE CLAMP102064016025)                       |
| 18  |          | 1   | C CLAMP 28MM (15210051)                              |
| 19  |          | 1   | EXHAUST SLEEVE (251729800600)                        |
| 20  |          | 1   | EXHAUST HOSE (36061299)                              |
| 21  |          | 1   | INTAKE HOSE (36000099)                               |
| 22  |          | 1   | COMPRESSION FITTING                                  |
| 23  |          | 1   | STRAIT PICKUP TUBE                                   |
| 24  |          | 1   | BULB 24V (20700006)                                  |
| 25  |          | 1   | SWITCH 24V (CA100004)                                |
| 26  |          | 1   | MUFFLER (251864810100)                               |
| 27  |          | 1   | CLAMP (201533880007)                                 |
| 28  |          | 1   | RELAY 24V (20300092)                                 |
| 29  |          | 1   | HARNESS ADAPTER, TIMER (CA160008001)                 |
| 30  |          | 1   | BEZEL, TIMER (251482700700)                          |
| 31  |          | 1   | TIMER, 7 DAY (221000303600) KIT W/HARNESS (CA100136) |
| 32  |          | 1   | BRACKET, TIMER (CA010061)                            |
| 33  |          | 1   | FAULT CODE DEVICE (CA105020)                         |
| 34  |          | 1   | MAIN FUSE HOLDER (CA107001)                          |
| 35  |          | 1   | FUSE (CA107005)                                      |
| 36  |          | 1   | WIRE, RED (CA161908)                                 |
| 37  |          | 1   | HARNESS, FAULT CODE (CA105028)                       |
| 38  |          | 1   | TERMINAL 3/8" (CA190014)                             |
| 39  |          | 1   | FUSE LINK HARNESS (CA165108)                         |
| 40  |          | 1   | DOUBLE PICKUP (CA012057001)                          |
| 41  |          | 1   | SPACER (251864800002)                                |
| 42  |          | 1   | SCREW (CA300103)                                     |
| 43  |          | 1   | REPLACEMENT HARDWARE KIT (CA100190)                  |
| 44  |          | 1   | BRACKET, FRAME MOUNT (CA010028)                      |
| 45  |          | 1   | BOX, BASE (CA010101) LID (CA010102)                  |
| 46  |          | 1   | PLUG CABLES - COMPLETE (221000301021)                |
| 47  |          | 1   | FUEL PUMP 24V (221000500300)                         |
| 48  |          | 1   | BOOT SLEEVE (32031120)                               |
| 49  |          | 1   | FUEL PUMP HOLDER (221000500300)                      |
| 50  |          | 1   | FILTER, FUEL (224502000100)                          |

This image shows a single page from a notebook or ledger. It features a series of evenly spaced, thin black horizontal lines running across the width of the page. The background is plain white, and there are no margins, text, or other markings present.

# ***Section DH-1***

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## ***Drive Hydraulics - Charge Pressure Circuit***



Parts T3565 04/08  
25.00

## CHARGE FILTER MANIFOLD INSTALLATION

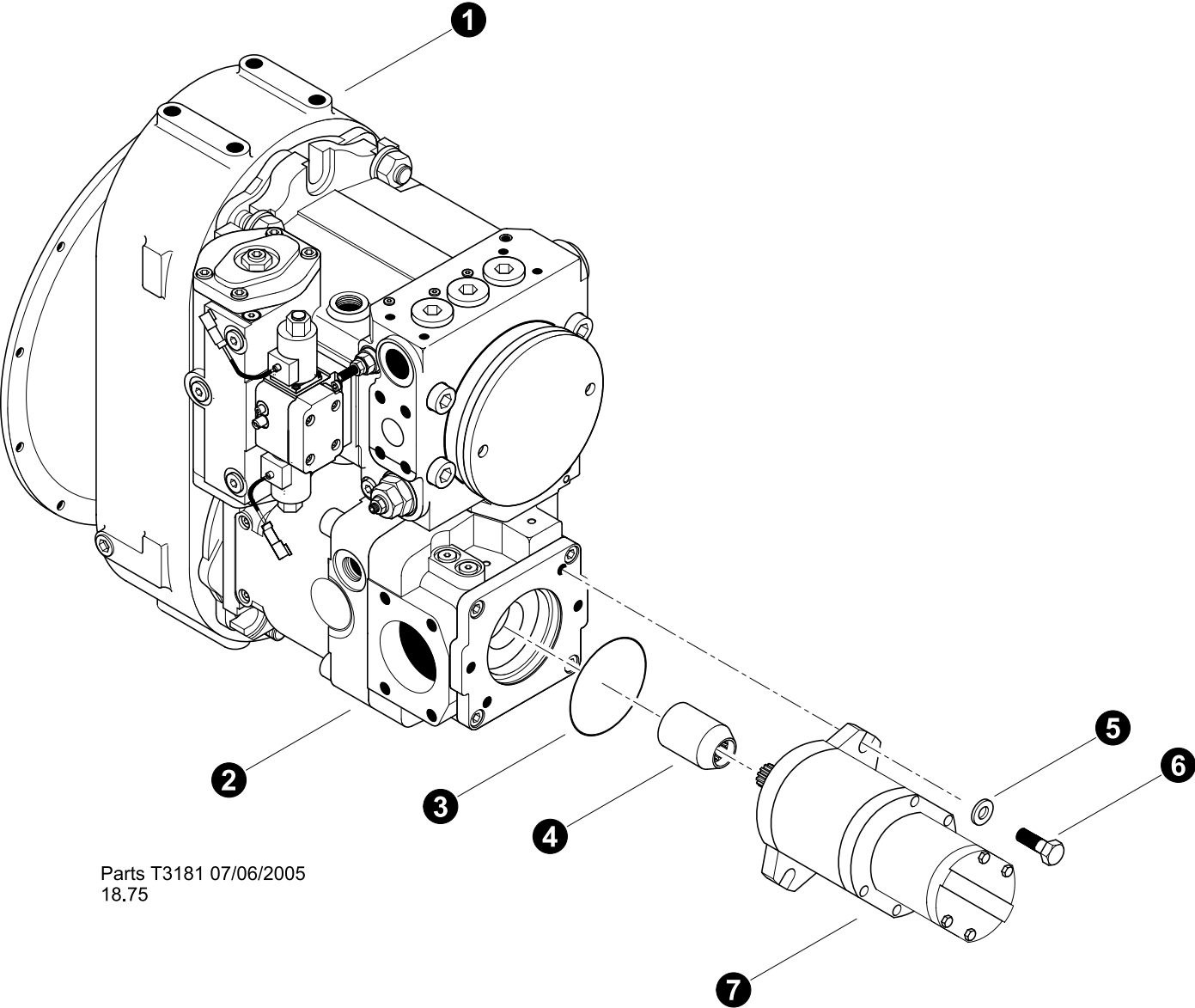
| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | REF      | 1   | FAN CONTROL / CHARGE MANIFOLD ..... | UP-3        |
| 2   | 24088-DH | 2   | BOLT - .5625" X 1.25"               |             |
| 3   | 10771-DH | 2   | WASHER, SAE FLAT - .5/8"            |             |
| 4   | 52961-DH | 1   | MOUNT, FAN/CHARGE VALVE             |             |
| 5   | 10731-DH | 3   | WASHER, SAE FLAT - .5/8"            |             |
| 6   | 10731-DH | 3   | BOLT - .375" X 1.5"                 |             |
| 7   | REF      | 1   | PUMP DRIVE TRANSMISSION.....        | EE-4        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



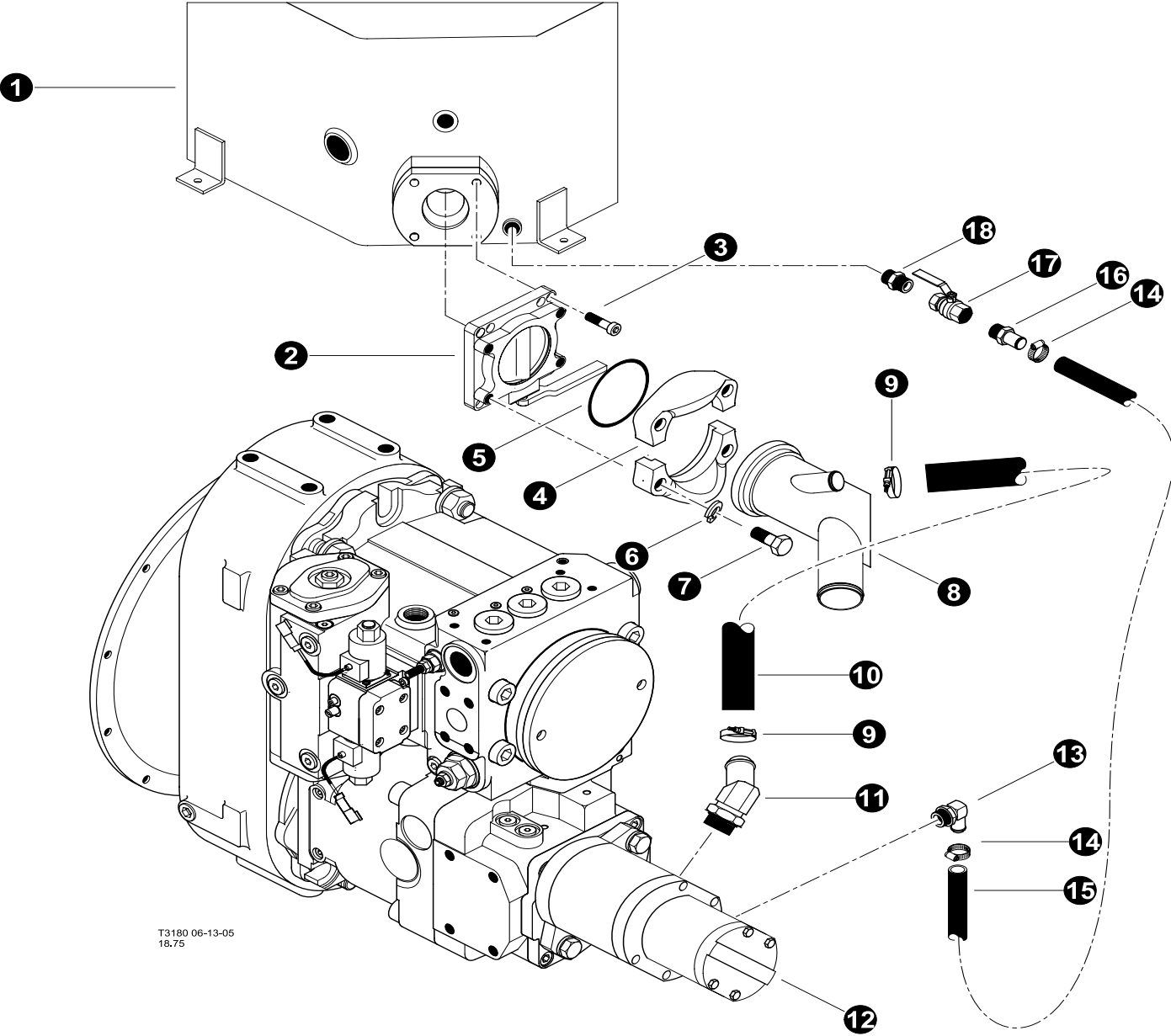
Parts T3181 07/06/2005  
18.75

**CHARGE PUMP INSTALLATION**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.     | 1   |  | DUAL PUMP DRIVE TRANSMISSION. ....       | EE-2        |
| 2   | REF.     | 1   |  | IMPLEMENT PUMP .....                     | LH,HH       |
| 3   | 18844-DH | 1   |                                                                                   | O-RING, THRU DRIVE COVER - REXROTH 130CC |             |
| 4   | 23480-DH | 1   |                                                                                   | COUPLING, SHAFT REX130 IMP/CHARGE PUMP-B |             |
| 5   | 15534-DH | 2   |                                                                                   | WASHER, SAE FLAT - .5"                   |             |
| 6   | 50100-DH | 2   |                                                                                   | BOLT - .5" X 1.25"                       |             |
| 7   | REF      | 1   |  | CHARGE PUMP ASSEMBLY .....               | DH-3        |



See referenced page for component or assembly breakdown.





**CHARGE PUMP INLET (SUCTION)**

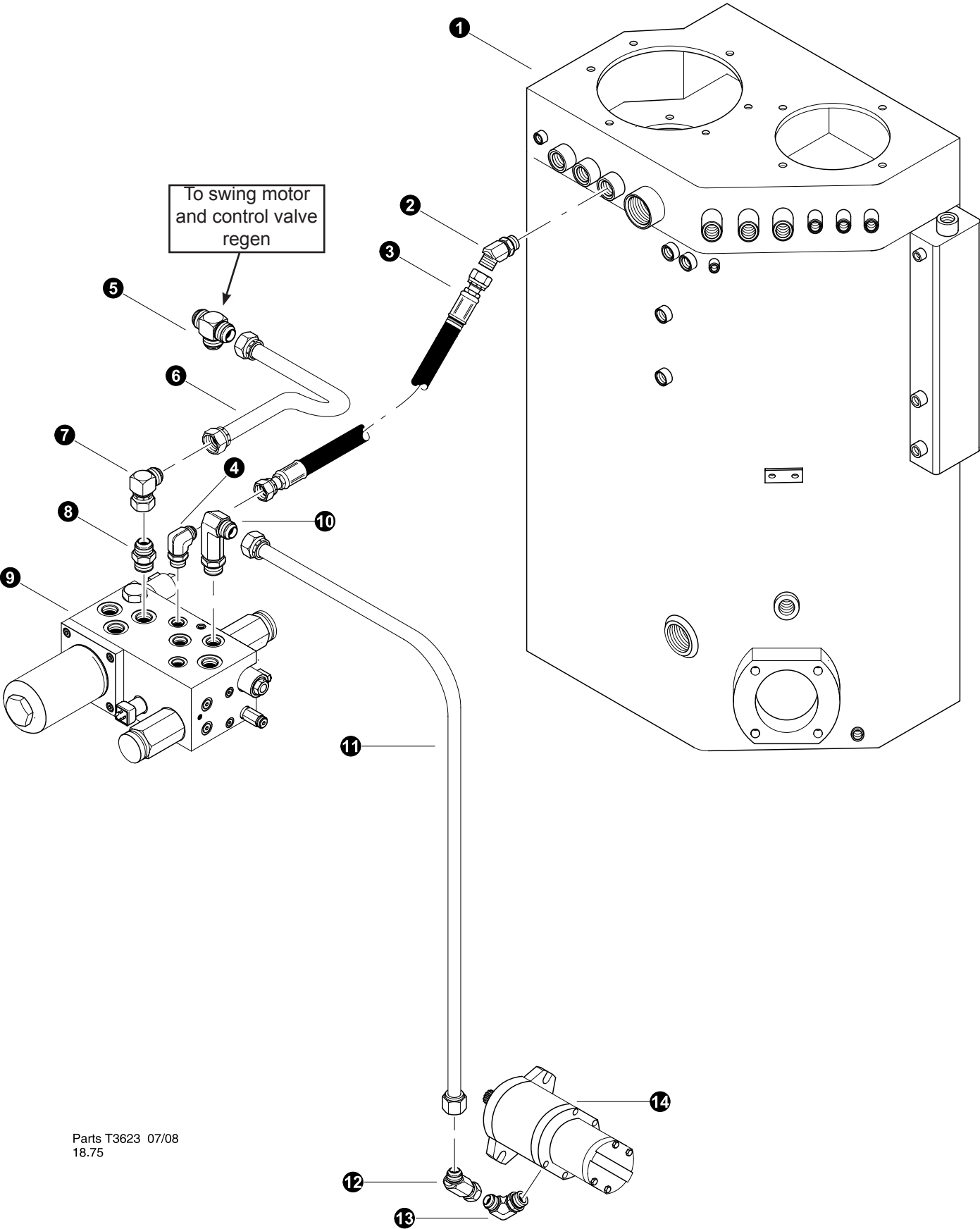
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------|-------------|
| 1   | REF      | 1   |  | HYDRAULIC TANK ASSEMBLY.....                   | UP-2        |
| 2   | 51619-DH | 1   |                                                                                   | VALVE, SHUT OFF - BUTTERFLY (4")               |             |
| 3   | 23095-DH | 4   |                                                                                   | BOLT, ALLEN HEAD - .625" x 2"                  |             |
| 4   | 51625-DH | 1   |  | KIT, FLANGE - SUCTION TUBE (4" )               |             |
| 5   |          | 1   |                                                                                   | O-RING - SUCTION TUBE (4")                     |             |
| 6   | 10721-DH | 4   |                                                                                   | WASHER, LOCK - .625"                           |             |
| 7   | 15526-DH | 4   |                                                                                   | BOLT - .625" X 2"                              |             |
| 8   | 42461-DH | 1   |                                                                                   | TUBE, SUCTION - 4" FLANGE - W/O DISC SAW PUMP  |             |
| 8   | 51886-DH | 1   |                                                                                   | TUBE, SUCTION - 4" FLANGE - WITH DISC SAW PUMP |             |
| 9   | 15641-DH | 2   |                                                                                   | CLAMP, strap band - 2"                         |             |
| 10  | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 2015-24-0-0                    |             |
| 11  | 51830-DH | 1   |                                                                                   | NIPPLE, KING SUCTION 1.5 X 20 SAE (45 DEGREE)  |             |
| 12  | REF.     | 1   |  | WHEEL DRIVE CHARGE PUMP.....                   | DH-3        |
| 13  | 52784-DH | 1   |                                                                                   | MALE ORB 90 DEGREE HOSE BARB #12               |             |
| 14  | 15629-DH | 2   |                                                                                   | CLAMP, HOSE - WORM STYLE - 1.5"                |             |
| 15  | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 2023-12-0-0                    |             |
| 16  | 52620-DH | 1   |                                                                                   | CONNECTOR, STR HOSE BARB - 4404-12-12          |             |
| 17  | 52618-DH | 1   |                                                                                   | VALVE, BALL - HYDRAULIC SUCTION 3/4"           |             |
| 18  | 52698-DH | 1   |                                                                                   | CONNECTOR, MALE SAE X MALE NPT 12-3/4          |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3623 07/08  
18.75

**CHARGE CIRCUIT (Pressure, Tank, and Regen)**

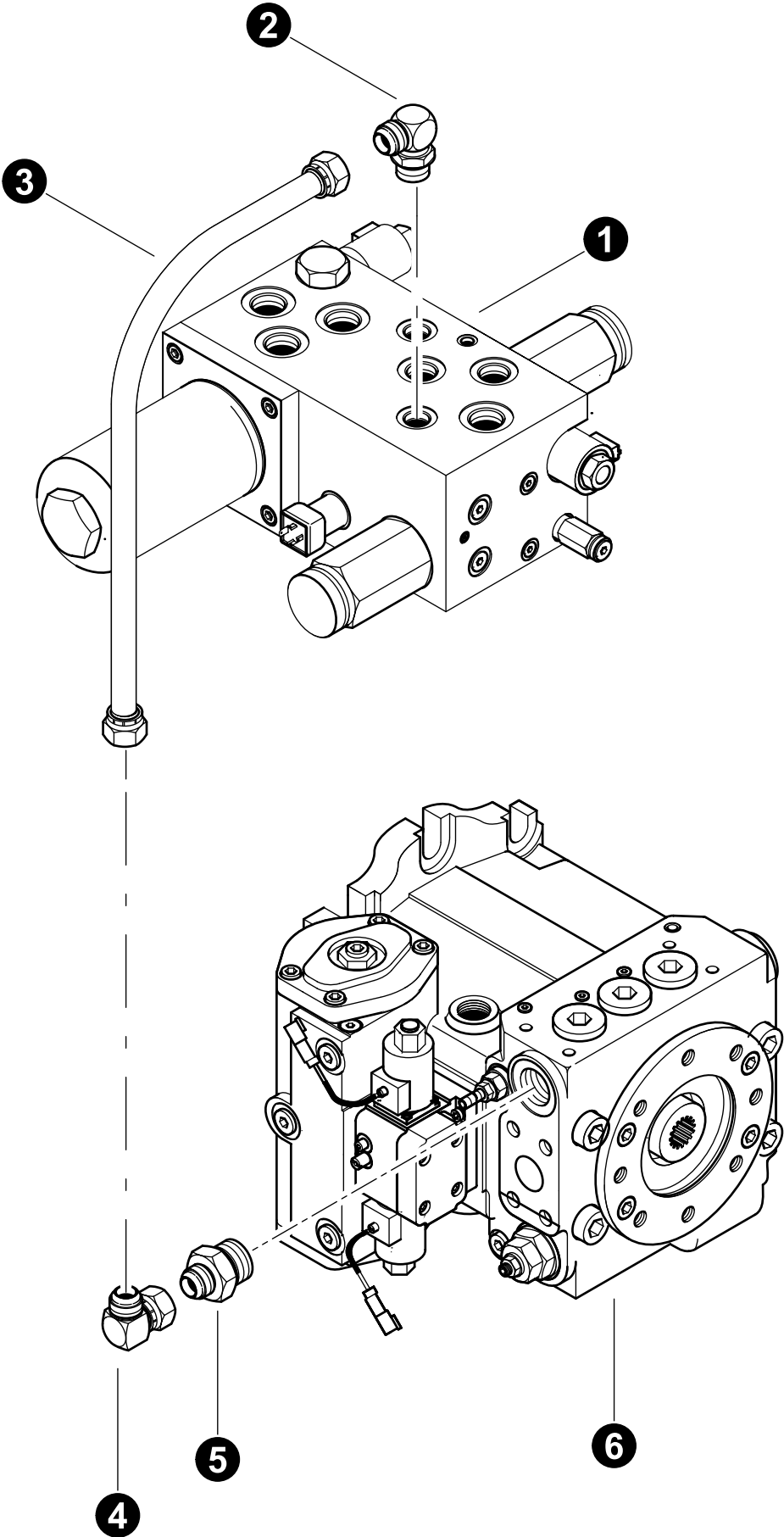
| REF | PART #   | QTY | DESCRIPTION                                                    | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------------|-------------|
| 1   | REF      | 1   | HYDRAULIC TANK ASSEMBLY.....                                   | UP-2        |
| 2   | 19127-DH | 1   | ELBOW, 45 - FF2068T-1212S                                      |             |
| 3   | -DH      | 1   | HOSE ASSEMBLY - 2136 12 12OS 1204 (T2 port to Hyd Tank Return) |             |
| 4   | 15484-DH | 1   | ELBOW, 90 - 16 C5OX-S                                          |             |
| 5   | 52970-DH | 1   | TEE, UNION - 16 JTXO                                           |             |
| 6   | 53128-DH | 1   | TUBELINE, CHARGE/FAN MANIFOLD 'T1' PORT                        |             |
| 7   | 52968-DH | 1   | ELBOW, 90 - 16 C6XO JIC                                        |             |
| 8   | 15497-DH | 1   | CONNECTOR, STR - 16 F5OX-S                                     |             |
| 9   | REF      | 1   | FAN CONTROL MANIFOLD.....                                      | UP-3        |
| 10  | 52971-DH | 1   | ELBOW, 90 - 16 CC5OX JIC/ORB (LONG)                            |             |
| 11  | 52937-DH | 1   | TUBELINE, CHARGE PUMP                                          |             |
| 12  | 15110-DH | 1   | ELBOW, 45 SWIVEL - 16 V6X-S                                    |             |
| 13  | 15484-DH | 1   | ELBOW, 90 - 16 C5OX-S                                          |             |
| 14  | REF      | 1   | WHEEL DRIVE CHARGE PUMP.....                                   | DH-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



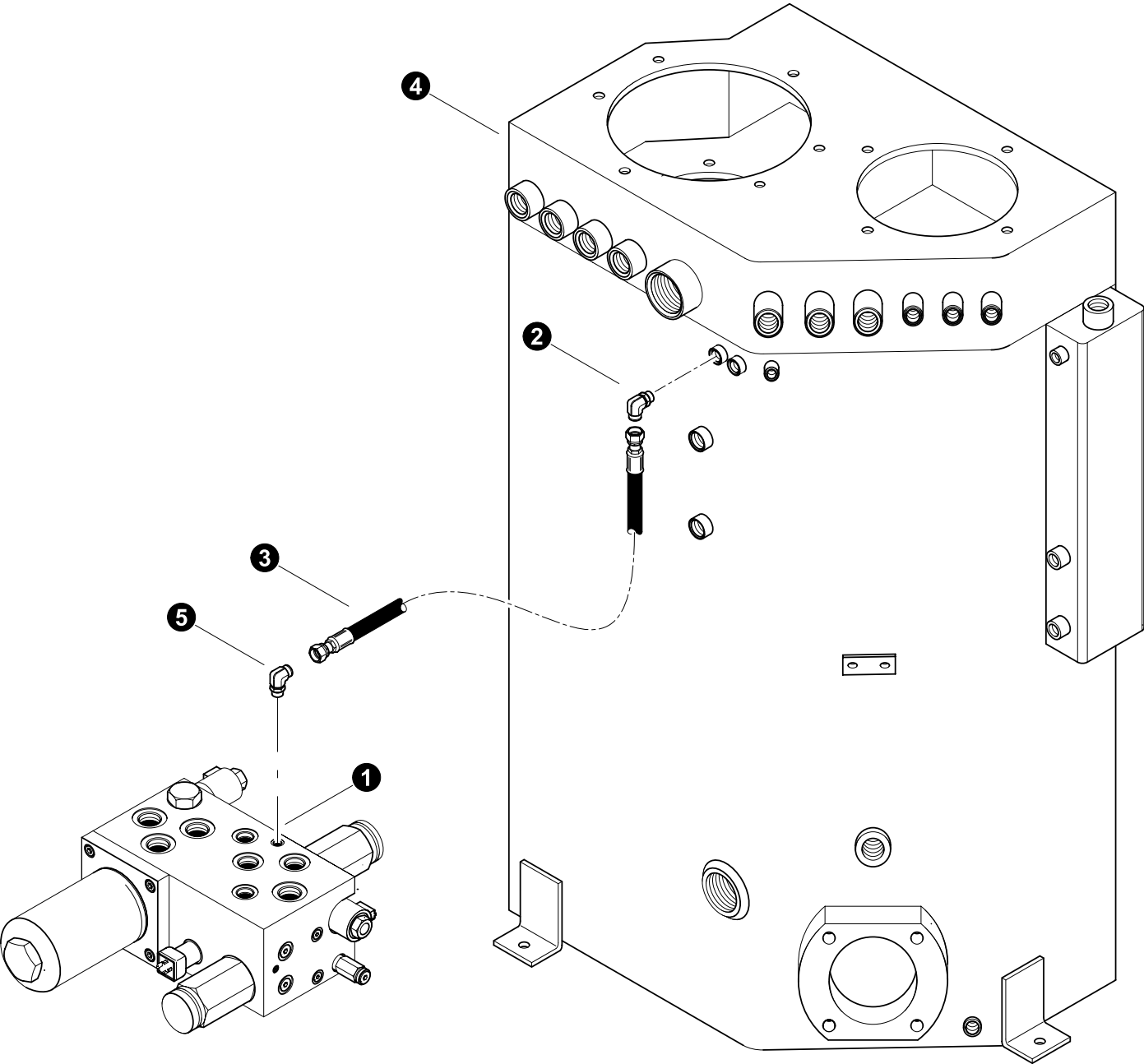
Parts T3624 08/08  
18.75

## WHEEL DRIVE PUMP CHARGE PRESSURE INLET

| REF | PART #   | QTY | DESCRIPTION                                                                                              | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | FAN CONTROL / CHARGE MANIFOLD .....                                                                      | UP-3        |
| 2   | 11306-DH | 1   | ELBOW, 90 12 C5OX-S                                                                                      |             |
| 3   | 52935-DH | 1   | TUBELINE, HYDRO CHARGE PRESSURE                                                                          |             |
| 4   | 15477-DH | 1   | ELBOW, 90 SWIVEL - 12 C6X-S                                                                              |             |
| 5   | 15495-DH | 1   | CONNECTOR, STR - 12-16 F5OX-S                                                                            |             |
| 6   | REF.     | 1   |  WHEEL DRIVE PUMP ..... | DH-3        |



See referenced page for component or assembly breakdown.



Parts T3625 08/08  
18.75

**CHARGE FILTER MANIFOLD DRAIN LINE**

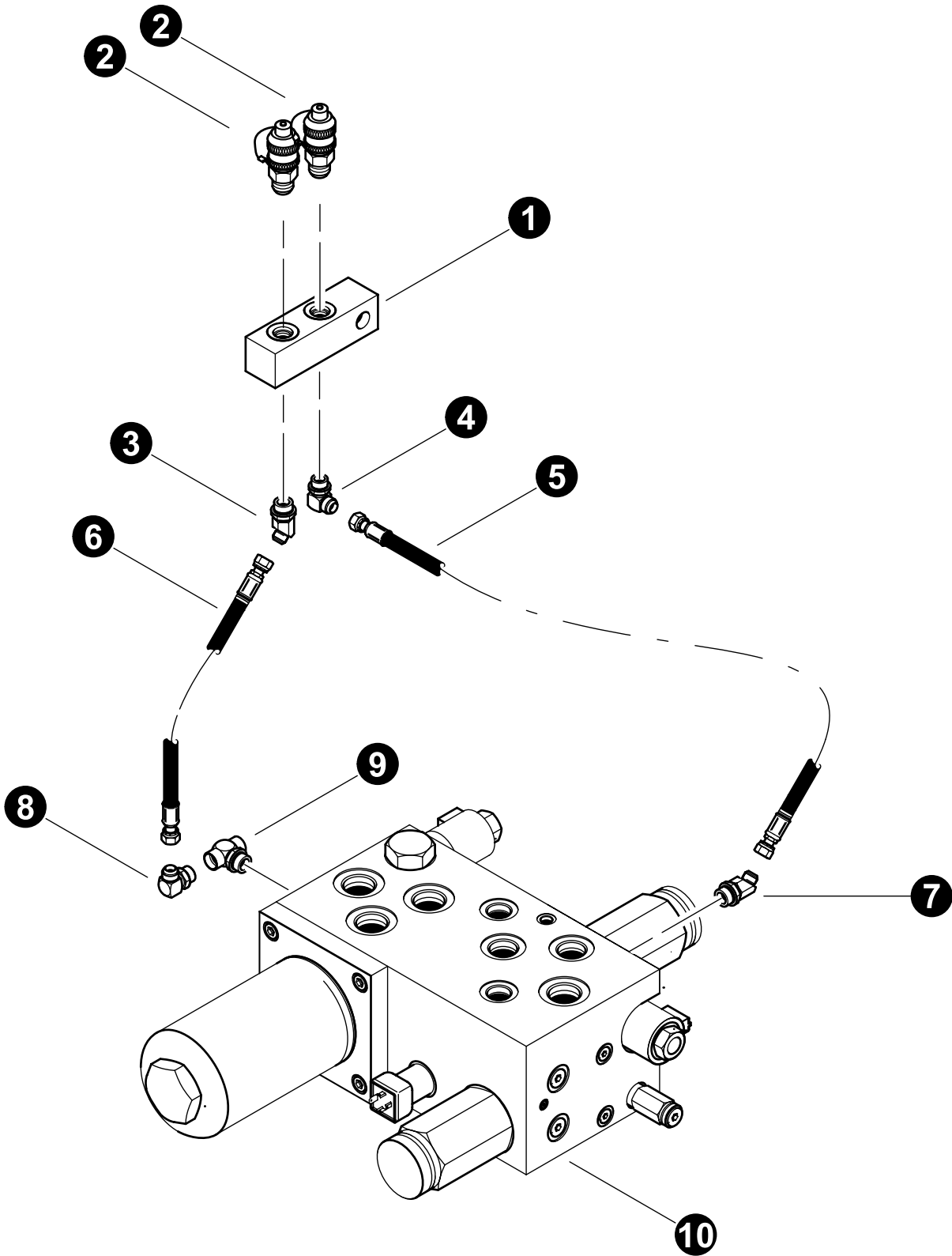
| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | REF      | 1   | FAN CONTROL / CHARGE MANIFOLD ..... | UP-3        |
| 2   | 20031-DH | 1   | ELBOW, 90 - 6-8 C5OLO-S             |             |
| 3   | -DH      | 1   | HOSE ASSEMBLY - 2022 06 06OS 06OS   |             |
| 4   | REF      | 1   | HYDRAULIC TANK ASSEMBLY.....        | UP-2        |
| 5   | 16296-DH | 1   | ELBOW, 90 - FF1868T-0606S           |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3626 07/08  
18.75



**CHARGE FILTER MANIFOLD GAUGE PORT LINE**

| REF | PART #   | QTY | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-------------------------------------|-------------|
| 1   | 23544-DH | 1   | MANIFOLD, PRESSURE CHECK (2-PORT)   |             |
| 2   | 16037-DH | 2   | Gauge Tap 1/4" Sae                  |             |
| 3   | 51884-DH | 1   | ELBOW, 45 - (4 V50X-S)              |             |
| 4   | 51889-DH | 1   | ELBOW, 90 - (4C50X-S)               |             |
| 5   | -DH      | 1   | HOSE ASSEMBLY - 2015 02 04JS 04JS   |             |
| 6   | -DH      | 1   | HOSE ASSEMBLY - 2008 02 04JS 04JS   |             |
| 7   | 51884-DH | 1   | ELBOW, 45 - (4 V50X-S)              |             |
| 8   | 51931-DH | 1   | ELBOW, 90 - 4-6 C50X-S (JIC)        |             |
| 9   | 52186-DH | 1   | TEE, RUN - MALE (4 A0G5J5-S)        |             |
| 10  | REF      | 1   | FAN CONTROL / CHARGE MANIFOLD ..... | UP-3        |



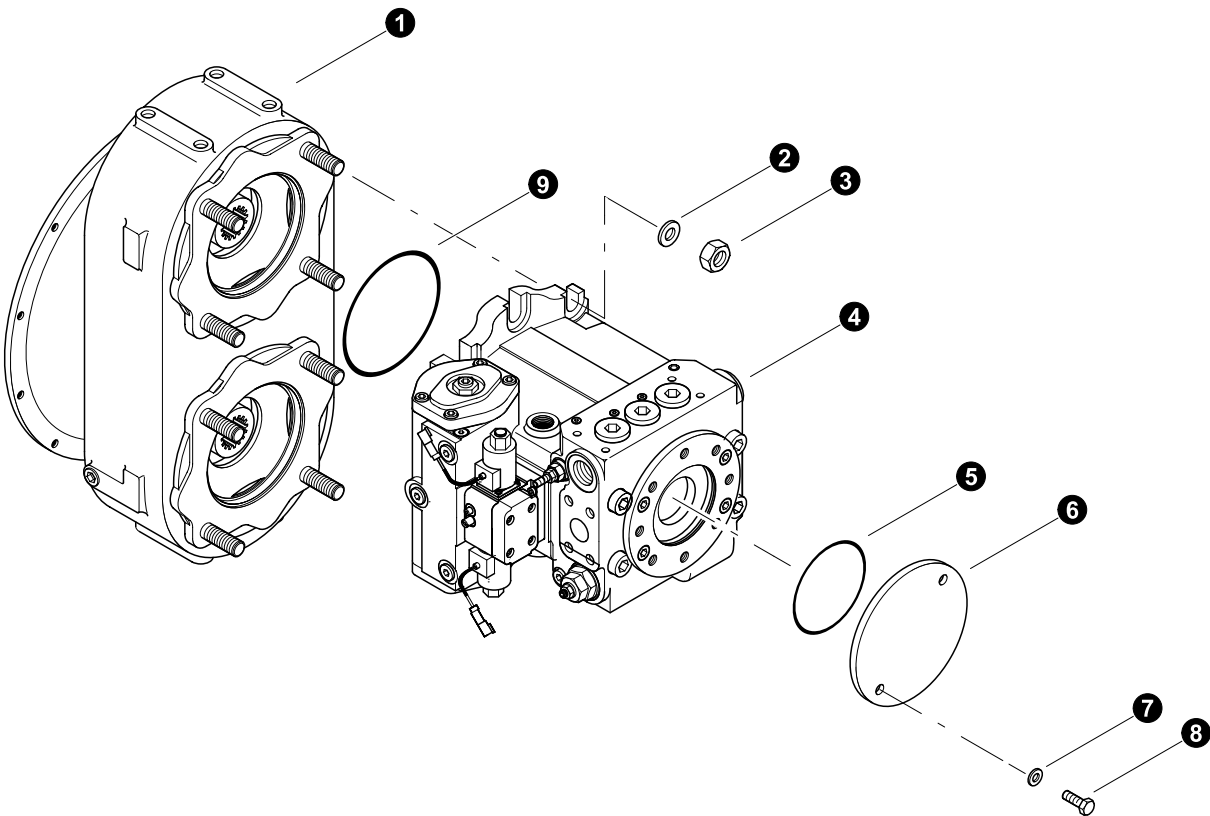
See referenced page for component or assembly breakdown.

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## ***Section DH-2***

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### ***Drive Hydraulics - Wheel Drive Pump Circuit***



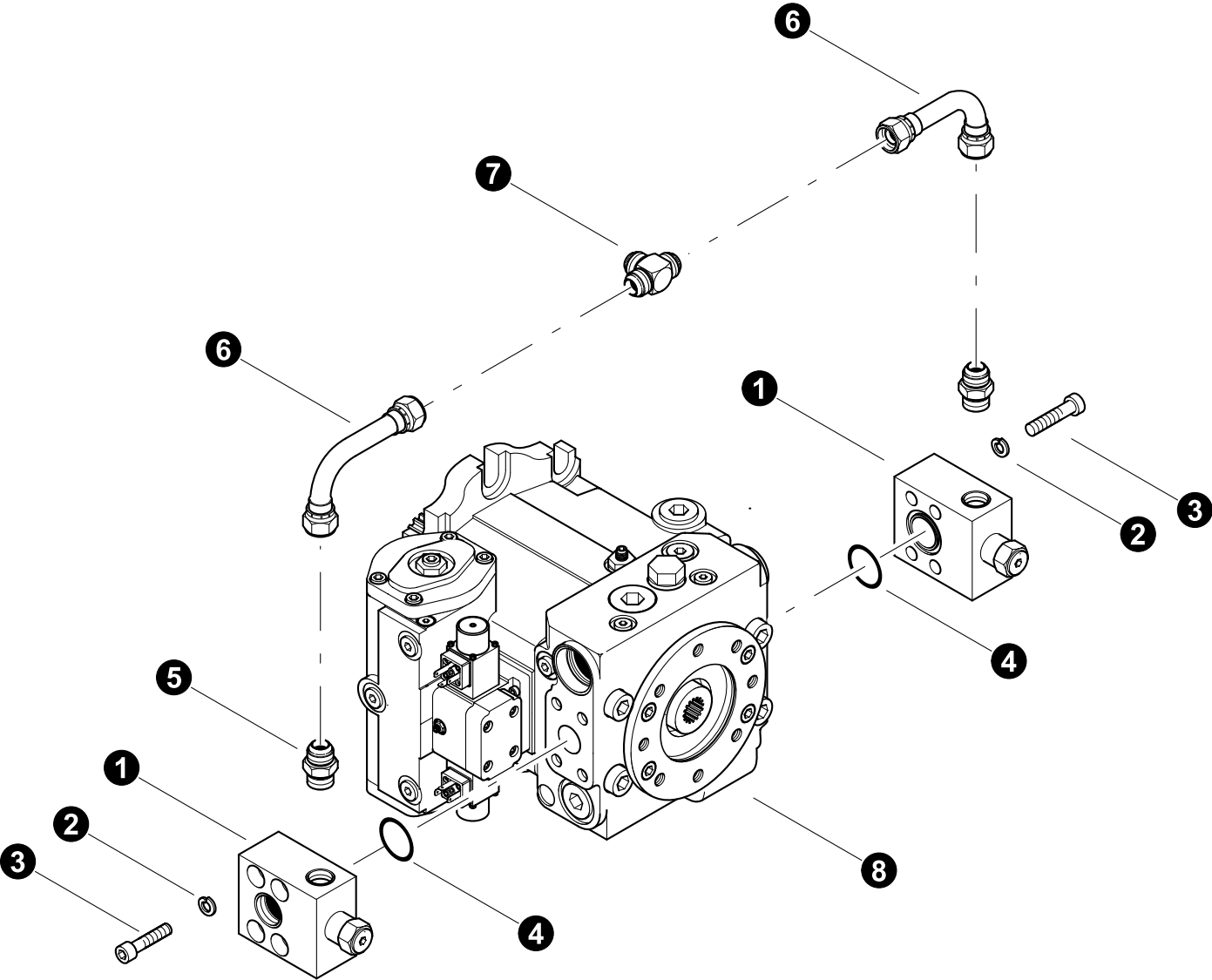
Parts T2666 04/30/2003  
18.75

## WHEEL DRIVE PUMP INSTALLATION

| REF | PART #     | QTY |                                                                                   | DESCRIPTION                              | SEE SECTION |
|-----|------------|-----|-----------------------------------------------------------------------------------|------------------------------------------|-------------|
| 1   | REF.       | 1   |  | TRANSMISSION double pump drive . . . . . | EE-4        |
| 2   | 15550-DH   | 4   |                                                                                   | WASHER, SAE flat - 3/4"                  |             |
| 3   | 10776-DH   | 4   |                                                                                   | NUT, hex - 3/4"                          |             |
| 4   | REF.       | 1   |  | WHEEL DRIVE PUMP . . . . .               | DH-3        |
| 5   | 15453-DH   | 1   |                                                                                   | O-RING                                   |             |
| 6   | 18414-DH   | 1   |                                                                                   | COVER, thru drive                        |             |
| 7   | 15534-DH   | 4   |                                                                                   | WASHER, SAE flat - 1/2"                  |             |
| 8   | 10783-DH   | 2   |                                                                                   | BOLT - 1/2" x 1"                         |             |
| 9   | 15442-2-DH | 1   |                                                                                   | O-RING, PUMP DRIVE PILOT - DRIVE         |             |



See referenced page for component or assembly breakdown.



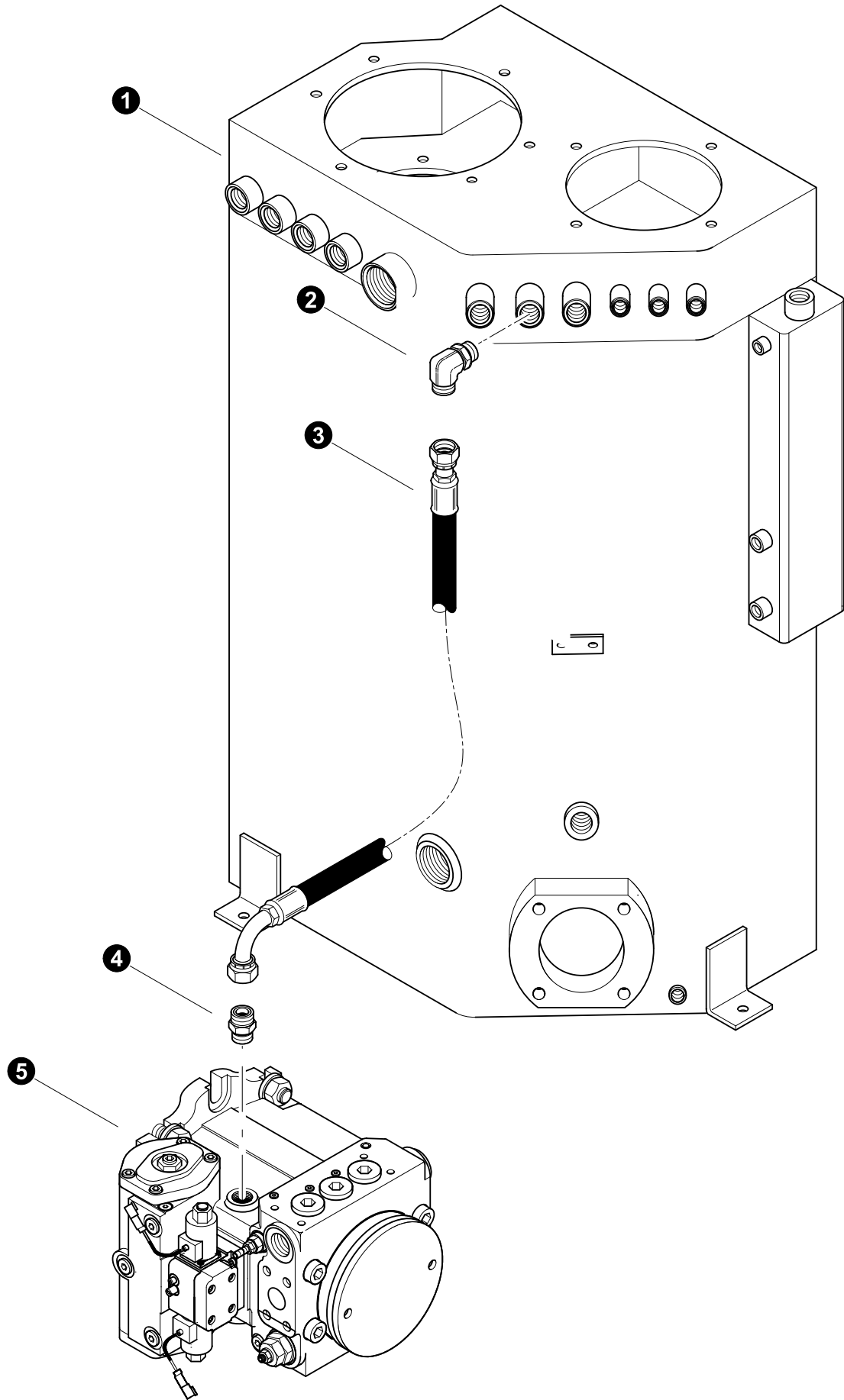
Parts T3192 07/14/2005  
18.75

**WHEEL DRIVE SYSTEM****Anti-Cavitation Block Installation**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------|-------------|
| 1   | 51773-DH | 2   |                                                                                   | MANIFOLD, KIT ANTI CAV- WHEEL DRIVE    |             |
| 2   | 50075-DH | 8   |                                                                                   | WASHER, LOCK - .5" HIGH COLLAR         |             |
| 3   | 17141-DH | 8   |                                                                                   | BOLT, ALLEN HEAD - .5" X 2.75"         |             |
| 4   | 15378-DH | 2   |                                                                                   | O-RING - 1.25" SF (CODE 61/62)         |             |
| 5   | 11324-DH | 2   |                                                                                   | CONNECTOR, STR - 6400-12               |             |
| 6   | 52100-DH | 2   |                                                                                   | TUBE, HYDRAULIC - FORMED 90 DRIVE PUMP |             |
| 7   | 52090-DH | 1   |                                                                                   | TEE - 12WJJTX-S                        |             |
| 8   | REF.     | 1   |  | WHEEL DRIVE PUMP .....                 | DH-3        |



See referenced page for component or assembly breakdown.



Parts T3194 07/18/2005  
18.75

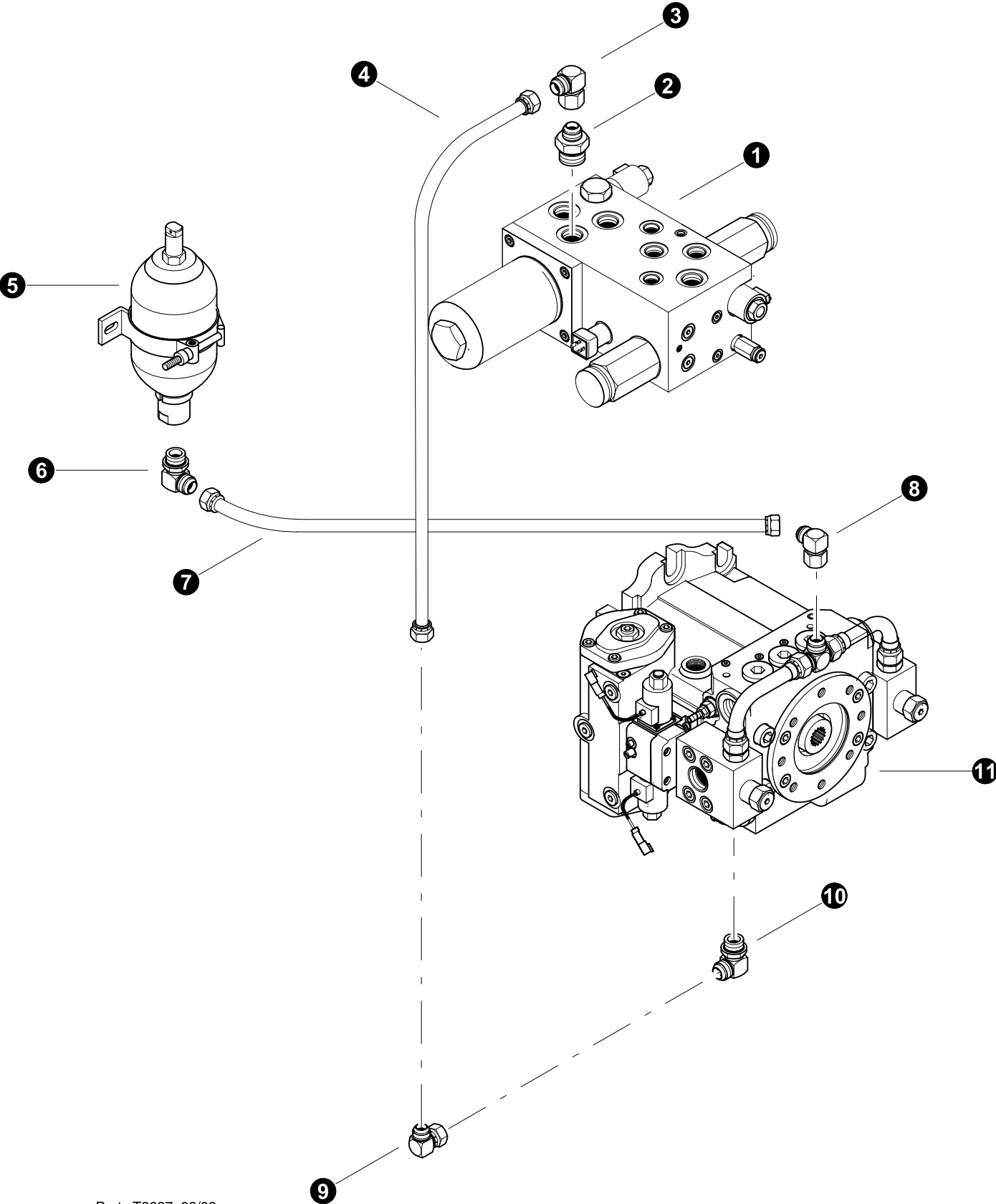


WHEEL DRIVE SYSTEM

Case Drain Hose

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                   | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | HYDRAULIC TANK ASSEMBLY.....                                  | UP-2        |
| 2   | 17688-DH | 1   |                                                                                   | ELBOW, 90 - FF1868T-1212S                                     |             |
| 3   |          | 1   |                                                                                   | HOSE ASSEMBLY - 2032 12-12OS-12O9 Pump Case to Hydraulic Tank |             |
| 4   | 15152-DH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                |             |
| 5   | REF.     | 1   |  | WHEEL DRIVE PUMP .....                                        | DH-3        |

 See referenced page for component or assembly breakdown.



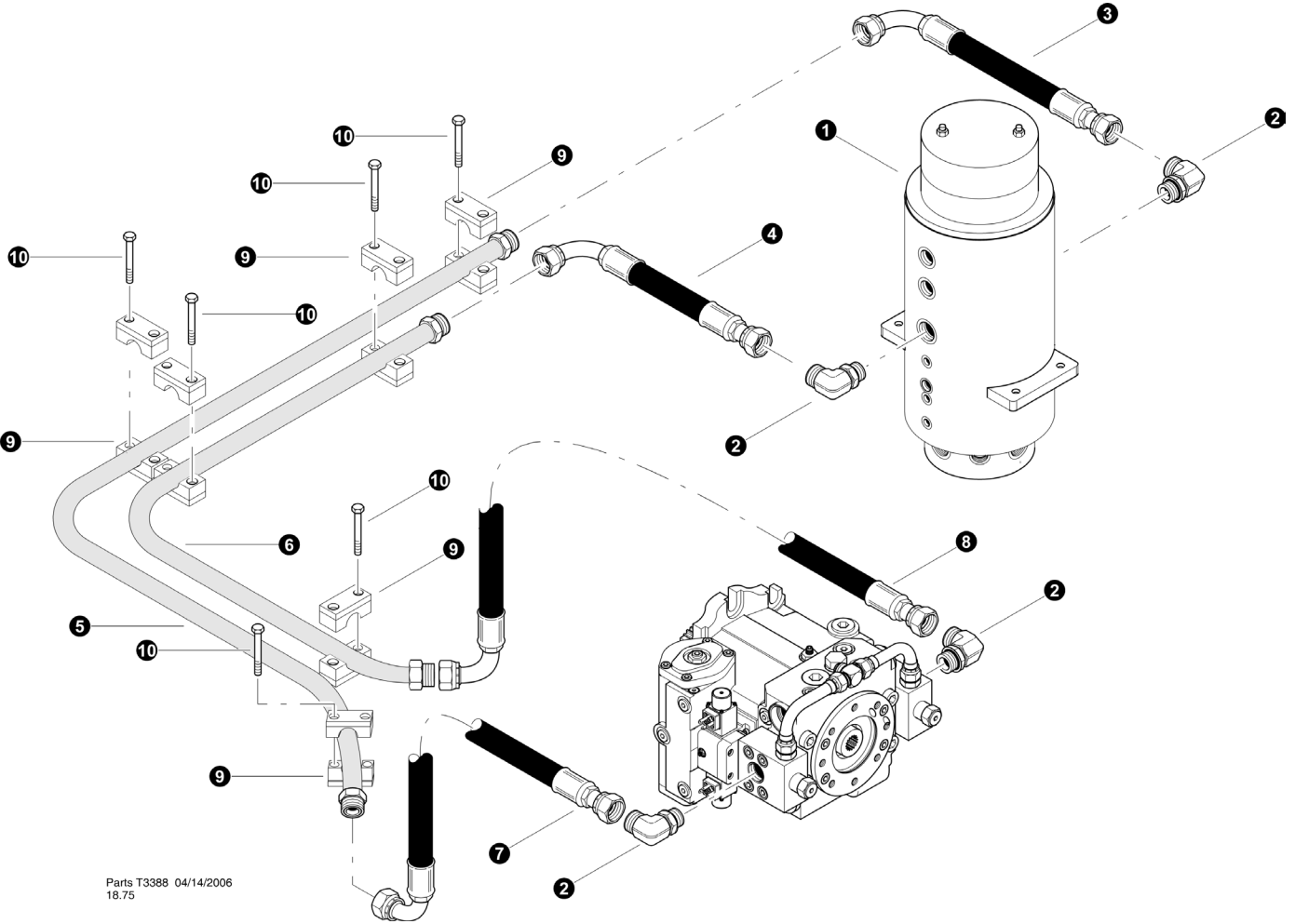
Parts T3627 08/08  
18.75

**WHEEL DRIVE SYSTEM****Anti-Cavitaion Connections**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|
| 1   | REF.     | 1   |  | FAN DRIVE / CHARGE FILTER MANIFOLD . . . . . | UP-3        |
| 2   | 15495-DH | 1   |                                                                                   | CONNECTOR, STR - 12-16 F5OX-S                |             |
| 3   | 15477-DH | 1   |                                                                                   | ELBOW, 90 SWIVEL - 12 C6X-S                  |             |
| 4   | 52936-DH | 1   |                                                                                   | TUBELINE, HYDRO REGEN PRESSURE               |             |
| 5   | 51709-DH | 1   |                                                                                   | ACCUMULATOR, GAS - WHEEL DRIVE               |             |
| 6   | 11306-DH | 1   |                                                                                   | ELBOW, 90 12 C5OX-S                          |             |
| 7   | 52934-DH | 1   |                                                                                   | TUBELINE, HYDRO ACCUMULATOR                  |             |
| 8   | 15477-DH | 1   |                                                                                   | ELBOW, 90 SWIVEL - 12 C6X-S                  |             |
| 9   | 15477-DH | 1   |                                                                                   | ELBOW, 90 SWIVEL - 12 C6X-S                  |             |
| 10  | 11306-DH | 1   |                                                                                   | ELBOW, 90 12 C5OX-S                          |             |



See referenced page for component or assembly breakdown.



## WHEEL DRIVE SYSTEM

### Drive Pump Pressure Connections

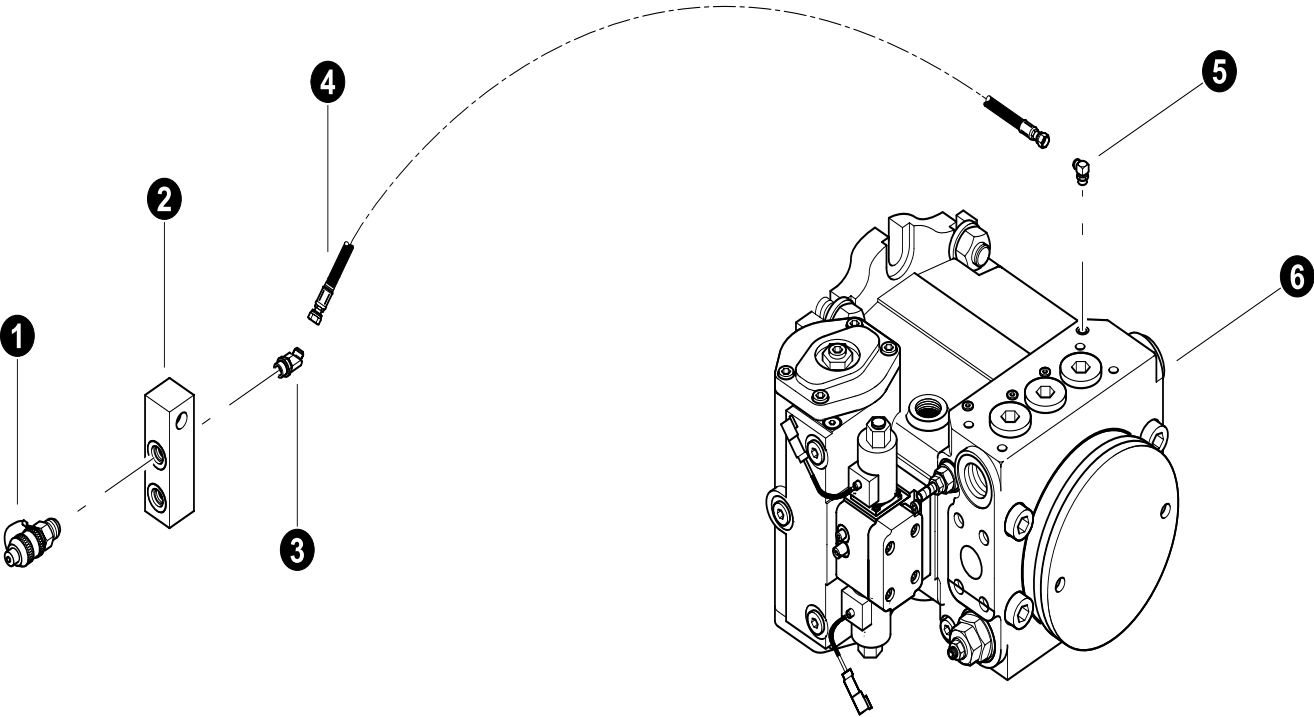
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTORY MANIFOLD . . . . .                                          | UP-1        |
| 2   | 15228-DH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                          |             |
| 3   | 50682-DH | 1   |                                                                                   | HOSE ASSEMBLY - 6019.5 16-16OS-16O9 Rotory Manifold #7 or WD1 Port |             |
| 4   | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 6015.5 16-16OS-16O9 Rotory Manifold #8 or WD2 Port |             |
| 5   | 52353-DH | 1   |                                                                                   | TUBELINE, WHEEL DRIVE - B PORT (6500PSI)                           |             |
| 6   | 52352-DH | 1   |                                                                                   | TUBELINE, WHEEL DRIVE - A PORT (6500PSI)                           |             |
| 7   | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 6021.5 16-16OS-16O9 Wheel Drive Pump "B" Port      |             |
| 8   | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 6027 16-16OS-16O9 Wheel Drive Pump "A" Port        |             |
| 9   | 52372-DH | 6   |  | CLAMP, STEEL TUBELINES (WHEEL DRIVE)                               |             |
| 10  | 16365-DH | 12  |                                                                                   | BOLT - .375" X 2.75"                                               |             |
|     | REF.     | 1   |  | WHEEL DRIVE PUMP . . . . .                                         | DH-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3195 07/18/2005  
18.75

WHEEL DRIVE PUMP GAUGE PORTS

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 16037-DH | 1   |                                                                                   | TAP, gauge port (1/4" ORB)                                                                                       |             |
| 2   | 23544-DH | 1   |                                                                                   | MANIFOLD, PRESSURE CHECK (2-PORT)                                                                                |             |
| 3   | 51884-DH | 1   |                                                                                   | ELBOW, 45 - (4 V50X-S)                                                                                           |             |
| 4   | -DH      | 1   |                                                                                   | HOSE ASSEMBLY - 2028-02-04JS-04JS (Wheel Drive Pump<br>gauge port to pressure check manifold) Part of kit #53024 |             |
| 5   | 51889-DH | 1   |                                                                                   | ELBOW, 90 - (4C50X-S)                                                                                            |             |
| 6   | REF.     | 1   |  | Wheel Drive Pump . . . . .                                                                                       | DH-3        |

 See referenced page for component or assembly breakdown.

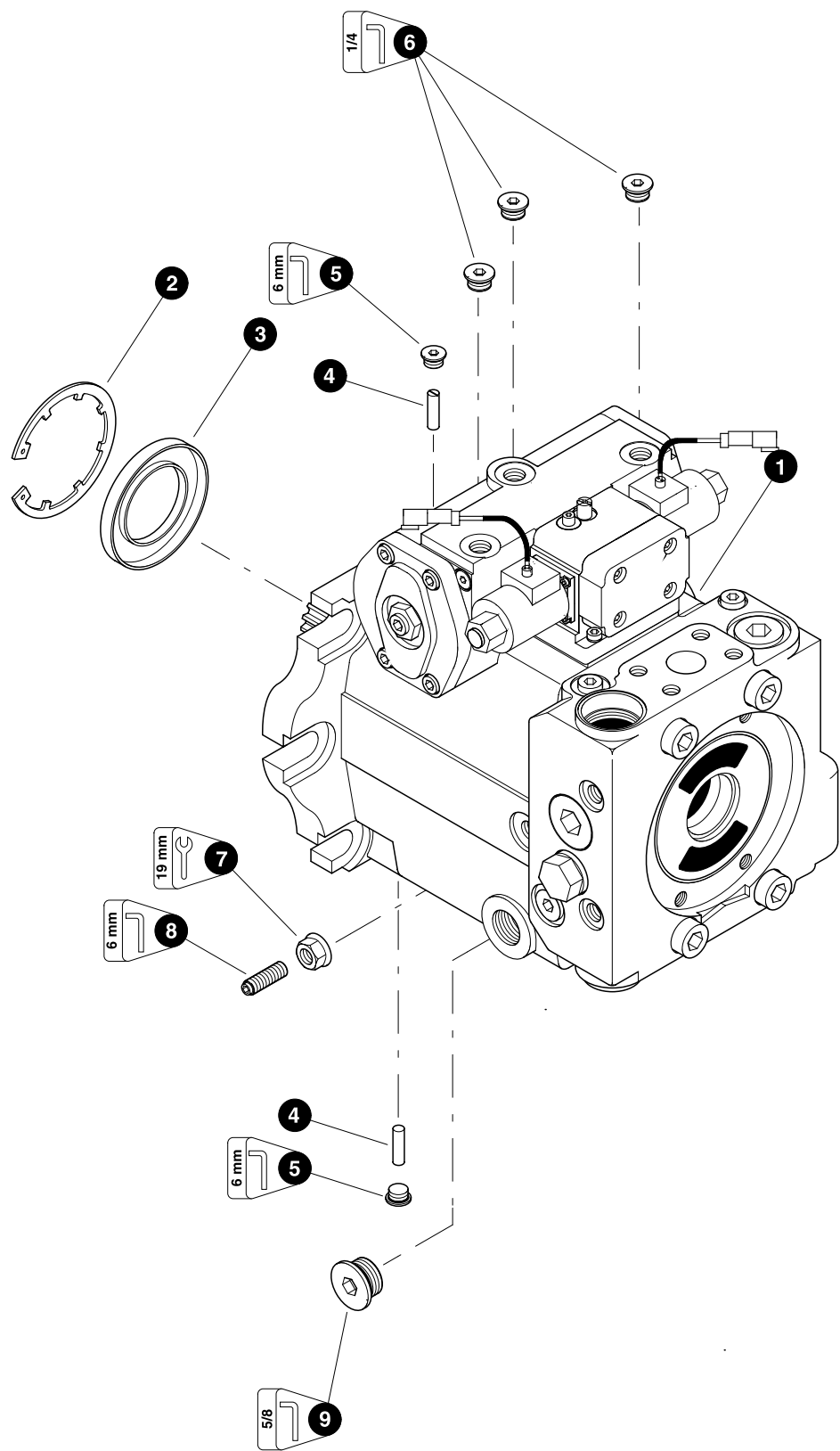
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## ***Section DH-3***

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### ***Drive Hydraulics - Wheel Drive System Components***



Parts T2676 05/15/2003  
37.50

## WHEEL DRIVE PUMP - REXROTH AA4VG125 (Forward Cast Housing Components)

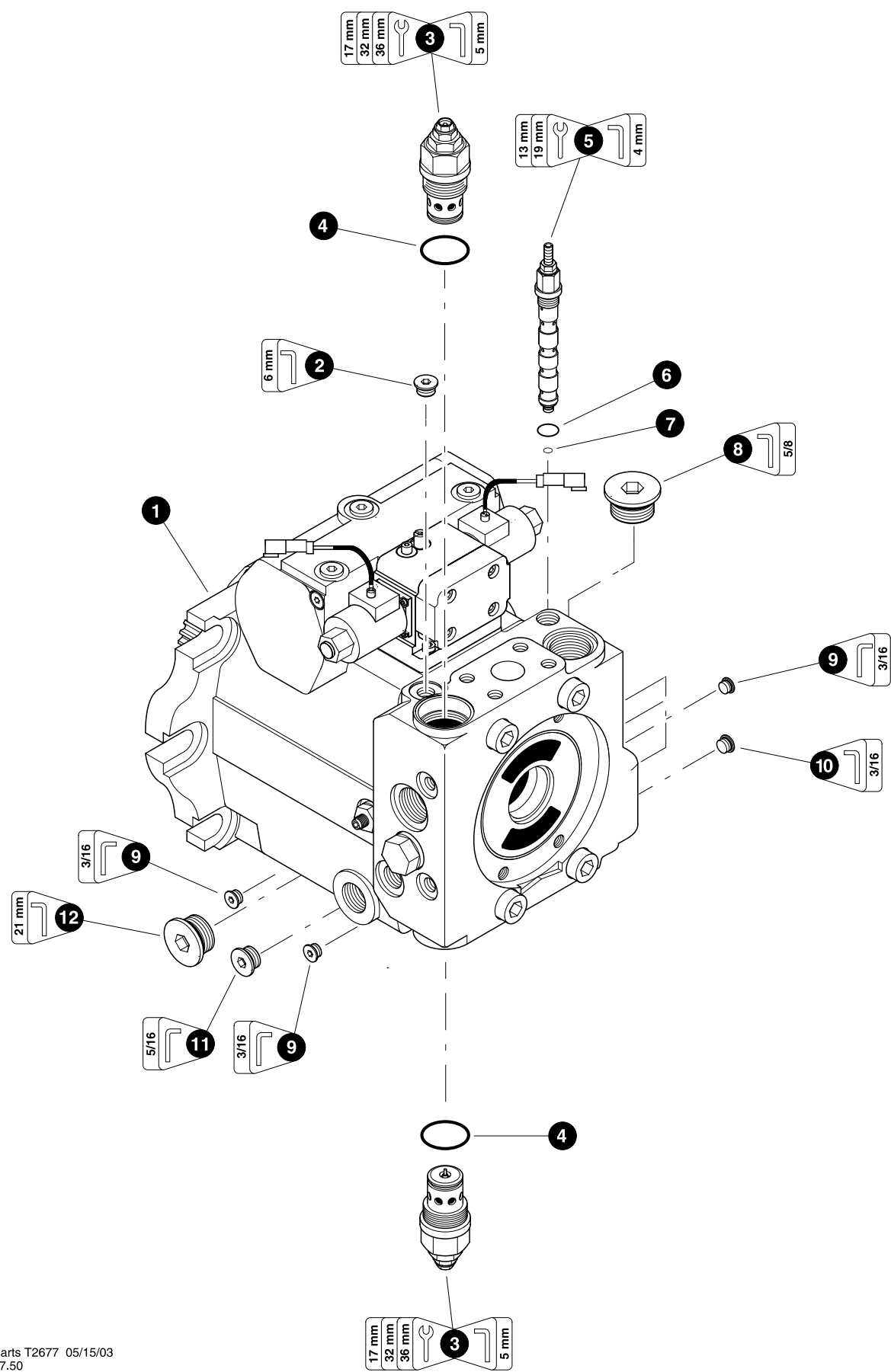
| REF | PART #   | QTY |   | DESCRIPTION                                | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------|-------------|
| 1   | 23612-DH | 1   | □ | PUMP, wheel drive - Rexroth AA4VG125 - 24V |             |
| 2   | 20315-DH | 1   |   | RING, snap                                 |             |
| 3   | 19353-DH | 1   | ⌘ | SEAL, shaft                                |             |
| 4   | 20318-DH | 2   |   | PIN, cradle                                |             |
| 5   | 20317-DH | 2   | ⌘ | PLUG - 12mm-1.5P                           |             |
| 6   | 15412-DH | 4   | □ | PLUG - 6408-HHP-6                          |             |
|     | 20320-DH | 1   | ⌘ | O-RING, ORB - #6                           |             |
| 7   | 20329-DH | 1   | ⌘ | NUT, seal - 12mm-1.5P                      |             |
| 8   | 20327-DH | 1   |   | PIN, threaded - 12mm-1.5P                  |             |
| 9   | 19847-DH | 1   | □ | PLUG - 6408-HHP-16                         |             |
|     | 20324-DH | 1   | ⌘ | O-RING, ORB - #16                          |             |
| -   | 19356-DH | 1   |   | KIT, seal repair - complete AA4VG125 pump  |             |

□ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 19356-WD.

### Note:

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



Parts T2677 05/15/03  
37.50

## WHEEL DRIVE PUMP - REXROTH AA4VG125 (Rear Port Block Components)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------|-------------|
| 1   | REF.     | 1   |  | WHEEL DRIVE PUMP - Rexroth AA4VG125.....  | DH-3        |
| 2   | 20317-DH | 1   |  | PLUG - 12mm-1.5P                          |             |
| 3   | 20330-DH | 2   |  | CARTRIDGE, high pressure relief valve     |             |
|     | 20331-DH | 1   |  | NUT, seal - 10mm-1.0P                     |             |
| 4   | 20332-DH | 1   |  | O-RING, HPRV cartridge                    |             |
| 5   | 20254-DH | 1   |  | CARTRIDGE, POR relief valve               |             |
| 6   | 20337-DH | 1   |  | O-RING, POR relief valve - body           |             |
| 7   | 20338-DH | 1   |  | O-RING, POR relief valve - chamber        |             |
| 8   | 19847-DH | 1   |  | PLUG - 6408-HHP-16                        |             |
|     | 20324-DH | 1   |  | O-RING, ORB - #16                         |             |
| 9   | 20339-DH | 4   |  | PLUG - 8mm-1.0P                           |             |
| 10  | 11383-DH | 2   |  | PLUG - 6408-HHP-4                         |             |
|     | 20319-DH | 1   |  | O-RING, ORB - #4                          |             |
| 11  | 19271-DH | 2   |  | PLUG - 6408-HHP-10                        |             |
|     | 20322-DH | 1   |  | O-RING, ORB - #10                         |             |
| 12  | 20333-DH | 1   |  | PLUG - 42mm-2.0P                          |             |
|     | 20334-DH | 1   |  | O-RING, ORB - 42mm-2.0P                   |             |
| -   | 19356-DH | 1   |                                                                                   | KIT, seal repair - complete AA4VG125 pump |             |



See referenced page for component breakdown.



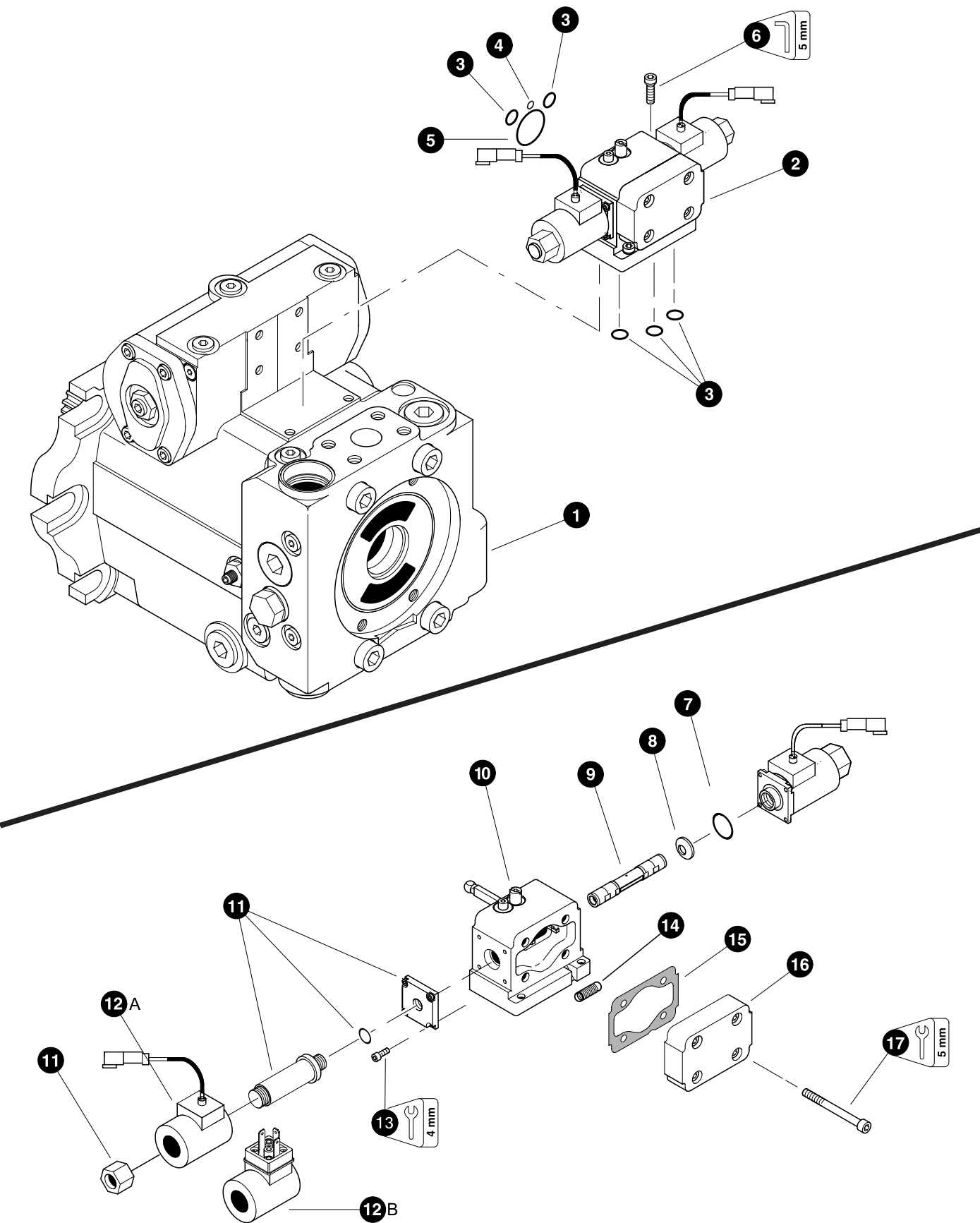
Kit or Assembly - includes all items indented underneath.



Included in seal repair kit Part # 19356-WD.

### Note:

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



Parts T2678 05/16/03  
37.50

## WHEEL DRIVE PUMP - REXROTH AA4VG125 (Stroke Control Assembly)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | WHEEL DRIVE PUMP - Rexroth AA4VG125.....                    | DH-3        |
| 2   | 50935-DH | 1   |  | VALVE, stroke control - 24V current                         |             |
| 3   | 20342-DH | 5   |  | O-RING, stroke control                                      |             |
| 4   | 20343-DH | 1   |  | O-RING, stroke control                                      |             |
| 5   | 20344-DH | 1   |  | O-RING, stroke control                                      |             |
| 6   | 20345-DH | 2   |                                                                                   | BOLT, allen head - 6mm x 20mm                               |             |
| 7   | -        | 2   |  | O-RING, (09083764)                                          |             |
| 8   | -        | 2   |                                                                                   | SPRING, CUP (02601640)                                      |             |
| 9   | NSS      | 1   |                                                                                   | SPOOL,                                                      |             |
| 10  | -        | 1   |                                                                                   | MODULE, stroke control - (02046894)                         |             |
| 11  | -        | 2   |                                                                                   | COIL STEM, assembly (02046037)                              |             |
| 12a | 50465-DH | 2   |                                                                                   | COIL, solenoid - 24V                                        |             |
| 12b | 50043-DH | 2   |                                                                                   | COIL, solenoid - (hershman style connector 24v) (old style) |             |
| 13  | -        | 8   |                                                                                   | BOLT, allen head - 4mm (09083183)                           |             |
| 14  | -        | 1   |                                                                                   | SPRING, stroke centering (02063327)                         |             |
| 15  | -        | 1   |  | GASKET, (09651478)                                          |             |
| 16  | -        | 1   |                                                                                   | COVER, (09443201)                                           |             |
| 17  | -        | 4   |                                                                                   | BOLT, allen head - 6mm (09085831)                           |             |
| -   | 19356-DH | 1   |                                                                                   | KIT, seal repair - complete AA4VG125 pump                   |             |



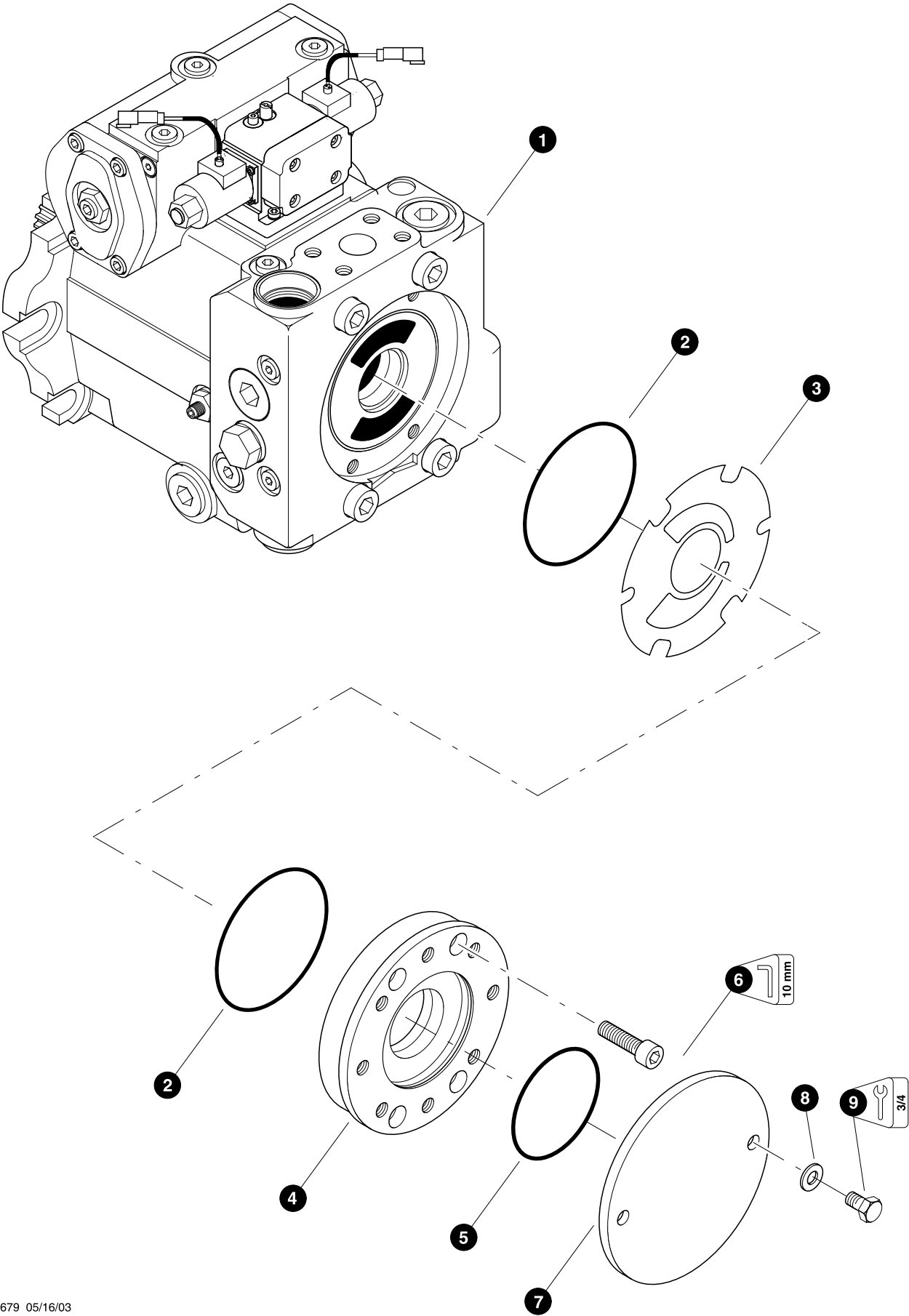
See referenced page for component breakdown.



Kit or Assembly - includes all items indented underneath.



Included in seal repair kit Part # 19356-WD





## WHEEL DRIVE PUMP - REXROTH AA4VG125 (Thru Drive Components)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|
| 1   | REF.     | 1   |  | WHEEL DRIVE PUMP - Rexroth AA4VG125. . . . . | DH-3        |
| -   | -----    | 1   |  | THRU DRIVE ASSEMBLY (No gear charge pump)    |             |
| 2   | 20368-DH | 2   |  | O-RING, thru drive wear plate                |             |
| 3   | 20369-DH | 1   |                                                                                   | PLATE, wear                                  |             |
| 4   | NSS      | 1   |                                                                                   | HOUSING                                      |             |
| 5   | 21624-DH | 1   |                                                                                   | O-RING, thru drive pilot (SAE "B")           |             |
| 6   | 18954-DH | 4   |                                                                                   | BOLT, allen head - 12mm-1.75P x 40mm         |             |
| 7   | 18414    | 1   |                                                                                   | COUPLING, thru drive                         |             |
| 8   | 18040    | 1   |                                                                                   | WASHER, flat - .5"                           |             |
| 9   | 10783    | 1   |                                                                                   | BOLT - .5" X 1"                              |             |
| -   | 19356-DH | 1   |                                                                                   | KIT, seal repair - complete AA4VG125 pump    |             |



See referenced page for component breakdown.



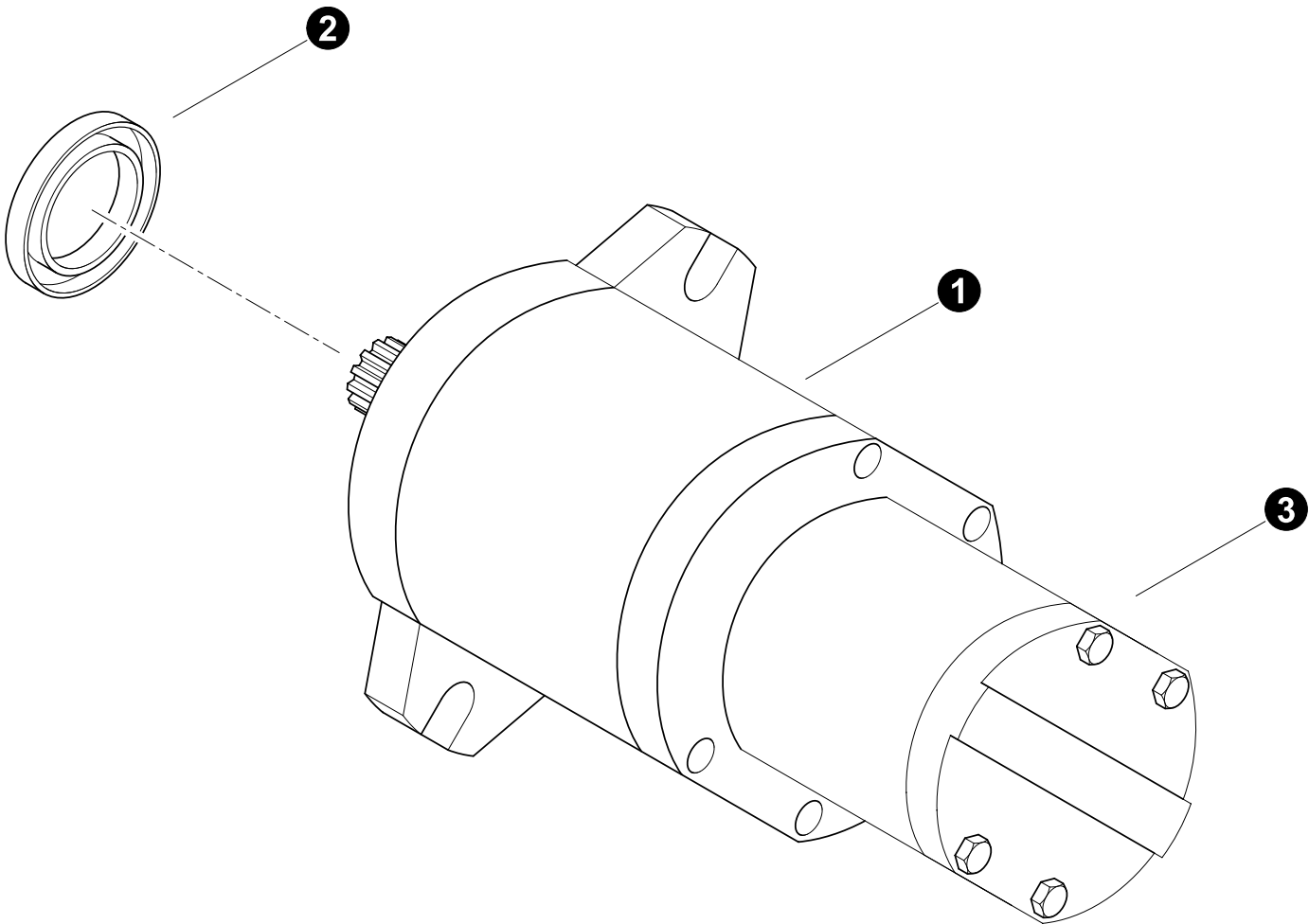
Kit or Assembly - includes all items indented underneath.



Included in seal repair kit Part # 19356-WD.

### Note:

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



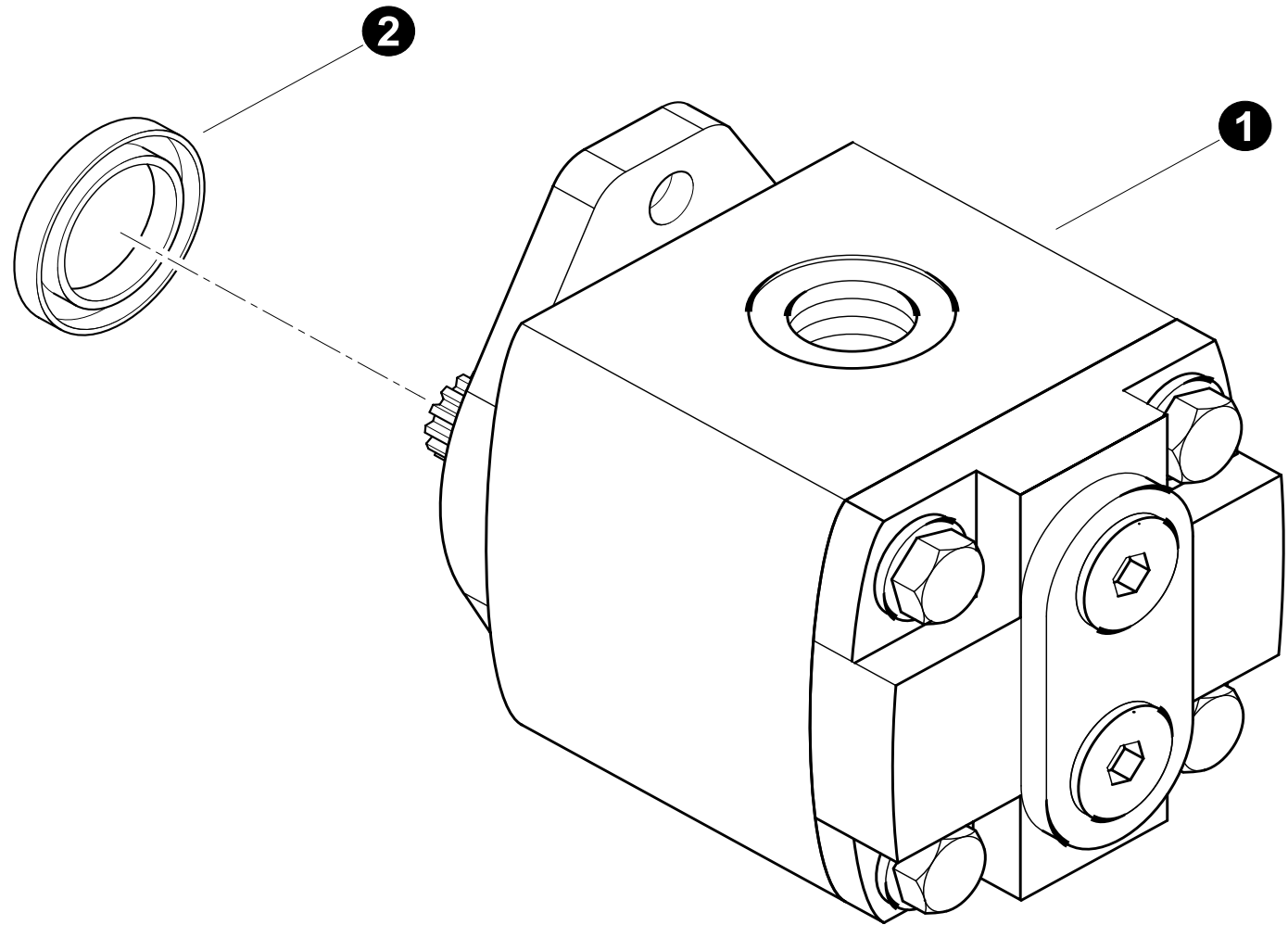
Parts T3190 07/14/2005  
50.00

## Charge Pump Breakdown

Machines built before 0354-011211

| REF | PART #   | QTY |                          | DESCRIPTION                                          | SEE SECTION |
|-----|----------|-----|--------------------------|------------------------------------------------------|-------------|
| -   | 51629-DH | 1   | <input type="checkbox"/> | PUMP, CHARGE / LOWER MANIFOLD - DUAL FLOW            |             |
| 1   | 52994-DH | 1   | <input type="checkbox"/> | PUMP, CHARGE SYSTEM (front pump only)                |             |
| 2   | -DH      | 1   |                          | SEAL, shaft (R98640012P)                             |             |
| 3   | 53003-DH | 1   | <input type="checkbox"/> | PUMP, LOWER MANIFOLD / BRAKE SYSTEM (rear pump only) |             |
| -   | -DH      | 1   |                          | SEAL, shaft (1510293027)                             |             |

☐ Kit or Assembly - includes all items indented underneath.



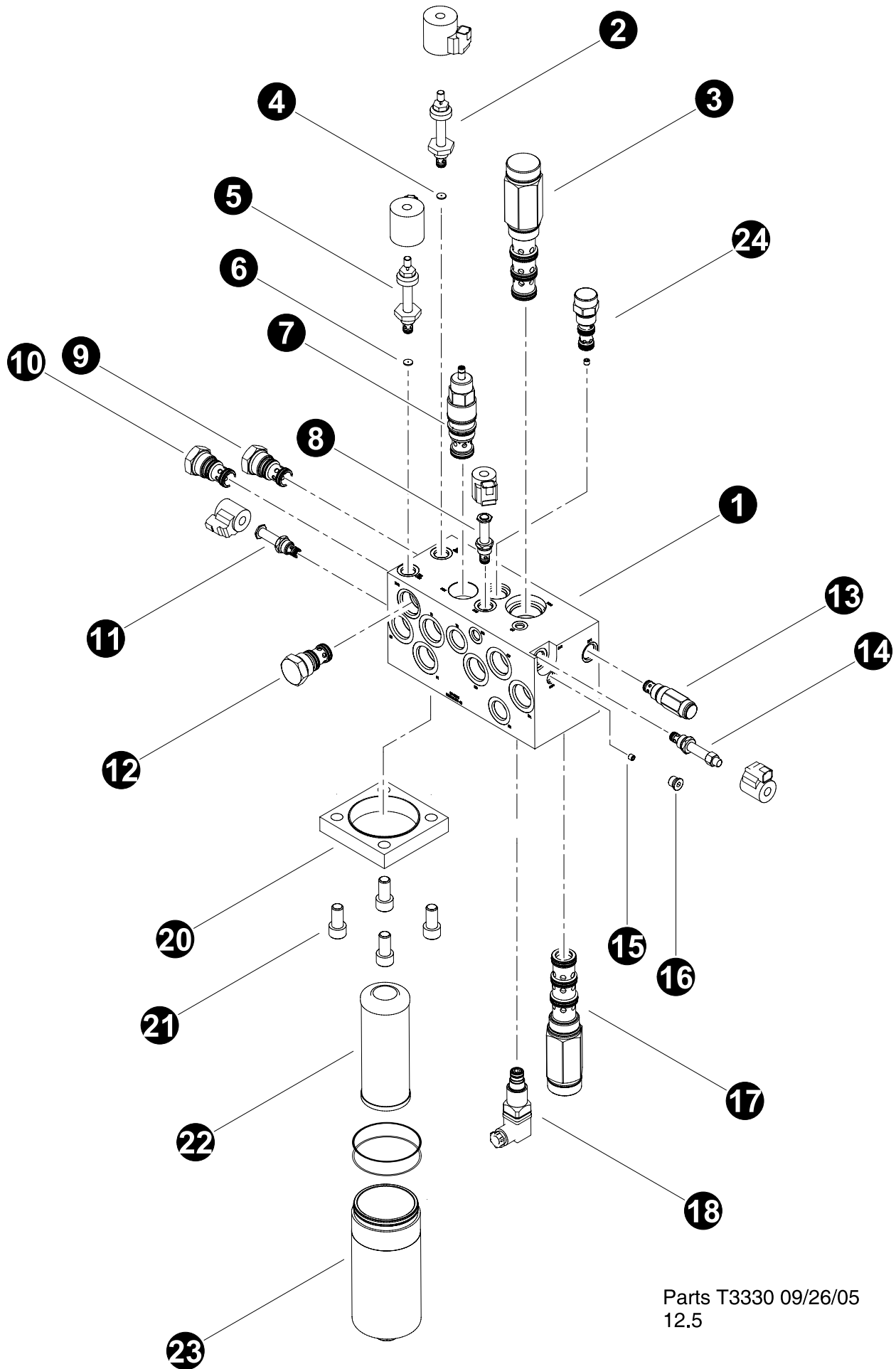
Parts T3739 10/08  
50.00

Charge Pump Breakdown

Machine 0355-020111 and after

| REF | PART #   | QTY |                          | DESCRIPTION                     | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------|-------------|
| 1   | 52566-DH | 1   | <input type="checkbox"/> | PUMP, CHARGE TRACK MACHINE      |             |
| 2   | 52160-DH | 1   |                          | SEAL, shaft - Track charge pump |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T3330 09/26/05  
12.5

## Fan / Charge System Control Valve Breakdown

(Used on Serial Number 0129 and Up)

| REF | PART #   | QTY |                          | DESCRIPTION                                                 | SEE SECTION |
|-----|----------|-----|--------------------------|-------------------------------------------------------------|-------------|
| -   | 52099-DH | 1   | <input type="checkbox"/> | VALVE, FAN / CHARGE SYSTEM CONTROL                          |             |
| 1   | -DH      | 1   |                          | MANIFOLD, fan / charge                                      |             |
| 2   | 52092-DH | 1   |                          | CARTRIDGE, HYDRAFORCE -TS38-20BM-0-N-24ER-VCO8-2 (Rad Fans) |             |
| -   | -DH      | 1   |                          | COIL, 24 V (4303724) NUT (4540560)                          |             |
| -   | 52225-DH |     |                          | KIT, SEAL (SKO8-2X-B)                                       |             |
| 3   | 52134-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - PD42-M40N-0-N-160-VC42-M4           |             |
| -   | 52226-DH |     |                          | KIT, SEAL (SK42-4X-MMM)                                     |             |
| 4   | -DH      | 1   |                          | ORIFACE                                                     |             |
| 5   | 52092-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE -TS38-20BM-0-N-24ER-VCO8-2 (Oil Fans) |             |
| -   | -DH      | 1   |                          | COIL, 24 V (4303724) - NUT (4540560)                        |             |
| -   | 52225-DH |     |                          | KIT, SEAL (SKO8-2X-B)                                       |             |
| 6   | -DH      | 1   |                          | ORIFACE                                                     |             |
| 7   | 52223-DH | 1   | <input type="checkbox"/> | CARTRIDGE, SUN HYDRAULICS - SCGA-LDNT-17A (Charge Relief)   |             |
| -   | 52227-DH |     |                          | KIT, SEAL (990-017-006)                                     |             |
| 8   | 52222-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - SV08-20-0-N-24ER (Charge Heater)    |             |
| -   | -DH      | 1   |                          | COIL, 24 V (4303624) NUT (7004400)                          |             |
| -   | 52228-DH |     |                          | KIT, SEAL (SKO8-3X-MM)                                      |             |
| 9   | 52220-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-70-VC16-S3             |             |
| -   | 52229-DH |     |                          | KIT, SEAL (SK16-3X-MM)                                      |             |
| 10  | 52220-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-70-VC16-S3             |             |
| -   | 52229-DH |     |                          | KIT, SEAL (SK16-3X-MM)                                      |             |
| 11  | 52221-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE -SV08-21-VCO8-2 (Charge Heater)       |             |
| -   | -DH      | 1   |                          | COIL, 24 V (4303624) NUT (7004410)                          |             |
| -   | -DH      |     |                          | KIT, SEAL (SKO8-2X-T)                                       |             |
| 12  | 52220-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EV16-S34-0-N-0-70-VC16-S3           |             |
| -   | 52229-DH |     |                          | KIT, SEAL (SK16-3X-MM)                                      |             |
| 13  | 21673-DH | 1   | <input type="checkbox"/> | CARTRIDGE, relief valve (RV10)                              |             |
| -   | -DH      |     |                          | KIT, SEAL (SK10-2X-MM)                                      |             |
| 14  | 52091-D  | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - SVO8-30M-0-P-24ER-VCO8-3 (Fans Rev) |             |
| -   | -DH      | 1   |                          | COIL, 24 V (4303624) NUT (7004400)                          |             |
| -   | 52228-DH |     |                          | KIT, SEAL (SKO8-3X-MM)                                      |             |
| 15  | -DH      | 1   |                          | ORIFACE                                                     |             |
| 16  | -DH      | 1   |                          | PLUG                                                        |             |
| 17  | 52134-DH | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - PD42-M40N-0-N-160-VC42-M4           |             |
| -   | 52226-DH |     |                          | KIT, SEAL (SK42-4X-MMM)                                     |             |
| 18  | 17675-DH | 1   |                          | SWITCH, filter indicator                                    |             |
| 19  | -DH      | 1   |                          | O-RING, Filter canister flange                              |             |
| 20  | -DH      | 1   |                          | FLANGE, Filter canister                                     |             |
| 21  | -DH      | 4   |                          | BOLT, ALLEN -                                               |             |
| 22  | 19861-DH | 1   |                          | ELEMENT, hydrostatic charge filter                          |             |
| 23  | 19864-DH | 1   | <input type="checkbox"/> | CANISTER                                                    |             |
| -   | 19863-DH | 1   |                          | O-RING, canister                                            |             |
| -   | 19862-DH | 1   |                          | RING, back-up - canister                                    |             |
| 24  | -DH      | 1   | <input type="checkbox"/> | CARTRIDGE, HYDRAFORCE - EP12-S35-0-N-90-VC12-S3             |             |
| -   | 52230-DH |     |                          | KIT, SEAL (SK12-3X-MM)                                      |             |

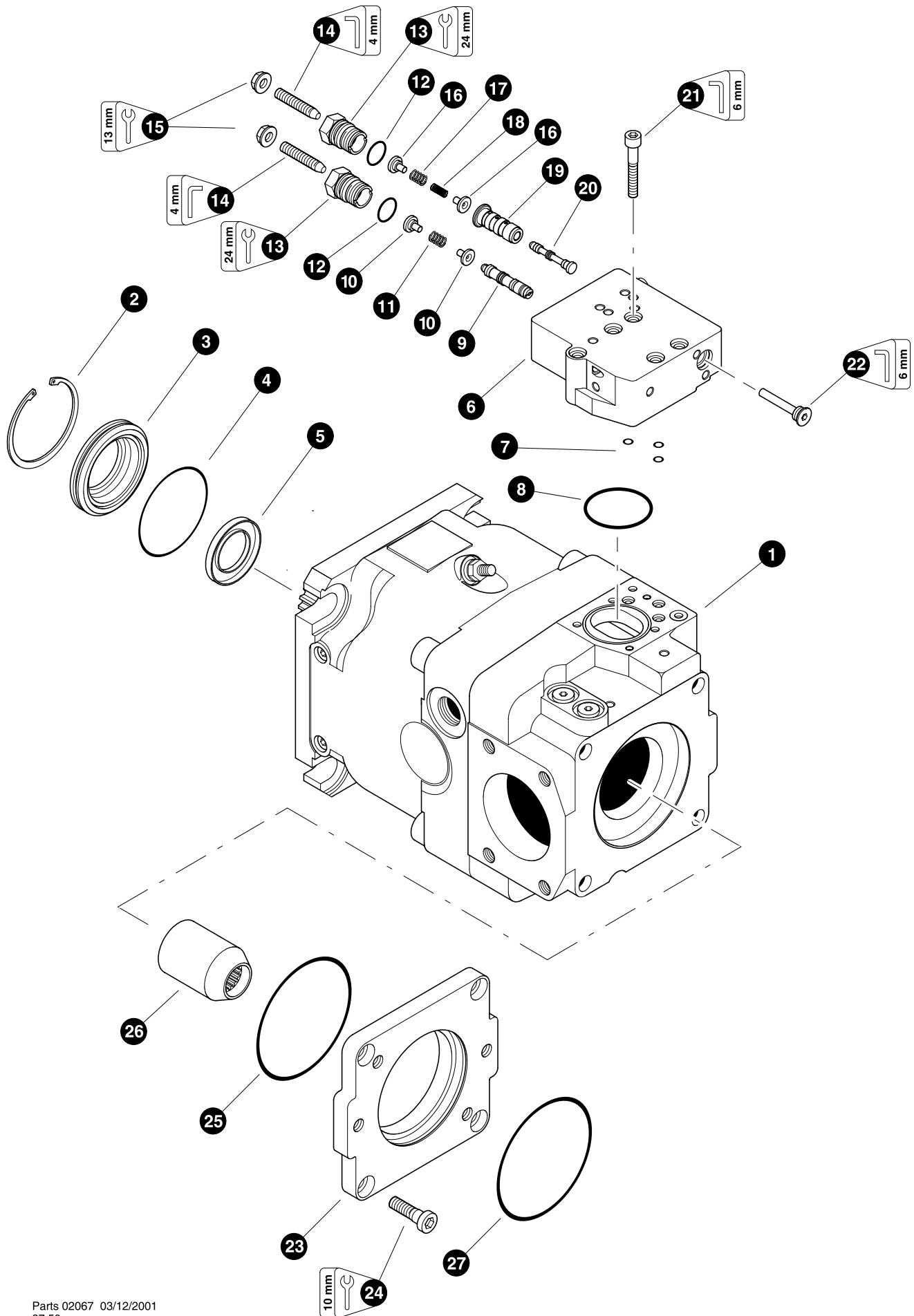
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# ***Section LH-1***

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## ***Loader Boom Hydraulics - Implement Pump and Control Valve***



Parts 02067 03/12/2001  
37.50

## IMPLEMENT PUMP (Rexroth 145cc)

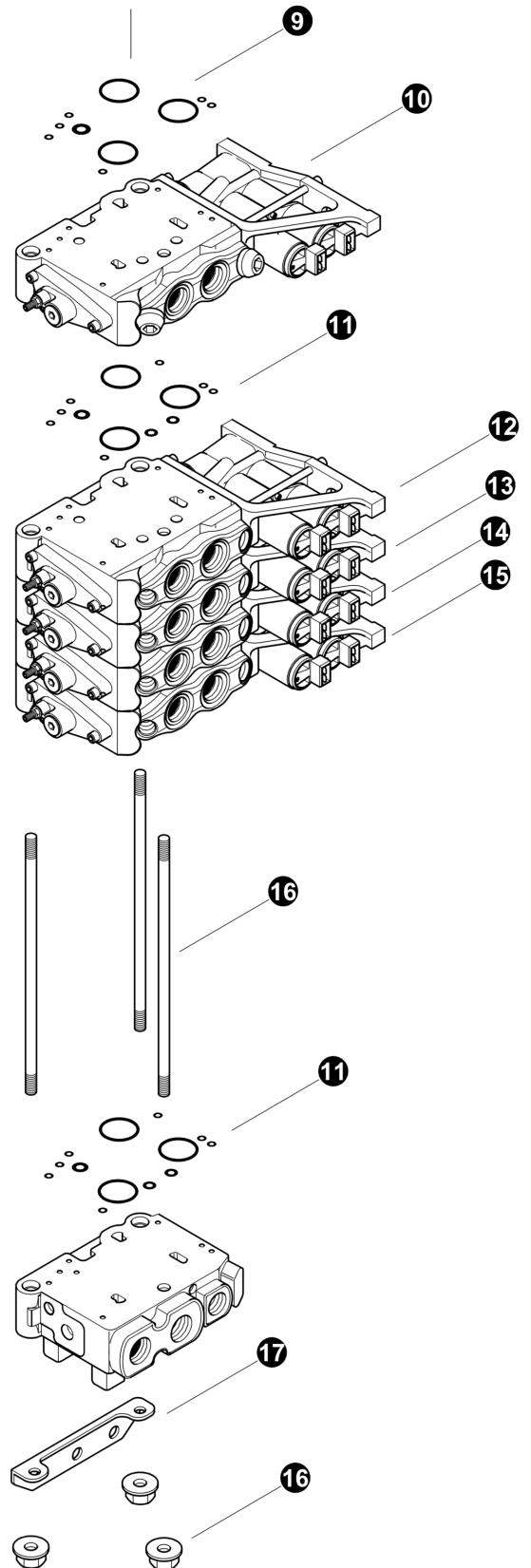
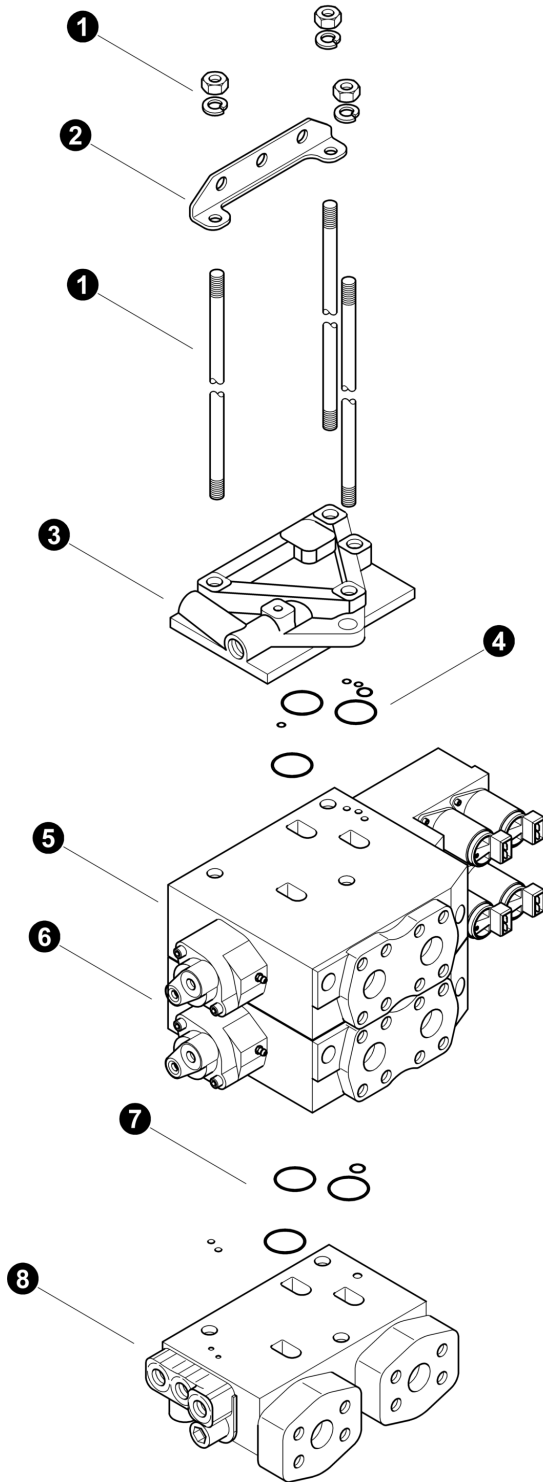
| REF | PART #   | QTY |   | DESCRIPTION                               | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------|-------------|
| 1   | 24505-LH | 1   | □ | PUMP, implement - Rexroth 145cc           |             |
| 2   | 21546-LH | 1   |   | RING, seal retaining                      |             |
| 3   | 21547-LH | 1   |   | COVER, front                              |             |
| 4   | 21548-LH | 1   | ⌘ | O-RING, front cover                       |             |
| 5   | 18687-LH | 1   | ⌘ | SEAL, shaft                               |             |
| 6   | 18681-LH | 1   | □ | COMPENSATOR                               |             |
| 7   | 20809-LH | 3   | ⌘ | O-RING, quad                              |             |
| 8   | 20808-LH | 1   | ⌘ | O-RING, compensator                       |             |
| 9   | NSS      | 1   |   | SPOOL, POR pressure                       |             |
| 10  | 21551-LH | 2   |   | RETAINER, spring                          |             |
| 11  | 21552-LH | 1   |   | SPRING                                    |             |
| 12  | 21553-LH | 2   | ⌘ | O-RING, compensator cap                   |             |
| 13  | 21554-LH | 2   |   | CAP, compensator                          |             |
| 14  | 20358-LH | 2   | ⌘ | NUT, seal                                 |             |
| 15  | 21555-LH | 2   |   | SCREW, adjusting                          |             |
| 16  | 21558-LH | 2   |   | RETAINER, spring                          |             |
| 17  | 21556-LH | 1   |   | SPRING                                    |             |
| 18  | 21557-LH | 1   |   | SPRING                                    |             |
| 19  | NSS      | 1   |   | SLEEVE, spool                             |             |
| 20  | NSS      | 1   |   | SPOOL, stand-by pressure                  |             |
| 21  | 21559-LH | 5   |   | BOLT, allen head - 8mm x 50mm             |             |
| 22  | NSS      | 1   |   | PLUG                                      |             |
| 23  | 24424-LH | 1   | □ | KIT, FLANGE, thru drive v/o               |             |
| 24  | 17608-LH | 4   |   | BOLT, allen head - 12mm-1.75P x 30mm      |             |
| 25  | 17744-LH | 1   | ⌘ | O-RING, thru drive flange                 |             |
| 26  | 18843-LH | 1   |   | COUPLING, thru drive                      |             |
| 27  | 18844-LH | 1   |   | O-RING, thru drive cover                  |             |
| --  | 18799-LH | 1   |   | KIT, seal repair ( <i>Complete pump</i> ) |             |

□ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit, PN# 18799-LH.

### **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 T3421 05/02/2006  
25.00

## MAIN CONTROL VALVE

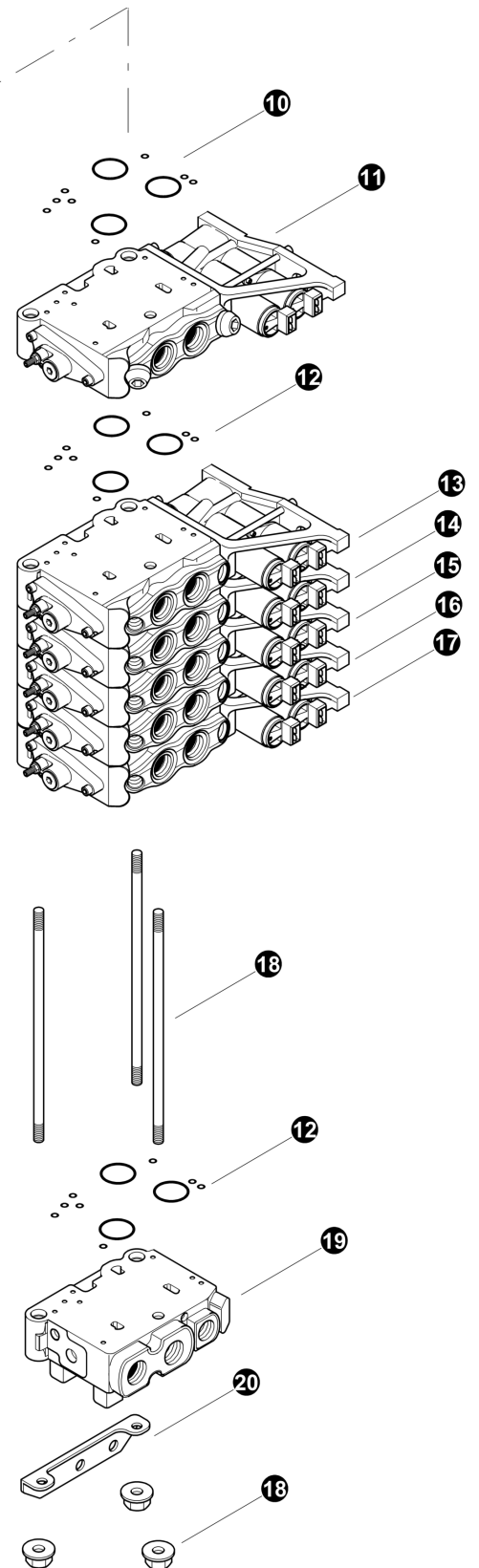
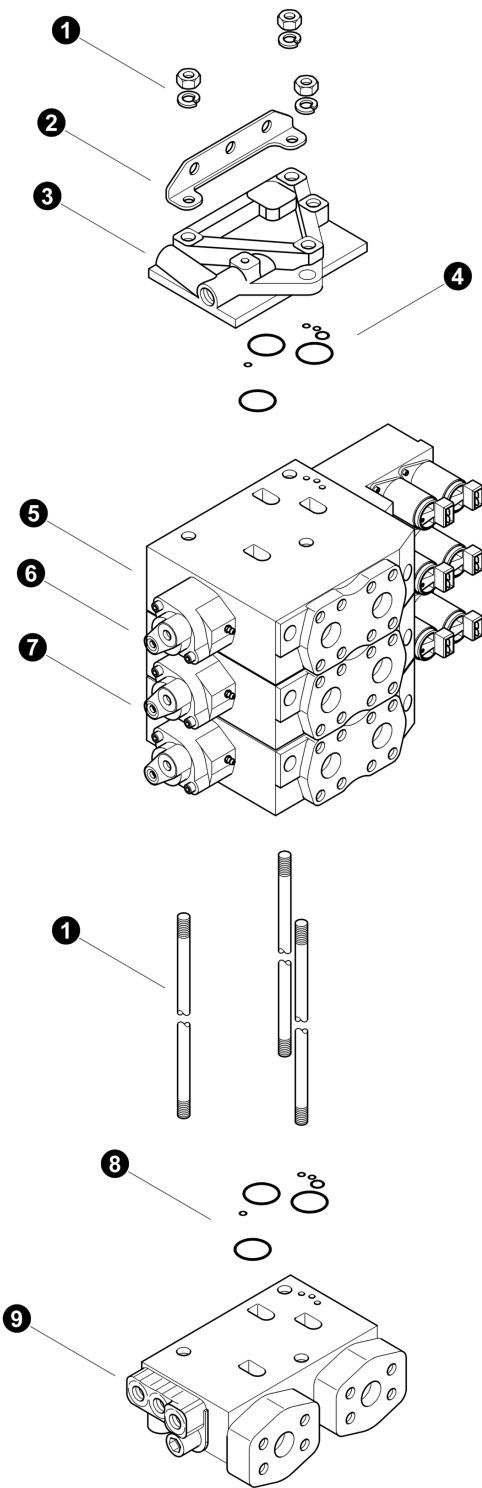
### (Forwarder TF 810, 830, 840)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------|
| -   | 52362-LH | 1   |  | VALVE, MAIN - VOAC (24 volt / 6 sections ) with out / squirt boom section |             |
| -   | 52361-LH | 1   |                                                                                   | VALVE, MAIN - VOAC (24 volt / 7 sections ) with / squirt boom section     |             |
| 1   | ---      | 1   |                                                                                   | KIT, Tie Rods and Nuts - K220 (2-Section span) (9120092371)               |             |
| 2   | ---      | 1   |                                                                                   | KIT, Bracket - K220 (9120092365)                                          |             |
| 3   | ---      | 1   |                                                                                   | COVER, K220 Valve                                                         |             |
| 4   | 24649-LH | 1   |                                                                                   | KIT, Seals - Voac Intersection (9120092315)                               |             |
| 5   | REF      | 1   |  | VALVE SECTION - Main Boom (830B-0314 and before) . . . . .                | LH-1        |
| 5   | REF      | 1   |  | VALVE SECTION - Stick Boom (830B-0314 and before) . . . . .               | LH-1        |
| 6   | REF      | 1   |  | VALVE SECTION - Stick Boom (830B-0315 and after) . . . . .                | LH-1        |
| 6   | REF      | 1   |  | VALVE SECTION - Main Boom (830B-0315 and after) . . . . .                 | LH-1        |
| 7   | 24649-LH | 1   |                                                                                   | KIT, Seals - Voac Parting "K" (9120092315)                                |             |
| 8   | REF      | 1   |                                                                                   | MID INLET, K220 to L90 . . . . .                                          | LH-1        |
| 9   | 23404-LH | 1   |                                                                                   | KIT, Seals - Voac Parting "L" (393000K820)                                |             |
| 10  | REF      | 1   |  | VALVE SECTION - "OPTIONAL" Squirt Boom . . . . .                          | LH-1        |
| 11  | ---      | 1   |                                                                                   | KIT, Seals - Voac Parting "L" (393000K820)                                |             |
| 12  | REF      | 1   |  | VALVE SECTION - Rotate function . . . . .                                 | LH-1        |
| 13  | REF      | 1   |  | VALVE SECTION - Grapple O/C function . . . . .                            | LH-1        |
| 14  | REF      | 1   |  | VALVE SECTION - Swing function . . . . .                                  | LH-1        |
| 15  | REF      | 1   |  | VALVE SECTION - Steer function . . . . .                                  | LH-1        |
| 16  | ---      | 1   |                                                                                   | KIT, Tie Rods and Nuts - L90 (4-Section span) (393000K003)                |             |
| 16  | 25133-LH | 1   |                                                                                   | KIT, Tie Rods and Nuts - L90 (5-Section span) (393000K004)                |             |
| 17  | ---      | 1   |                                                                                   | KIT, Bracket - L90 (393000K824)                                           |             |
| 18  | REF      | 1   |                                                                                   | COVER, L90 valve outlet. . . . .                                          | LH-1        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

***Shown are standard valve configurations, some machines have custom built valves, contact the factory for more informatoin if your valve doesn't match what is shown.***



Parts T3446 05/02/2006  
25.00

## MAIN CONTROL VALVE

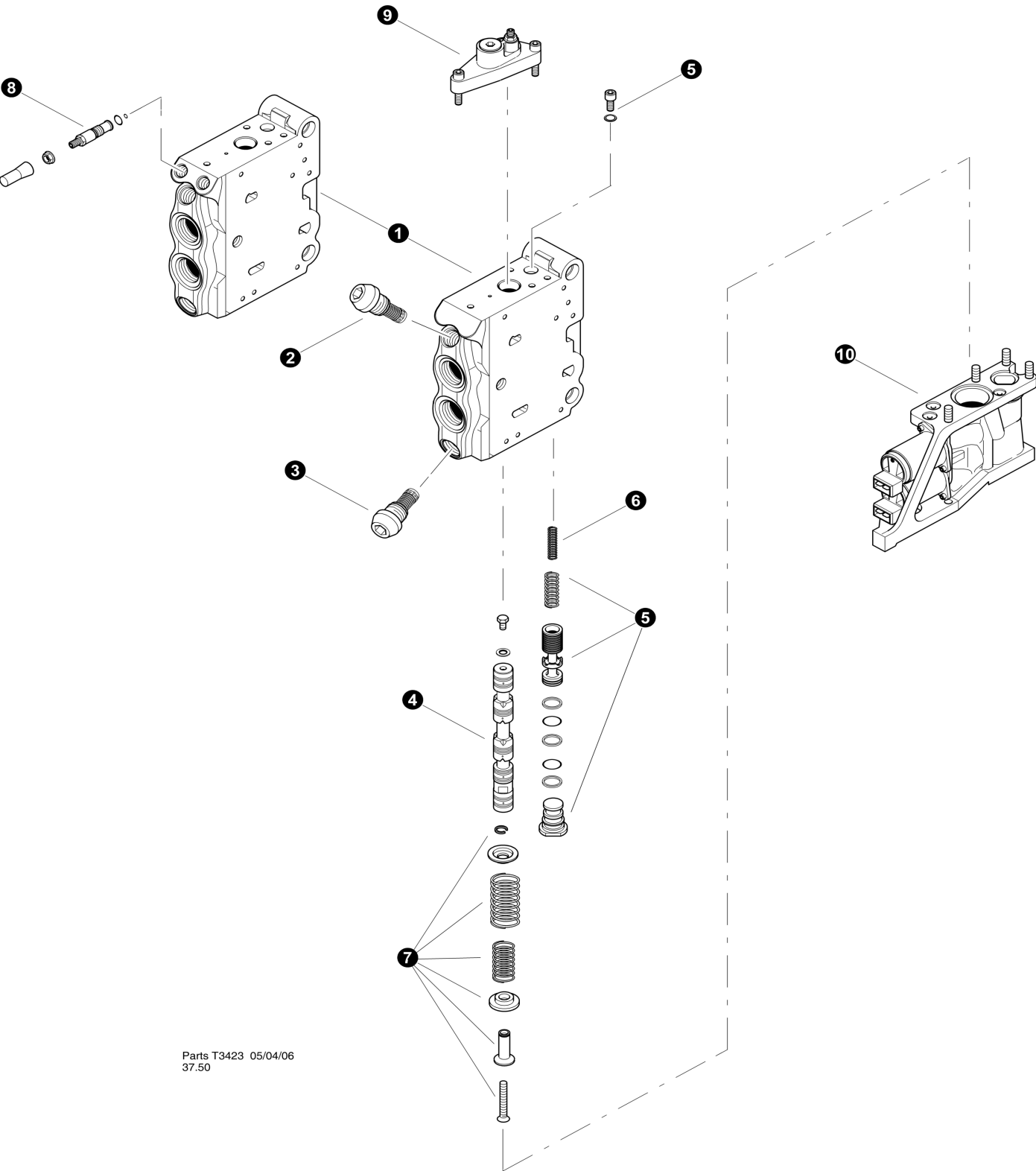
### (Harvester TF 830 & TB 630)

| REF | PART #   | QTY |                                                                                     | DESCRIPTION                                                 | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------|
| -   | 52496-LH | 1   |    | VALVE, MAIN - VOAC (24 volt / 9 section) Log Max Harvester  |             |
| 1   | ---      | 1   |                                                                                     | KIT, Tie Rods and Nuts - K220 (2-Section span) (9120092372) |             |
| 2   | ---      | 1   |                                                                                     | KIT, Bracket - K220 (9120092365)                            |             |
| 3   | ---      | 1   |                                                                                     | COVER, K220 Valve                                           |             |
| 4   | 24649-LH | 1   |                                                                                     | KIT, Seals - Voac Intersection (9120092315)                 |             |
| 5   | REF      | 1   |    | VALVE SECTION - Harvester Press (830B-0314 and before) .    | LH-1        |
| 5   | REF      | 1   |    | VALVE SECTION - Stick Boom (830B-0315 and after) . . . . .  | LH-1        |
| 6   | REF      | 1   |    | VALVE SECTION - Main Boom (830B-0314 and before) . . . . .  | LH-1        |
| 6   | REF      | 1   |    | VALVE SECTION - Harvester Press (830B-0315 and after) . . . | LH-1        |
| 7   | REF      | 1   |    | VALVE SECTION - Stick Boom (830B-0314 and before) . . . . . | LH-1        |
| 7   | REF      | 1   |    | VALVE SECTION - Main Boom (830B-0315 and after) . . . . .   | LH-1        |
| 8   | 24649-LH | 1   |                                                                                     | KIT, Seals - Voac Parting "K" (9120092315)                  |             |
| 9   | REF      | 1   |                                                                                     | MID INLET, K220 to L90 . . . . .                            | LH-1        |
| 10  | 23404-LH | 1   |                                                                                     | KIT, Seals - Voac Parting "L" (393000K820)                  |             |
| 11  | REF      | 1   |    | VALVE SECTION - "OPTIONAL" Squirt Boom . . . . .            | LH-1        |
| 12  | ---      | 1   |                                                                                     | KIT, Seals - Voac Parting "L" (393000K820)                  |             |
| 13  | REF      | 1   |    | VALVE SECTION - Harvester - Low Flow . . . . .              | LH-1        |
| 14  | REF      | 1   |    | VALVE SECTION - Rotate function . . . . .                   | LH-1        |
| 15  | REF      | 1   |    | VALVE SECTION - Swing function . . . . .                    | LH-1        |
| 16  | REF      | 1   |   | VALVE SECTION - Cab Level . . . . .                         | LH-1        |
| 17  | REF      | 1   |  | VALVE SECTION - Steer function . . . . .                    | LH-1        |
| 18  | ---      | 1   |                                                                                     | KIT, Tie Rods and Nuts - L90 (6-Section span) (393000K005)  |             |
| 19  | REF      | 1   |                                                                                     | COVER, L90 valve outlet. . . . .                            | LH-1        |
| 20  | ---      | 1   |                                                                                     | KIT, Bracket - L90 (393000K824)                             |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

***Shown are standard valve configurations, some machines have custom built valves, contact the factory for more informatoin if your valve doesn't match what is shown.***



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37.50

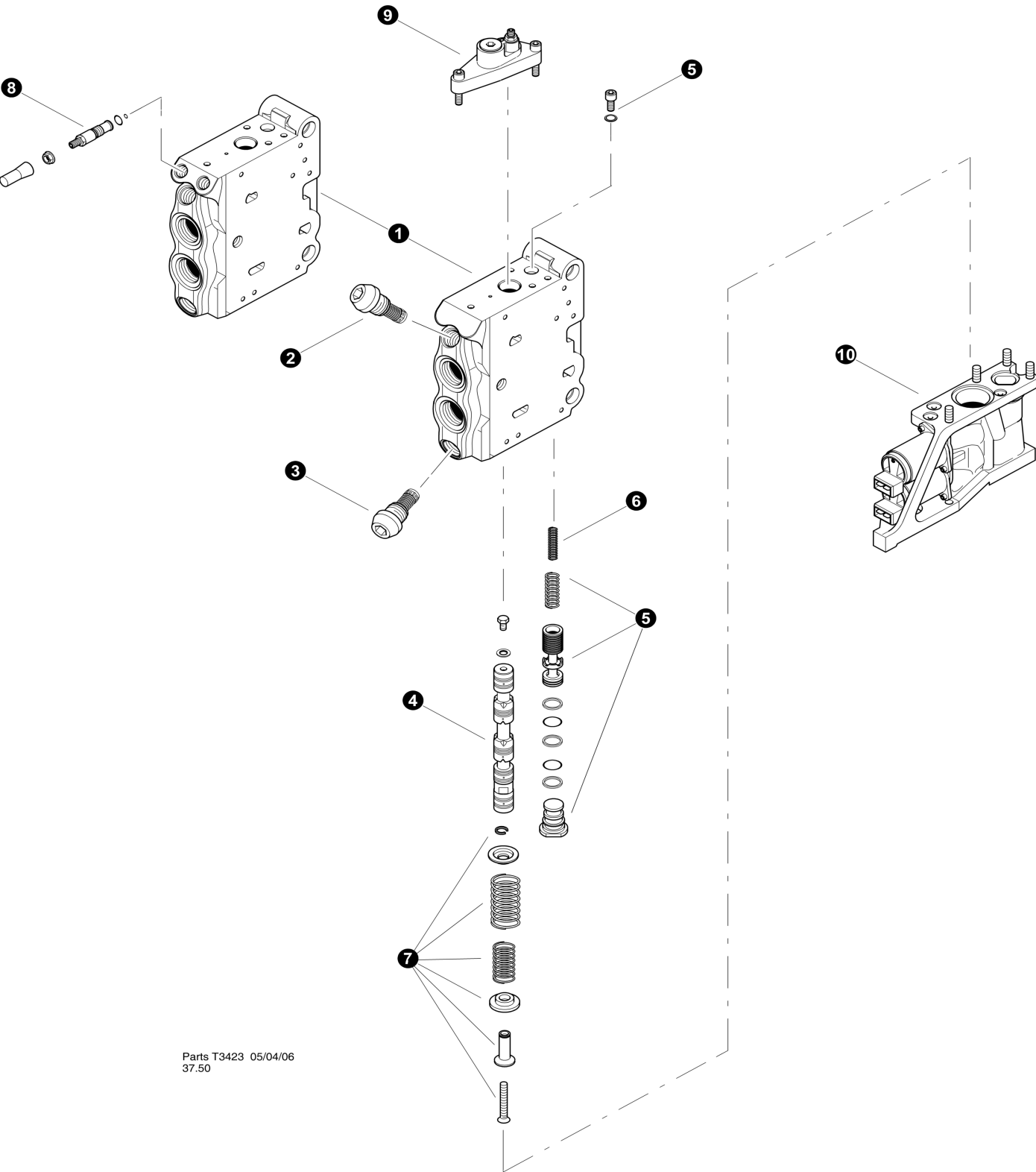


**L90LS VALVE SECTION**

| REF | PART #   | QTY |   | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------------------------|-------------|
| -   | -LH      | 1   | ☐ | VALVE SECTION - (Optional) Squirt Boom function (L90LS-MS-US60-275) |             |
| 1   | NSS      | 1   |   | BODY                                                                |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (250 Bar) (393000K569)                   |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (250 Bar) (393000K569)                   |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                             |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, BLUE (393000K616)                            |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, GREEN (393000K617)                           |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                                 |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)                         |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)                            |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                                      |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                                |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port . . . . .                               | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port . . . . .                               | LH-1        |
| -   | -LH      | 1   | ☐ | VALVE SECTION - Grapple Rotate function (L90LS-MS-US60-273)         |             |
| 1   | NSS      | 1   |   | BODY                                                                |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (250 Bar) (393000K569)                   |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (250 Bar) (393000K569)                   |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                             |             |
| 5   | ---      | 1   | ☐ | KIT, "K" COMPENSATOR, BLUE (393000K169)                             |             |
| 5   | ---      | 1   | ☐ | KIT, "K" COMPENSATOR, GREEN (393000K469)                            |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                                 |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)                         |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)                            |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                                      |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                                |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port . . . . .                               | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port . . . . .                               | LH-1        |
| -   | -LH      | 1   | ☐ | VALVE SECTION - Grapple Open / Close function (L90LS-MS-US60-272)   |             |
| 1   | NSS      | 1   |   | BODY                                                                |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (280 Bar) (393000K571)                   |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (280 Bar) (393000K571)                   |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                             |             |
| 5   | ---      | 1   | ☐ | KIT, "K" COMPENSATOR, BLUE (393000K169)                             |             |
| 5   | ---      | 1   | ☐ | KIT, "K" COMPENSATOR, GREEN (393000K469)                            |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                                 |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)                         |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)                            |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                                      |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                                |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port . . . . .                               | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port . . . . .                               | LH-1        |

☐ Kit or Assembly - includes all items indented underneath.

☞ See referenced page for component or assembly breakdown.



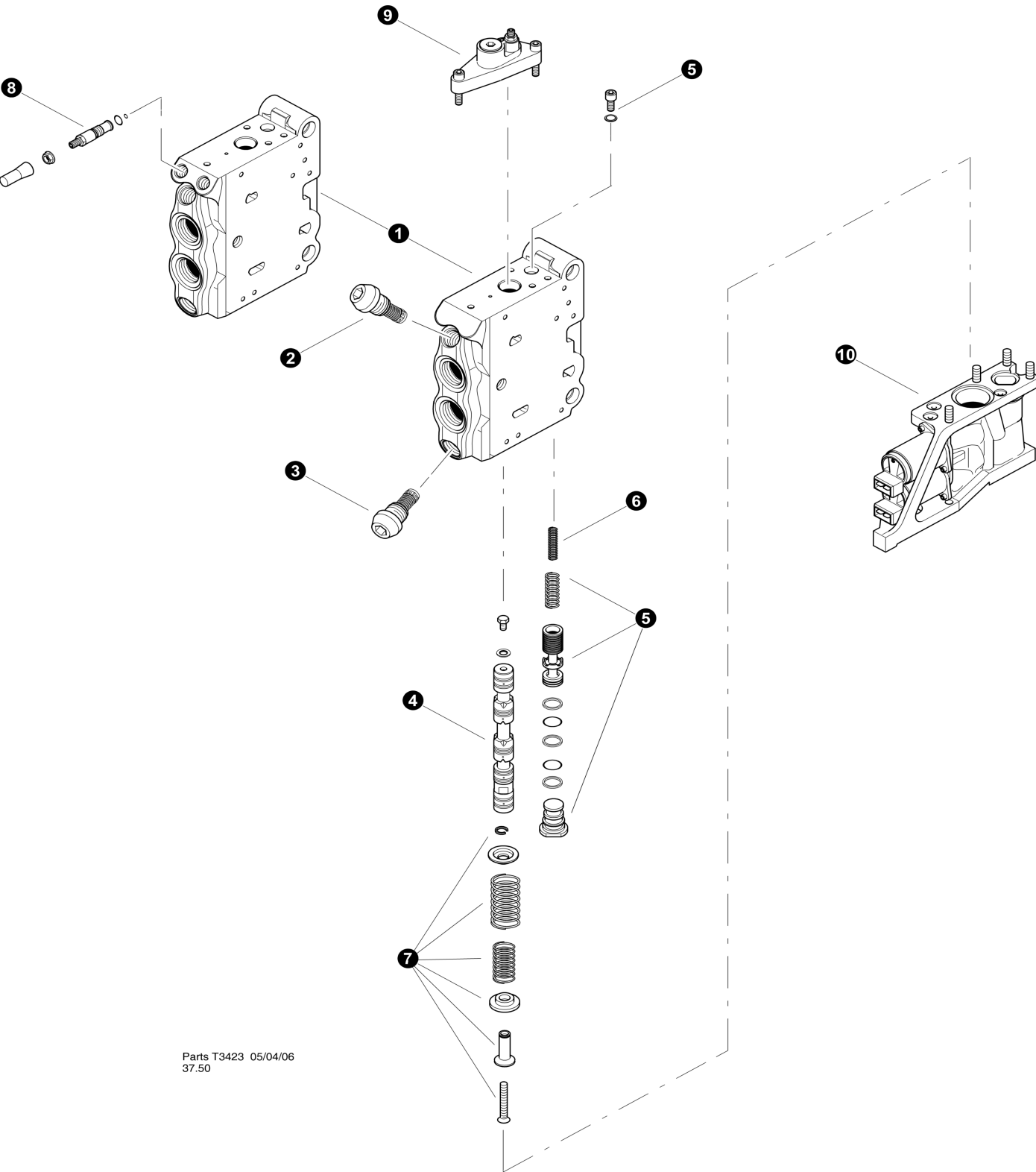
Parts T3423 05/04/06  
37.50

**L90LS VALVE SECTION (Continued...)**

| REF | PART #   | QTY |   | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------------------|-------------|
| -   | -LH      | 1   | ☐ | VALVE SECTION - Cab Swing function (L90LS-MS-US60-271) |             |
| 1   | NSS      | 1   |   | BODY                                                   |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (300 Bar) (393000K572)      |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (300 Bar) (393000K572)      |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                |             |
| 5   | ---      | 1   | ☐ | KIT, "KH" COMPENSATOR, BLUE (393000K505)               |             |
| 5   | ---      | 1   | ☐ | KIT, "KH" COMPENSATOR, GREEN (393000K506)              |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                    |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)            |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)               |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                         |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                   |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port .....                      | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port .....                      | LH-1        |
| -   | -LH      | 1   | ☐ | VALVE SECTION - Steer function (L90LS-MS-US60-270)     |             |
| 1   | NSS      | 1   |   | BODY                                                   |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (250 Bar) (393000K569)      |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (250 Bar) (393000K569)      |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, BLUE (393000K616)               |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, GREEN (393000K617)              |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                    |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)            |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)               |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                         |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                   |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port .....                      | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port .....                      | LH-1        |
| -   | -LH      | 1   | ☐ | VALVE SECTION - Cab Level function (L90LS-MS-US60-276) |             |
| 1   | NSS      | 1   |   | BODY                                                   |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (300 Bar) (393000K572)      |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (300 Bar) (393000K572)      |             |
| 4   | ---      | 1   |   | SPOOL, ZEX ( )                                         |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, BLUE (393000K616)               |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, GREEN (393000K617)              |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                    |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)            |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)               |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                         |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                   |             |
| 9   | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port .....                      | LH-1        |
| 10  | REF      | 1   | ☞ | END CAP ASSEMBLY - "B" port .....                      | LH-1        |

☐ Kit or Assembly - includes all items indented underneath.

☞ See referenced page for component or assembly breakdown.



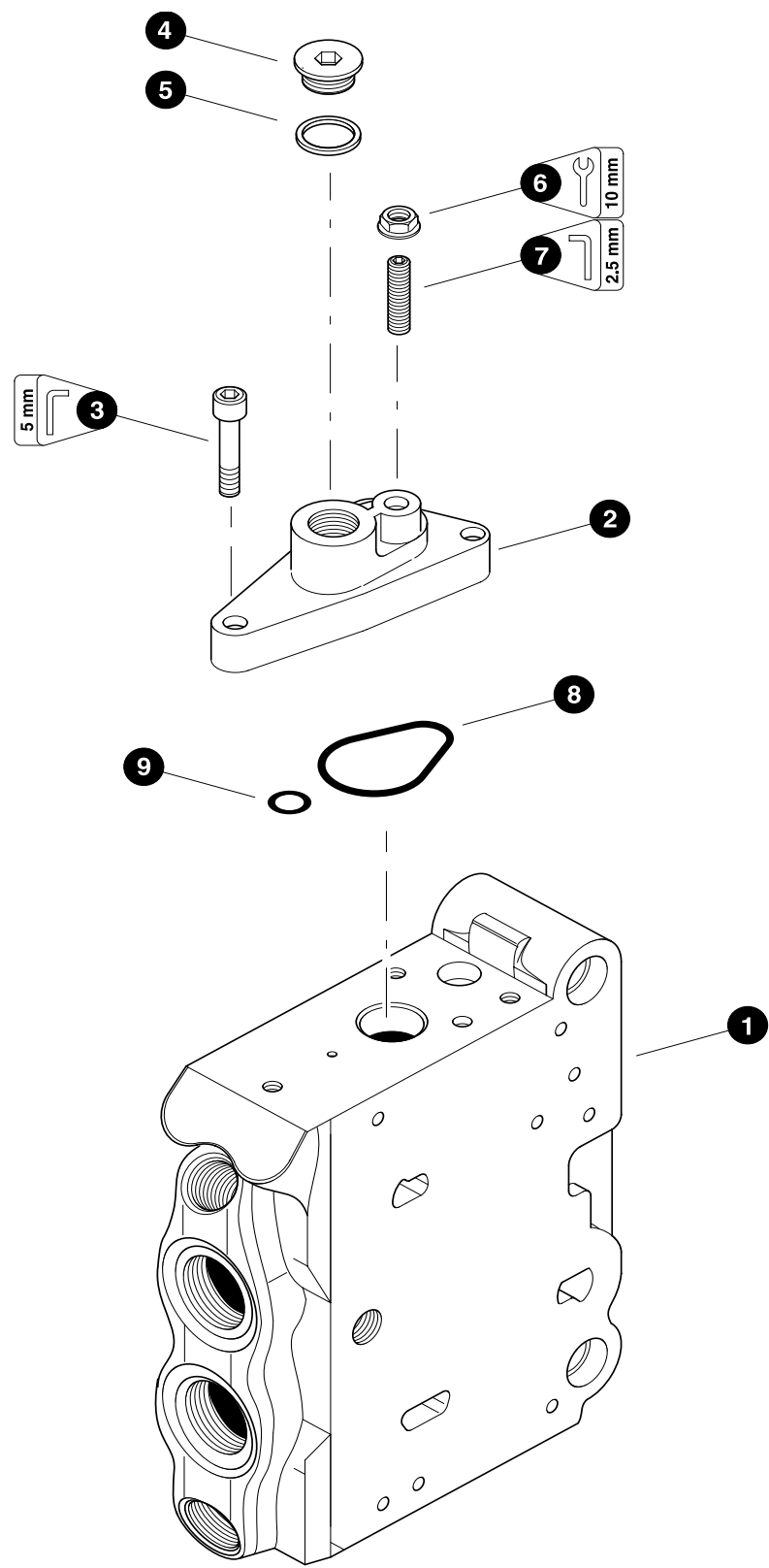
Parts T3423 05/04/06  
37.50

**L90LS VALVE SECTION (Continued...)**

| REF | PART #   | QTY |   | DESCRIPTION                                                     | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------------------------------|-------------|
| -   | -LH      | 1   | ☐ | VALVE SECTION - Low Flow Harvester function (L90LS-MS-US60-281) |             |
| 1   | NSS      | 1   |   | BODY                                                            |             |
| 2   | ---      | 1   |   | CARTRIDGE, "A" port relief (300 Bar) (393000K572) STD           |             |
|     | ---      | 1   |   | CARTRIDGE, "A" port relief (320 Bar) (393000K573)               |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (300 Bar) (393000K572) STD           |             |
|     | ---      | 1   |   | CARTRIDGE, "A" port relief (320 Bar) (393000K573)               |             |
| 4   | ---      | 1   |   | SPOOL, RKX (393000S490)                                         |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, BLUE (393000K616)                        |             |
| 5   | ---      | 1   | ☐ | KIT, "KX" COMPENSATOR, GREEN (393000K617)                       |             |
| -   | ---      | 1   |   | KIT, compensator seals (393000K811)                             |             |
| 6   | ---      | 1   |   | SPRING, (only used with KX compensator kit)                     |             |
| 7   | 23423-LH | 1   | ☐ | KIT, spool centering spring (393000K343)                        |             |
| 8   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                                  |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                            |             |
| 9   | REF      | 1   | 📖 | END CAP ASSEMBLY - "A" port .....                               | LH-1        |
| 10  | REF      | 1   | 📖 | END CAP ASSEMBLY - "B" port .....                               | LH-1        |

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.



**L90LS VALVE END CAP**

| REF | PART #   | QTY |   | DESCRIPTION                                     | SEE SECTION |
|-----|----------|-----|---|-------------------------------------------------|-------------|
| 1   | NSS      | 1   |   | VALVE SECTION BODY                              |             |
| -   | 23414-LH | 1   | ☐ | KIT, end cap - "A" port side                    |             |
| 2   | NSS      | 1   |   | CAP, end                                        |             |
| 3   | -----    | 3   |   | BOLT, allen head - 6mm-1.0P x 20mm (0211124703) |             |
| 4   | 15412-LH | 1   |   | PLUG - 6408-HHP-6                               |             |
| 5   | -----    | 1   | ⌘ | RING, seal (3-906)                              |             |
| 6   | -----    | 1   | ⌘ | NUT, seal - 6mm (3763131)                       |             |
| 7   | -----    | 1   |   | SCREW, adjustment (3764640)                     |             |
| -   | 23415-LH | 1   | ☐ | KIT, seal repair - "A" port side end cap        |             |
| 8   | -----    | 1   | ⌘ | O-RING (Large) (0663210509)                     |             |
| 9   | -----    | 1   | ⌘ | O-RING (Small) (06632114)                       |             |



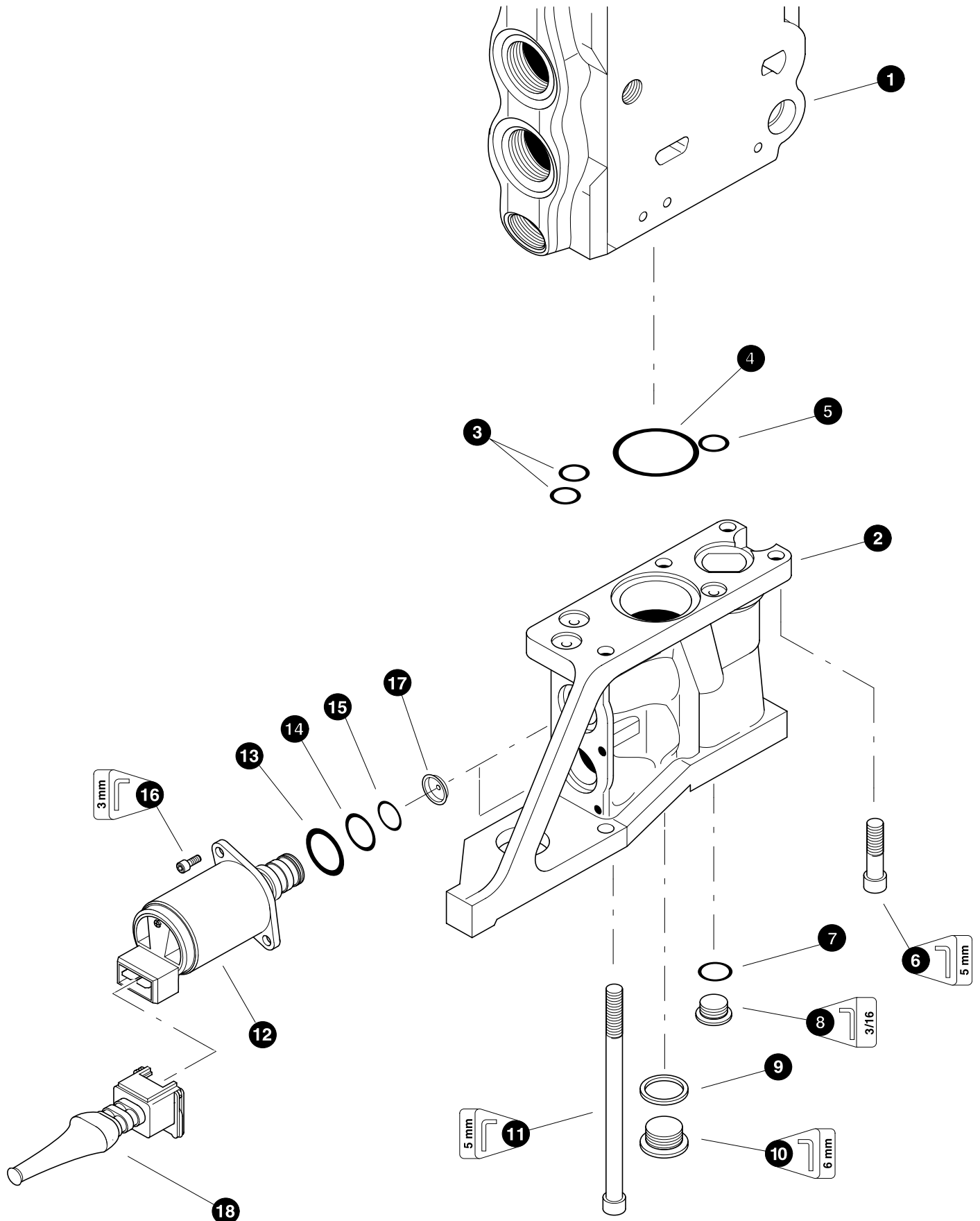
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in seal repair kit PN# 23415-LH.





**L90LS VALVE CONTROL CAP**

| REF | PART #   | QTY |   | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------------------------|-------------|
| 1   | NSS      | 1   |   | VALVE SECTION BODY                                                  |             |
| -   | 23416-LH | 1   | □ | KIT, end cap - "B" port side                                        |             |
| 2   | -----    | 1   |   | CAP, end                                                            |             |
| 3   | -----    | 2   | ⌘ | O-RING (Small)                                                      |             |
| 4   | -----    | 1   | ⌘ | O-RING (Large)                                                      |             |
| 5   | -----    | 1   | ⌘ | O-RING (Small)                                                      |             |
| 6   | -----    | 2   |   | BOLT, allen head - 6mm-1.0P x 20mm (0211124703)                     |             |
| 7   | -----    | 1   | ⌘ | O-RING                                                              |             |
| 8   | 11383-LH | 1   |   | PLUG - 6408-HHP-4                                                   |             |
| 9   | -----    | 1   | ⌘ | RING, seal                                                          |             |
| 10  | -----    | 1   |   | PLUG (0686644203)                                                   |             |
| 11  | -----    | 2   |   | SCREW, allen head - 6mm-1.0P x 100mm (0211126403)                   |             |
| 12  | 20976-LH | 2   |   | SOLENOID - 24V                                                      |             |
| 13  | -----    | 2   | ◆ | O-RING (Large)                                                      |             |
| 14  | -----    | 2   | ◆ | O-RING (Medium)                                                     |             |
| 15  | -----    | 2   | ◆ | O-RING (Small)                                                      |             |
| 16  | -----    | 4   |   | SCREW, allen head - 4mm-.75P x 12mm (0211117103)                    |             |
| 17  | -----    | 2   |   | DAMPER, pilot restrictor orifice (voac solenoid)(see note #1 below) |             |
| 18  | 19179-LH | 2   |   | CONNECTOR, (kit) voac controll valve                                |             |
| -   | 23417-LH | 1   |   | KIT, seal repair - "B" port side end cap                            |             |
| -   | 23418-LH | 1   |   | KIT, seal repair - solenoid                                         |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in seal repair kit PN# 23417-LH.



Included in seal repair kit PN# 23418-LH.

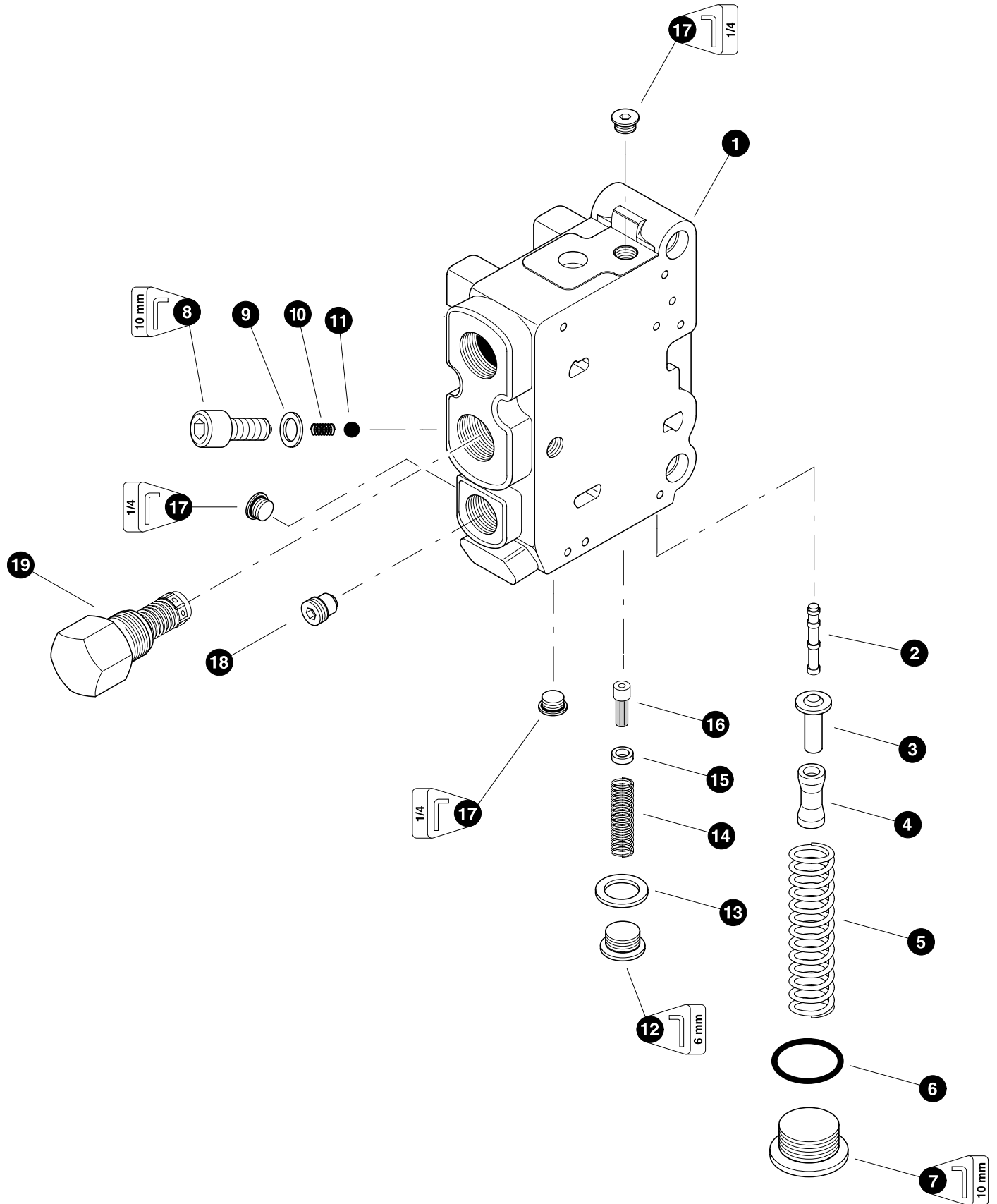
**NOTE #1:**

Orifice sizes vary depending upon function.

#3762396 0.6 mm

#3762397 0.8 mm

#3762398 1.0 mm



Parts 01319 09/16/99  
62.00

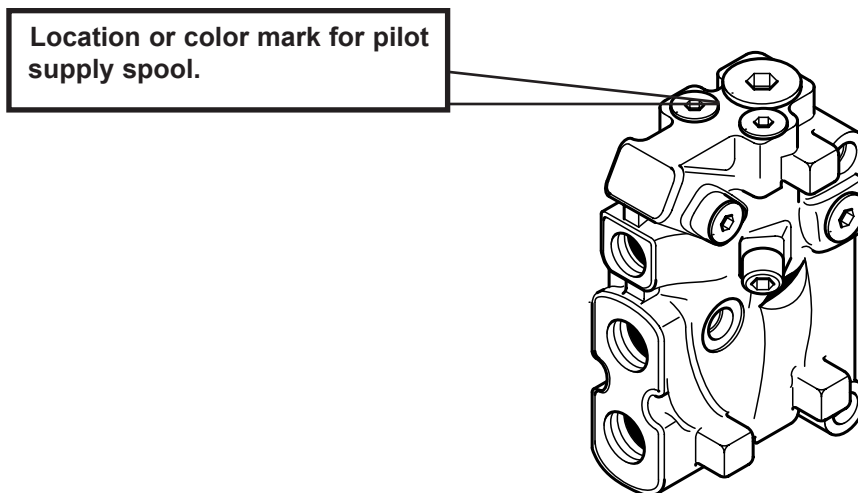
**L90LS VALVE OUTLET**

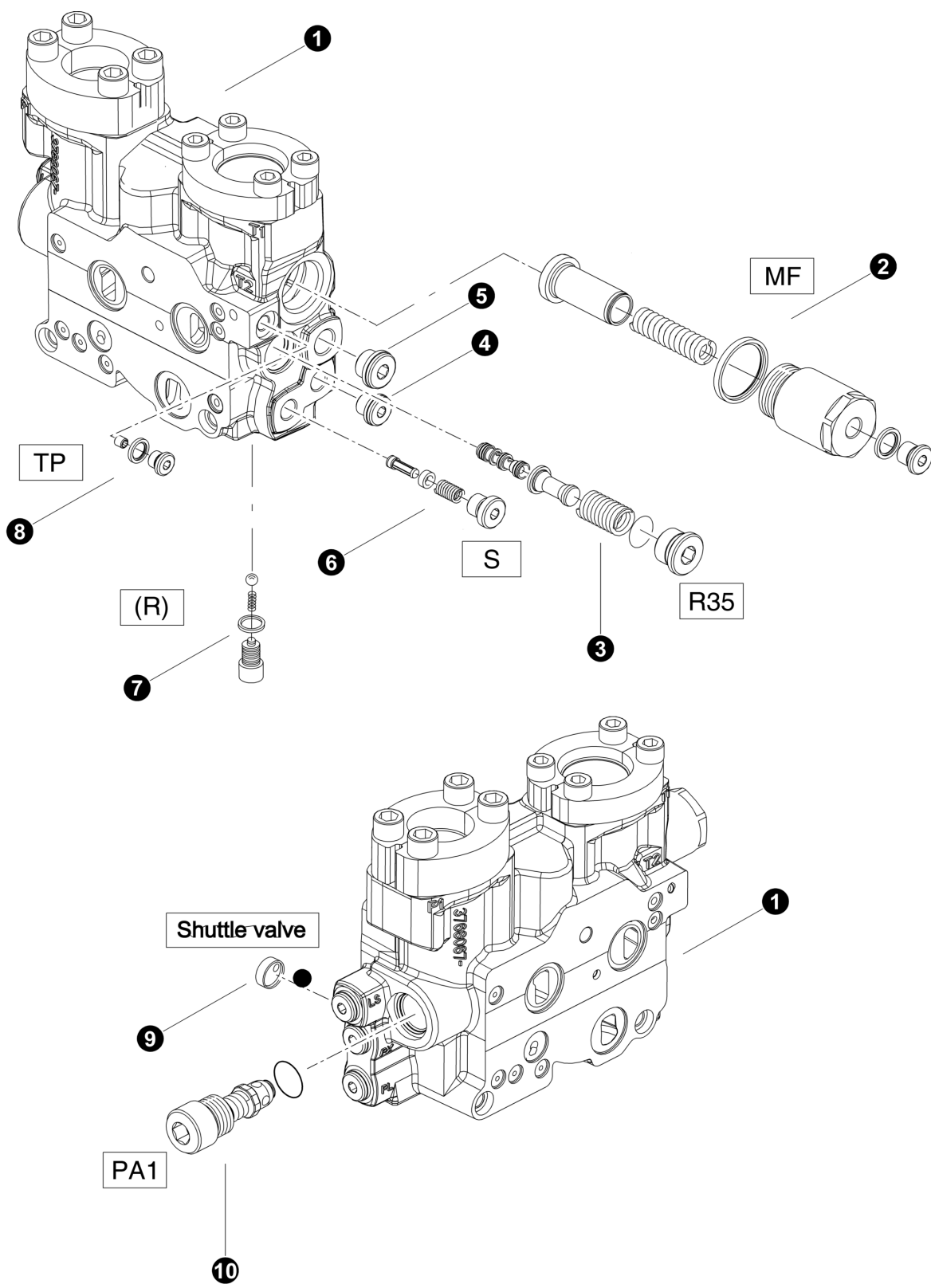
| REF | PART #   | QTY |                          | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|--------------------------|--------------------------------------------------------|-------------|
| -   | 23412-LH | 1   | <input type="checkbox"/> | VALVE SECTION, outlet                                  |             |
| 1   | NSS      | 1   |                          | BODY, valve section                                    |             |
| -   | 23431-LH | 1   | <input type="checkbox"/> | KIT, pilot supply reducer (Green)(35 bar)(see note #1) |             |
|     | 23432-LH | 1   | <input type="checkbox"/> | KIT, pilot supply reducer (Red)(35 bar)(see note #1)   |             |
| 2   | -----    | 1   |                          | SPOOL, pilot reducer                                   |             |
| 3   | -----    | 1   |                          | RETAINER, spring                                       |             |
| 4   | -----    | 1   |                          | SPACER, spring                                         |             |
| 5   | -----    | 1   |                          | SPRING                                                 |             |
| 6   | -----    | 1   |                          | O-RING (0663909901)                                    |             |
| 7   | -----    | 1   |                          | PLUG (9126244413)                                      |             |
| 8   | -----    | 1   |                          | PLUG (9127320022)                                      |             |
| 9   | -----    | 1   |                          | RING, seal (06611005)                                  |             |
| 10  | -----    | 1   |                          | SPRING                                                 |             |
| 11  | -----    | 1   |                          | BALL, check                                            |             |
| -   | 23433-LH | 1   | <input type="checkbox"/> | KIT, pilot supply strainer                             |             |
| 12  | -----    | 1   |                          | PLUG (9127320020)                                      |             |
| 13  | -----    | 1   |                          | RING, seal (06611020)                                  |             |
| 14  | -----    | 1   |                          | SPRING                                                 |             |
| 15  | -----    | 1   |                          | SPACER                                                 |             |
| 16  | -----    | 1   |                          | STRAINER (9126386076)                                  |             |
| 17  | 15412-LH | 3   |                          | PLUG - 6408-HHP-6                                      |             |
| 18  | -----    | 1   |                          | PLUG, pilot drain (393000K078)                         |             |
| 19  | -----    | 1   |                          | Counter press. valve - 130 PSI (393000K068)            |             |

☐ Kit or Assembly - includes all items indented underneath.

**NOTE #1**

Each section is color coded to insure proper fit, please check color mark before ordering.





Parts T3422 05/02/2006  
50.00

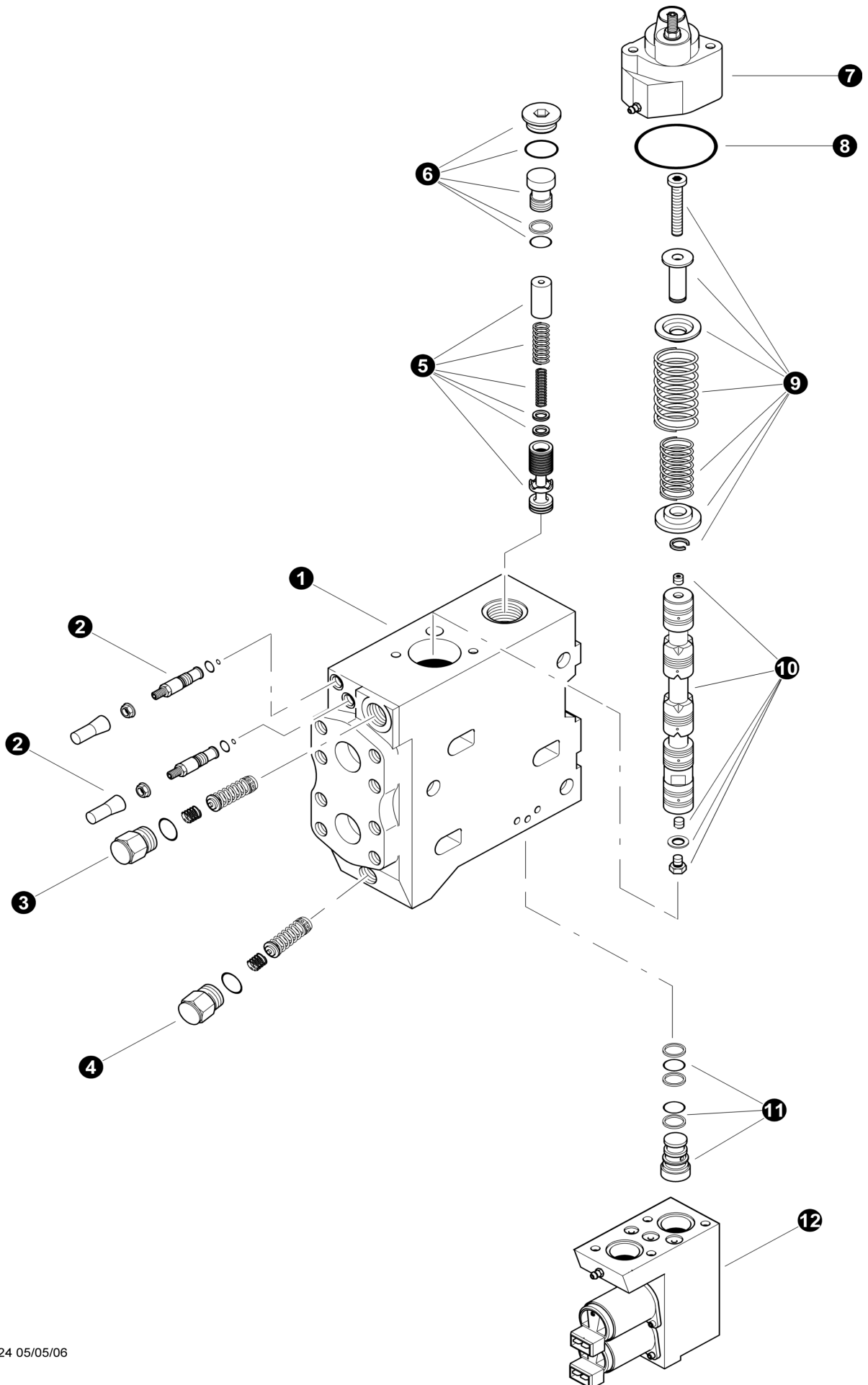
## MID INLET SECTION K220 to L90

| REF | PART # | QTY |                          | DESCRIPTION                              | SEE SECTION |
|-----|--------|-----|--------------------------|------------------------------------------|-------------|
| 1   | -LH    | 1   | <input type="checkbox"/> | MID INLET SECTION -                      |             |
| 2   | ---    | 1   |                          | VALVE, Counter Pressure (9120092550)     |             |
| 3   | ---    | 1   |                          | VALVE, Pilot Reducer 35 bar (9120092553) |             |
| 4   | ---    | 1   |                          | PLUG                                     |             |
| 5   | ---    | 1   |                          | PLUG                                     |             |
| 6   | ---    | 1   |                          | FILTER, Internal Pilot (9120092004)      |             |
| 7   | ---    | 1   |                          | VALVE, Check (9120092554)                |             |
| 8   | ---    | 1   |                          | PLUG, pilot tank conection (9120092555)  |             |
| 9   | ---    | 1   |                          | SHUTTLE, Load Sence (9120092050)         |             |
| 10  | ---    | 1   |                          | VALVE, main relief 300 bar (9120029264)  |             |

☐ Kit or Assembly - includes all items indented underneath.

### NOTE #1

Each section is color coded to insure proper fit, please check color mark before ordering.



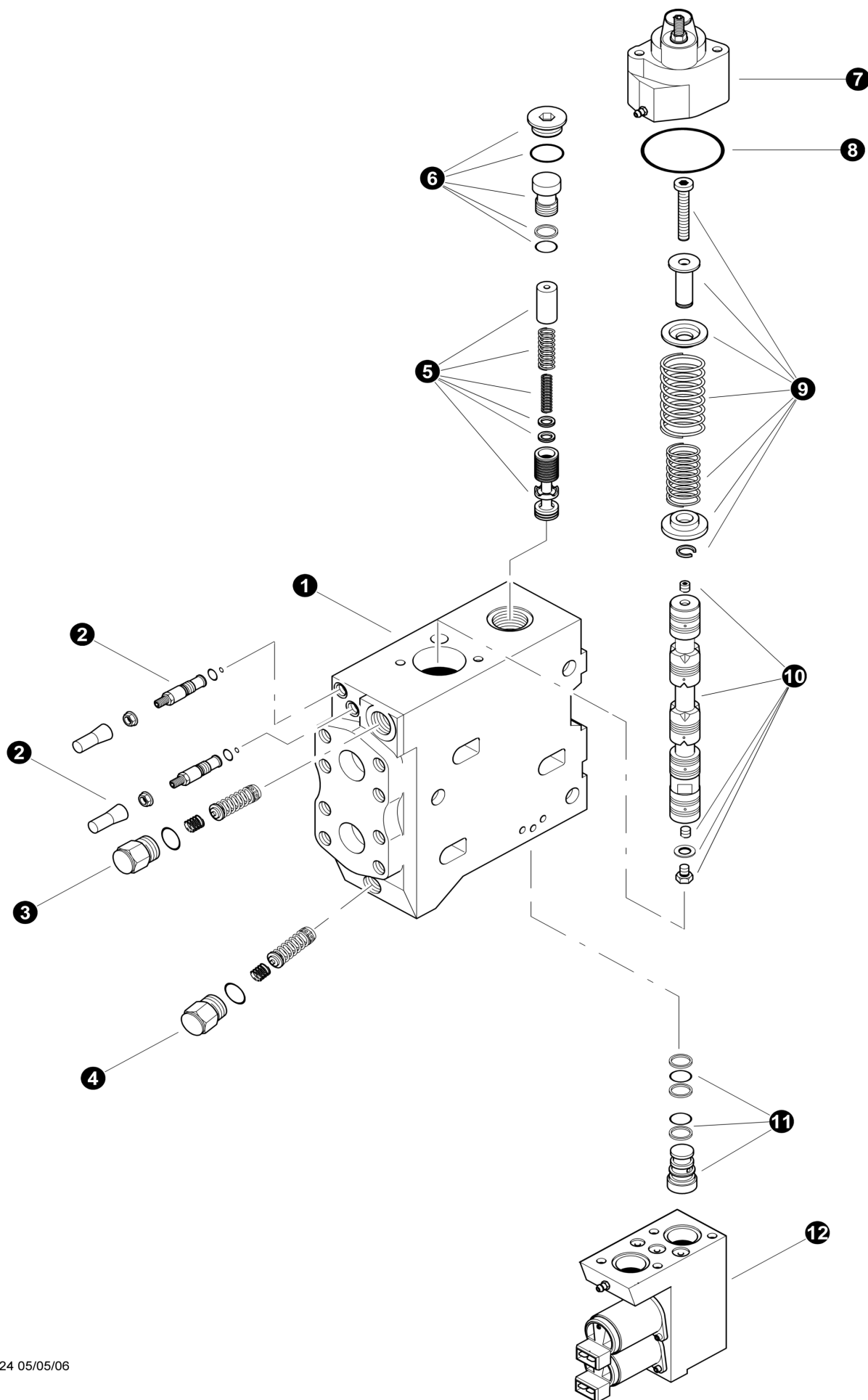
Parts T3424 05/05/06  
37.5

## VOAC K220 VALVE SECTION

| REF | PART #   | QTY |   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------------|-------------|
| -   | -LH      | 1   | ☐ | VALVE SECTION - Main Boom function (L90LS-MS-US60-231)  |             |
| 1   | NSS      | 1   |   | BODY                                                    |             |
| 2   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                          |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                    |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (300 Bar) (9120029967)       |             |
| 4   | ---      | 1   |   | CARTRIDGE, "A" port relief (300 Bar) (9120029967)       |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, BLUE (9120092056)                |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, GREEN (9120092060)               |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, RED (9120092064)                 |             |
| 6   | ---      | 1   | ☐ | PLUG 8, Compensator (9120092480)                        |             |
| -   | ---      | 1   |   | KIT, Plug 8 seals (9120092482)                          |             |
| 7   | REF.     | 1   | ☞ | CAP, "B"port. ....                                      | LH-1        |
| 8   | ---      | 1   |   | KIT, seals (9120092284)                                 |             |
| 9   | 23423-LH | 1   |   | KIT, spool centering spring (393000K343)                |             |
| 10  | ---      | 1   |   | SPOOL, YXA                                              |             |
| 11  | ---      | 1   | ☐ | PLUG 6, Compensator (3764731)                           |             |
| -   | ---      | 1   |   | KIT, Seal Plug 6 (9120092355)                           |             |
| 12  | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port ....                        | LH-1        |
| -   | -LH      | 1   | ☐ | VALVE SECTION - Stick Boom function (L90LS-MS-US60-232) |             |
| 1   | NSS      | 1   |   | BODY                                                    |             |
| 2   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                          |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                    |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (160 Bar) (9120029960)       |             |
| 4   | ---      | 1   |   | CARTRIDGE, "A" port relief (300 Bar) (9120029967)       |             |
| 5   | ---      | 1   |   | KIT, "K1" COMPENSATOR, BLUE (9120092054)                |             |
| 5   | ---      | 1   |   | KIT, "K1" COMPENSATOR, GREEN (9120092058)               |             |
| 5   | ---      | 1   |   | KIT, "K1" COMPENSATOR, RED (9120092062)                 |             |
| 6   | ---      | 1   | ☐ | PLUG 8, Compensator (9120092480)                        |             |
| -   | ---      | 1   |   | KIT, Plug 8 seals (9120092482)                          |             |
| 7   | REF.     | 1   | ☞ | CAP, "B"port. ....                                      | LH-1        |
| 8   | ---      | 1   |   | KIT, seals (9120092284)                                 |             |
| 9   | 23423-LH | 1   |   | KIT, spool centering spring (393000K343)                |             |
| 10  | ---      | 1   |   | SPOOL, YRX                                              |             |
| 11  | ---      | 1   | ☐ | PLUG 6, Compensator (3764731)                           |             |
| -   | ---      | 1   |   | KIT, Seal Plug 6 (9120092355)                           |             |
| 12  | REF      | 1   | ☞ | END CAP ASSEMBLY - "A" port ....                        | LH-1        |

☐ Kit or Assembly - includes all items indented underneath.

☞ See referenced page for component or assembly breakdown.



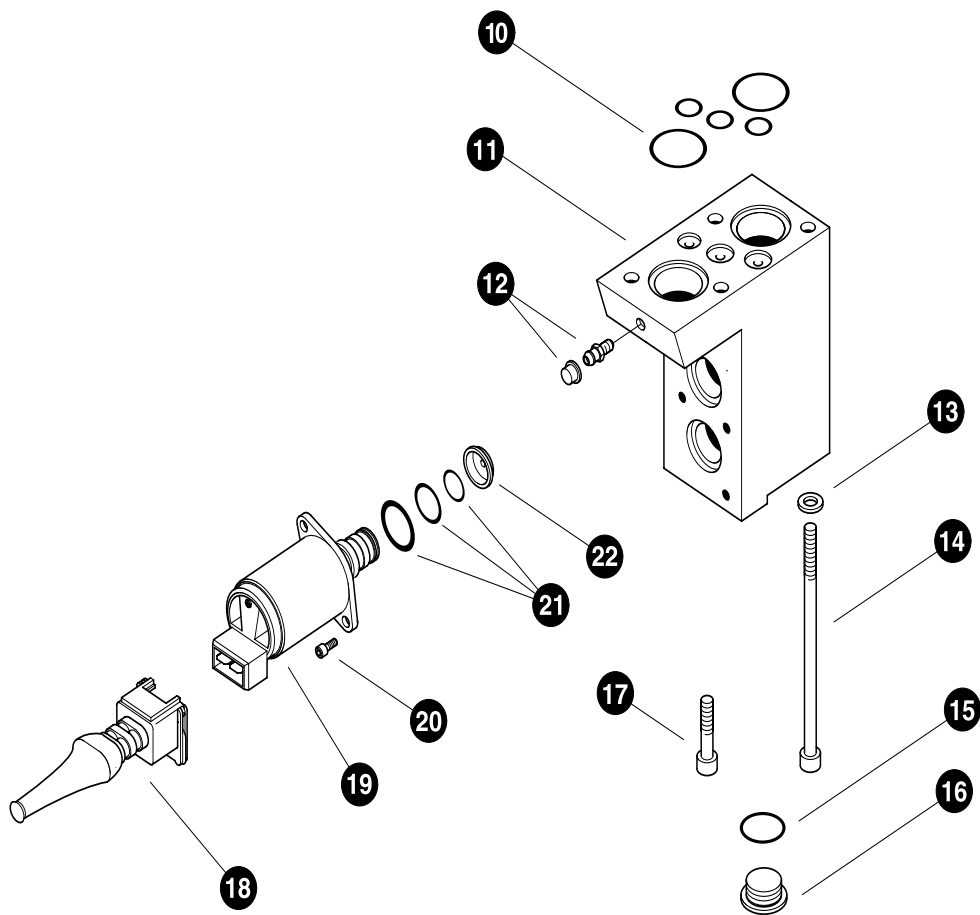
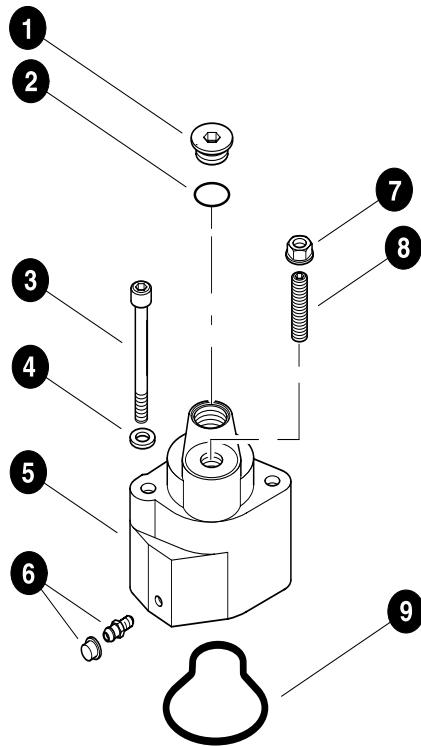


**VOAC K220 VALVE SECTION (Continued...)**

| REF | PART #   | QTY |   | DESCRIPTION                                                      | SEE SECTION |
|-----|----------|-----|---|------------------------------------------------------------------|-------------|
| -   | -LH      | 1   | ☐ | VALVE SECTION - Harvester High Flow function (L90LS-MS-US60-248) |             |
| 1   | NSS      | 1   |   | BODY                                                             |             |
| 2   | ---      | 2   | ☐ | KIT, FEED REDUCER (393000K817)                                   |             |
| -   | ---      | 2   |   | KIT, feed reducer seals (393000K852)                             |             |
| 3   | ---      | 1   |   | CARTRIDGE, "B" port relief (330 Bar) (9120029265)                |             |
| 4   | ---      | 1   |   | CARTRIDGE, "A" port relief (330 Bar) (9120029265)                |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, BLUE (9120092056)                         |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, GREEN (9120092060)                        |             |
| 5   | ---      | 1   |   | KIT, "K3" COMPENSATOR, RED (9120092064)                          |             |
| 6   | ---      | 1   | ☐ | PLUG 8, Compensator (9120092480)                                 |             |
| -   | ---      | 1   |   | KIT, Plug 8 seals (9120092482)                                   |             |
| 7   | REF.     | 1   | 📖 | CAP, "B"port. ....                                               | LH-1        |
| 8   | ---      | 1   |   | KIT, seals (9120092284)                                          |             |
| 9   | 23423-LH | 1   |   | KIT, spool centering spring (393000K343)                         |             |
| 10  | ---      | 1   |   | SPOOL, YXA                                                       |             |
| 11  | ---      | 1   | ☐ | PLUG 6, Compensator (3764731)                                    |             |
| -   | ---      | 1   |   | KIT, Seal Plug 6 (9120092355)                                    |             |
| 12  | REF      | 1   | 📖 | END CAP ASSEMBLY - "A" port. ....                                | LH-1        |

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.



Parts T2762 07/15/03  
50.00

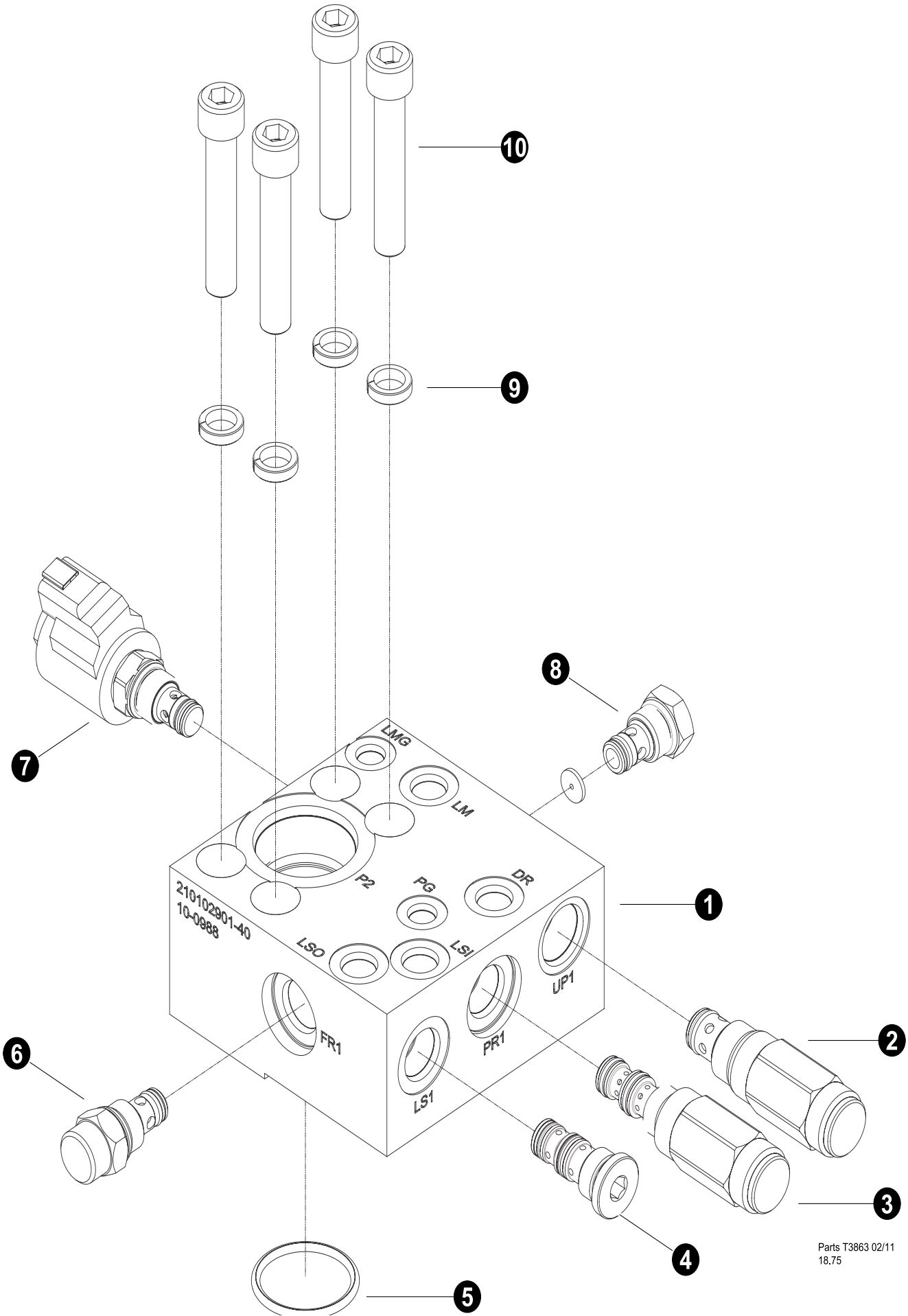
**VOAC K220 VALVE END CAPS**

| REF | PART #   | QTY |   | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|---|---------------------------------------------------------------------|-------------|
| -   | 51264-FH | 1   | ☐ | CUP, PILOT - K220 W / FLOW LIMIT                                    |             |
| 1   | ---      | 1   |   | PLUG                                                                |             |
| 2   | ---      | 1   | ⌘ | O-RING                                                              |             |
| 3   | ---      | 2   |   | BOLT, M6 X 35mm (3764640)                                           |             |
| 4   | ---      | 2   |   | WASHER, M6                                                          |             |
| 5   | ---      | 1   |   | CAP                                                                 |             |
| 6   | ---      | 1   |   | BLEEDER                                                             |             |
| 7   | ---      | 1   | ⌘ | NUT, seal M6 (91267109)                                             |             |
| 8   | ---      | 1   |   | SCREW                                                               |             |
| 9   | 26418-FH | 1   | ⌘ | KIT, cup seals - includes orings, seal nut and bleeder (9120092284) |             |
| -   | ---      | 1   | ☐ | KIT, CONTROL "A port side" K220                                     |             |
| 10  | 26417-FH | 1   | ◆ | KIT, O-RING                                                         |             |
| 11  | ---      | 1   |   | CAP                                                                 |             |
| 12  | ---      | 1   |   | BLEEDER                                                             |             |
| 13  | ---      | 4   |   | WASHER, M6                                                          |             |
| 14  | ---      | 2   |   | BOLT, M6 X 110mm (0211126603)                                       |             |
| 15  | ---      | 1   | ◆ | O-RING                                                              |             |
| 16  | ---      | 1   |   | PLUG                                                                |             |
| 17  | ---      | 2   |   | BOLT, M6 X 22mm (0211124803)                                        |             |
| 18  | 19179-FH | 2   |   | KIT, CONNECTOR -VOAC solenoid                                       |             |
| -   | 20976-FH | 2   |   | KIT, SOLENOID VALVE 24V                                             |             |
| 19  | ---      | 1   |   | SOLENOID VALVE 24V                                                  |             |
| 20  | ---      | 2   |   | SCREW, 4mm x 12mm (0211117103)                                      |             |
| 21  | ---      | 1   |   | KIT, SEAL -SOLENOID VALVE (393000K813)                              |             |
| 22  | ---      | 1   |   | DAMPER, pilot restrictor orifice 0.6 mm (3762396) - 1 DOT           |             |
| 22  | ---      | 1   |   | DAMPER, pilot restrictor orifice 0.8 mm (3762397) - 2 DOT           |             |
| 22  | ---      | 1   |   | DAMPER, pilot restrictor orifice 1 mm (3762398) - 3 DOT             |             |
| 22  | ---      | 1   |   | DAMPER, pilot restrictor orifice 1.1 mm (3762609) - 4 DOT           |             |
| 22  | ---      | 1   |   | DAMPER, pilot restrictor orifice 3 mm (3763308)                     |             |

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit PN# - 26418-FH

◆ Included in seal repair kit PN# - 26417-FH



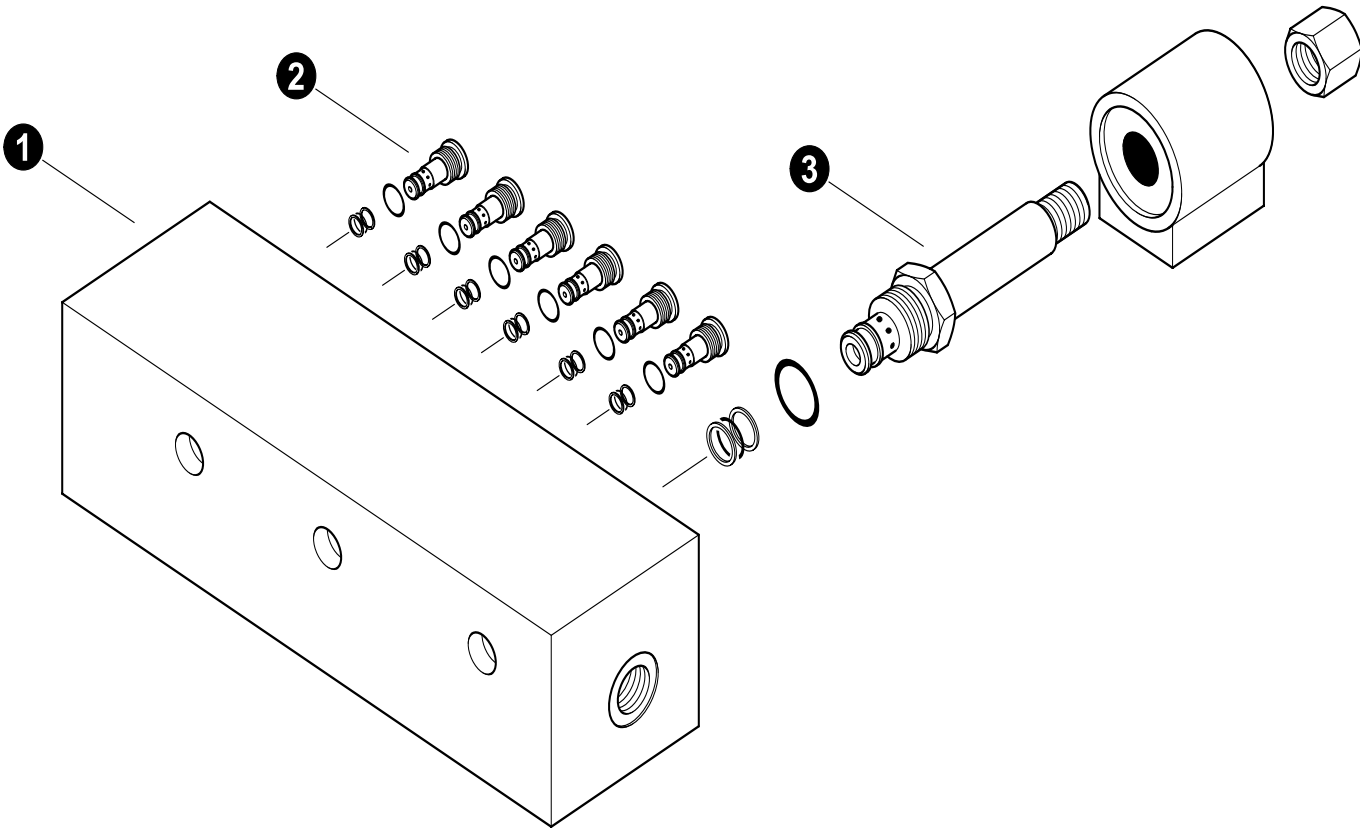
Parts T3863 02/11  
18.75

## UPPER MANIFOLD LOWER BLOCK SUPPLY PRESSURE

### Machine 0355-020111 and after

| REF | PART #   | QTY |   | DESCRIPTION                                    | SEE SECTION |
|-----|----------|-----|---|------------------------------------------------|-------------|
| 1   | 54264-LB | 1   | □ | VALVE, LOWER MANIFOLD PRESSURE CONTROL         |             |
| 2   | -LB      | 1   | ⊙ | UP1 Valve, Unloading - UP10-3005F-0-N-90-30/28 |             |
| 3   | -LB      | 1   | ⌘ | PR1 Valve, Relief - PR58-38H-0-N-32/32.0       |             |
| 4   | -LB      | 1   |   | LS1 Valve, Shuttle - 04.94.05.00.56.00         |             |
| 5   | -LB      | 1   |   | O-RING - 1.25"                                 |             |
| 6   | -LB      | 1   | ◆ | FR1 Valve, Flow Control - FR08-20F0-N-.25      |             |
| 7   | -LB      | 1   | ✱ | SV1 Valve, Solenoid - SF08-20-0-P-24ERZ        |             |
| 8   | -LB      | 1   | ▲ | CV1 Valve, Check - CV08-20-0-N-25              |             |
| -   | -LB      | 1   |   | OR1 Orifice - 7051078                          |             |
| 9   | -LB      | 4   |   | LOCK WASHER - 1/2"                             |             |
| 10  | -LB      | 4   |   | ALLEN BOLT - 1/2" 13 UNC X 2.75"               |             |

- Kit or Assembly - includes all items indented underneath.
- ⌘ Seal Repair Kit (SK10-3N-BM)
- ◆ Seal Repair Kit (SK08-2X-M)
- ⊙ Seal Repair Kit (SK10-2N-B)
- ▲ Seal Repair Kit (SK08-2N-T)
- ✱ Seal Repair Kit (SK08-2P-T)



Parts T3882 09/19/2011  
25.00

## UPPER MANIFOLD LOWER BLOCK SUPPLY PRESSURE

### Machine 0355-020111 and after

| REF | PART #   | QTY |   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|---|---------------------------------------|-------------|
| 1   | 52912-LH | 1   | □ | VALVE, COMBO DRAIN                    |             |
| 2   | -LH      | 6   | ⌘ | Shuttle - Drain (CV04-20-0-N-05)      |             |
| 3   | -LH      | 1   | ◆ | Valve, Solenoid - (SF08-23-0-P-24ERZ) |             |

- Kit or Assembly - includes all items indented underneath.
- ⌘ Seal Repair Kit (SK04-2X-T)
- ◆ Seal Repair Kit (SK08-2P-T)

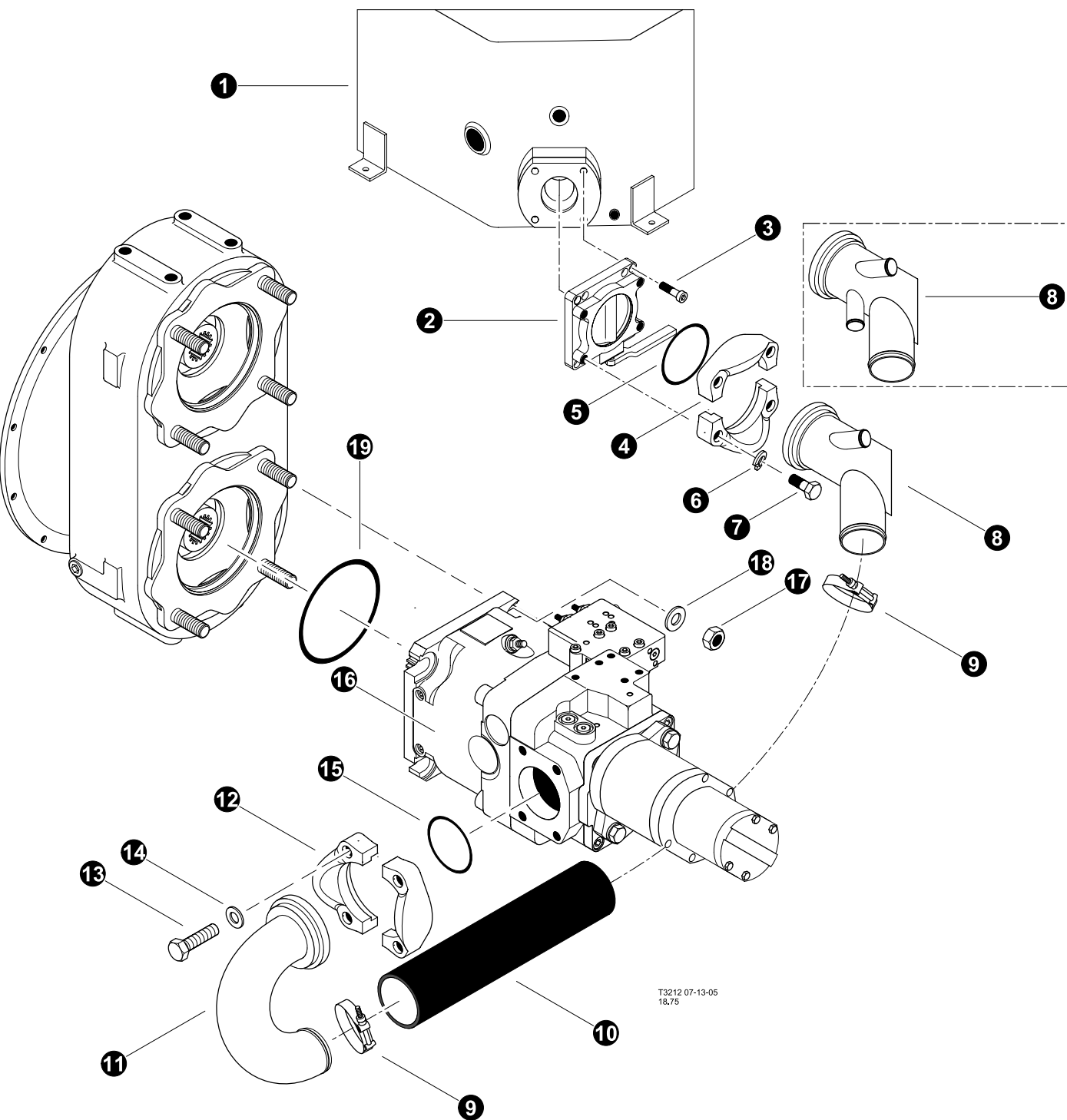
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## ***Section LH-2***

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### ***Loader Boom Hydraulics - Supply, Tank, Load sense, and Drain Circuits***



T3212 07-13-05  
18,75

## IMPLEMENT PUMP INSTALLATION

| REF | PART #     | QTY |                                                                                   | DESCRIPTION                               | SEE SECTION |
|-----|------------|-----|-----------------------------------------------------------------------------------|-------------------------------------------|-------------|
| 1   | REF        | 1   |  | HYDRAULIC TANK ASSEMBLY . . . . .         | UP-2        |
| 2   | 51619-LH   | 1   |                                                                                   | VALVE, SHUT OFF - BUTTERFLY (4")          |             |
| 3   | 23095-LH   | 4   |                                                                                   | BOLT, ALLEN HEAD - .625" x 2"             |             |
| 4   | 51625-LH   | 1   |  | KIT, FLANGE - SUCTION TUBE (4" )          |             |
| 5   |            | 1   |                                                                                   | O-RING - SUCTION TUBE (4")                |             |
| 6   | 10721-LH   | 4   |                                                                                   | WASHER, LOCK - .625"                      |             |
| 7   | 15526-LH   | 4   |                                                                                   | BOLT - .625" X 2"                         |             |
| 8   | 42461-LH   | 1   |                                                                                   | TUBE, SUCTION - 4" FLANGE - W/O DISC SAW  |             |
| 8   | 51886-LH   | 1   |                                                                                   | TUBE, SUCTION - 4" FLANGE - WITH DISC SAW |             |
| 9   | 15613-LH   | 2   |                                                                                   | CLAMP, STRAP BAND - 3.5"                  |             |
| 10  | 52146-LH   | 1   |                                                                                   | HOSE ASSEMBLY - 1012 48-0-0               |             |
| 11  | 51876-LH   | 1   |                                                                                   | TUBE, SUCTION 180 DEG 3.0" 630/830        |             |
| 12  | 18306-LH   | 1   |  | KIT, split flange - 3" (Code 61)          |             |
| 13  | 15562-LH   | 1   |                                                                                   | BOLT - 5/8" x 2"                          |             |
| 14  | 10721-LH   | 4   |                                                                                   | WASHER, lock - 5/8"                       |             |
| 15  | 18695-LH   | 1   |                                                                                   | O-RING - 3" SF                            |             |
| 16  | REF        | 1   |  | IMPLEMENT PUMP. . . . .                   | LH-1        |
| 17  | 10776-LH   | 4   |                                                                                   | NUT, hex - 3/4"                           |             |
| 18  | 15550-LH   | 4   |                                                                                   | WASHER, SAE flat - 3/4"                   |             |
| 19  | 15442-2-LH | 1   |                                                                                   | O-RING, PUMP DRIVE PILOT                  |             |



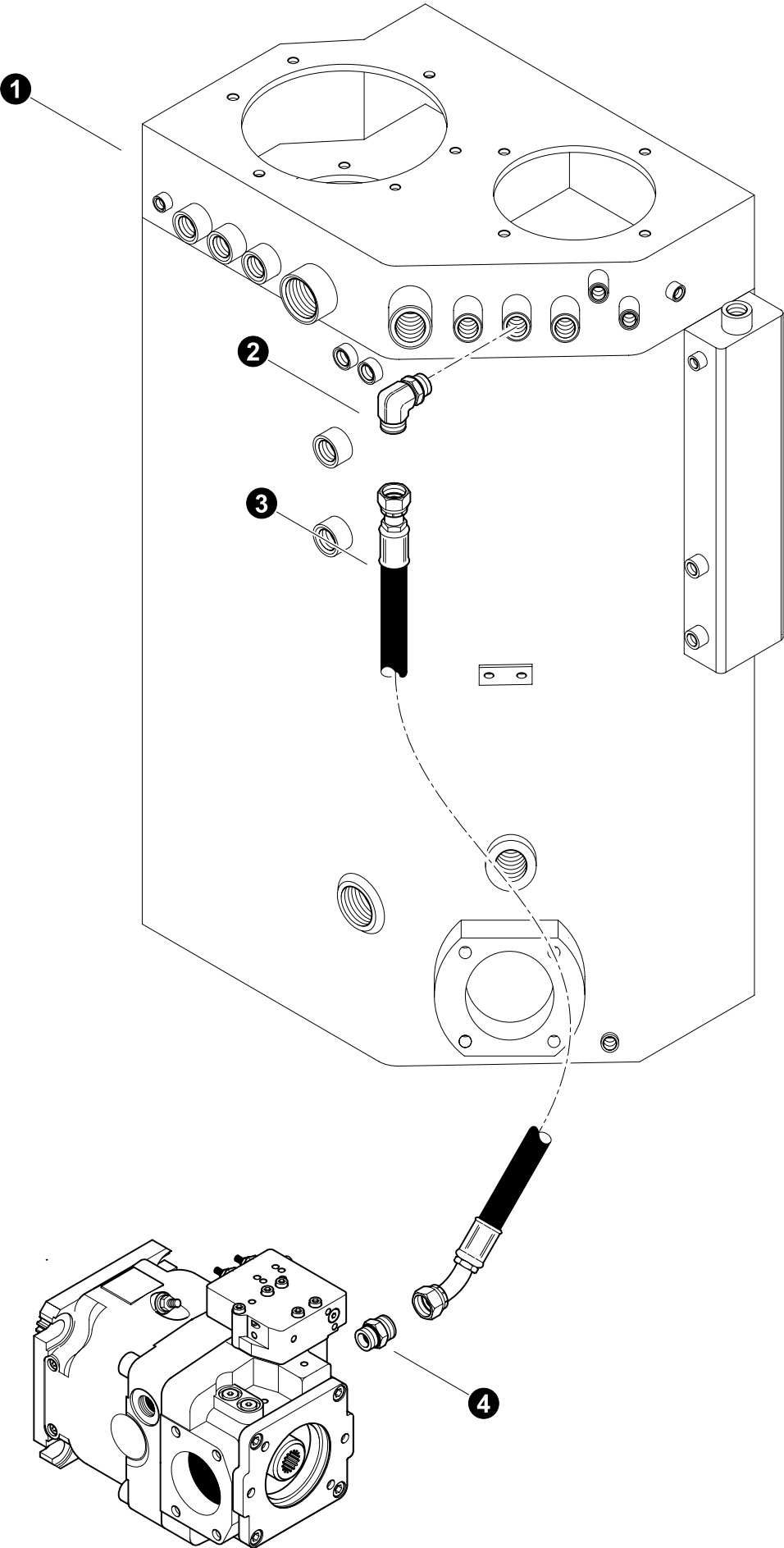
See referenced page for component or assembly breakdown.



Bulk material - order length required in feet or meters.



Kit or Assembly - includes all items indented underneath.



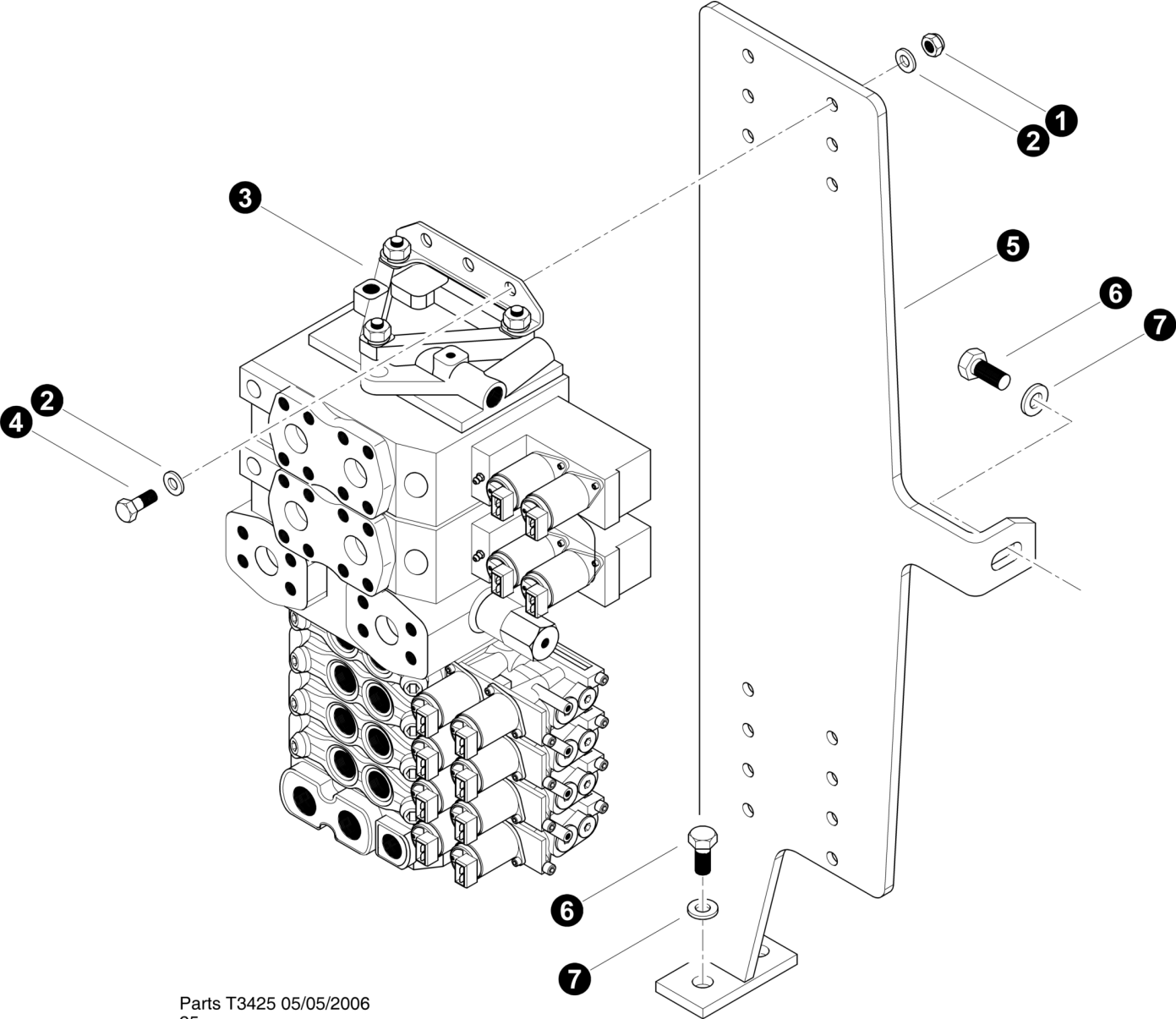
Parts T3632 08/08  
18.75

## IMPLEMENT PUMP CASE DRAIN LINE

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |                                                                                   | HYDRAULIC TANK .....                                                                              | UP-2        |
| 2   | 17688-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-1212S                                                                         |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2039-12-120S-1204 ( <i>Implement pump<br/>case drain port to hydraulic tank</i> ) |             |
| 4   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                                    |             |
| 5   | REF.     | 1   |  | IMPLEMENT PUMP. ....                                                                              | LH-1        |



See referenced page for component or assembly breakdown.



Parts T3425 05/05/2006  
25

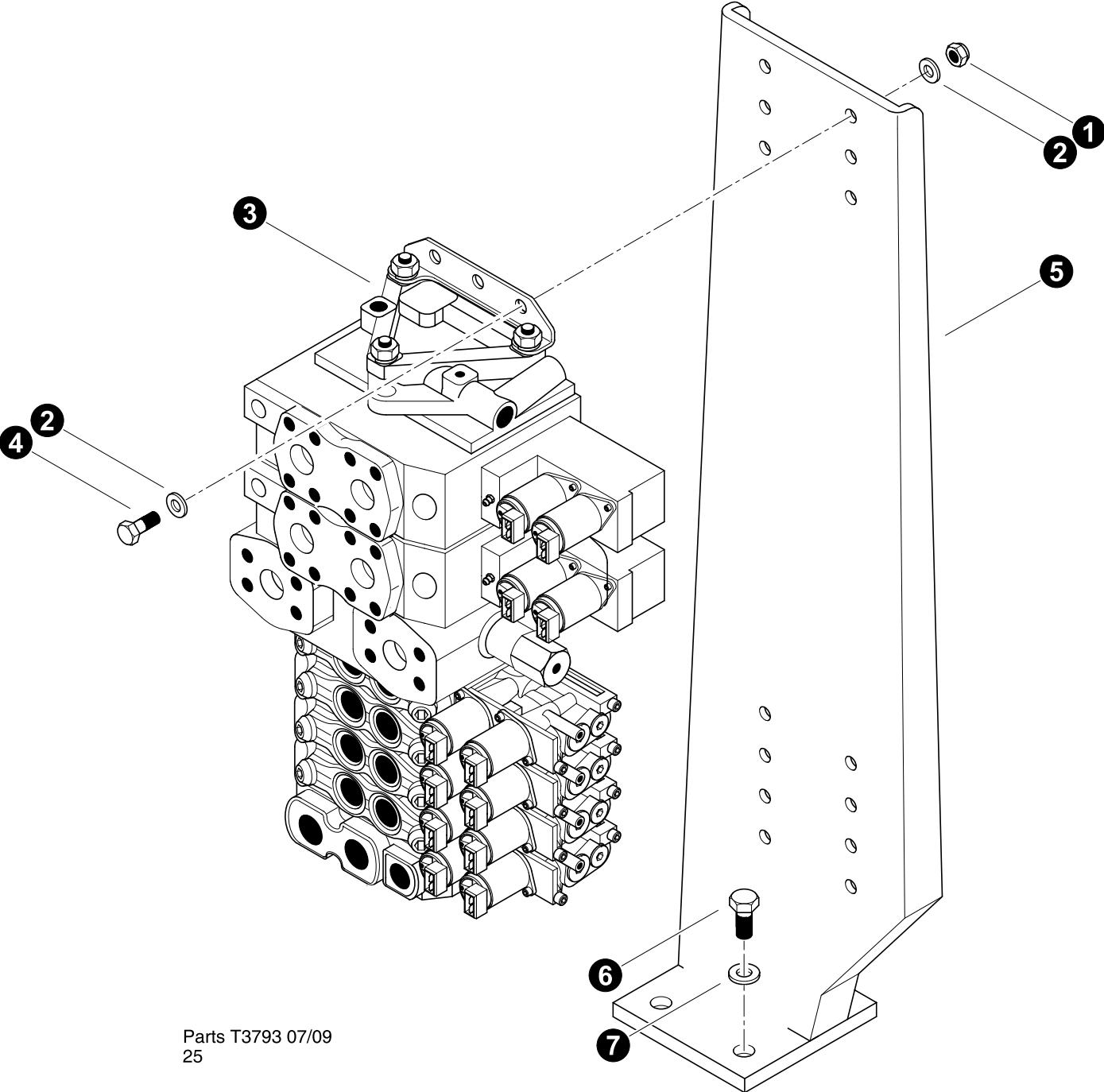
## MAIN CONTROL VALVE MOUNTING

### (machine 830B-0314-071609 and before)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------|-------------|
| 1   | 10813-LH | 4   |                                                                                   | NUT, lock 3/8"              |             |
| 2   | 10802-LH | 8   |                                                                                   | WASHER, FLAT - .375"        |             |
| 3   | REF      | 1   |  | MAIN CONTROL VALVE .....    | LH-1        |
| 4   | 15507-LH | 4   |                                                                                   | BOLT, 3/8 X 1 1/4"          |             |
| 5   | 52344-LH | 1   |                                                                                   | BRACKET, MAIN VALVE CONTROL |             |
| 6   | 10739-LH | 3   |                                                                                   | BOLT - .5" X 1.5"           |             |
| 7   | 10804-LH | 3   |                                                                                   | WASHER, FLAT - .5"          |             |



See referenced page for component or assembly breakdown.



Parts T3793 07/09  
25

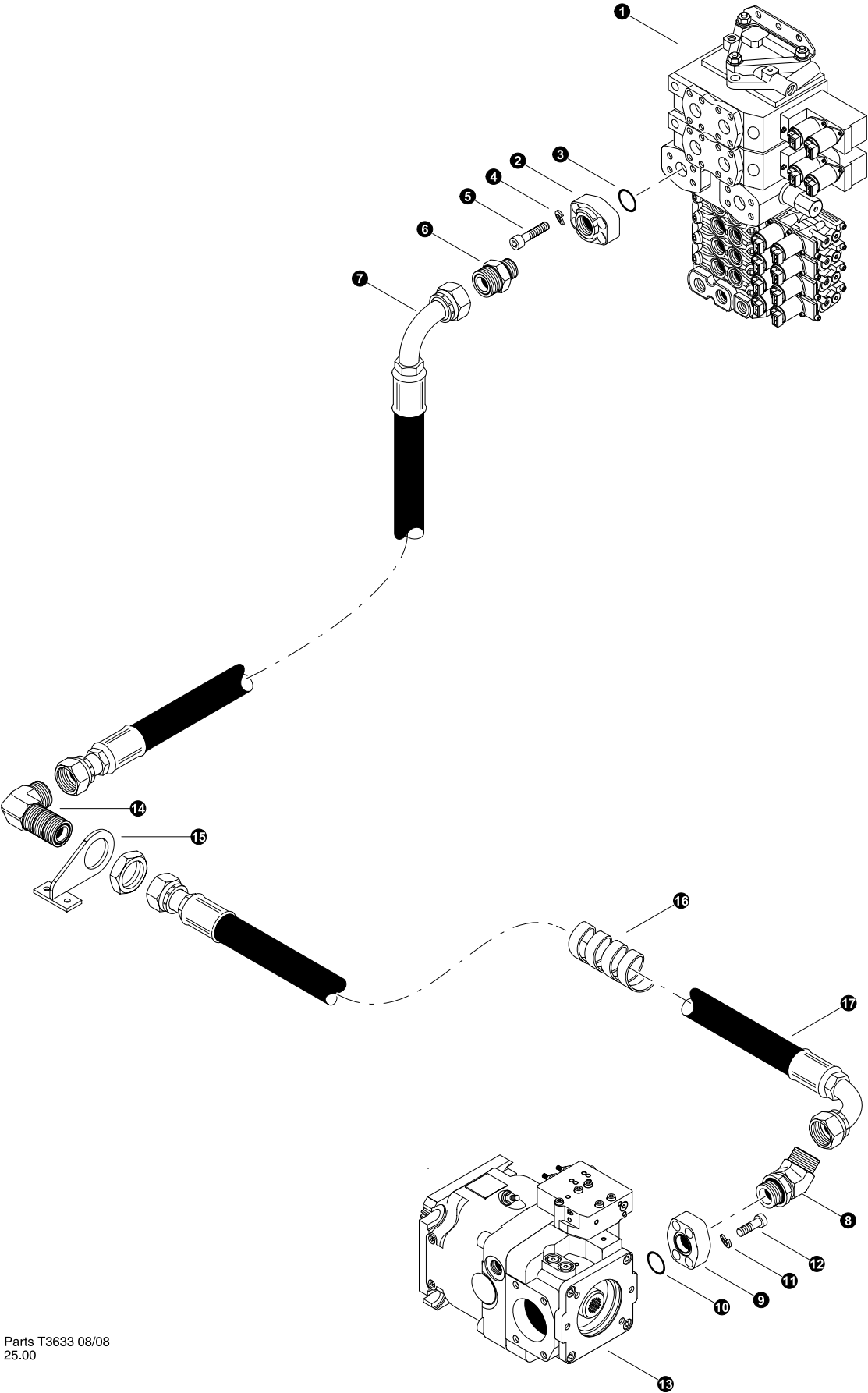


**MAIN CONTROL VALVE MOUNTING****(machine 830B-0315 and after)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------|-------------|
| 1   | 10813-LH | 4   |                                                                                   | NUT, lock 3/8"              |             |
| 2   | 10802-LH | 8   |                                                                                   | WASHER, FLAT - .375"        |             |
| 3   | REF      | 1   |  | MAIN CONTROL VALVE .....    | LH-1        |
| 4   | 15507-LH | 4   |                                                                                   | BOLT, 3/8 X 1 1/4"          |             |
| 5   | 53871-LH | 1   |                                                                                   | BRACKET, MAIN VALVE CONTROL |             |
| 6   | 10739-LH | 4   |                                                                                   | BOLT - .5" X 1.5"           |             |
| 7   | 10804-LH | 4   |                                                                                   | WASHER, FLAT - .5"          |             |



See referenced page for component or assembly breakdown.



Parts T3633 08/08  
25.00

## IMPLEMENT PUMP PRESSURE LINE TO MAIN CONTROL VALVE

### Machines built before 0354-011211

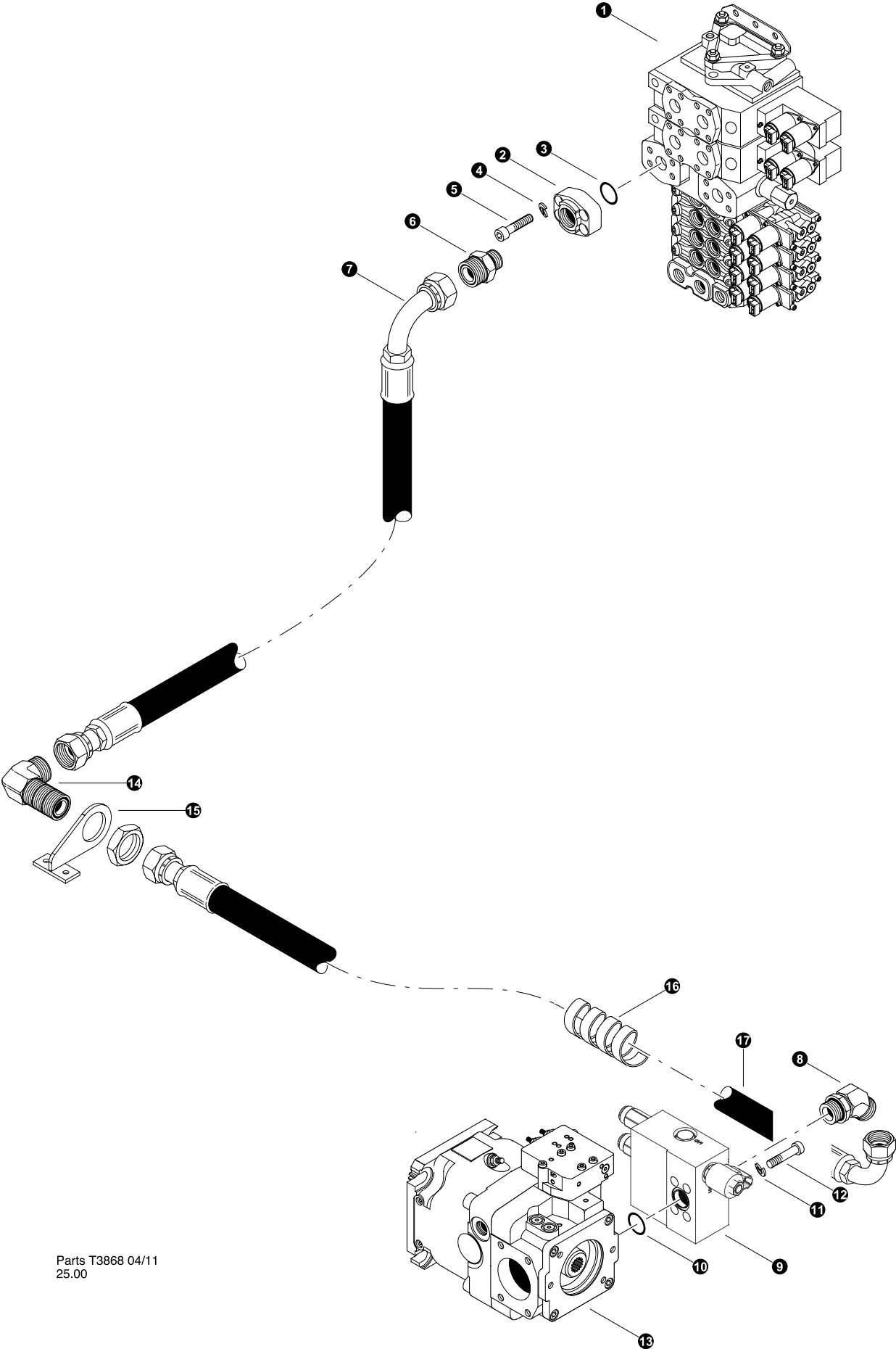
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                                              | LH-1        |
| 2   | 18397-LH | 1   |  | CONNECTOR, FLANGE PAD - 1" C 62                                                                                                           |             |
| 3   | 15377-LH | 1   |                                                                                   | O-RING - 1"                                                                                                                               |             |
| 4   | -        | 4   |                                                                                   | WASHER, lock                                                                                                                              |             |
| 5   | 18988-LH | 4   |                                                                                   | BOLT, ALLEN HEAD - 12MM-1.75P X 45MM                                                                                                      |             |
| 6   | 17063-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-2016S                                                                                                            |             |
| 7   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4025-20-20OS-2009 ( <i>Pump Pressure Bulkhead to main control valve pressure inlet port "P1"</i> ) 830B-0244 to 830B-0314 |             |
| 7   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4029-20-20OS-2009 ( <i>Pump Pressure Bulkhead to main control valve pressure inlet port "P1"</i> ) 830B-0315 and newer    |             |
| 8   | 17056-LH | 1   |                                                                                   | ELBOW, 45 - FF2068T-2020S                                                                                                                 |             |
| 9   | 17016-LH | 1   |  | CONNECTOR, FLANGE PAD - 1.25" C 62                                                                                                        |             |
| 10  | -        | 1   |                                                                                   | O-RING - 1.25"                                                                                                                            |             |
| 11  | -        | 4   |                                                                                   | WASHER, lock                                                                                                                              |             |
| 12  | -        | 4   |                                                                                   | BOLT, ALLEN HEAD                                                                                                                          |             |
| 13  | REF.     | 1   |  | IMPLEMENT PUMP. . . . .                                                                                                                   | LH-1        |
| 14  | 52429-LH | 1   |                                                                                   | ELBOW, BULKHEAD #16 UNION                                                                                                                 |             |
| 15  | 52347-LH | 1   |                                                                                   | BRACKET, #16 Bulkhead Pump Pressure                                                                                                       |             |
| 16  | -LH      | 47" |                                                                                   | WRAP, Plastic Spiral - SHW-32                                                                                                             |             |
| 17  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4047-20-20OS-2009 ( <i>Pump Pressure Bulkhead to Implement Pump Pressure Port</i> )                                       |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3868 04/11  
25.00

## IMPLEMENT PUMP PRESSURE LINE TO MAIN CONTROL VALVE

### Machine 0355-020111 and after

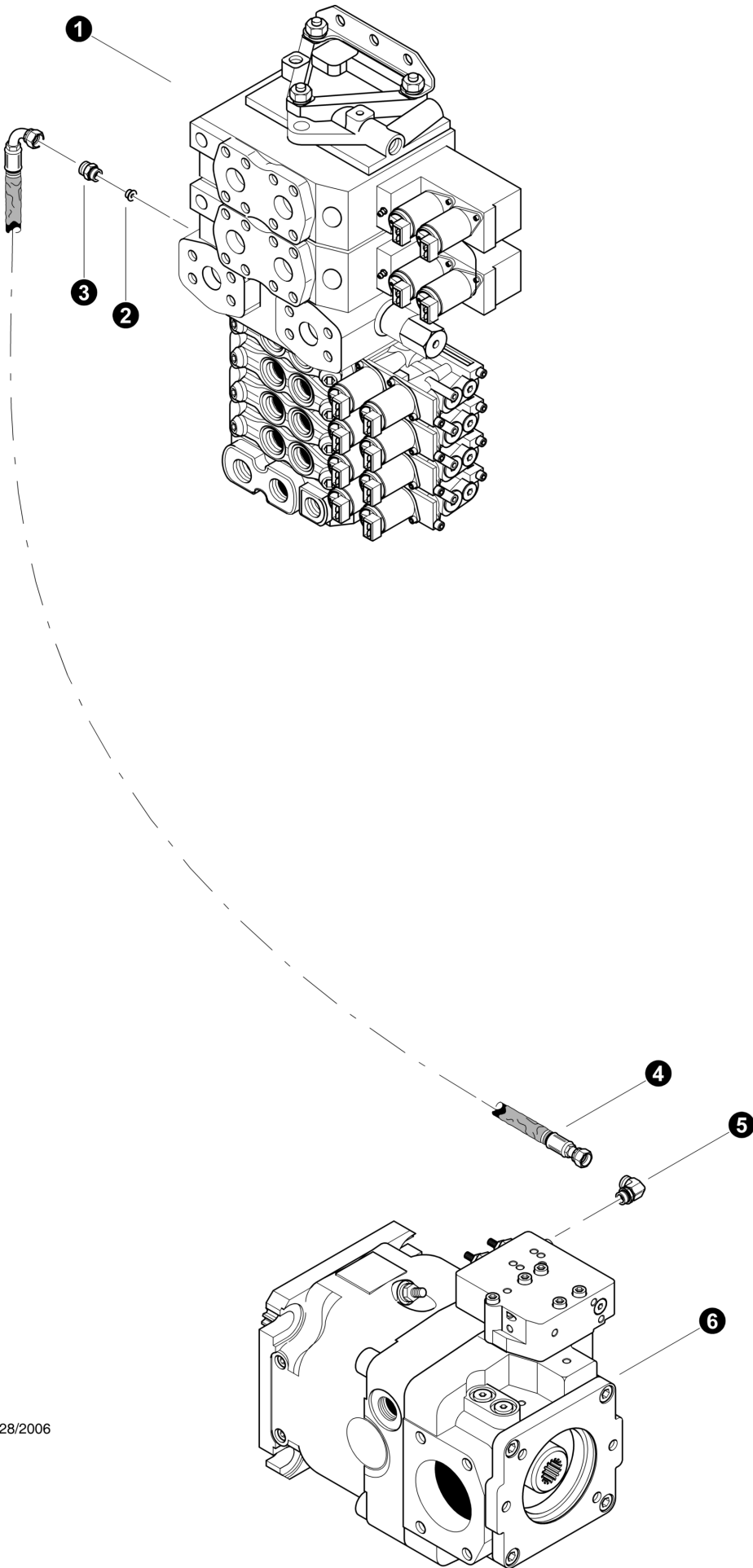
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                                              | LH-1        |
| 2   | 18397-LH | 1   |  | CONNECTOR, FLANGE PAD - 1" C 62                                                                                                           |             |
| 3   | 15377-LH | 1   |                                                                                   | O-RING - 1"                                                                                                                               |             |
| 4   | -        | 4   |                                                                                   | WASHER, lock                                                                                                                              |             |
| 5   | 18988-LH | 4   |                                                                                   | BOLT, ALLEN HEAD - 12MM-1.75P X 45MM                                                                                                      |             |
| 6   | 17063-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-2016S                                                                                                            |             |
| 7   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4025-20-20OS-2009 ( <i>Pump Pressure Bulkhead to main control valve pressure inlet port "P1"</i> ) 830B-0244 to 830B-0314 |             |
| 7   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4029-20-20OS-2009 ( <i>Pump Pressure Bulkhead to main control valve pressure inlet port "P1"</i> ) 830B-0315 and newer    |             |
| 8   | 17056-LH | 1   |                                                                                   | ELBOW, 45 - FF2068T-2020S                                                                                                                 |             |
| 9   | 54264-LB | 1   |  | VALVE, LOWER MANIFOLD PRESSURE CONTROL . . . . .                                                                                          | LH-1        |
| 10  | -        | 1   |                                                                                   | O-RING - 1.25"                                                                                                                            |             |
| 11  | -        | 4   |                                                                                   | LOCK WASHER - 1/2"                                                                                                                        |             |
| 12  | -        | 4   |                                                                                   | ALLEN BOLT - 1/2" 13 UNC X 2.75"                                                                                                          |             |
| 13  | REF.     | 1   |  | IMPLEMENT PUMP. . . . .                                                                                                                   | LH-1        |
| 14  | 52429-LH | 1   |                                                                                   | ELBOW, BULKHEAD #16 UNION                                                                                                                 |             |
| 15  | 52347-LH | 1   |                                                                                   | BRACKET, #16 Bulkhead Pump Pressure                                                                                                       |             |
| 16  | -LH      | 47" |                                                                                   | WRAP, Plastic Spiral - SHW-32                                                                                                             |             |
| 17  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4047-20-20OS-2009 ( <i>Pump Pressure Bulkhead to Implement Pump Pressure Port</i> )                                       |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



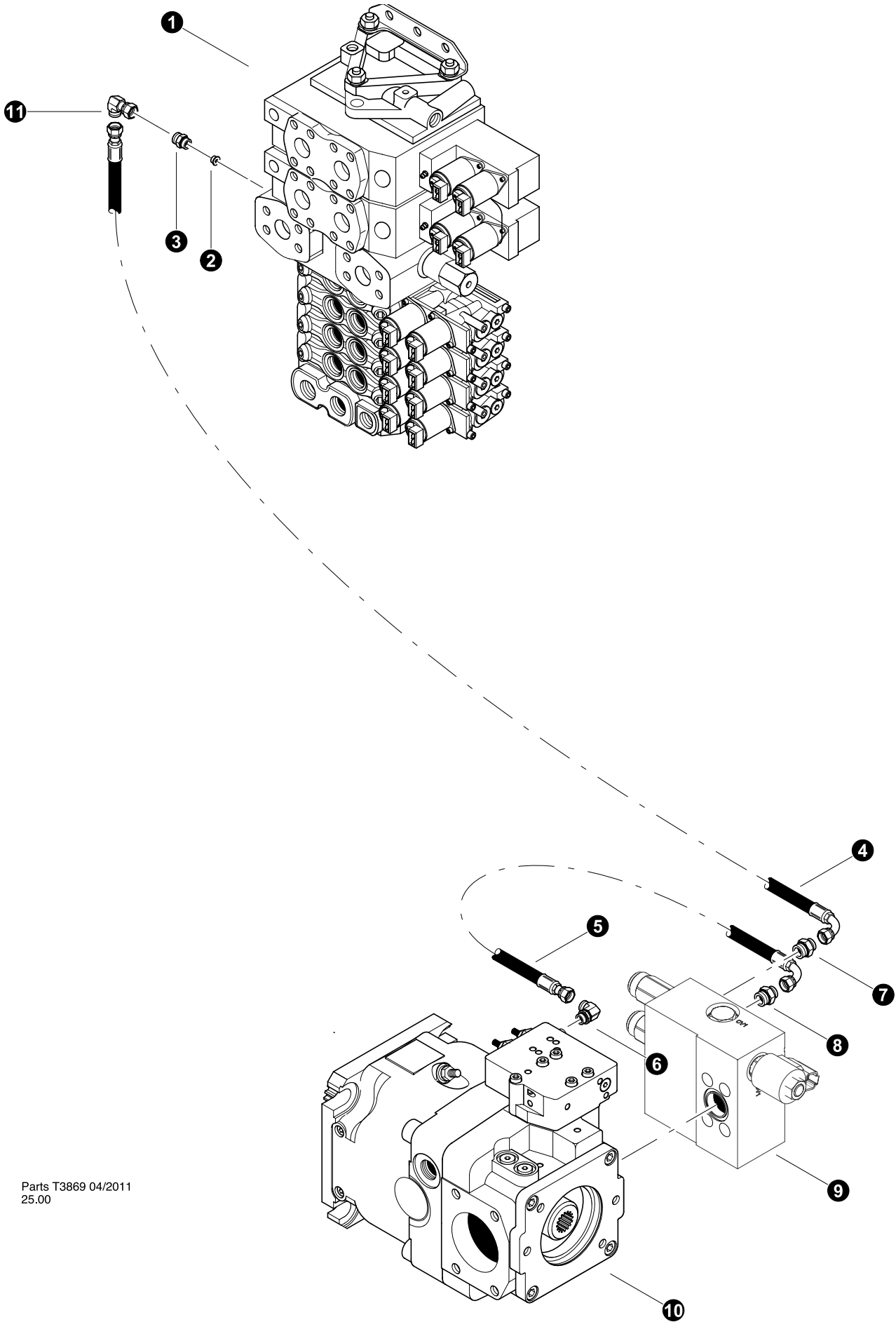
Parts T3430 05/28/2006  
25.00

**MAIN CONTROL VALVE LOAD SENSE LINE****Machines built before 0354-011211**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                   | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                  | LH-1        |
| 2   | 15488-LH | 1   |                                                                                   | CONNECTOR, STR - 6400-6 ( <i>Tapped for 0.028" orifice</i> )                                                  |             |
| 3   | 18503-LH | 1   |                                                                                   | ORIFICE - .028"                                                                                               |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2140-06-060S-0609-W ( <i>Control Valve load sense "PL" port to Implement Pump controler</i> ) |             |
| 5   | 16296-LH | 2   |                                                                                   | ELBOW, 90° - FF1868T-0606                                                                                     |             |
| 6   | REF.     | 1   |  | IMPLEMENT PUMP. . . . .                                                                                       | LH-1        |



See referenced page for component or assembly breakdown.



Parts T3869 04/2011  
25.00

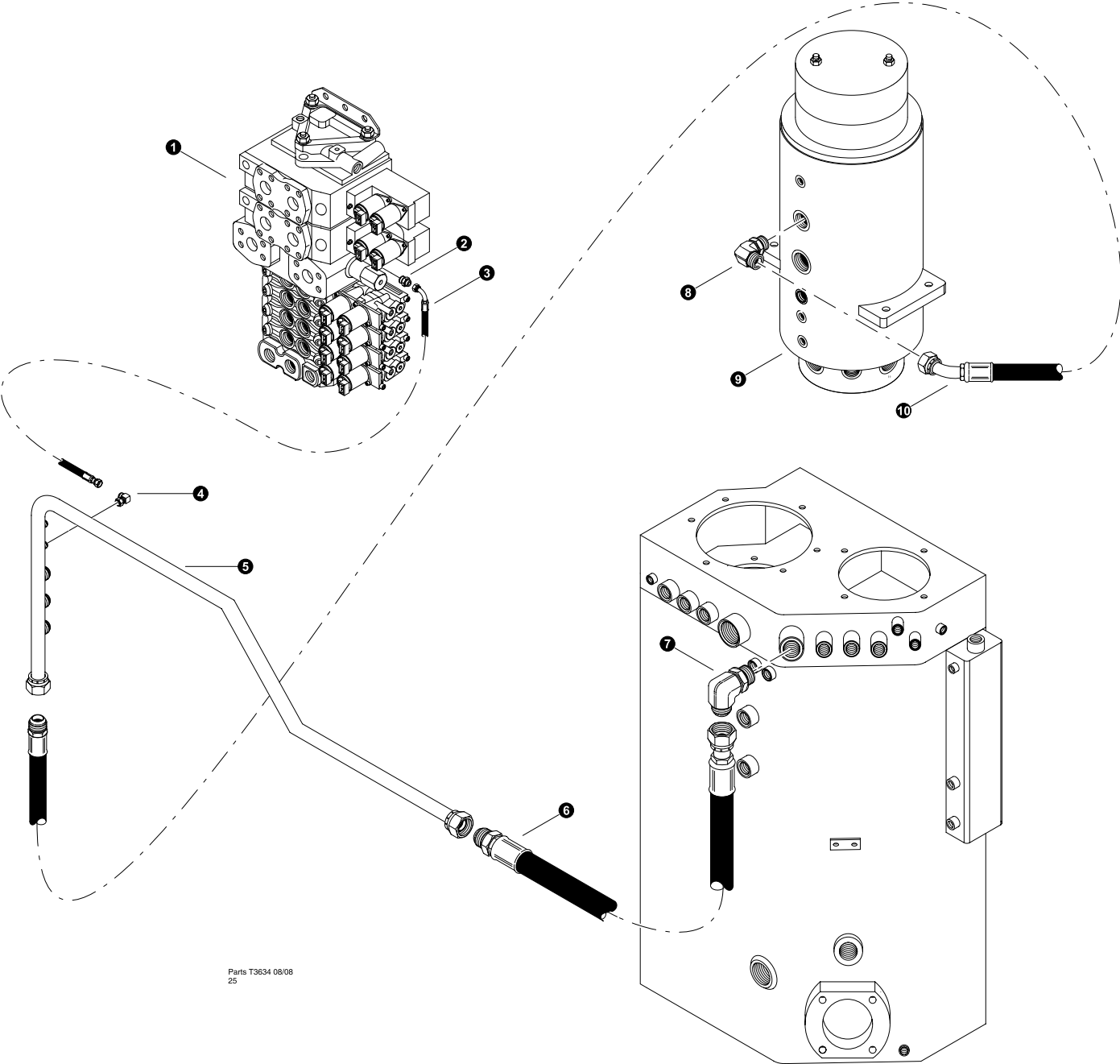


**MAIN CONTROL VALVE LOAD SENSE LINE****Machine 0355-020111 and after**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                        | LH-1        |
| 2   | 15488-LH | 1   |                                                                                   | CONNECTOR, STR - 6400-6 ( <i>Tapped for 0.028" orifice</i> )                                                        |             |
| 3   | 18503-LH | 1   |                                                                                   | ORIFICE - .028"                                                                                                     |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2090-06-060S-0609-W ( <i>Control Valve load sense "PL" port to Implement Pump controler "LSI"</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2021-06-060S-0609-W ( <i>Lower Manifold Control "LSO" port to Implement Pump Load Sense</i> )       |             |
| 6   | 16296-LH | 2   |                                                                                   | ELBOW, 90° - FF1868T-0606                                                                                           |             |
| 7   | 15488-LH | 1   |                                                                                   | CONNECTOR, STR - 6400-6                                                                                             |             |
| 8   | 15488-LH | 1   |                                                                                   | CONNECTOR, STR - 6400-6                                                                                             |             |
| 9   | 54264-LB | 1   |                                                                                   | VALVE, LOWER MANIFOLD PRESSURE CONTROL . . . . .                                                                    | LH-1        |
| 10  | REF.     | 1   |  | IMPLEMENT PUMP. . . . .                                                                                             | LH-1        |
| 11  | 23267-LH | 1   |                                                                                   | ELBOW, 90 SWIVEL - 6901-6-6                                                                                         |             |



See referenced page for component or assembly breakdown.



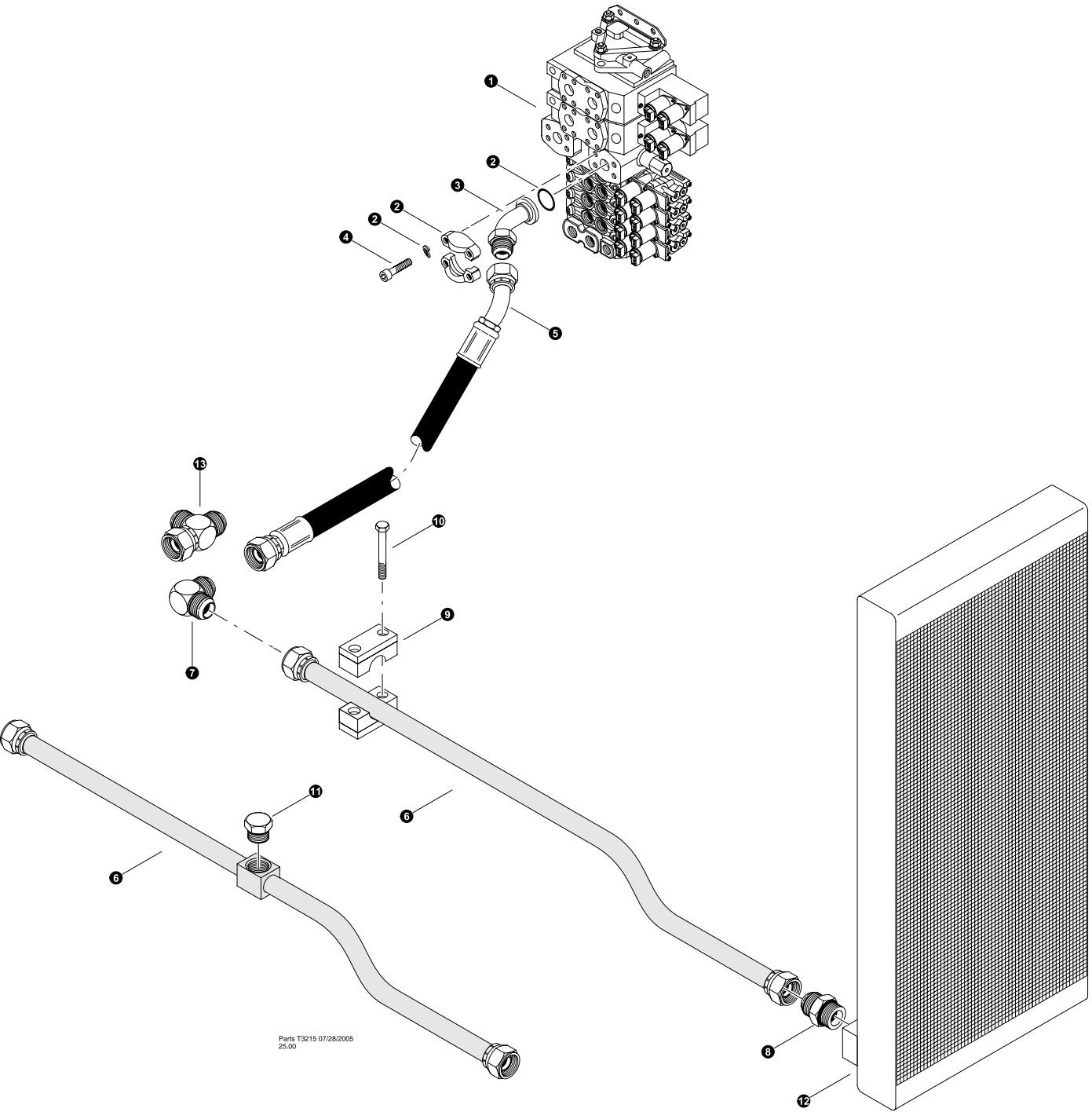
Parts T3634 08/08  
25

## MAIN CONTROL VALVE PILOT DRAIN LINE

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                           | LH-1        |
| 2   | 22902-LH | 1   |                                                                                   | CONNECTOR, STR - 848-TT-08X06                                                                          |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2027-06-06JS-0409 <i>(Main control valve port "TP" to Case Drain Manifold Tube)</i>    |             |
| 4   | 16661-LH | 1   |                                                                                   | ELBOW, 90 SWIVEL - 6500-6                                                                              |             |
| 5   | 52942-LH | 1   |                                                                                   | TUBELINE, CASE DRAIN                                                                                   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2026-16-16MJ-16FJ <i>(Case Drain Tube to Hydraulic Tank)</i>                           |             |
| 7   | 52968-LH | 1   |                                                                                   | ELBOW, 90 - 16 C6XO JIC/ORB                                                                            |             |
| 8   | 17688-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-1212S                                                                              |             |
| 9   | REF      | 1   |                                                                                   | ROTORY MANIFOLD . . . . .                                                                              | UP-1        |
| 10  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2056-12-1204-16MJ <i>(Rotory Manifold Port "10 or V1" to Case Drain Manifold Tube)</i> |             |



See referenced page for component or assembly breakdown.



## MAIN CONTROL VALVE RETURN LINE

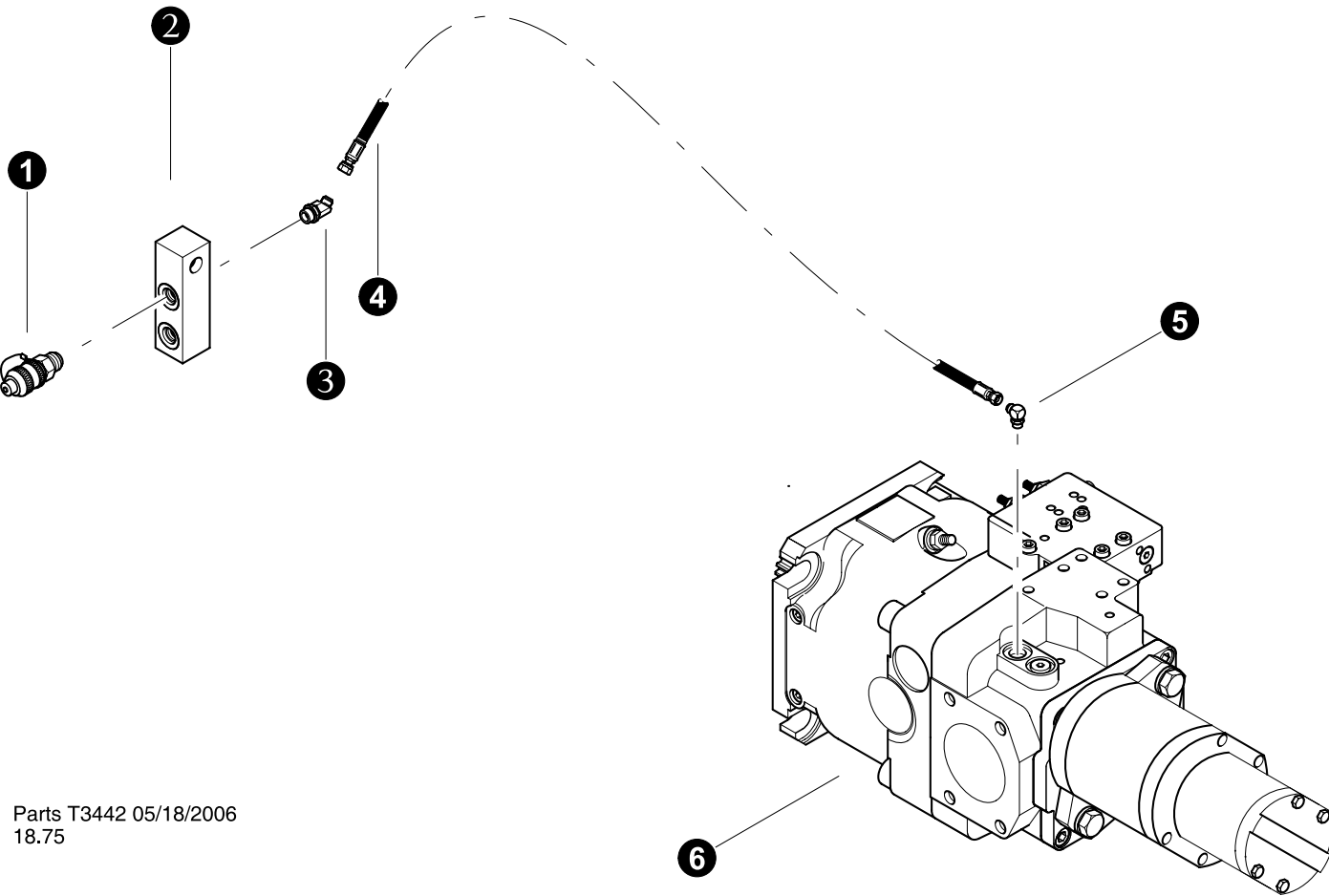
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                             | LH-1        |
| 2   | 15112-LH | 1   |  | KIT, SPLIT FLANGE - 1.25" (CODE 61)                                                                                      |             |
| -   | 15378-LH | 1   |                                                                                   | O-RING - 1.25" SF (CODE 61/62)                                                                                           |             |
| -   | -LH      | 4   |                                                                                   | WASHER,                                                                                                                  |             |
| 3   | 52443-LH | 1   |                                                                                   | ELBOW, 45 MALE JIC X O-RING FLANGE (61)                                                                                  |             |
| 4   | -LH      | 4   |                                                                                   | BOLT, ALLEN HEAD - 10MM                                                                                                  |             |
| 5   | 53244-LH | 1   |                                                                                   | HOSE ASSEMBLY - 2024-20-20JS-20J4 ( <i>Return Oil Tubeline to main control valve tank port "T1" Standard</i> )           |             |
| -   | 53245-LH | 1   |                                                                                   | HOSE ASSEMBLY - 2020-20-20JS-20J4 ( <i>Return Oil Tee to main control valve tank port "T1" - Harvester Application</i> ) |             |
| 6   | 52599-LH | 1   |                                                                                   | TUBELINE, OIL COOLER RETURN - Standard                                                                                   |             |
| -   | 52384-LH | 1   |                                                                                   | TUBELINE, OIL COOLER RETURN - Rolly II Harvester                                                                         |             |
| 7   | 53614-LH | 1   |                                                                                   | ELBOW, 90 JIC #24                                                                                                        |             |
| 8   | 53616-LH | 1   |                                                                                   | FITTING, STR - 24 X 20 - RETURN TUBE                                                                                     |             |
| 9   | 52372-WD | 1   |  | CLAMP, STEEL TUBELINES (WHEEL DRIVE)                                                                                     |             |
| 10  | 16365-WD | 2   |                                                                                   | BOLT - .375" X 2.75"                                                                                                     |             |
| 11  | 18950-LH | 1   |                                                                                   | PLUG - 6408-HHP-20                                                                                                       |             |
| 12  | REF      | 1   |                                                                                   | OIL COOLER BREAKDOWN . . . . .                                                                                           | UP-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3442 05/18/2006  
18.75

**IMPLEMENT PUMP GAUGE PORT**

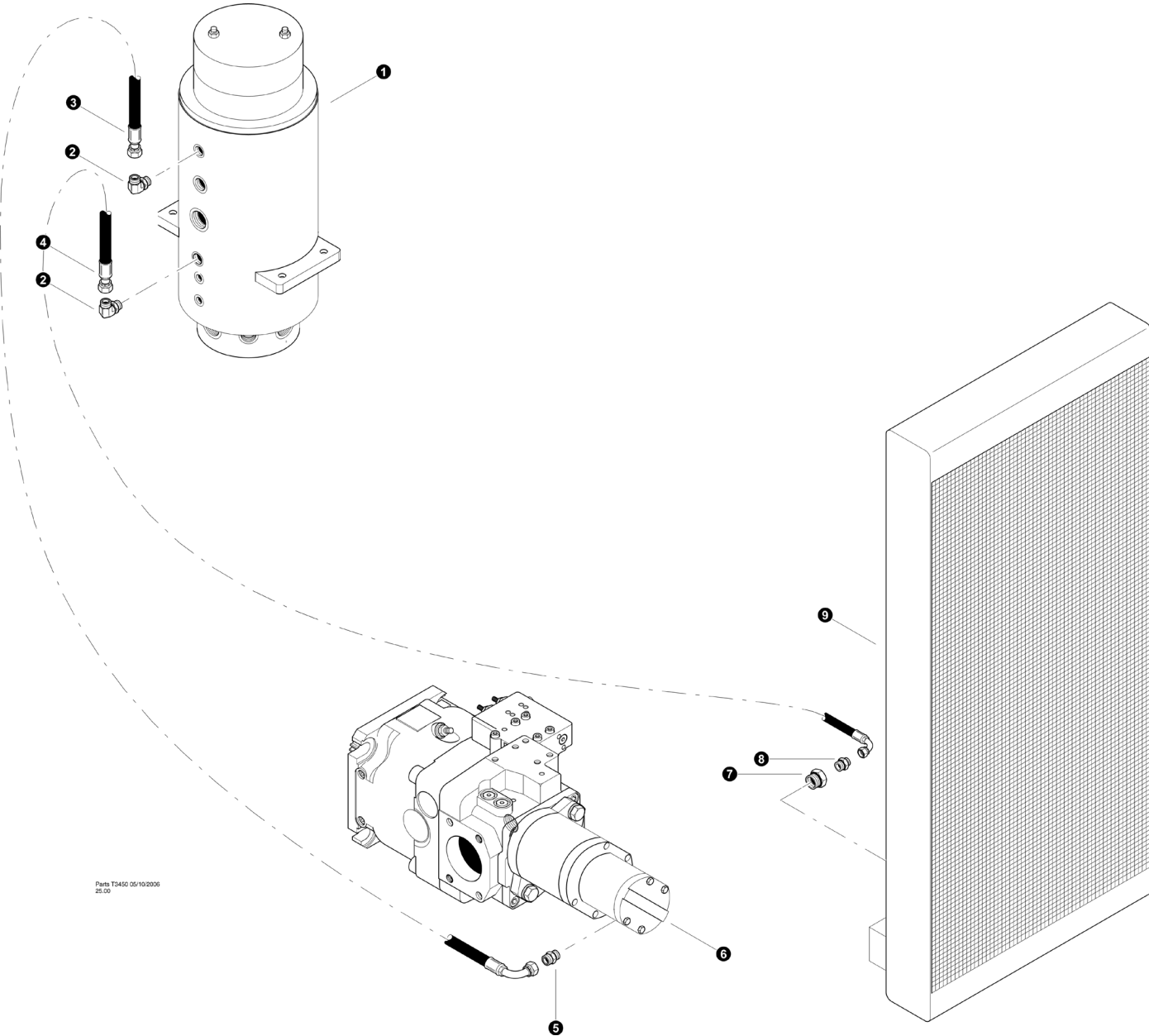
| REF | PART #   | QTY | DESCRIPTION                                                                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 16037-LH | 1   | TAP, gauge port (1/4" ORB)                                                                                      |             |
| 2   | 23544-DH | 1   | MANIFOLD, PRESSURE CHECK (2-PORT)                                                                               |             |
| 3   | 51884-LH | 1   | ELBOW, 45 - (4 V50X-S)                                                                                          |             |
| 4   | -LH      | 1   | HOSE ASSEMBLY - 2052-02-04JS-04JS (Implement Pump to pressure check manifold) Part of kit #52203                |             |
| 5   | 51889-LH | 1   | ELBOW, 90 - (4C50X-S)                                                                                           |             |
| 6   | REF.     | 1   |  MAIN CONTROL VALVE ..... LH-1 |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





**LOWER SOLENOID SUPPLY PUMP**  
**built without optional leveling**  
**Machines built before 0354-011211**

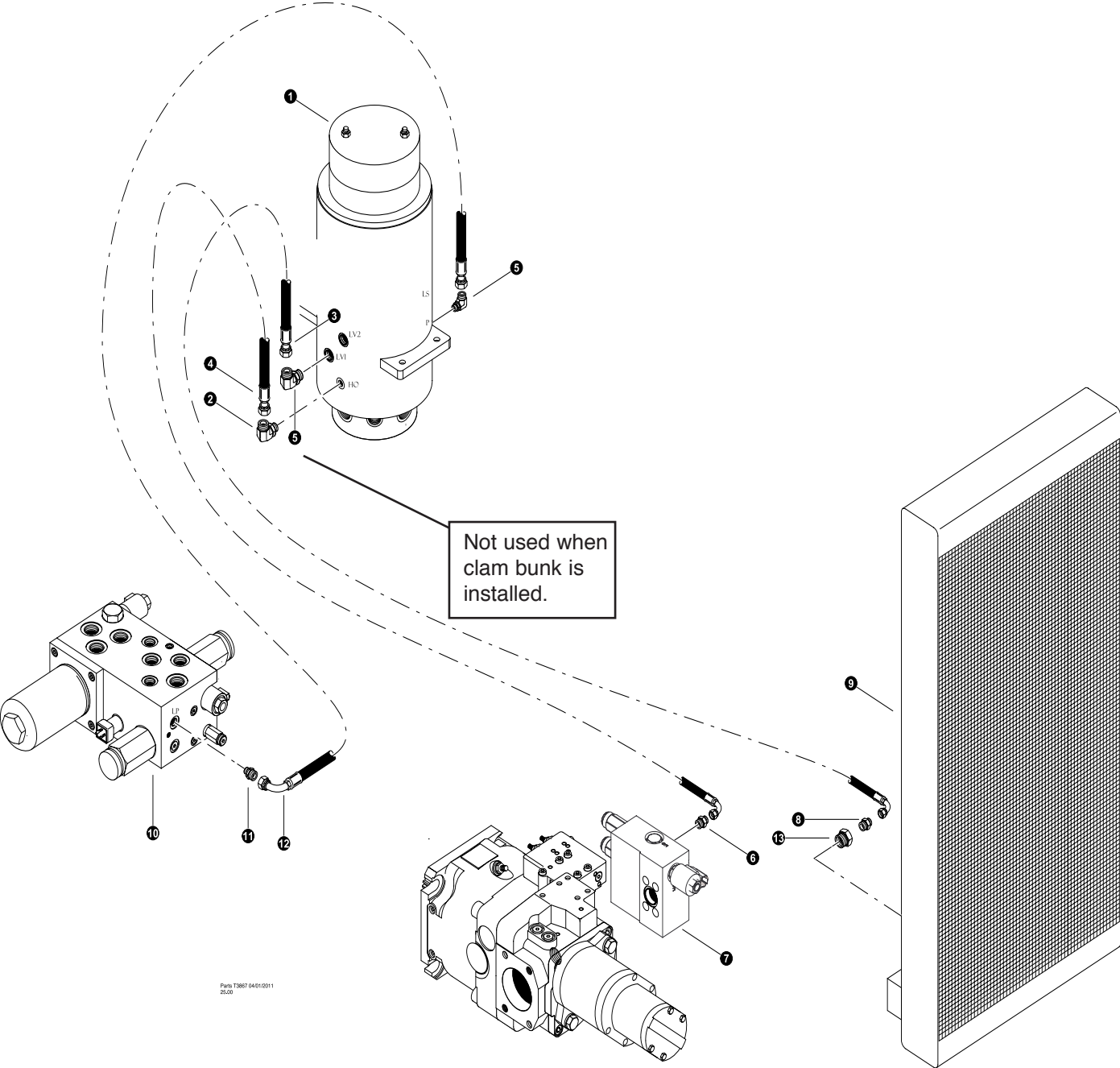
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTARY MANIFOLD. ....                                                              | UP-1        |
| 2   | 16360-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-0808S                                                          |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4076-08-08OS-08O9w (LSM Pump to Rotary Manifold port #12 or P1))   |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2068-06-06OS-06O9w (Rotary Manifold port #6 or HO to Cooler Inlet) |             |
| Oil |          |     |                                                                                   |                                                                                    |             |
| 5   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                     |             |
| 6   | REF.     | 1   |  | LSM GEAR PUMP. ....                                                                | WD-1        |
| 7   | 20067-LH | 1   |                                                                                   | BUSHING, REDUCER - 6410-12-8                                                       |             |
| 8   | 22902-LH | 1   |                                                                                   | CONNECTOR, STR - 848-TT-08X06                                                      |             |
| 9   | REF.     | 1   |  | OIL COOLER. ....                                                                   | UP-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



**LOWER SOLENOID SUPPLY PUMP  
built without Optional Leveling  
Machine 0355-020111 and after**

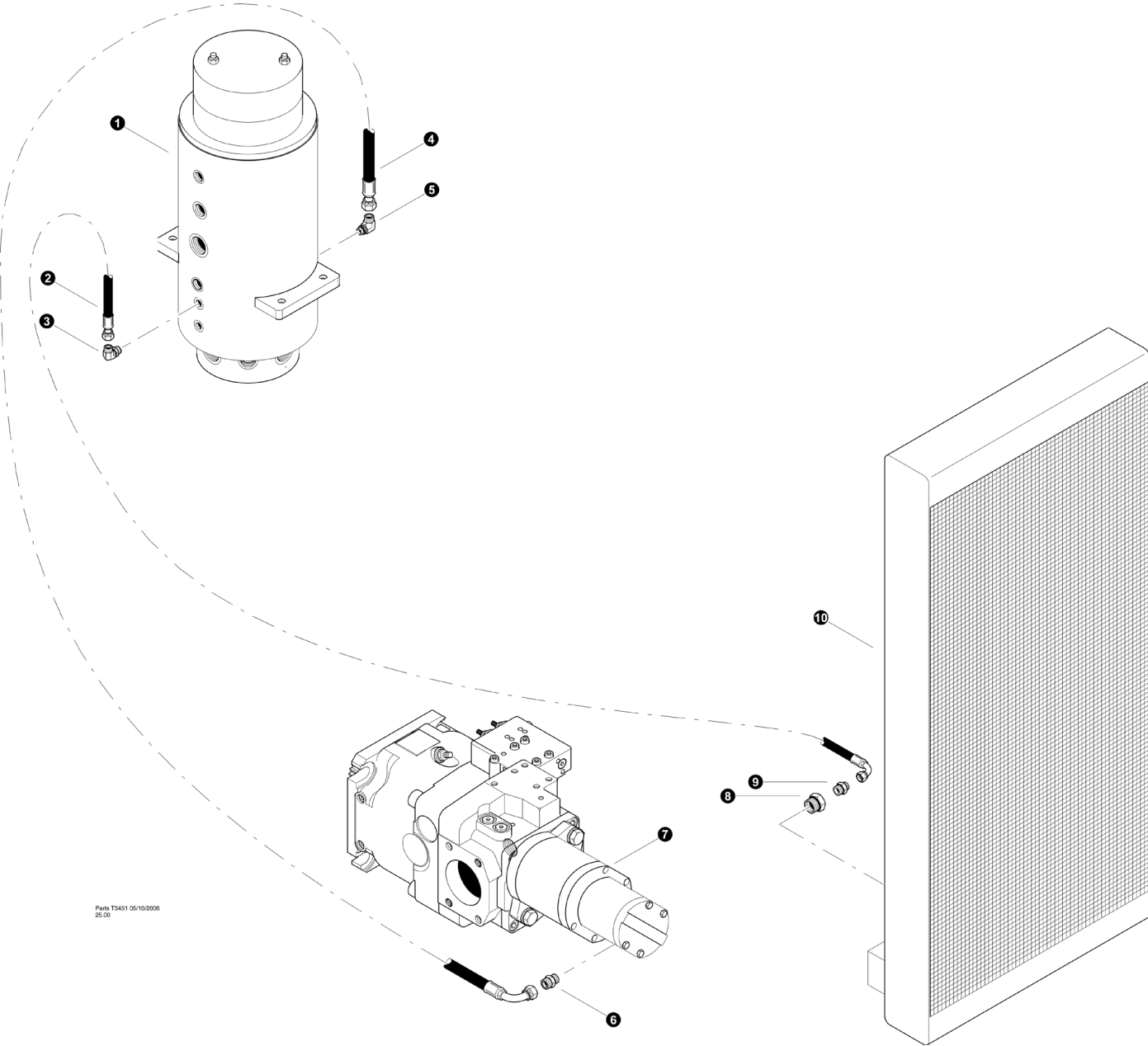
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                   | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTARY MANIFOLD. . . . .                                                                                      | UP-1        |
| 2   | 16296-LH | 2   |                                                                                   | ELBOW, 90° - FF1868T-0606                                                                                     |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2072-08-08OS-08O9w (LSM Pump to Rotary Manifold port #LV1 or Oil Cooler Inlet))               |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2072-06-08OS-08O9w (Rotary Manifold port HO to Lower Manifold Pressure Control Valve Port HP) |             |
| 5   | 22405-LH | 2   |                                                                                   | ELBOW, 90 - 8-6 C5OLO-S                                                                                       |             |
| 6   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                |             |
| 7   | 54264-LB | 1   |                                                                                   | VALVE, LOWER MANIFOLD PRESSURE CONTROL . . . . .                                                              | LH-1        |
| 8   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                |             |
| 9   | REF.     | 1   |  | OIL COOLER. . . . .                                                                                           | UP-3        |
| 10  | REF.     | 1   |  | CHARGE/FAN MANIFOLD . . . . .                                                                                 | UP-3        |
| 11  | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                |             |
| 12  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2086-06-06OS-06O9w (Rotary Manifold port #P to LP Charge/Fan Manifold)                        |             |
| 13  | 20067-LH | 1   |                                                                                   | BUSHING, REDUCER - 6410-12-8                                                                                  |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



**LOWER SOLENOID SUPPLY PUMP**  
**built with optional leveling**  
**Machines built before 0354-011211**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTARY MANIFOLD.....                                                             | UP-1        |
| 2   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2068-06-06OS-06O9w (Rotary Manifold port #6 to Oil Cooler Inlet) |             |
| 3   | 16296-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-0606S                                                        |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4076-08-08OS-08O9w (LSM Pump to Rotary Manifold port #12)        |             |
| 5   | 16360-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-0808S                                                        |             |
| 6   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                   |             |
| 7   | REF.     | 1   |  | LSM GEAR PUMP.....                                                               | WD-1        |
| 8   | 20067-LH | 1   |                                                                                   | BUSHING, REDUCER - 6410-12-8                                                     |             |
| 9   | 22902-LH | 1   |                                                                                   | CONNECTOR, STR - 848-TT-08X06                                                    |             |
| 10  | REF.     | 1   |  | OIL COOLER.....                                                                  | UP-3        |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

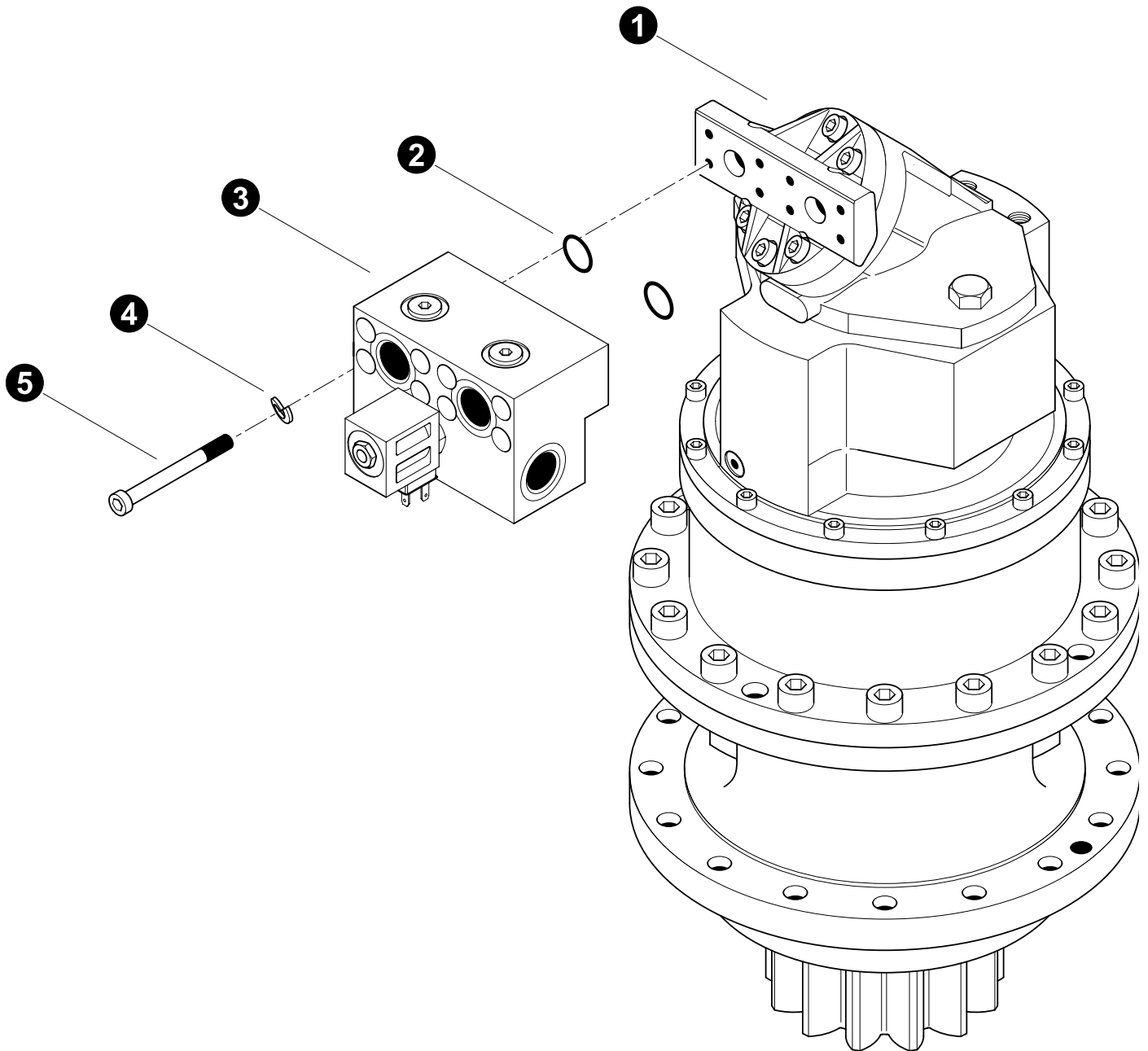
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## ***Section LH-3***

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### ***Loader Boom Hydraulics - Swing Motor Hydraulics***



Parts T3234 07/29/2005  
25.00

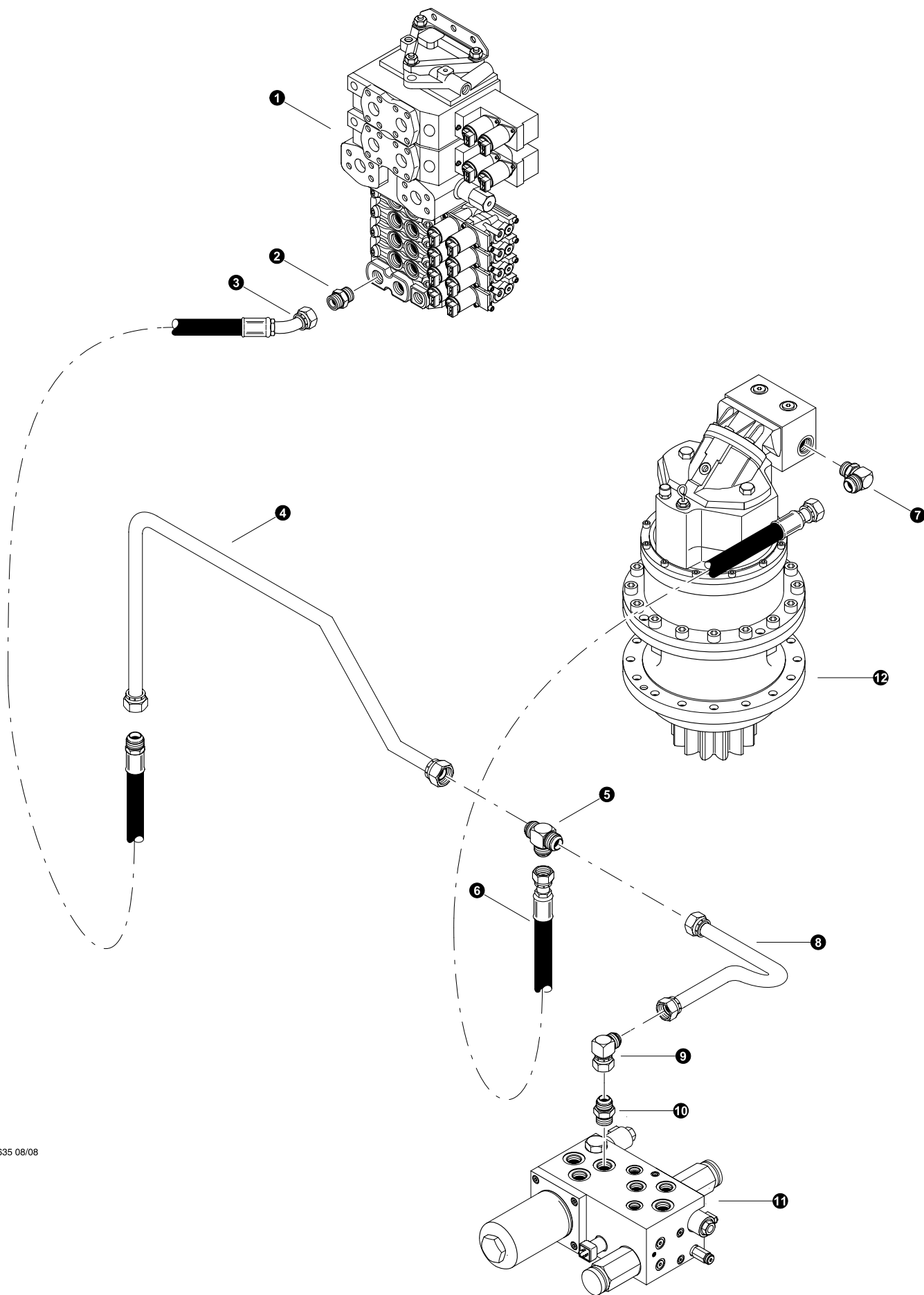


## SWING MOTOR HYDRAULICS (anti-cavitation valve installation)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF.     | 1   |  | MOTOR/GEARBOX - SWING . . . . .      | LH-3        |
| 2   | -LH      | 2   |                                                                                   | O-RING, 3/4 code 62                  |             |
| 3   | REF.     | 1   |  | ANTI-CAVITATION VALVE. . . . .       | LH-3        |
| 4   | -LH      | 4   |                                                                                   | WASHER, LOCK - 10 mm HIGH COLLAR     |             |
| 5   | 51389-LH | 4   |                                                                                   | BOLT, ALLEN HEAD - 10MM-1.5P X 100MM |             |



See referenced page for component or assembly breakdown.



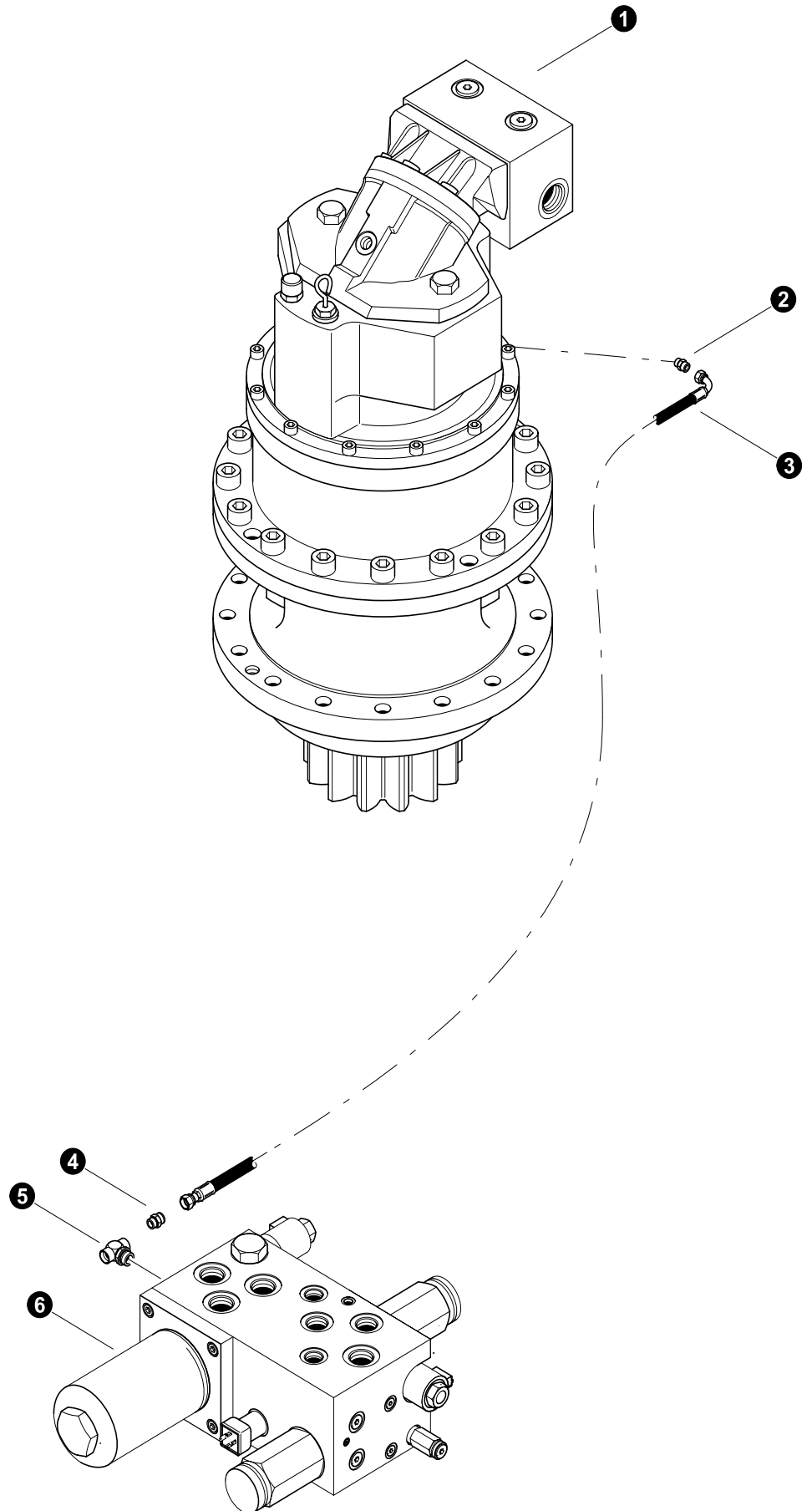
Parts T3635 08/08  
25.00

## SWING MOTOR HYDRAULICS (anti cavitation block supply)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                     | LH-1        |
| 2   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                                   |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2035 -12-12O4-16MJ ( <i>Anti-cav supply tube to main control valve port T3</i> ) |             |
| 4   | 52943-LH | 1   |                                                                                   | TUBELINE, REGEN/IMPLEMENT VALVE                                                                  |             |
| 5   | 52970-LH | 1   |                                                                                   | TEE, UNION - 16 JTXO                                                                             |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2034 -16-16FJ-16FJ ( <i>Anti-cav supply tube tee to swing motor</i> )            |             |
| 7   | 53076-LH | 1   |                                                                                   | ELBOW - 16-12 C50X-S                                                                             |             |
| 8   | 53128-UP | 1   |                                                                                   | TUBELINE, CHARGE/FAN MANIFOLD 'T1' PORT                                                          |             |
| 9   | 52968-UP | 1   |                                                                                   | ELBOW, 90 - 16 C6XO JIC                                                                          |             |
| 10  | 15497-UP | 1   |                                                                                   | CONNECTOR, STR - 16 F5OX-S                                                                       |             |
| 11  | REF      | 1   |                                                                                   | FAN CONTROL MANIFOLD . . . . .                                                                   | UP-3        |
| 12  | REF.     | 1   |  | MOTOR/GEARBOX - SWING . . . . .                                                                  | LH-3        |



See referenced page for component or assembly breakdown.



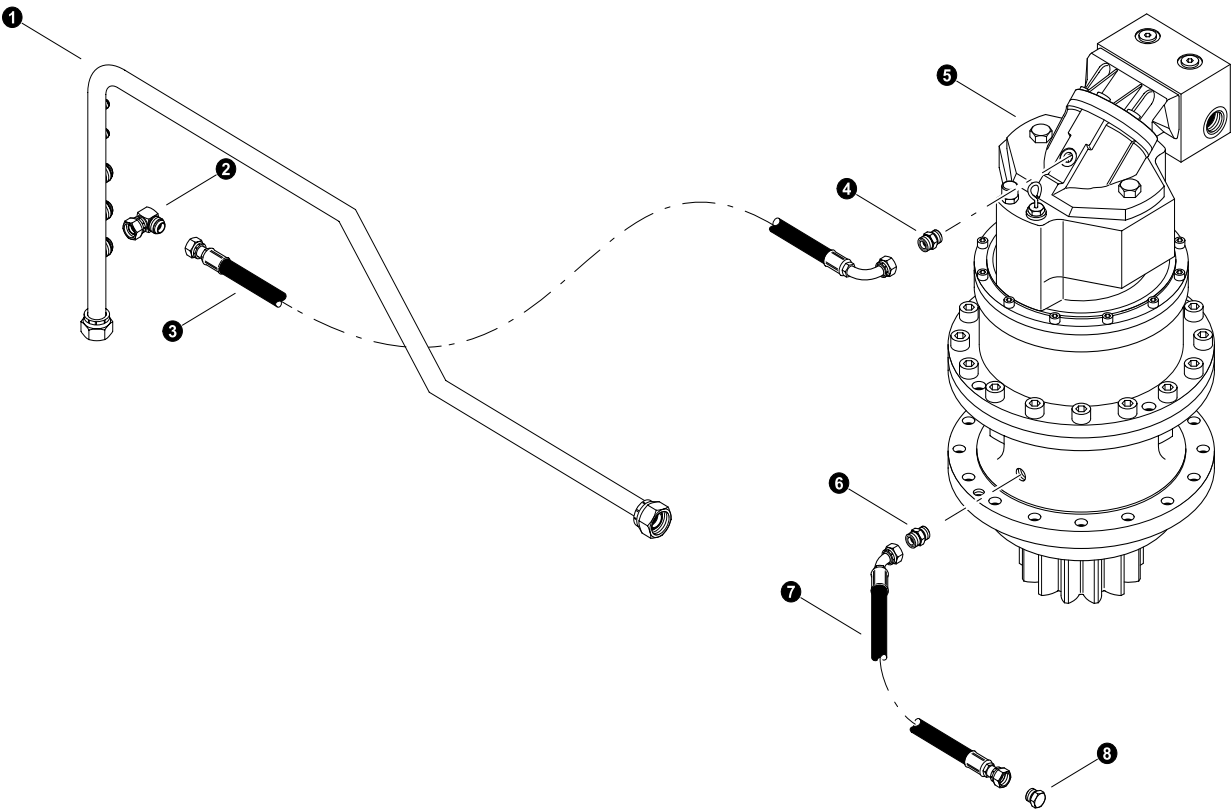
Parts T3636 08/08  
25

## SWING MOTOR HYDRAULICS (swing gearbox brake release)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MOTOR/GEARBOX - SWING . . . . .                                                                                | LH-3        |
| 2   | 19469-LH | 1   |                                                                                   | CONNECTOR, STR METRIC - 4M12F82EDMLO-S                                                                         |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2069-04-040S-0409 ( <i>swing motor gearbox brake relase<br/>port to G1 port charge valve</i> ) |             |
| 4   | 16541-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0404S                                                                                 |             |
| 5   | 24293-LH | 1   |                                                                                   | TEE - 4-G5G5JAO-S                                                                                              |             |
| 6   | REF.     | 1   |  | CHARGE VALVE / FILTER ASSEMBLY . . . . .                                                                       | WD-3        |



See referenced page for component or assembly breakdown.



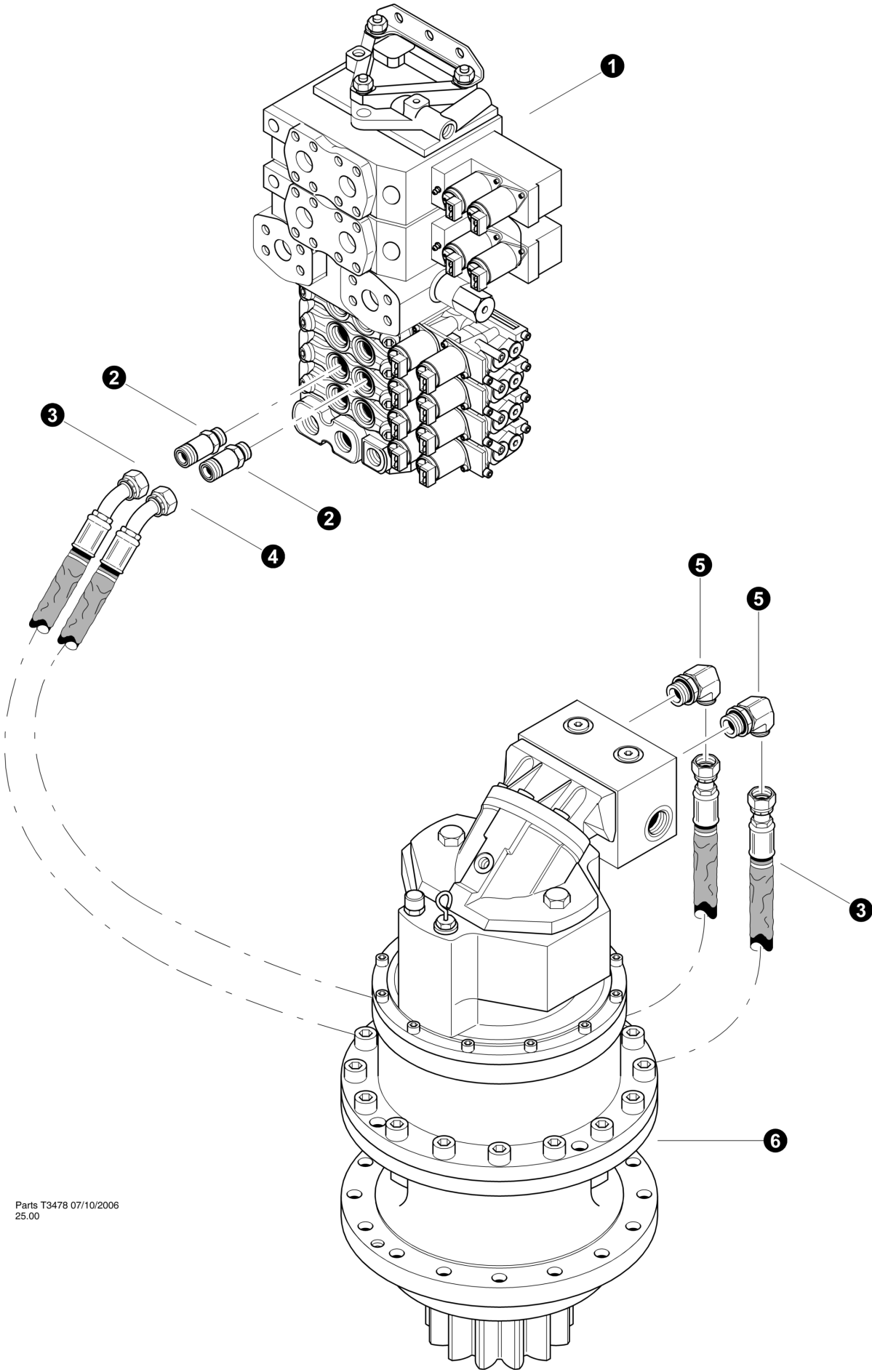
Parts T3637 08/08  
25.00

## SWING MOTOR HYDRAULICS (swing motor drain)

| REF | PART #   | QTY | DESCRIPTION                                                                                                            | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 52942-LH | 1   | MANIFOLD, CASE DRAIN (3) #8 PORTS                                                                                      |             |
| 2   | 16360-LH | 1   | ELBOW, 90 - FF1868T-0808S                                                                                              |             |
| 3   | -LH      | 1   | HOSE ASSEMBLY - 2054-08-08JS-0809 (swing motor case drain to drain manifold tube)                                      |             |
| 4   | 24182-LH | 1   | CONNECTOR, STR - 6002-08-8BSPP                                                                                         |             |
| 5   | REF.     | 1   |  MOTOR/GEARBOX - SWING . . . . . LH-3 |             |
| 6   | 24182-LH | 1   | CONNECTOR, STR - 6002-08-8BSPP                                                                                         |             |
| 7   | -LH      | 1   | HOSE ASSEMBLY - 2025-08-08OS-0804 (swing motor gearbox drain)                                                          |             |
| 8   | 11390-LH | 1   | PLUG - 2408-8                                                                                                          |             |



See referenced page for component or assembly breakdown.



Parts T3478 07/10/2006  
25.00

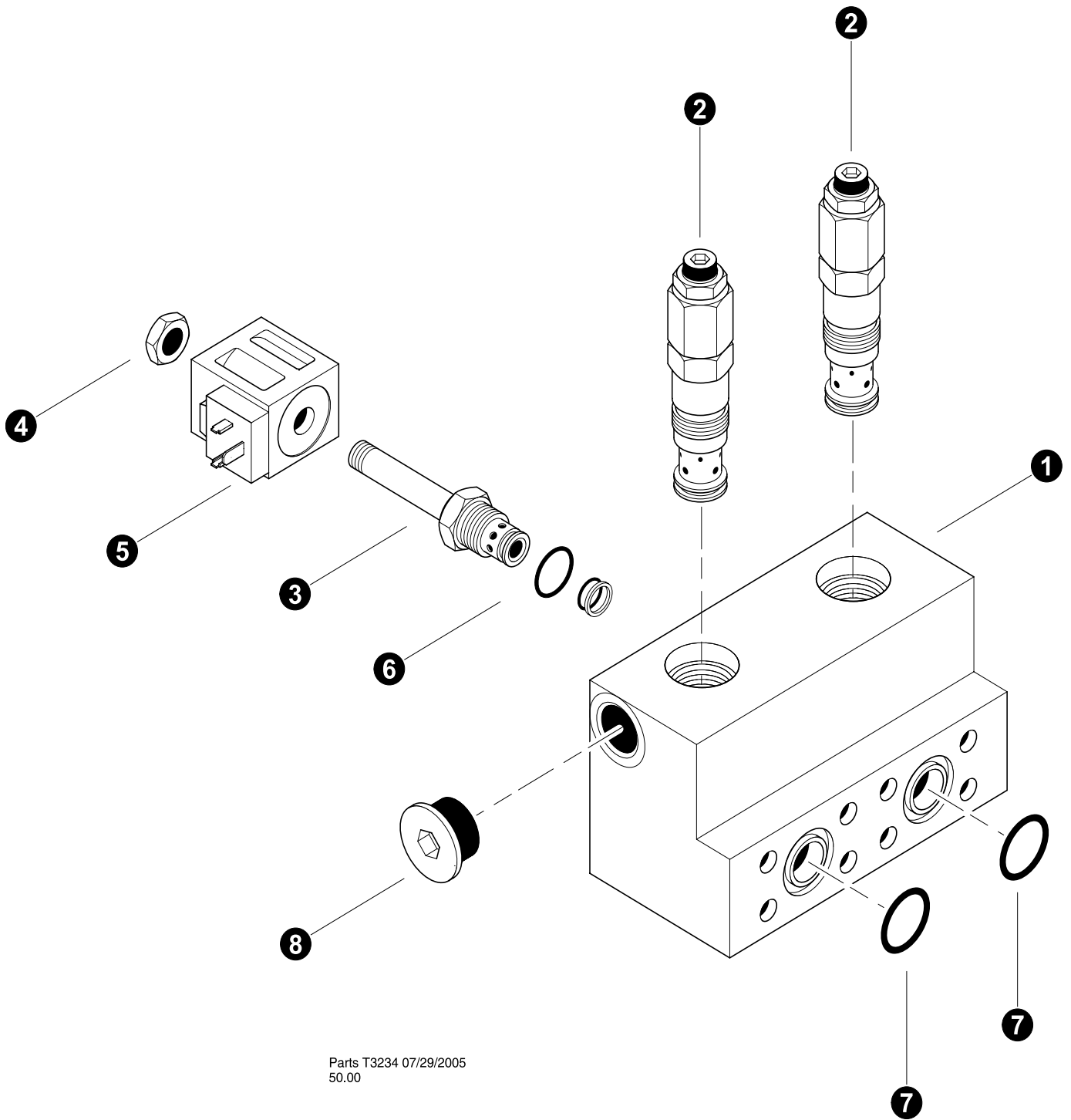


## SWING MOTOR HYDRAULICS (Swing Motor to Valve Connection)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE.....                                                                                                     | LH-1        |
| 2   | 52554-LH | 2   |                                                                                   | CONNECTOR, STR LONG - 10X10                                                                                                 |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4037-10-100S-1004W ( <i>Swing valve section work port A to swing anti-cav "V1"</i> ) 830B-0244 to 830B-0314 |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4040-10-100S-1004W ( <i>Swing valve section work port A to swing anti-cav "V1"</i> ) 830B-0315 and newer    |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4036-10-100S-100SW ( <i>Swing valve section work port B to swing anti-cav "V2"</i> ) 830B-0244 to 830B-0314 |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4036.5-10-100S-100SW ( <i>Swing valve section work port B to swing anti-cav "V2"</i> ) 830B-0315 and newer  |             |
| 5   | 50036-LH | 3   |                                                                                   | ELBOW, 90 - 849-TTO-10X12                                                                                                   |             |
| 6   | REF.     | 1   |  | MOTOR/GEARBOX - SWING.....                                                                                                  | LH-3        |



See referenced page for component or assembly breakdown.



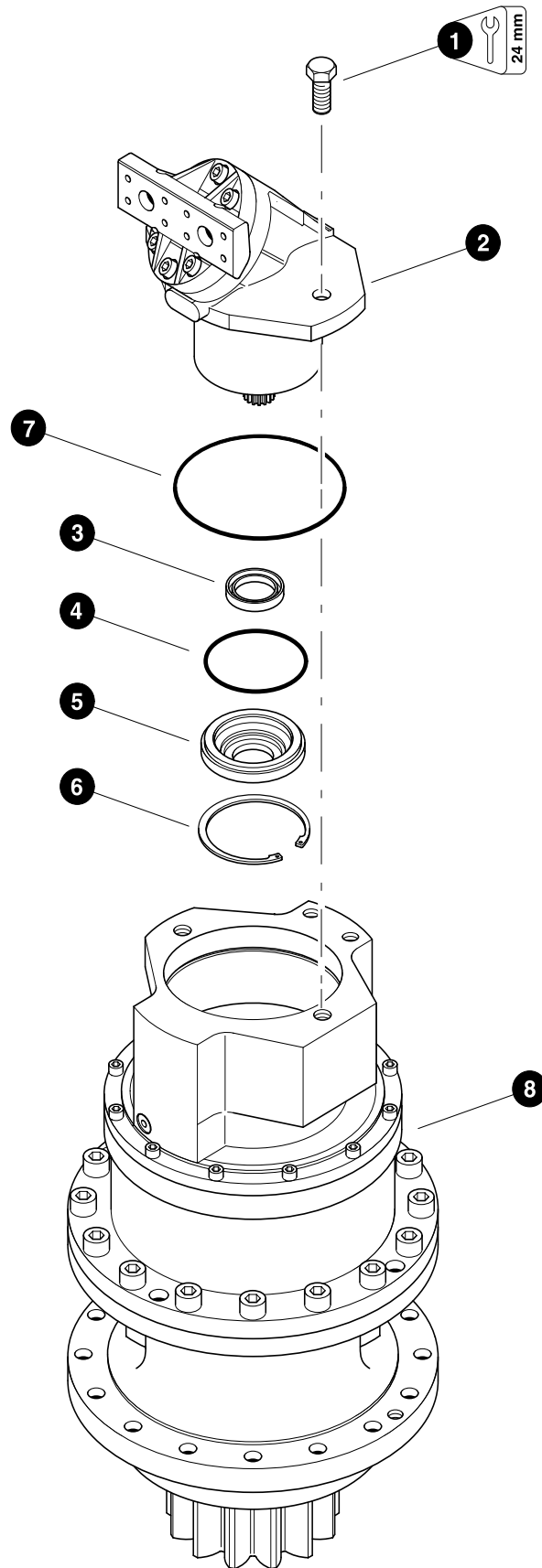
## SWING MOTOR HYDRAULICS (anti-cavitation valve)

| REF | PART #   | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------|-------------|
| 1   | 52015-LH | 1   |   | VALVE, SWING ANTI/CAV W/FLOAT LOW MOUNT |             |
| 2   | 51507-LH | 2   |   | CARTRIDGE, Anti-Cav (51055-20 D03 B)    |             |
| 3   | 53740-LH | 2   | ☐ | CARTRIDGE, solenoid - 24V               |             |
| 4   | NSS      | 1   |   | NUT                                     |             |
| 5   | 22554-LH | 1   |   | COIL, SOLENOID - (PARKER)               |             |
| 6   | -LH      | 1   | ⌘ | KIT, SEAL - solenoid valve              |             |
| 7   | -LH      | 2   |   | O-RING - 3/4" code 62                   |             |
| 8   | 11385-LH | 1   |   | PLUG - 6408-12                          |             |

☐ Kit or Assembly - includes all items indented underneath.

### 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.



## SWING MOTOR HYDRAULICS (swing motor installation)

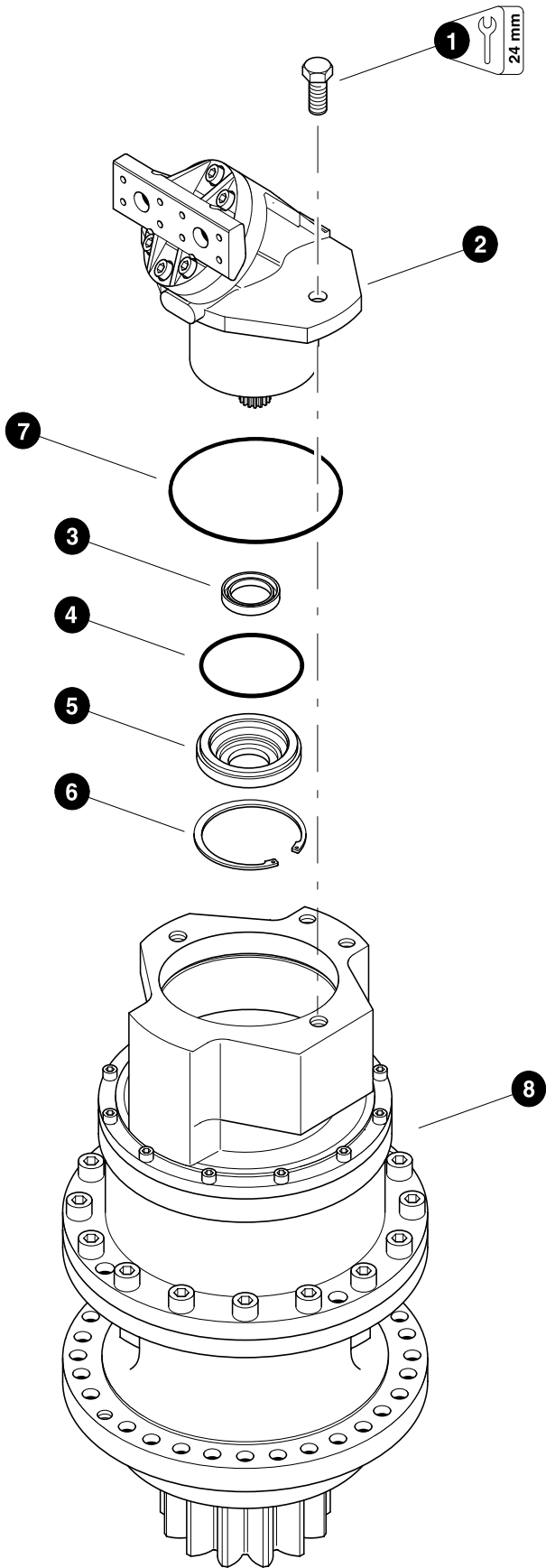
(Machine 0327-123109 and before)

| REF | PART #   | QTY |                          | DESCRIPTION                                         | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------------------|-------------|
| --  | 20070-LH | 1   | <input type="checkbox"/> | MOTOR/GEARBOX, swing - Lohmann Gearbox & 45cc motor |             |
| 1   | 20661-LH | 1   |                          | BOLT - 16mm-2.0P x 35mm                             |             |
| 2   | 17312-LH | 1   | <input type="checkbox"/> | MOTOR, hydraulic - Rexroth A2FE45 cc                |             |
|     | 17238-LH | 1   | <input type="checkbox"/> | MOTOR, hydraulic - Rexroth A2FE56 cc (Optional)     |             |
| 3   | 21576-LH | 1   |                          | SEAL, shaft - 45cc                                  |             |
|     | 51638-LH | 1   |                          | SEAL, shaft - 56cc                                  |             |
| 4   | 21577-LH | 1   |                          | O-RING, front cover - 45cc                          |             |
|     | 51639-LH | 1   |                          | O-RING, front cover - 56cc                          |             |
| 5   | 21578-LH | 1   |                          | COVER, front                                        |             |
| 6   | 21579-LH | 1   |                          | RING, seal retaining                                |             |
| 7   | 21580-LH | 1   |                          | O-RING, motor pilot                                 |             |
| 8   | 22694-LH | 1   |                          | GEARBOX - Lohmann                                   |             |

☐ Kit or Assembly - includes all items indented underneath.

### 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.



## SWING MOTOR HYDRAULICS (swing motor installation)

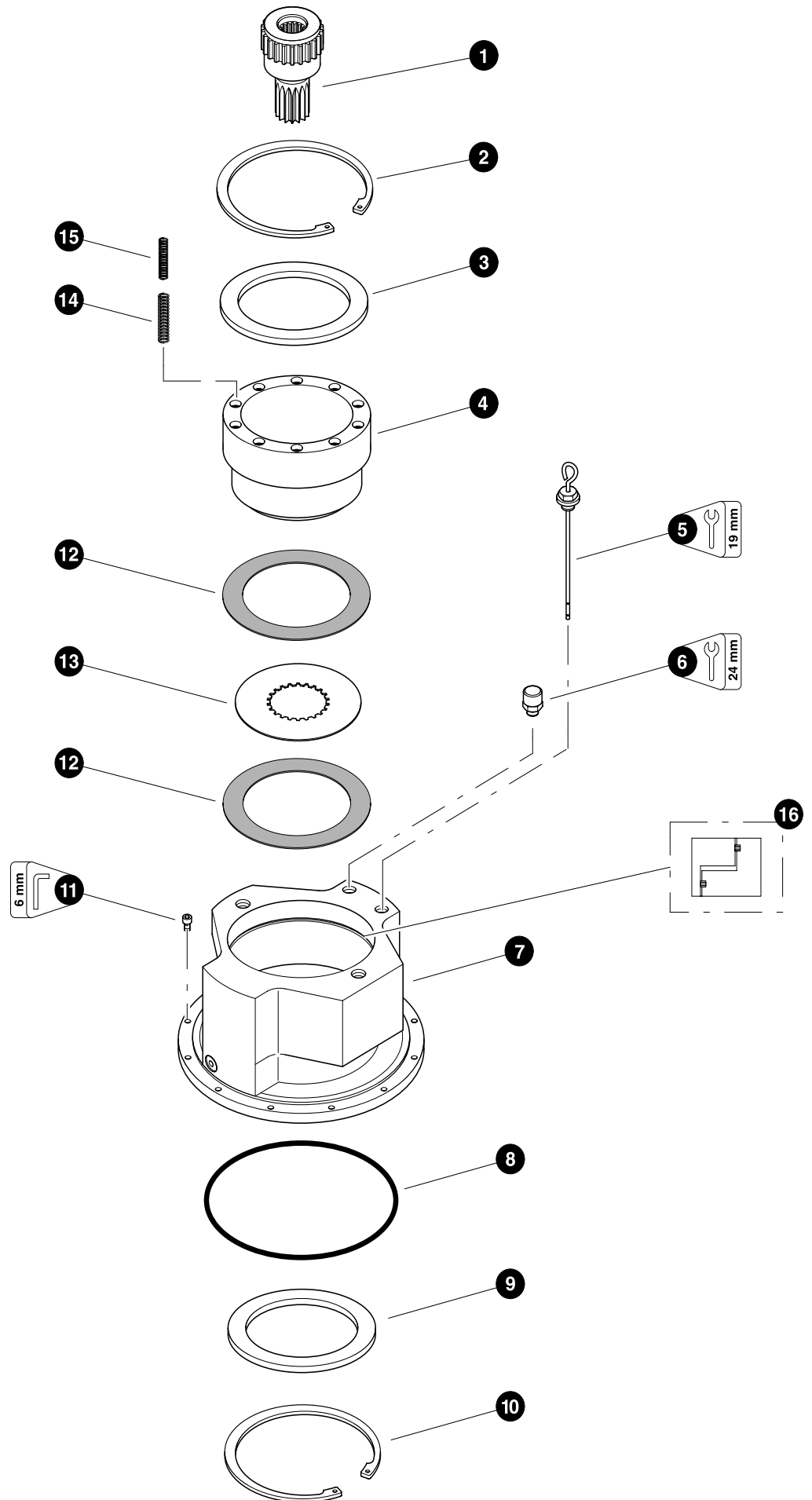
(Machine 0328-021010 and after)

| REF | PART #   | QTY |                          | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------|-------------|
| --  | 52745-LH | 1   | <input type="checkbox"/> | MOTOR, SWING - ECCENTRIC L&S W/56 MOTOR |             |
| 1   | 20661-LH | 1   |                          | BOLT - 16mm-2.0P x 35mm                 |             |
| 2   | 17238-LH | 1   | <input type="checkbox"/> | MOTOR, hydraulic - Rexroth A2FE56 cc    |             |
| 3   | 21576-LH | 1   |                          | SEAL, shaft - 45cc                      |             |
|     | 51638-LH | 1   |                          | SEAL, shaft - 56cc                      |             |
| 4   | 21577-LH | 1   |                          | O-RING, front cover - 45cc              |             |
|     | 51639-LH | 1   |                          | O-RING, front cover - 56cc              |             |
| 5   | 21578-LH | 1   |                          | COVER, front                            |             |
| 6   | 21579-LH | 1   |                          | RING, seal retaining                    |             |
| 7   | 21580-LH | 1   |                          | O-RING, motor pilot                     |             |
| 8   | -LH      | 1   |                          | GEARBOX - Lohmann                       |             |

☐ Kit or Assembly - includes all items indented underneath.

### 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 00626 11/10/2000  
25.00



## SWING MOTOR HYDRAULICS (swing gearbox brake assembly)

| REF | PART #   | QTY |   | DESCRIPTION                                        | SEE SECTION |
|-----|----------|-----|---|----------------------------------------------------|-------------|
| -   | 22694-LH | 1   |   | GEARBOX - Lohmann (Machine 0327-123109 and before) |             |
| -   | -LH      | 1   |   | GEARBOX - Lohmann (Machine 0328-021010 and after)  |             |
| 1   | 21565-LH | 1   |   | SHAFT, brake                                       |             |
| 2   | 21566-LH | 1   |   | RING, snap - upper brake                           |             |
| 3   | 21567-LH | 1   |   | PLATE, back-up - upper brake                       |             |
| 4   | 21568-LH | 1   |   | PISTON, brake                                      |             |
| 5   | 21569-LH | 1   | ☐ | DIPSTICK                                           |             |
|     | 21571-LH | 1   |   | RING, seal                                         |             |
| 6   | 21570-LH | 1   | ☐ | BREATHER                                           |             |
|     | 21571-LH | 1   |   | RING, seal                                         |             |
| 7   | NSS      | 1   |   | HOUSING, brake                                     |             |
| 8   | 21572-LH | 1   |   | O-RING, brake housing                              |             |
| 9   | 21573-LH | 1   |   | PLATE, back-up - lower brake                       |             |
| 10  | 21574-LH | 1   |   | RING, snap - lower brake                           |             |
| 11  | 21575-LH | 12  |   | BOLT, allen head - 8mm x 25mm                      |             |
| 12  | NSS      | 5   | ⌘ | DISC, brake                                        |             |
| 13  | NSS      | 4   | ⌘ | DISC, spacer                                       |             |
| 14  | NSS      | 10  | ⌘ | SPRING, outer                                      |             |
| 15  | NSS      | 10  | ⌘ | SPRING, inner                                      |             |
| --  | 21418-FH | 1   |   | KIT, repair - brake disc                           |             |

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in disc brake kit PN# 20788-UP.

### 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.

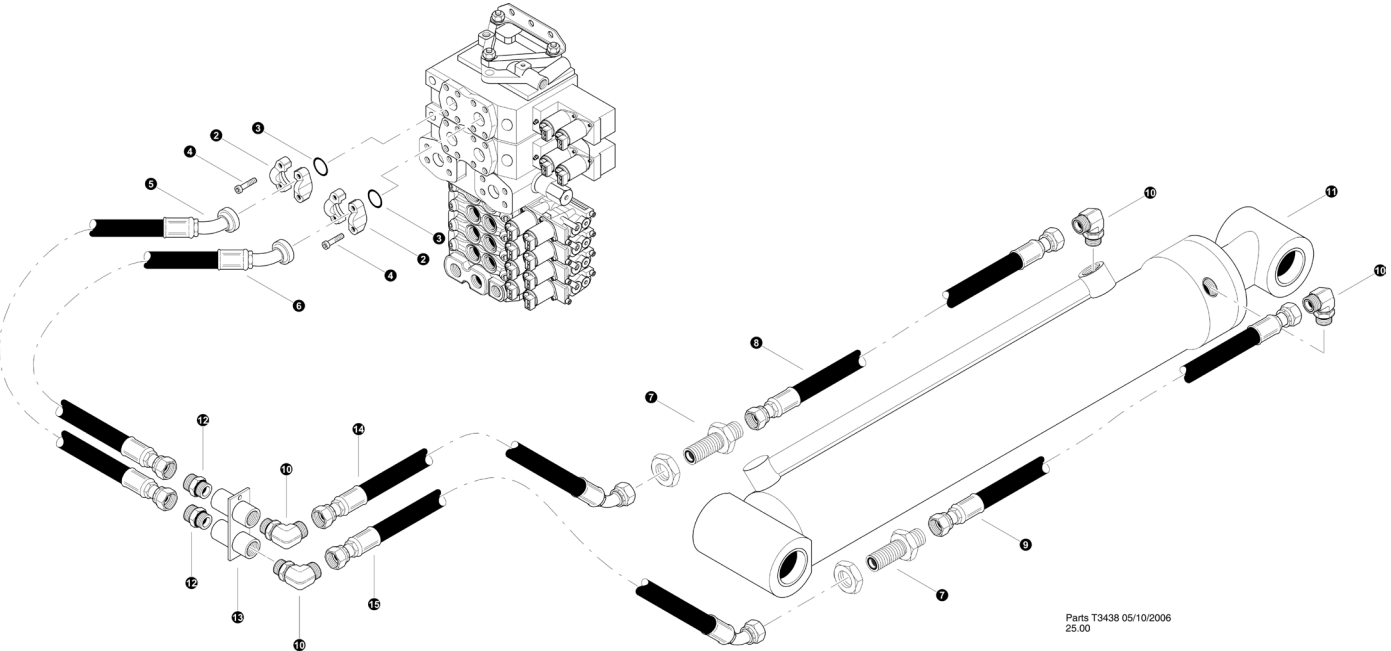
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## ***Section LH-4***

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### ***Loader Boom Hydraulics - Implement Connections - Forwarder***



## MAIN BOOM CYLINDER FUNCTION

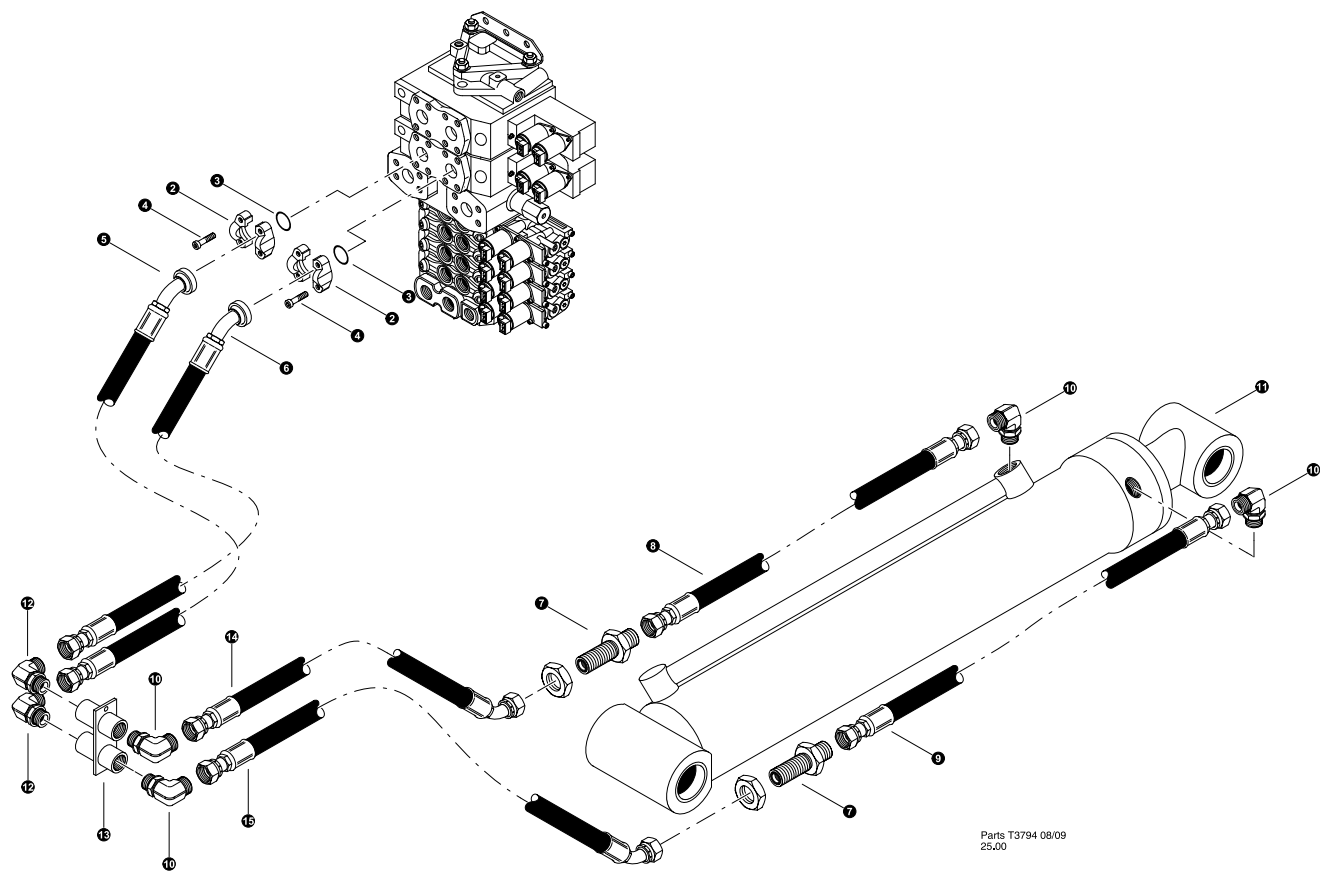
### (Main Control Valve To Main Boom (Hoist) Cylinder)

830B-0244 to 830B-0314

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                           | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                    |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                         |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                 |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4031-16-160S-16PA4 (Main boom valve<br>work port "B" to main boom cylinder bulkhead)   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4029.5-16-160S-16PA4 (Main boom valve<br>work port "A" to main boom cylinder bulkhead) |             |
| 7   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                    |             |
| 8   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main<br>boom cylinder base port)              |             |
| 9   | 50864-LH | 1   |                                                                                   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main<br>boom cylinder rod port)               |             |
| 10  | 15228-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                                                              |             |
| 11  | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER . . . . .                                                                   | LB-3        |
| 12  | 15525-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                                         |             |
| 13  | -LH      | 1   |                                                                                   | BULKHEAD, UPPER MAIN CYL                                                                               |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to bulk-<br>head bracket "a" port)          |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to bulk-<br>head bracket "b" port)         |             |



See referenced page for component or assembly breakdown.



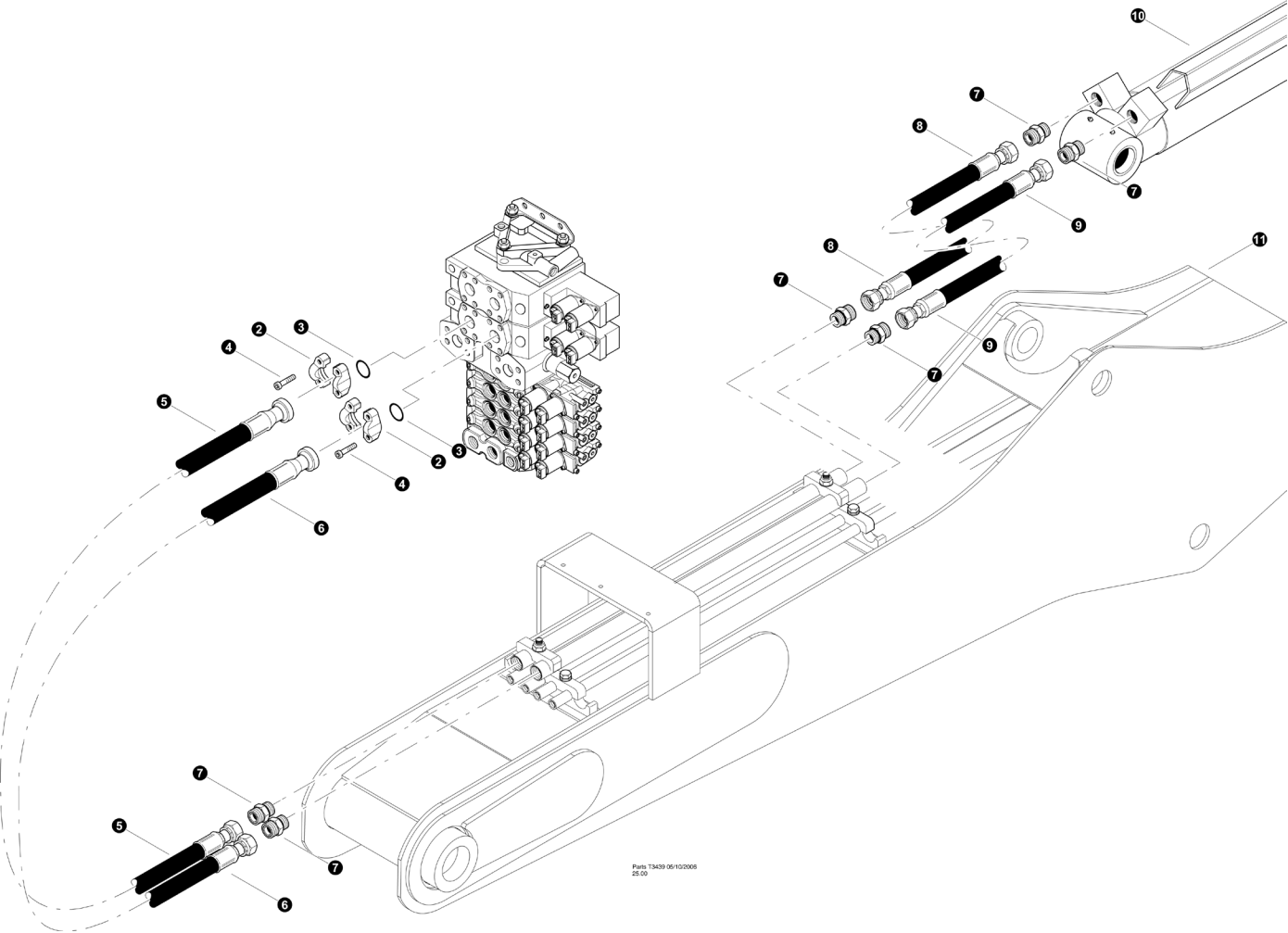
## MAIN BOOM CYLINDER FUNCTION

### (Main Control Valve To Main Boom (Hoist) Cylinder)

| Machine 830B-0315 and newer |          |     |                                                                                                                        |             |
|-----------------------------|----------|-----|------------------------------------------------------------------------------------------------------------------------|-------------|
| REF                         | PART #   | QTY | DESCRIPTION                                                                                                            | SEE SECTION |
| 1                           | REF.     | 1   |  MAIN CONTROL VALVE . . . . .         | LH-1        |
| 2                           | 15111-LH | 2   |  KIT, split flange - 1" SF (Code 61)  |             |
| 3                           | 15377-LH | 2   | O-RING - 1" SF                                                                                                         |             |
| 4                           | 18979-LH | 8   | BOLT, allen M10 X 45MM                                                                                                 |             |
| 5                           | -LH      | 1   | HOSE ASSEMBLY - 4020-16-160S-16PA4 (Main boom valve work port "B" to main boom cylinder bulkhead)                      |             |
| 6                           | -LH      | 1   | HOSE ASSEMBLY - 4019-16-160S-16PA4 (Main boom valve work port "A" to main boom cylinder bulkhead)                      |             |
| 7                           | 20033-LH | 2   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                                    |             |
| 8                           | -LB      | 1   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main boom cylinder base port)                                 |             |
| 9                           | 50864-LH | 1   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main boom cylinder rod port)                                  |             |
| 10                          | 15228-LH | 2   | ELBOW, 90 - FF1868T-1616S                                                                                              |             |
| 11                          | REF.     | 1   |  MAIN BOOM (HOIST) CYLINDER . . . . . | LB-3        |
| 12                          | 15525-LH | 1   | CONNECTOR, STR - FF1852T-1616S                                                                                         |             |
| 13                          | -LH      | 1   | BULKHEAD, UPPER MAIN CYL                                                                                               |             |
| 14                          | -LH      | 1   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to bracket "a" port)                                        |             |
| 15                          | -LH      | 1   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to bracket "b" port)                                       |             |



See referenced page for component or assembly breakdown.





## STICK BOOM CYLINDER FUNCTION

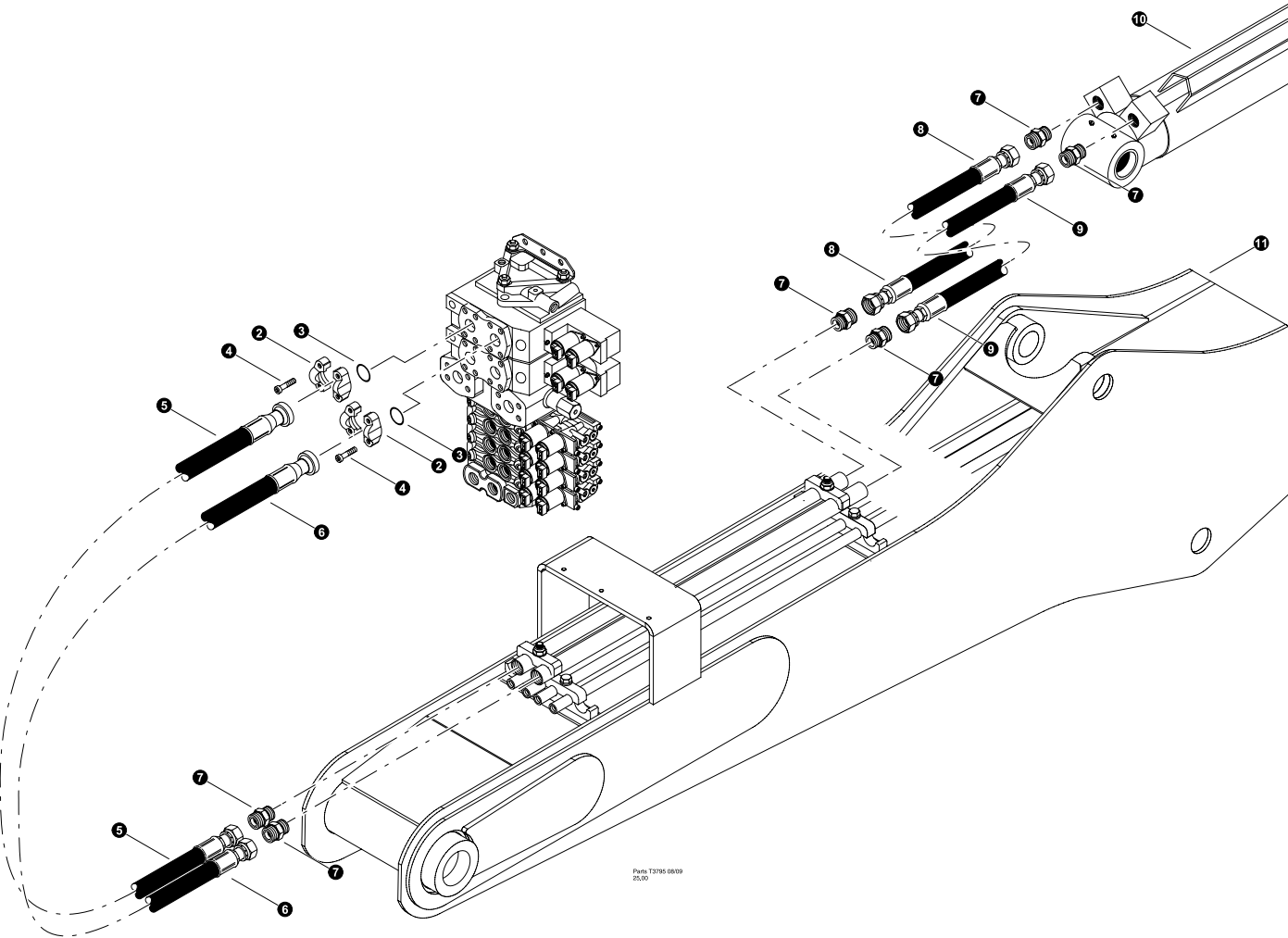
### (Main Control Valve To Main Boom Tube Lines)

830B-0244 to 830B-0314

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                           | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                    |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                         |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                 |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1609-16PA (Stick boom valve<br>work port "B" to main boom tube line base side) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA (Stick boom valve<br>work port "A" to main boom tube line rod side)  |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                         |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 (Stick Cylinder to main boom<br>tube line base side)               |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 (Stick Cylinder to main boom<br>tube line rod side)                |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                          | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                           | LB-1        |



See referenced page for component or assembly breakdown.



## STICK BOOM CYLINDER FUNCTION

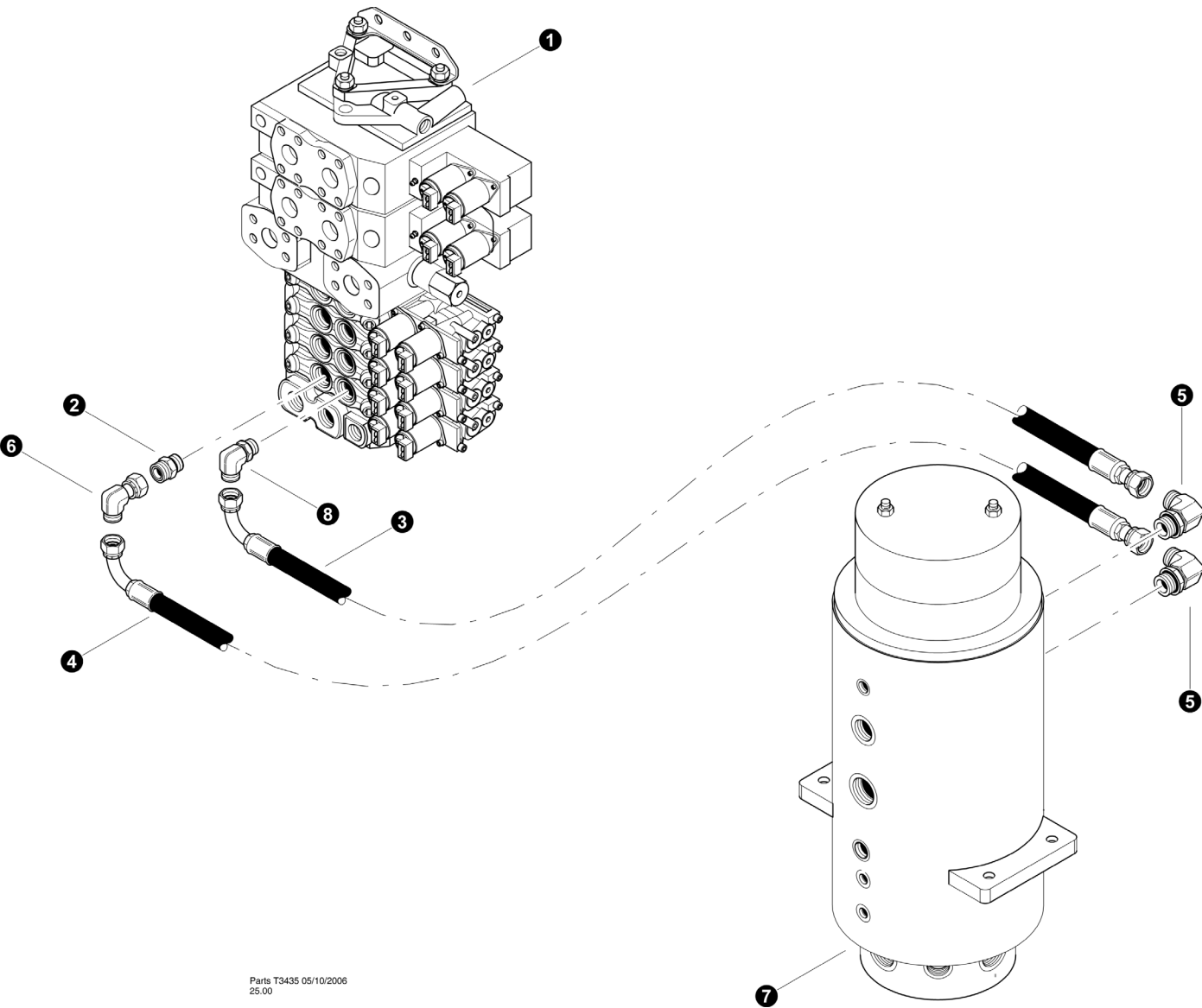
### (Main Control Valve To Main Boom Tube Lines)

Machine 830B-0315 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                   | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF ( <i>Code 61</i> )                                                                   |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                                 |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                         |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4052.5-16-1609-16PA ( <i>Stick boom valve work port "B" to main boom tube line base side</i> ) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA ( <i>Stick boom valve work port "A" to main boom tube line rod side</i> )    |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                                 |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 ( <i>Stick Cylinder to main boom tube line base side</i> )                 |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 ( <i>Stick Cylinder to main boom tube line rod side</i> )                  |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                                  | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                   | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3435 05/10/2006  
25.00

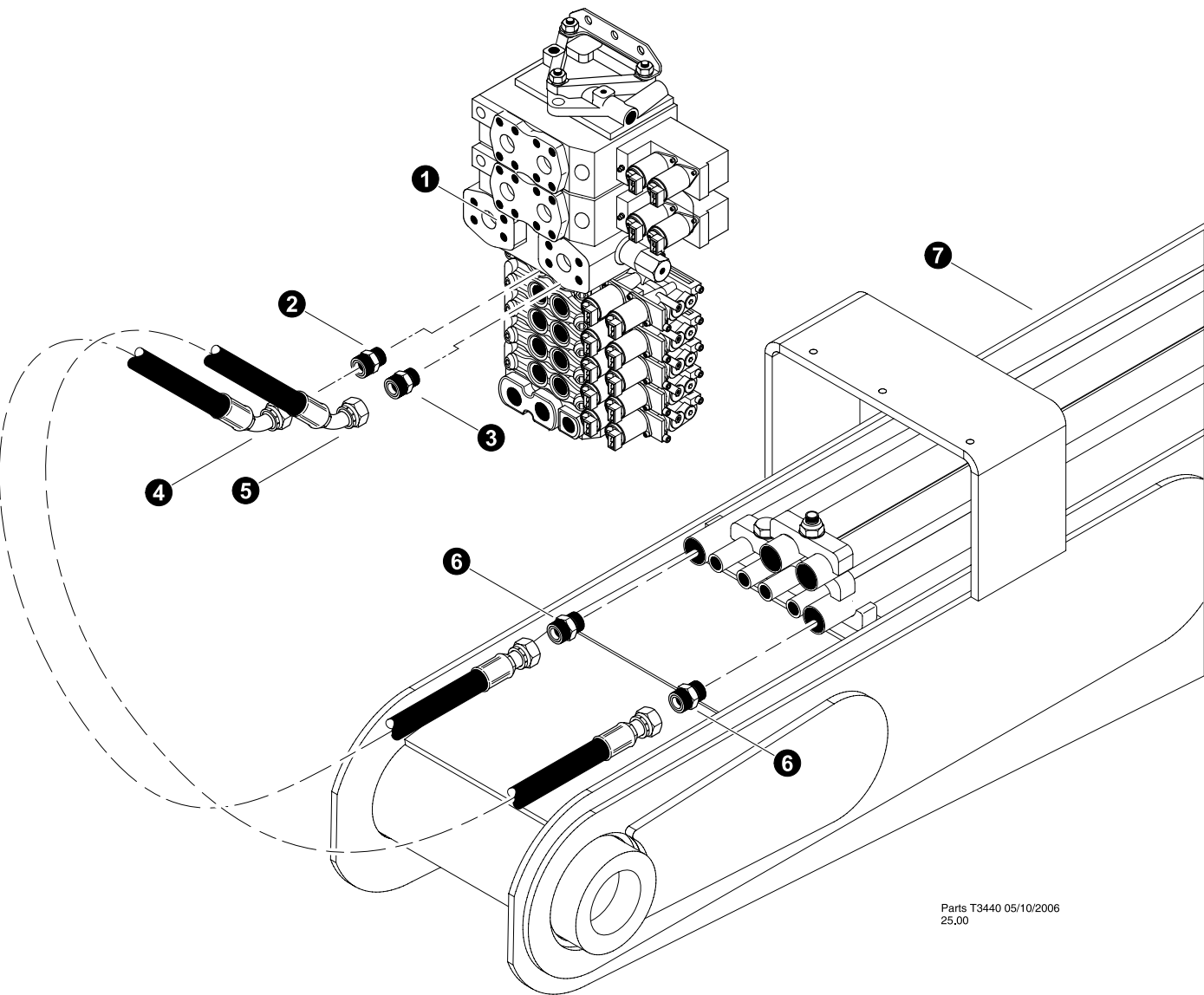
## STEER FUNCTION LINES

### (Main Control Valve To Upper Rotary Manifold Ports)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                       | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                     |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4034.5-10-100S-1009( <i>Steer valve section work port "B" to rotary manifold #11 or ST1 port</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4036-10-100S-1009( <i>Steer valve section work port "A" to rotary manifold #9 or ST2 port</i> )    |             |
| 5   | 50036-LH | 3   |                                                                                   | ELBOW, 90 - 849-TTO-10X12                                                                                          |             |
| 6   | 51882-LH | 3   |                                                                                   | ELBOW, 90 - SWIVEL (10 C6L0-S)                                                                                     |             |
| 7   | REF.     | 1   |  | ROTARY MANIFOLD ASSEMBLY . . . . .                                                                                 | UP-1        |
| 8   | 51881-LH | 3   |                                                                                   | ELBOW, 90 - (10 C50L0-S)                                                                                           |             |



See referenced page for component or assembly breakdown.



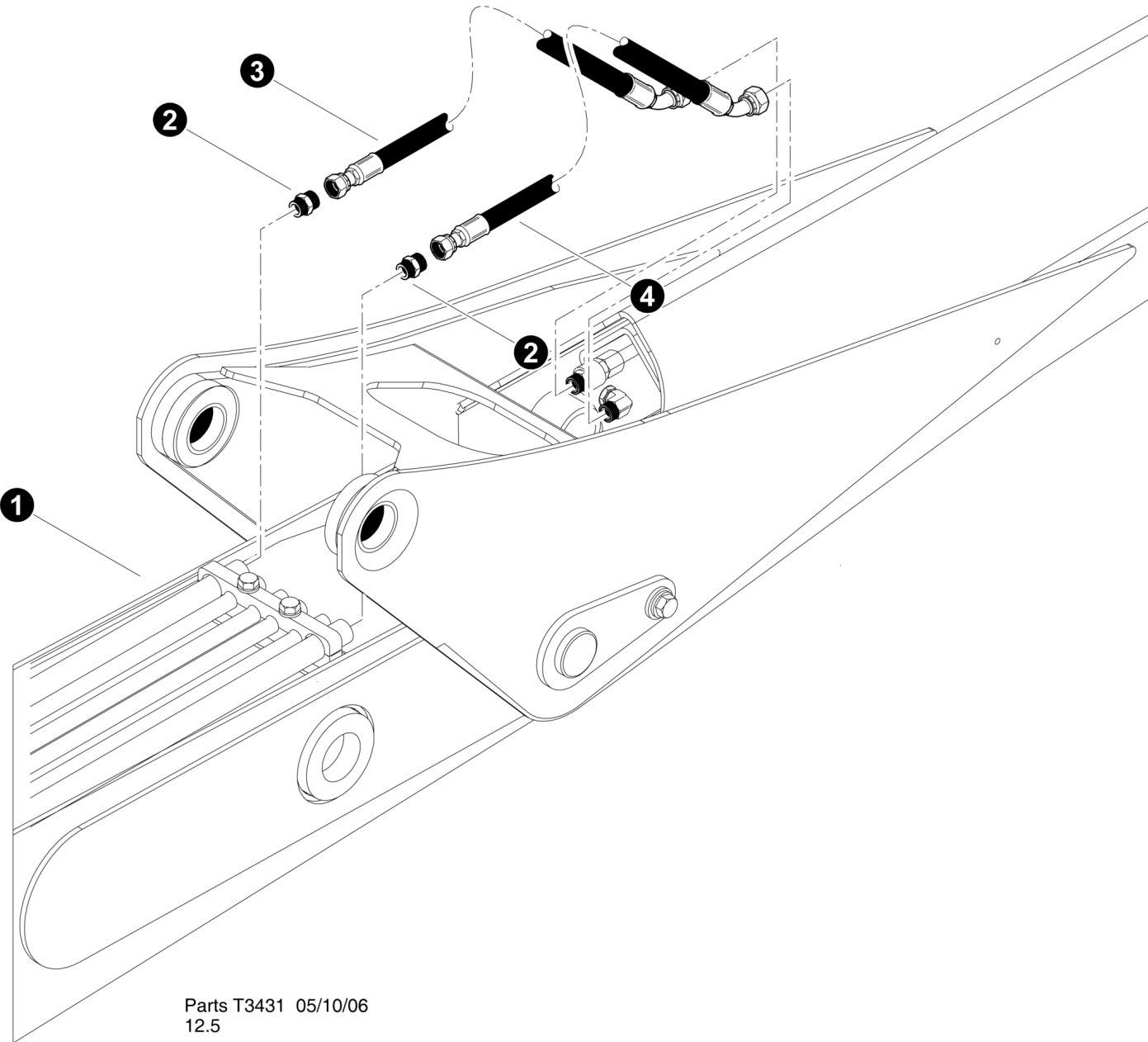
Parts T3440 05/10/2006  
25,00

**“Optional” SQUIRT BOOM CONNECTIONS**  
**(Main Control Valve To Squirt Cylinder tube lines)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE (with optional squirt/tele) . . . . .                              | LH-1        |
| 2   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 3   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4051-12-120S-1204 ( <i>Squirt Boom Section“A” port to Main Boom</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-12-120S-1204 ( <i>Squirt Boom Section“B” port to Main Boom</i> ) |             |
| 6   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                        |             |
| 7   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                          | LB-1        |



See referenced page for component or assembly breakdown.





## “Optional” SQUIRT BOOM CONNECTIONS

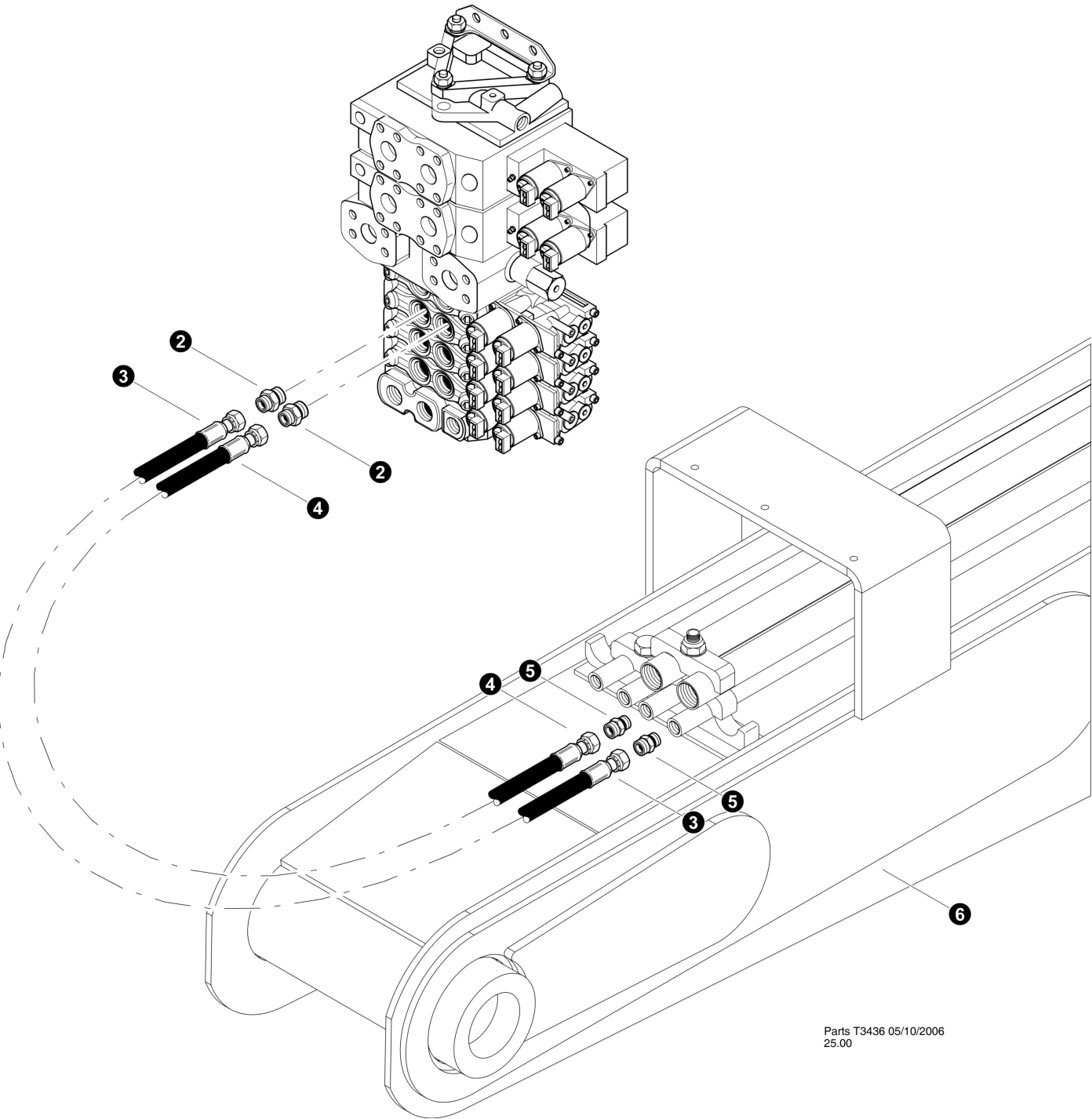
### (Main Boom To Squirt Cylinder)

#### Typical Forwarder - Machine SN 0144 02/14/06 and after

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN / SQUIRT BOOM ASSEMBLY . . . . .                                                    | LB-1        |
| 2   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                           |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |



See referenced page for component or assembly breakdown.



Parts T3436 05/10/2006  
25.00

## GRAPPLE OPEN/CLOSE FUNCTION

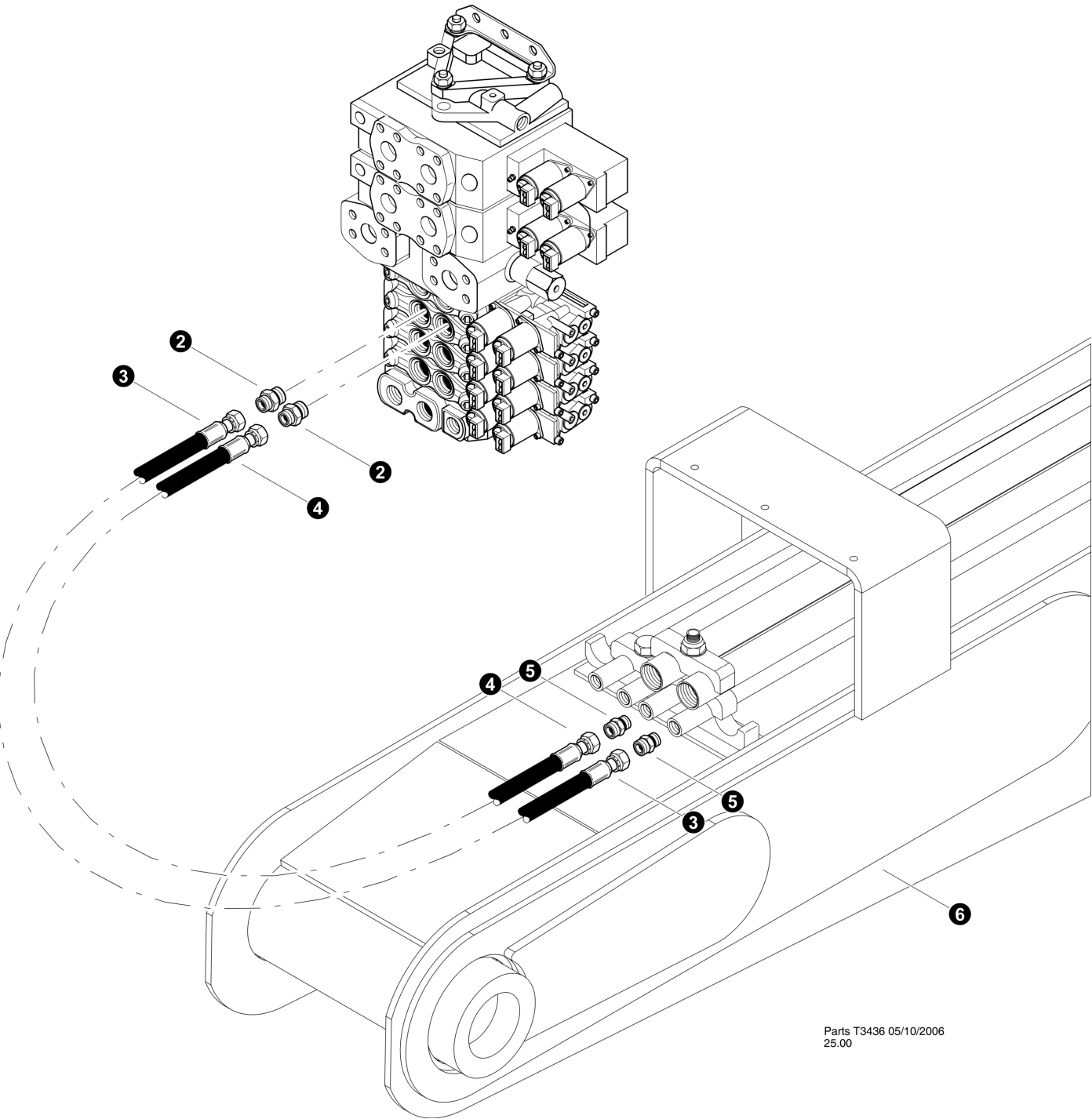
### (Main Control Valve To Main Boom Tube Lines)

830B-0244 to 830B-0314

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                                              | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                        |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4060-10-100S-100S ( <i>Grapple valve section work port "A" to main boom right outside tube line</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4059-10-100S-100S ( <i>Grapple valve section work port "B" to main boom right inside tube line</i> )  |             |
| 5   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                                              | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3436 05/10/2006  
25.00

## GRAPPLE OPEN/CLOSE FUNCTION

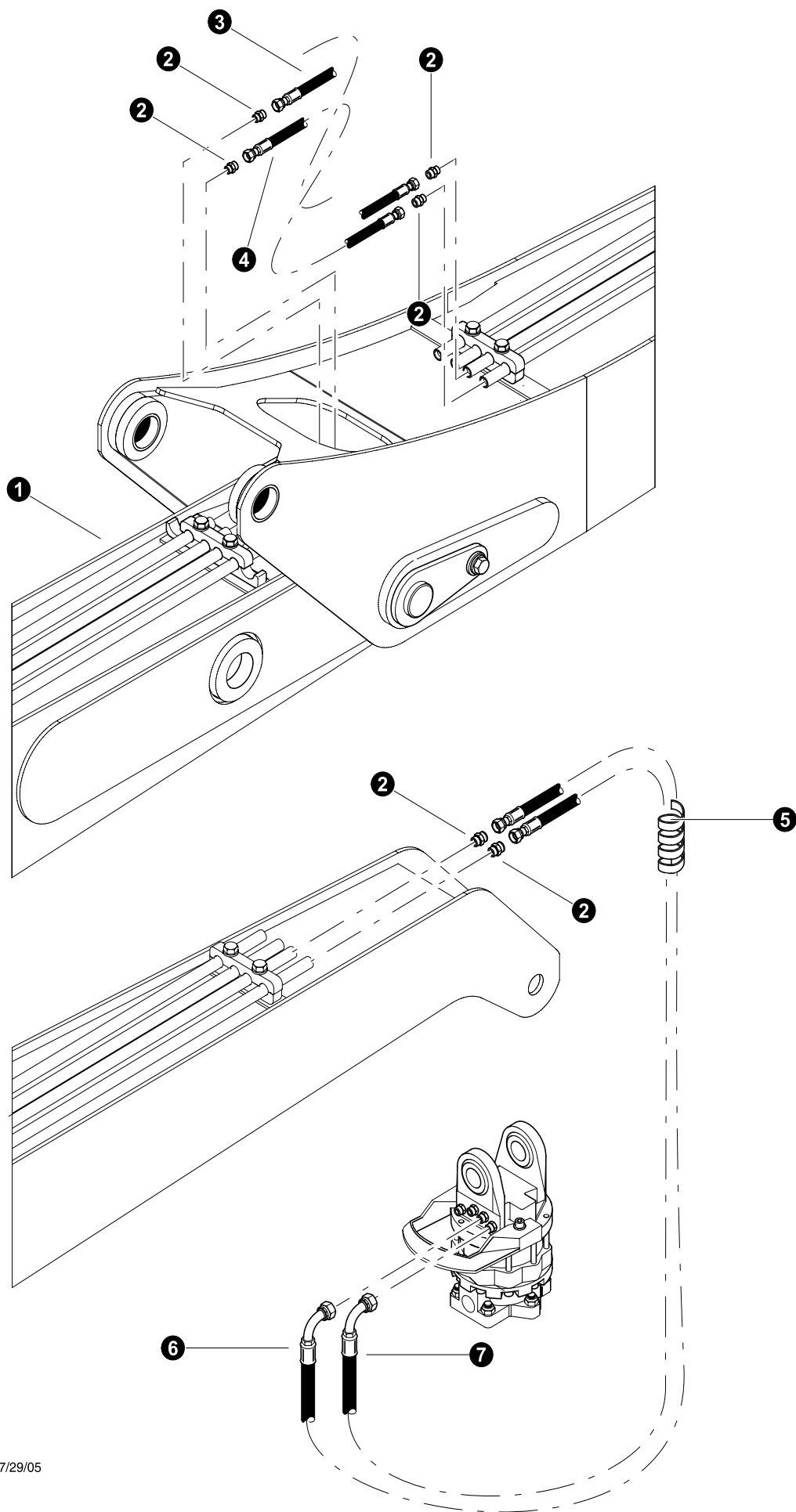
### (Main Control Valve To Main Boom Tube Lines)

Machine 830B-0315 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                                              | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                        |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4066-10-100S-100S ( <i>Grapple valve section work port "A" to main boom right outside tube line</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4066-10-100S-100S ( <i>Grapple valve section work port "B" to main boom right inside tube line</i> )  |             |
| 5   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                                              | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3327 07/29/05  
12.5

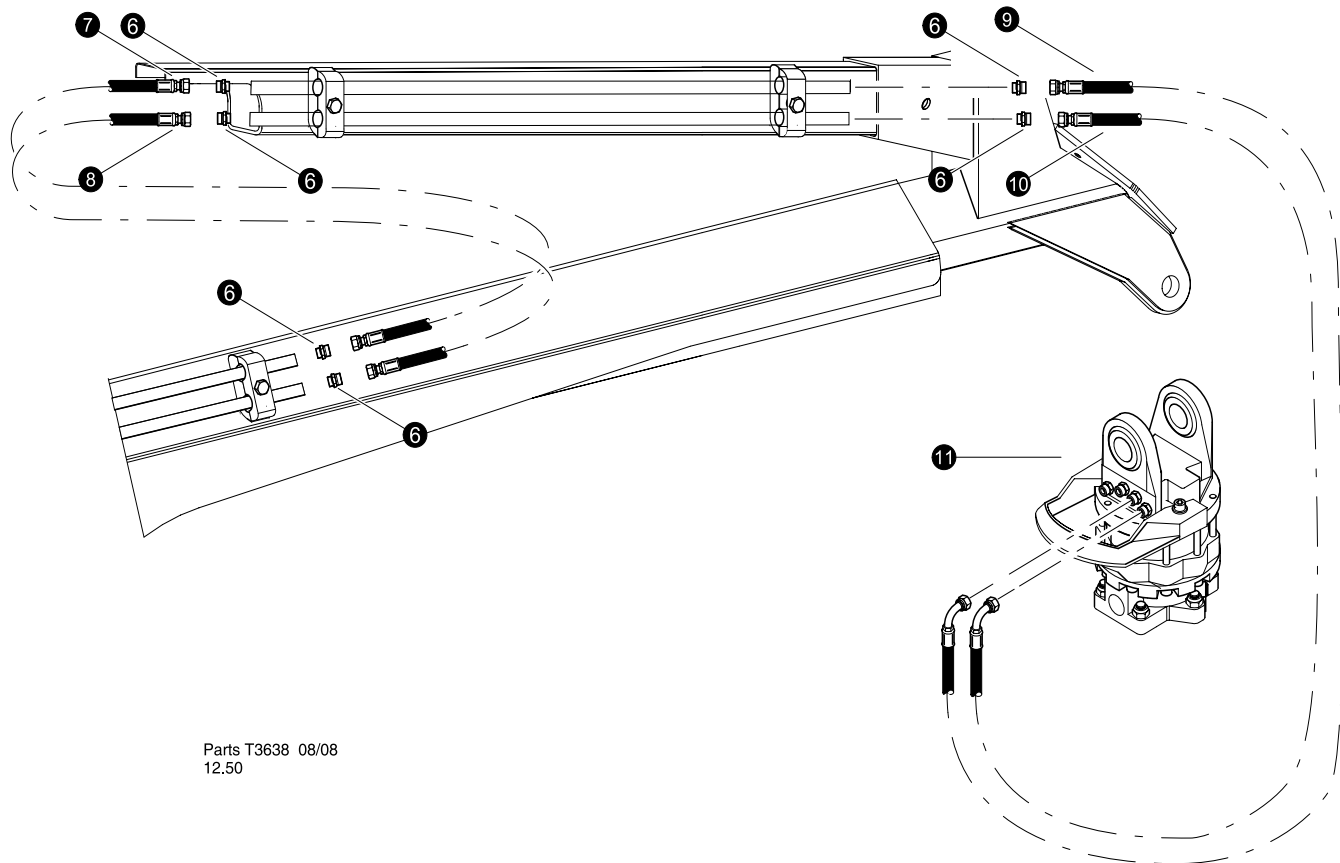
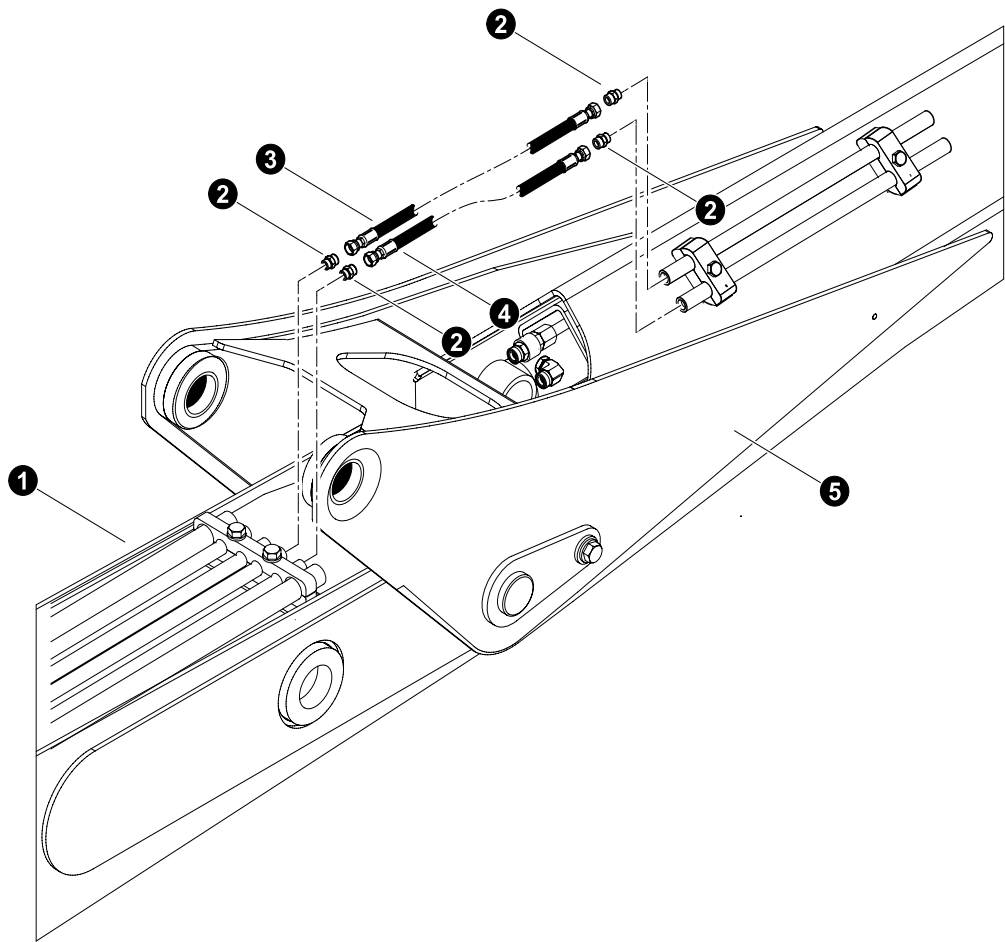
## GRAPPLE OPEN/CLOSE FUNCTION

### (Main & Stick Boom Tube lines to Grapple)

| REF | PART #   | QTY  |                                                                                   | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1    |  | LOADER BOOM ASSEMBLY . . . . .                                                        | LB          |
| 2   | 15115-LH | 2    |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                   |             |
| 3   | -LH      | 1    |                                                                                   | HOSE ASSEMBLY - 4045-10-100S-100S ( <i>main boom to stick boom tube lines</i> )       |             |
| 4   | -LH      | 1    |                                                                                   | HOSE ASSEMBLY - 4045-10-100S-100S ( <i>main boom to stick boom tube lines</i> )       |             |
| 5   | 19677-LH | 6 ft |                                                                                   | PROTECTOR, HOSE - SPRIAL (1.25")(BULK)                                                |             |
| 6   | 51482-LH | 1    |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>stick boom tube lines to grapple rotator</i> ) |             |
| 7   | 51482-LH | 1    |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>stick boom tube lines to grapple rotator</i> ) |             |



See referenced page for component or assembly breakdown.



Parts T3638 08/08  
12.50

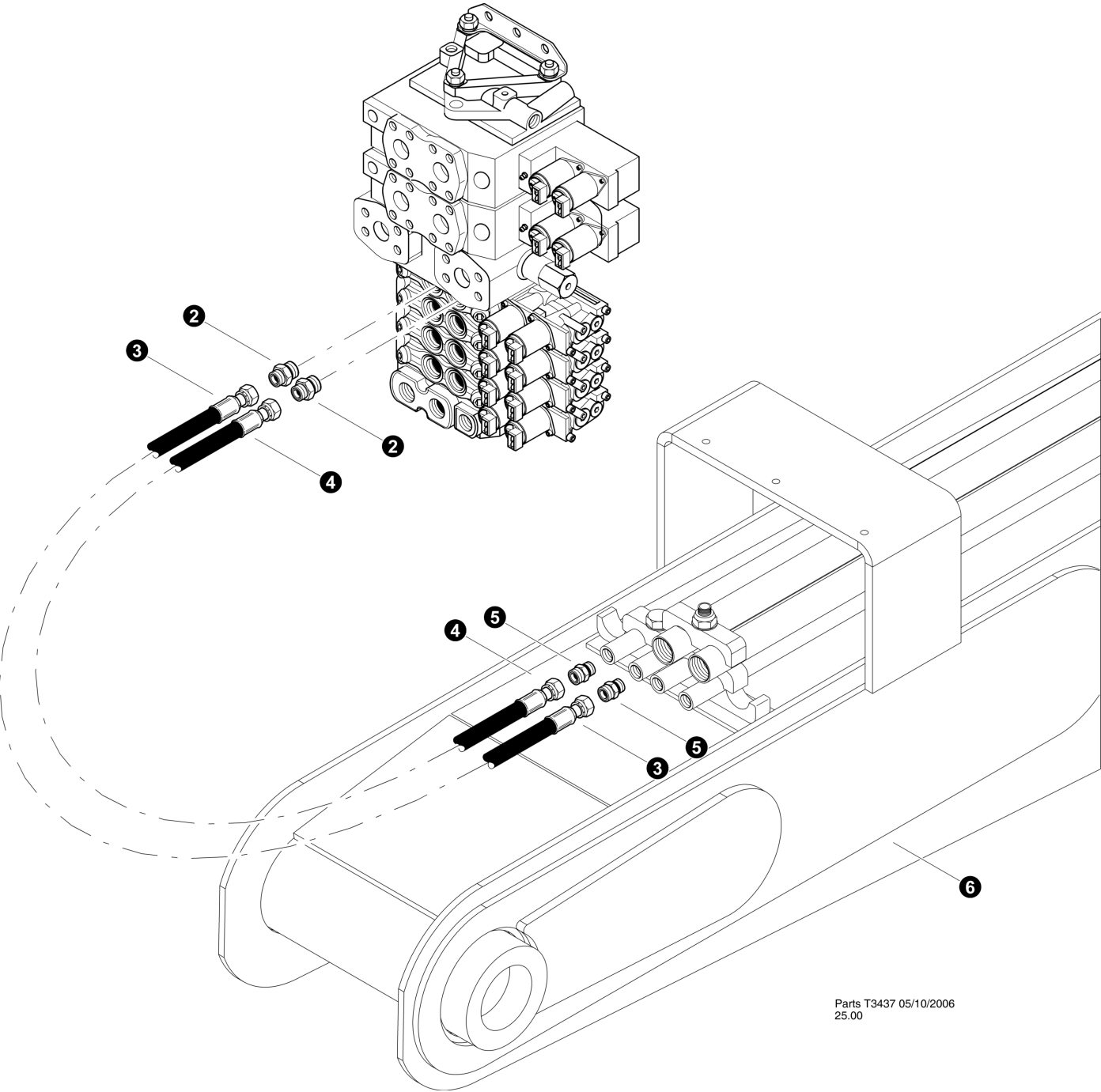


## “Optional” SQUIRT BOOM CONNECTIONS (Grapple Open and Close)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                           | LB-1        |
| 2   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                         |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-10-100S-100S ( <i>Main Boom tube line to Squir</i><br><i>Boom tube line</i> )     |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-10-100S-100S ( <i>Main Boom tube line to Squir</i><br><i>Boom tube line</i> )     |             |
| 5   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                                                                         | LB-1        |
| 6   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                    |             |
| 6   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                         |             |
| 7   | - - -    | 2   |                                                                                   | HOSE ASSEMBLY - 4093-10-100S-100S (Squirt boom lowertube line to<br>Singer lower tubeline) . . . . .   |             |
| 8   | - - -    | 2   |                                                                                   | HOSE ASSEMBLY - 4093-10-100S-100S (Squirt boom lowertube line to<br>Singer lower tubeline)             |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>Squirt boom top</i><br><i>cab-side hoseline to grapple</i> )    |             |
| 10  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>Squirt boom bottom</i><br><i>cab-side hoseline to grapple</i> ) |             |
| 11  | REF.     | 1   |  | ROTATOR, GV17. . . . .                                                                                 | LB-5        |



See referenced page for component or assembly breakdown.



Parts T3437 05/10/2006  
25.00

## GRAPPLE ROTATE FUNCTION

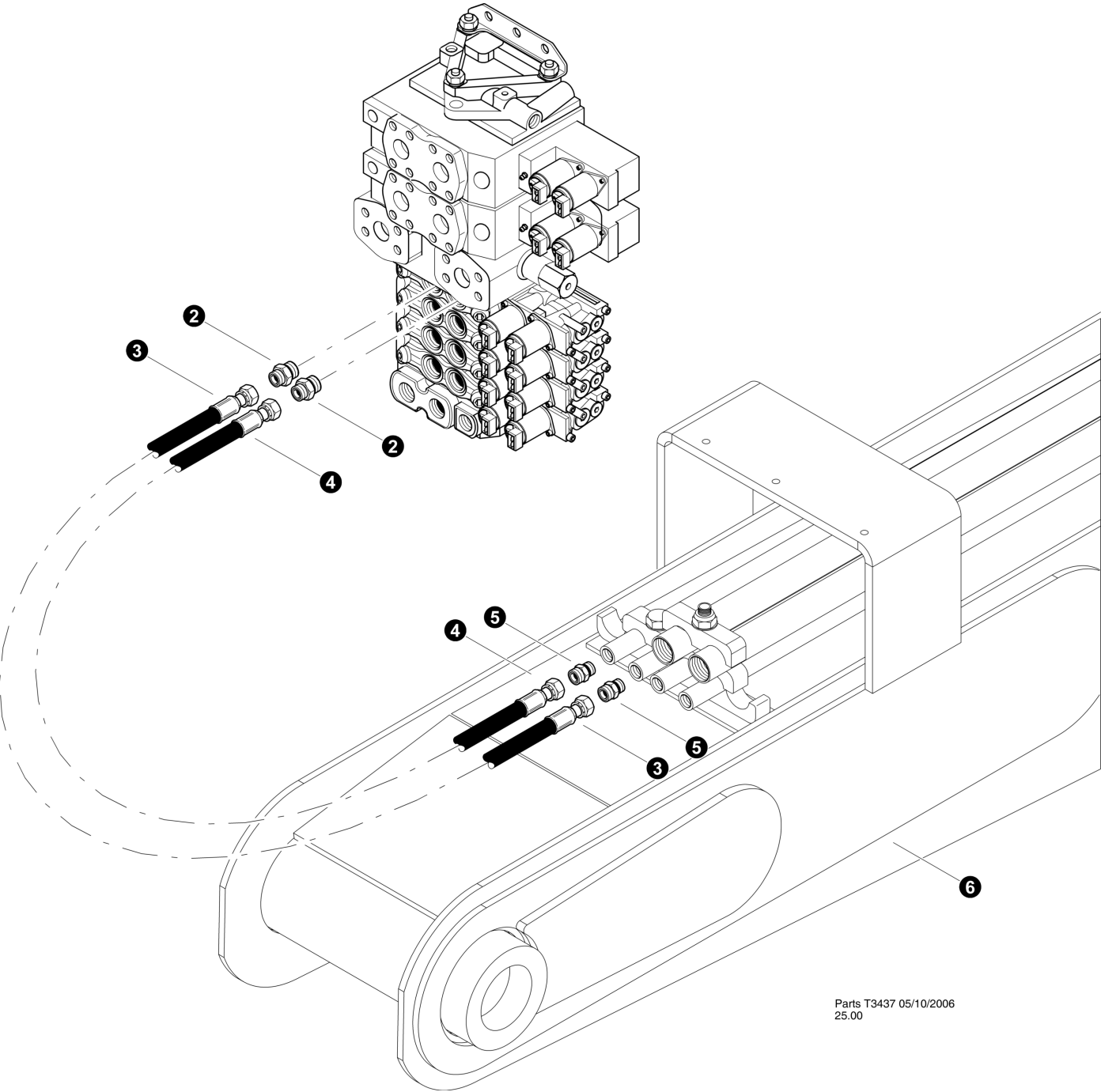
### (Main Control Valve To Main Boom Tube Lines)

830B-0244 to 830B-0314

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                          | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                        |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4058-10-100S-100S ( <i>Grapple rotate section work port "A" to main boom left outside tube line</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4057-10-100S-100S ( <i>Grapple rotate section work port "B" to main boom left inside tube line</i> )  |             |
| 5   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                          | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3437 05/10/2006  
25.00

## GRAPPLE ROTATE FUNCTION

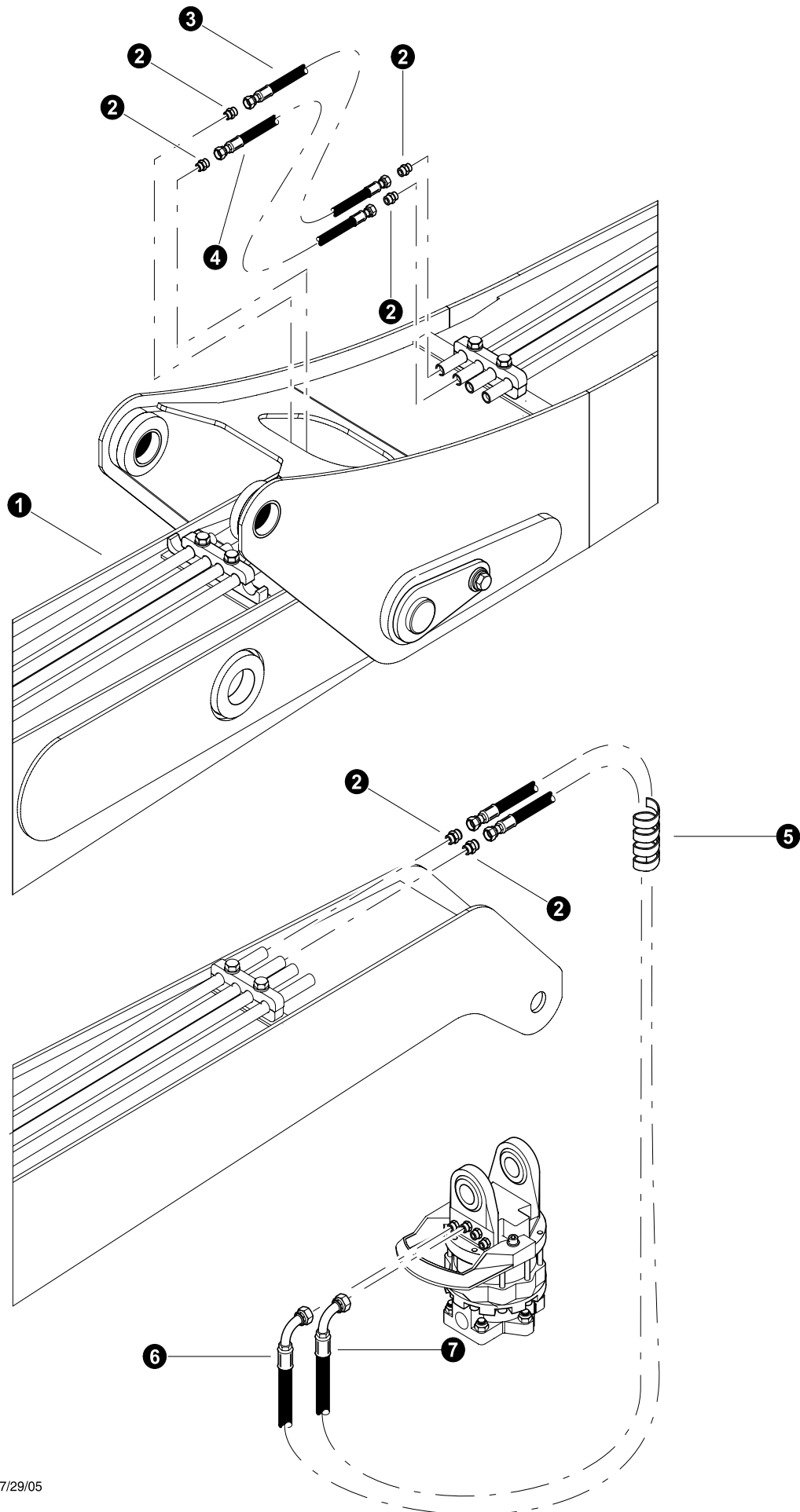
### (Main Control Valve To Main Boom Tube Lines)

Machine 830B-0315 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                          | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                        |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4060-10-100S-100S ( <i>Grapple rotate section work port "A" to main boom left outside tube line</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4063-10-100S-100S ( <i>Grapple rotate section work port "B" to main boom left inside tube line</i> )  |             |
| 5   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                          | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3325 07/29/05  
12.5

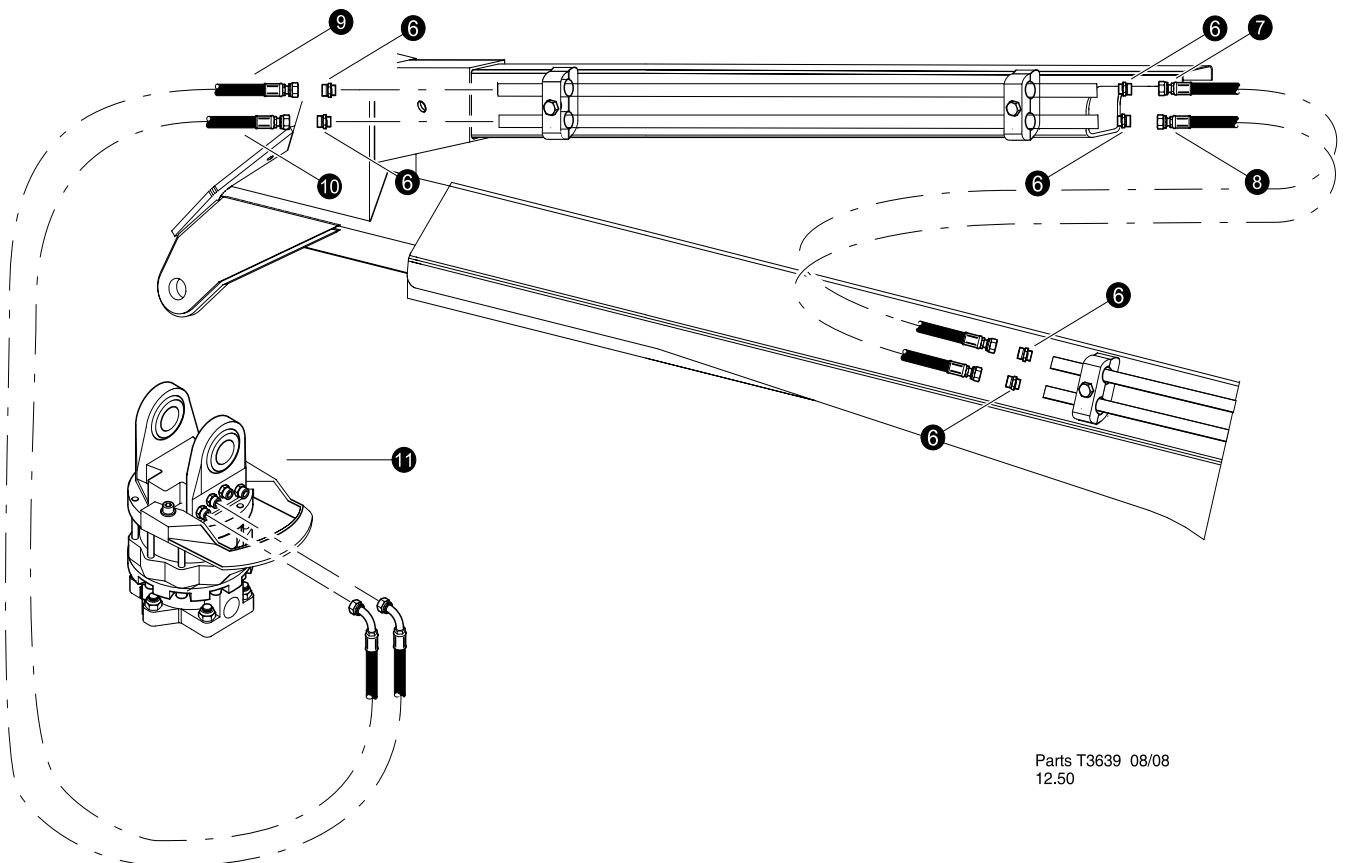
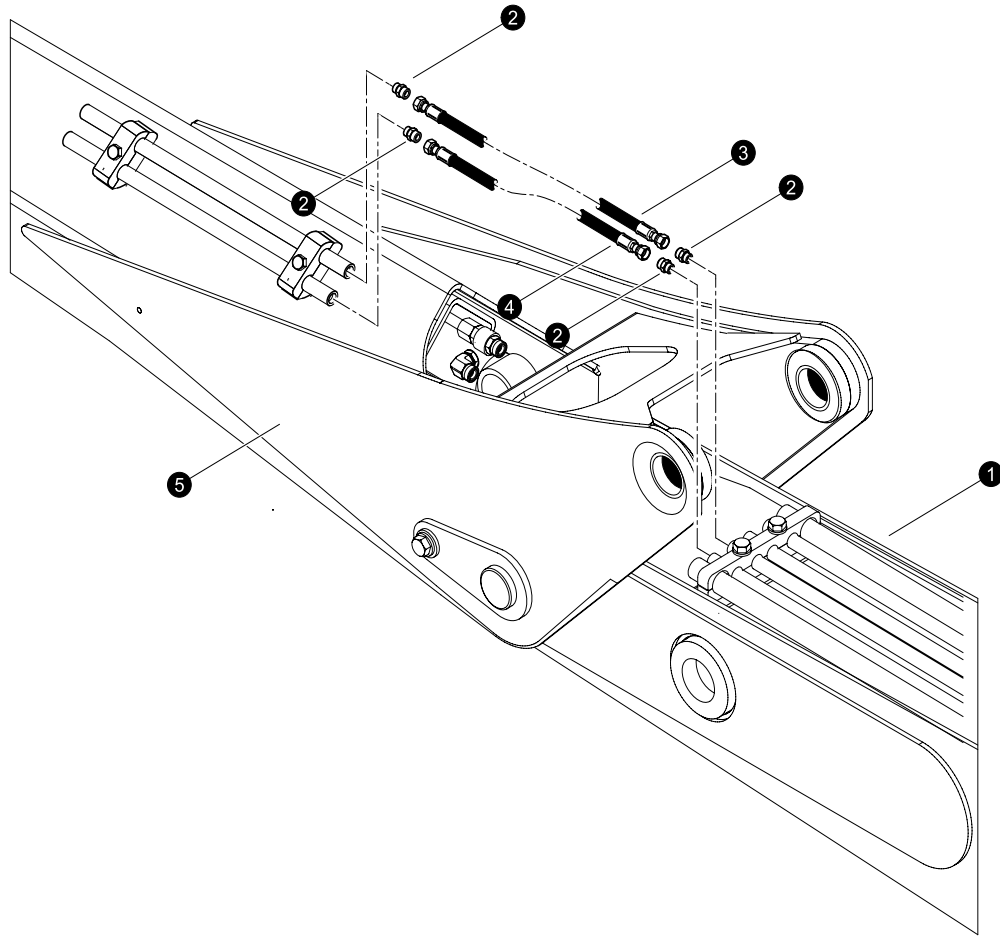
## GRAPPLE ROTATE FUNCTION

### (Main & Stick Boom Tube lines to Grapple)

| REF | PART #   | QTY  |                                                                                   | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1    |  | LOADER BOOM ASSEMBLY .....                                                            | LB          |
| 2   | 15117-LH | 2    |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                        |             |
| 3   | -LH      | 1    |                                                                                   | HOSE ASSEMBLY - 4045-08-080S-080S ( <i>main boom to stick boom tube lines</i> )       |             |
| 4   | -LH      | 1    |                                                                                   | HOSE ASSEMBLY - 4045-08-080S-080S ( <i>main boom to stick boom tube lines</i> )       |             |
| 5   | 19677-LH | 6 ft |                                                                                   | PROTECTOR, HOSE - SPRIAL (1.25")(BULK)                                                |             |
| 6   | 51482-LH | 1    |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>stick boom tube lines to grapple rotator</i> ) |             |
| 7   | 51482-LH | 1    |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>stick boom tube lines to grapple rotator</i> ) |             |



See referenced page for component or assembly breakdown.



Parts T3639 08/08  
12.50



## “Optional” SQUIRT BOOM CONNECTIONS (Grapple Rotate)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                     | LB-1        |
| 2   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                   |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S ( <i>Main Boom tube line to Squirt Boom tube line</i> )                        |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S ( <i>Main Boom tube line to Squirt Boom tube line</i> )                        |             |
| 5   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                                                                                   | LB-1        |
| 6   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                   |             |
| 7   | - - -    | 2   |                                                                                   | HOSE ASSEMBLY - 4093-08-080S-080S (Squirt boom lowertube line to Singer lower tubeline) . . . . .                |             |
| 8   | - - -    | 2   |                                                                                   | HOSE ASSEMBLY - 4093-08-080S-080S (Squirt boom lowertube line to Singer lower tubeline)                          |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>Squirt boom top cab-side hoseline to grapple middle cab-side port</i> )   |             |
| 10  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4069-08-080S-0809 ( <i>Squirt boom bottom cab-side hoseline to grapple outer cab-side port</i> ) |             |
| 11  | REF.     | 1   |  | ROTATOR, GV17. . . . .                                                                                           | LB-5        |



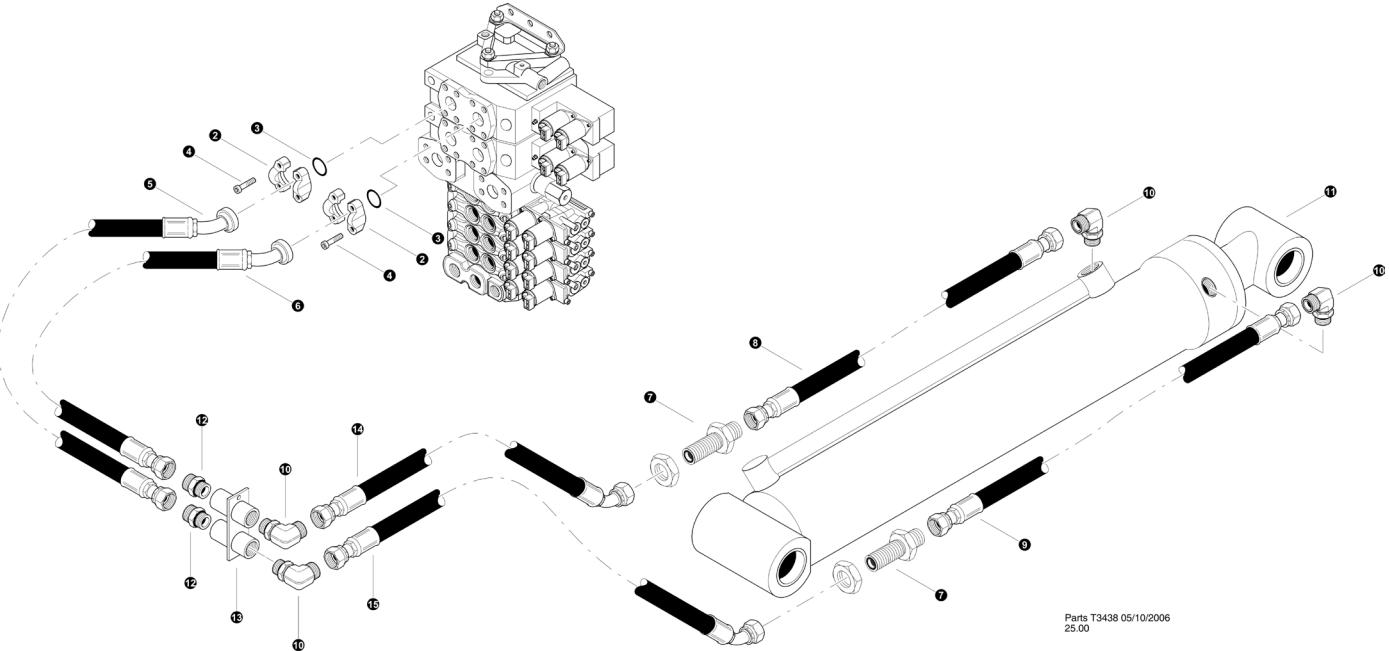
See referenced page for component or assembly breakdown.

[illegible]

## ***Section LH-5***

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### ***Loader Boom Hydraulics - Implement Connections - Harvester***



## MAIN BOOM CYLINDER FUNCTION

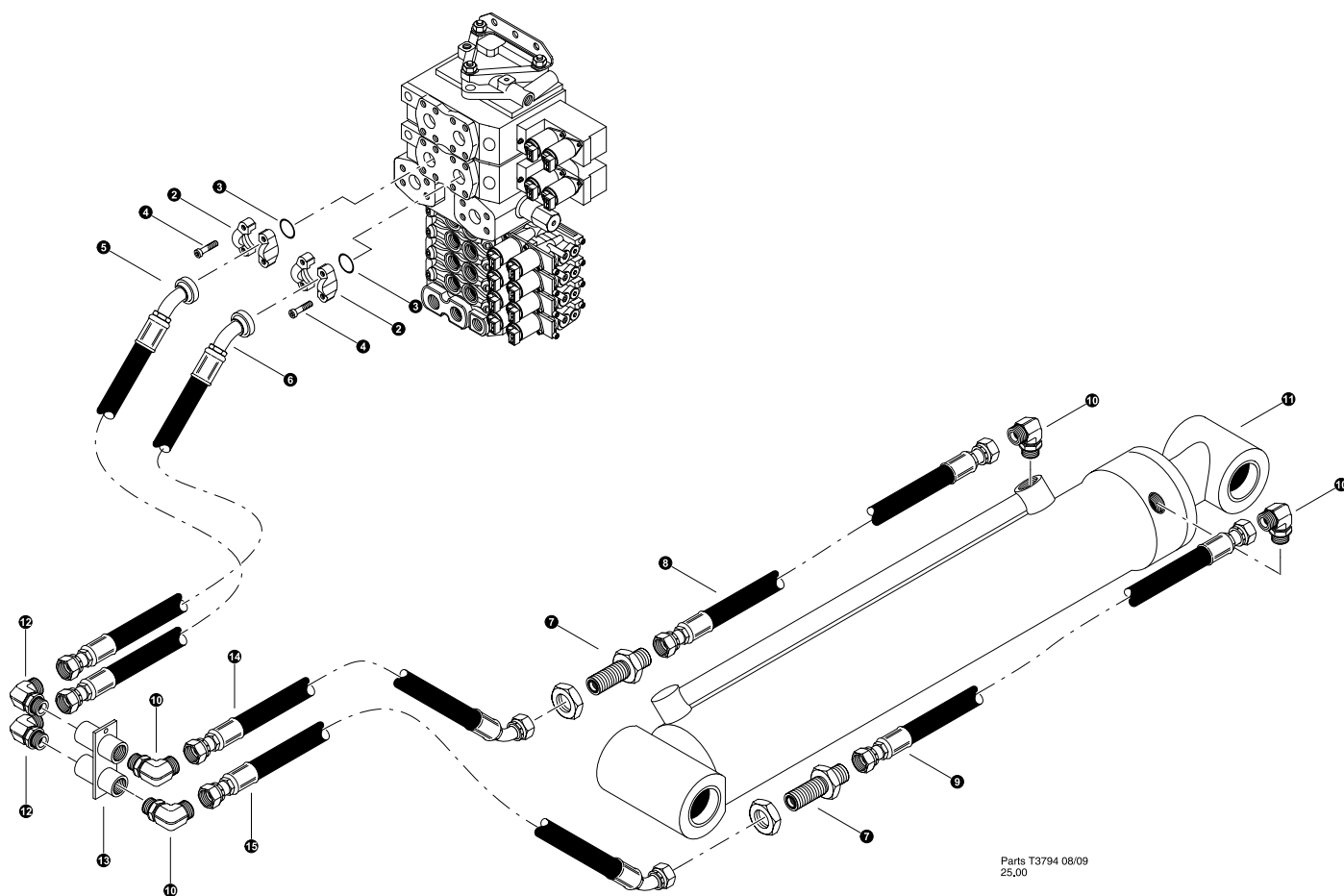
### (Main Control Valve To Main Boom (Hoist) Cylinder)

830B-0244-021808 to 830B-0314-071609

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                           | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                    |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                         |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                 |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4031-16-160S-16PA4 (Main boom valve<br>work port "B" to main boom cylinder bulkhead)   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4029.5-16-160S-16PA4 (Main boom valve<br>work port "A" to main boom cylinder bulkhead) |             |
| 7   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                    |             |
| 8   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main<br>boom cylinder base port)              |             |
| 9   | 50864-LH | 1   |                                                                                   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main<br>boom cylinder rod port)               |             |
| 10  | 15228-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                                                              |             |
| 11  | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER . . . . .                                                                   | LB-3        |
| 12  | 15525-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                                         |             |
| 13  | -LH      | 1   |                                                                                   | BULKHEAD, UPPER MAIN CYL                                                                               |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to bulk-<br>head bracket "a" port)          |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to bulk-<br>head bracket "b" port)         |             |



See referenced page for component or assembly breakdown.



## MAIN BOOM CYLINDER FUNCTION

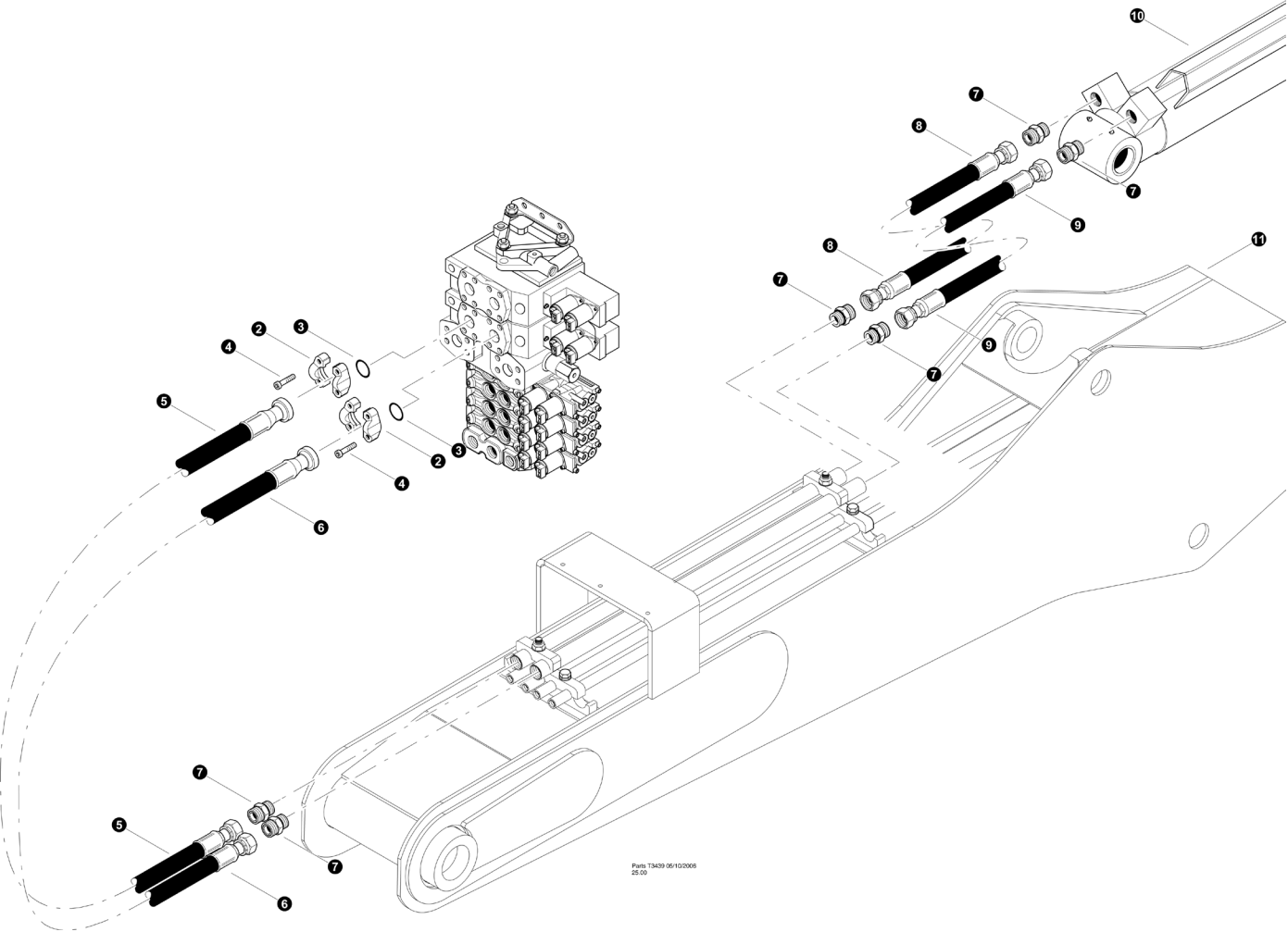
### (Main Control Valve To Main Boom (Hoist) Cylinder)

Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                         | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                  |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                       |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                               |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4020-16-160S-16PA4 (Main boom valve<br>work port "B" to main boom cylinder bulkhead) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019-16-160S-16PA4 (Main boom valve<br>work port "A" to main boom cylinder bulkhead) |             |
| 7   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                  |             |
| 8   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main<br>boom cylinder base port)            |             |
| 9   | 50864-LH | 1   |                                                                                   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main<br>boom cylinder rod port)             |             |
| 10  | 15228-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                                                            |             |
| 11  | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER . . . . .                                                                 | LB-3        |
| 12  | 15525-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                                       |             |
| 13  | -LH      | 1   |                                                                                   | BULKHEAD, UPPER MAIN CYL                                                                             |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to<br>bulkhead bracket "a" port)          |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to<br>bulkhead bracket "b" port)         |             |



See referenced page for component or assembly breakdown.





## STICK BOOM CYLINDER FUNCTION

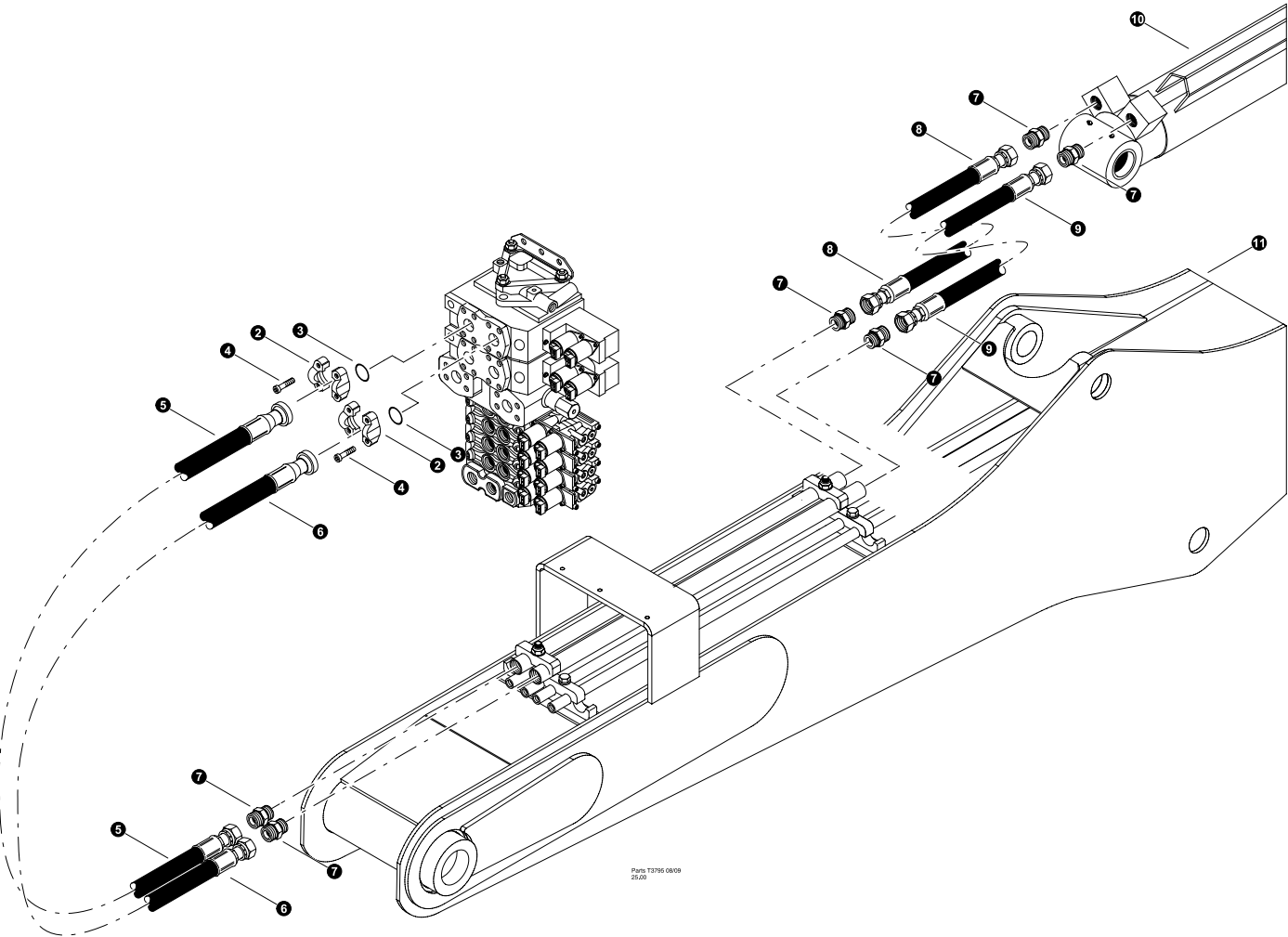
### (Main Control Valve To Main Boom Tube Lines)

830B-0244-021808 to 830B-0314-071609

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                 | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF ( <i>Code 61</i> )                                                                 |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                               |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                       |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1609-16PA ( <i>Stick boom valve work port "B" to main boom tube line base side</i> ) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA ( <i>Stick boom valve work port "A" to main boom tube line rod side</i> )  |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                               |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 ( <i>Stick Cylinder to main boom tube line base side</i> )               |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 ( <i>Stick Cylinder to main boom tube line rod side</i> )                |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                                | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                 | LB-1        |



See referenced page for component or assembly breakdown.



## STICK BOOM CYLINDER FUNCTION

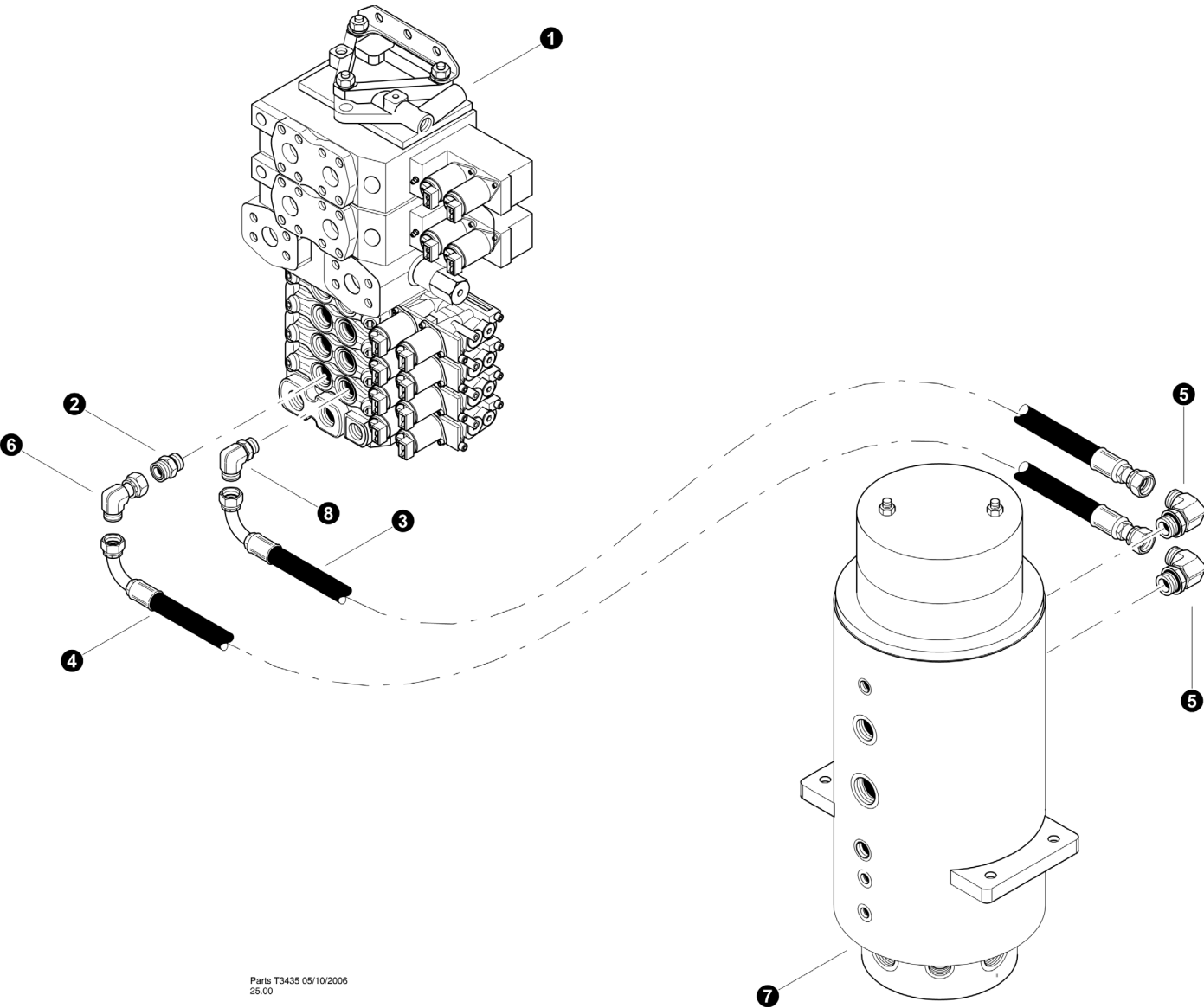
### (Main Control Valve To Main Boom Tube Lines)

Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                   | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF ( <i>Code 61</i> )                                                                   |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                                 |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                         |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4052.5-16-1609-16PA ( <i>Stick boom valve work port "B" to main boom tube line base side</i> ) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA ( <i>Stick boom valve work port "A" to main boom tube line rod side</i> )    |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                                 |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 ( <i>Stick Cylinder to main boom tube line base side</i> )                 |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 ( <i>Stick Cylinder to main boom tube line rod side</i> )                  |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                                  | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                   | LB-1        |



See referenced page for component or assembly breakdown.



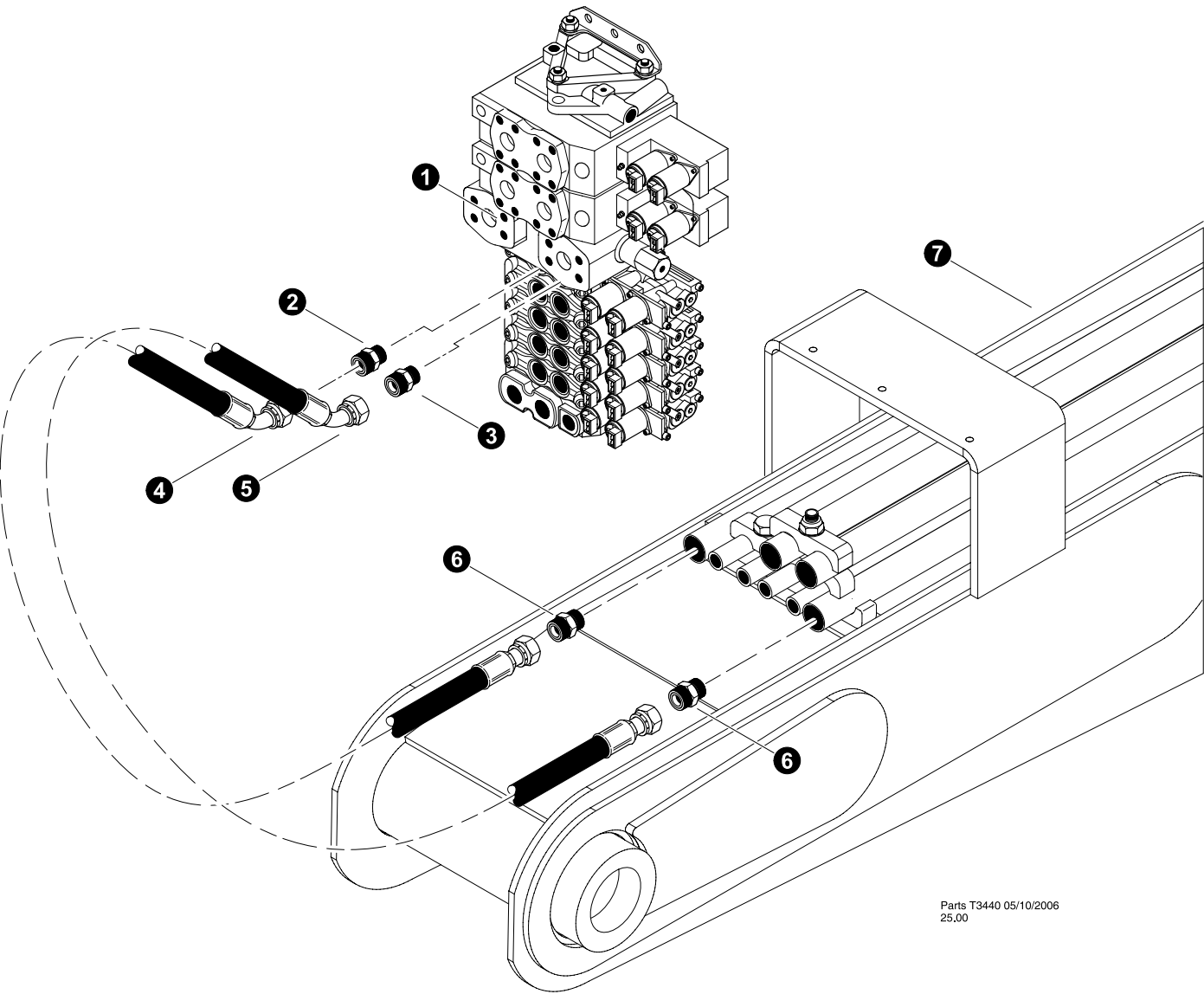
## STEER FUNCTION LINES

### (Main Control Valve To Upper Rotary Manifold Ports)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                       | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                                     |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4034.5-10-100S-1009( <i>Steer valve section work port "B" to rotary manifold #11 or ST1 port</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4036-10-100S-1009( <i>Steer valve section work port "A" to rotary manifold #9 or ST2 port</i> )    |             |
| 5   | 50036-LH | 3   |                                                                                   | ELBOW, 90 - 849-TTO-10X12                                                                                          |             |
| 6   | 51882-LH | 3   |                                                                                   | ELBOW, 90 - SWIVEL (10 C6L0-S)                                                                                     |             |
| 7   | REF.     | 1   |  | ROTARY MANIFOLD ASSEMBLY . . . . .                                                                                 | UP-1        |
| 8   | 51881-LH | 3   |                                                                                   | ELBOW, 90 - (10 C50L0-S)                                                                                           |             |



See referenced page for component or assembly breakdown.

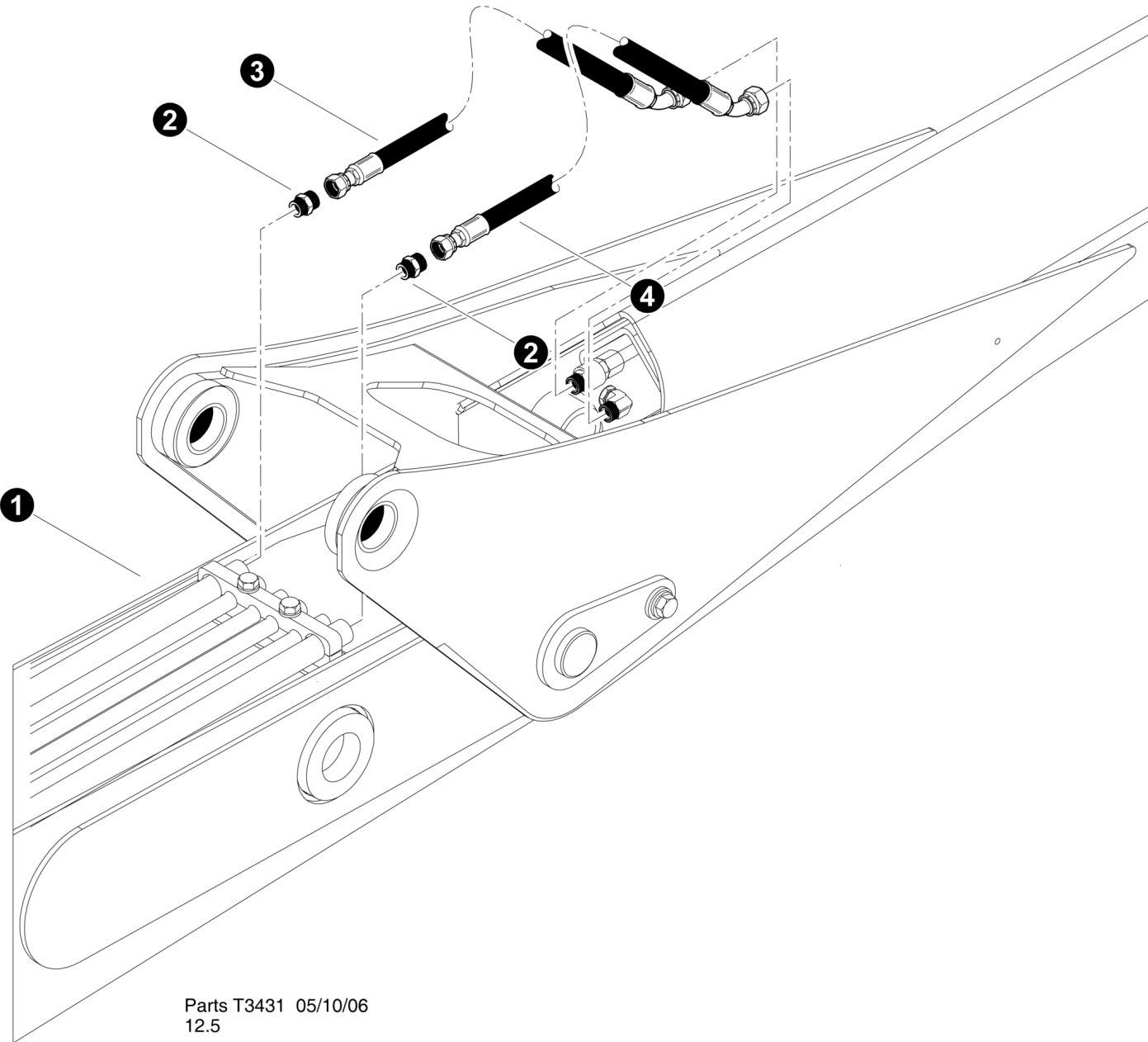


**“Optional” SQUIRT BOOM CONNECTIONS**  
**(Main Control Valve To Squirt Cylinder tube lines)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE (with optional squirt/tele) . . . . .                              | LH-1        |
| 2   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 3   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4051-12-120S-1204 ( <i>Squirt Boom Section“A” port to Main Boom</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-12-120S-1204 ( <i>Squirt Boom Section“B” port to Main Boom</i> ) |             |
| 6   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                        |             |
| 7   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                          | LB-1        |



See referenced page for component or assembly breakdown.





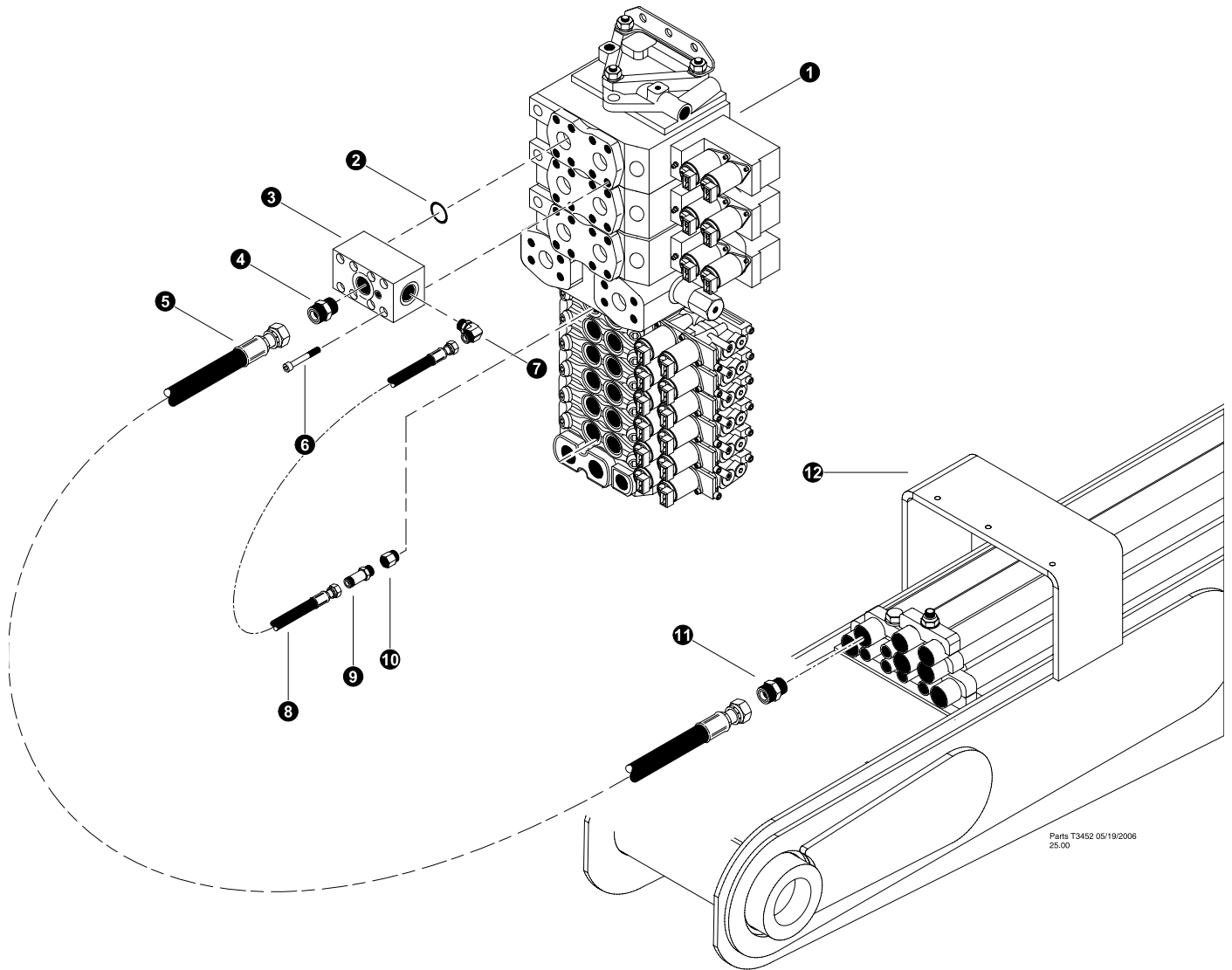
## “Optional” SQUIRT BOOM CONNECTIONS

### (Main Boom To Squirt Cylinder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN / SQUIRT BOOM ASSEMBLY . . . . .                                                    | LB-1        |
| 2   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                           |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |



See referenced page for component or assembly breakdown.



## HARVESTER WITH SQUIRT BOOM CONNECTIONS

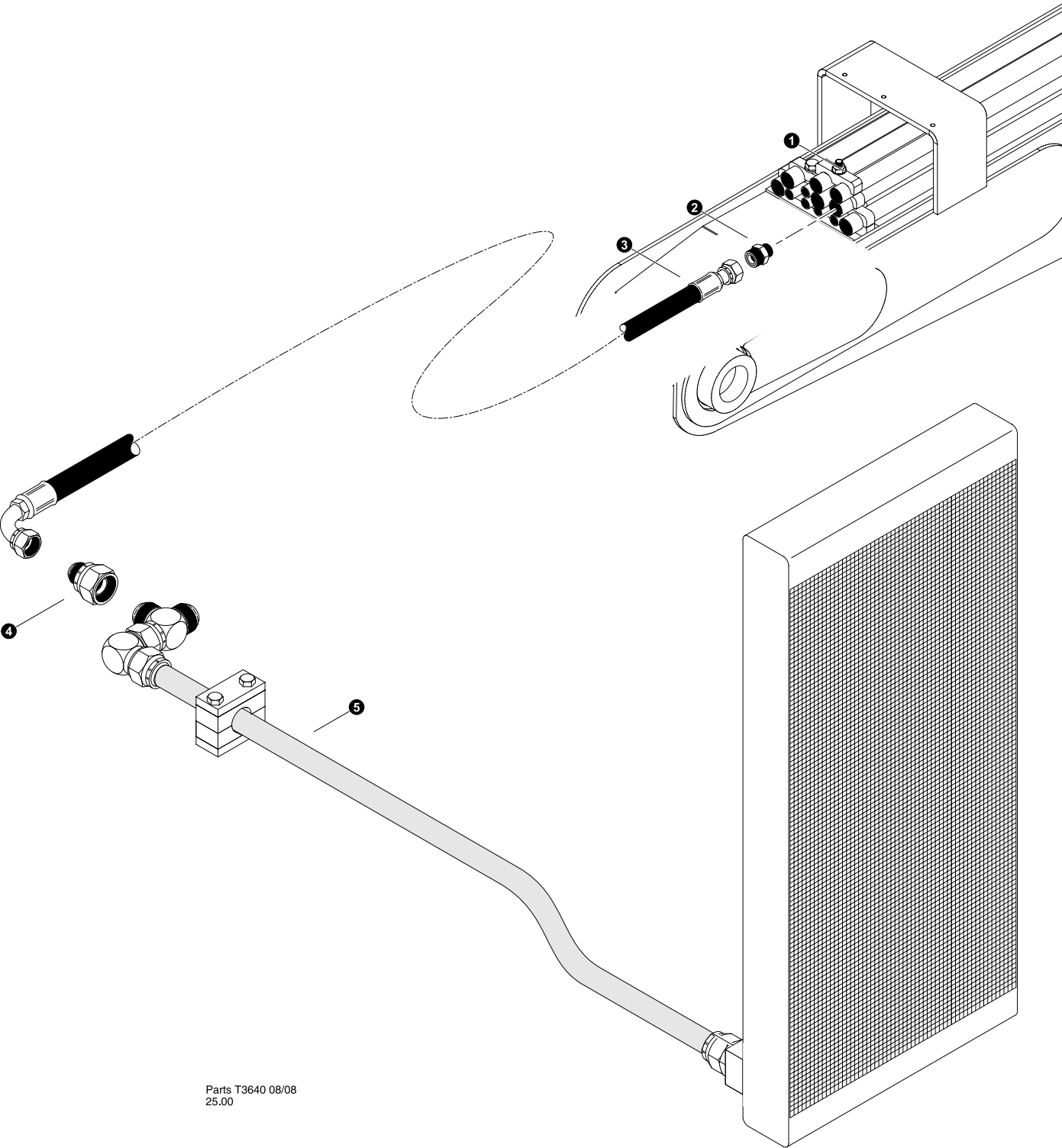
### (Pressure and Tank Connections)

#### Pressure Line

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                | LH-2        |
| 2   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                          |             |
| 3   | 51807-LH | 1   |                                                                                   | MANIFOLD, COMBINED FLOW - VOAC COMBO                                                    |             |
| 4   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4046-16-160S-160S ( <i>Combined flow block to Main Boom</i> )           |             |
| 6   | 50117-LH | 8   |                                                                                   | BOLT, ALLEN HEAD - 10MM-1.5P X 75MM                                                     |             |
| 7   | 15372-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-0812S                                                               |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4023-08-080S-080S ( <i>L90 processor valve to combined flow block</i> ) |             |
| 9   | 19091-LH | 1   |                                                                                   | CONNECTOR, STR LONG - 848L-TTO-08X08                                                    |             |
| 10  | 19290-LH | 1   |                                                                                   | BUSHING, REDUCER - 6410-10-8                                                            |             |
| 11  | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 12  | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                | LB-1        |



See referenced page for component or assembly breakdown.



## HARVESTER WITH SQUIRT BOOM CONNECTIONS

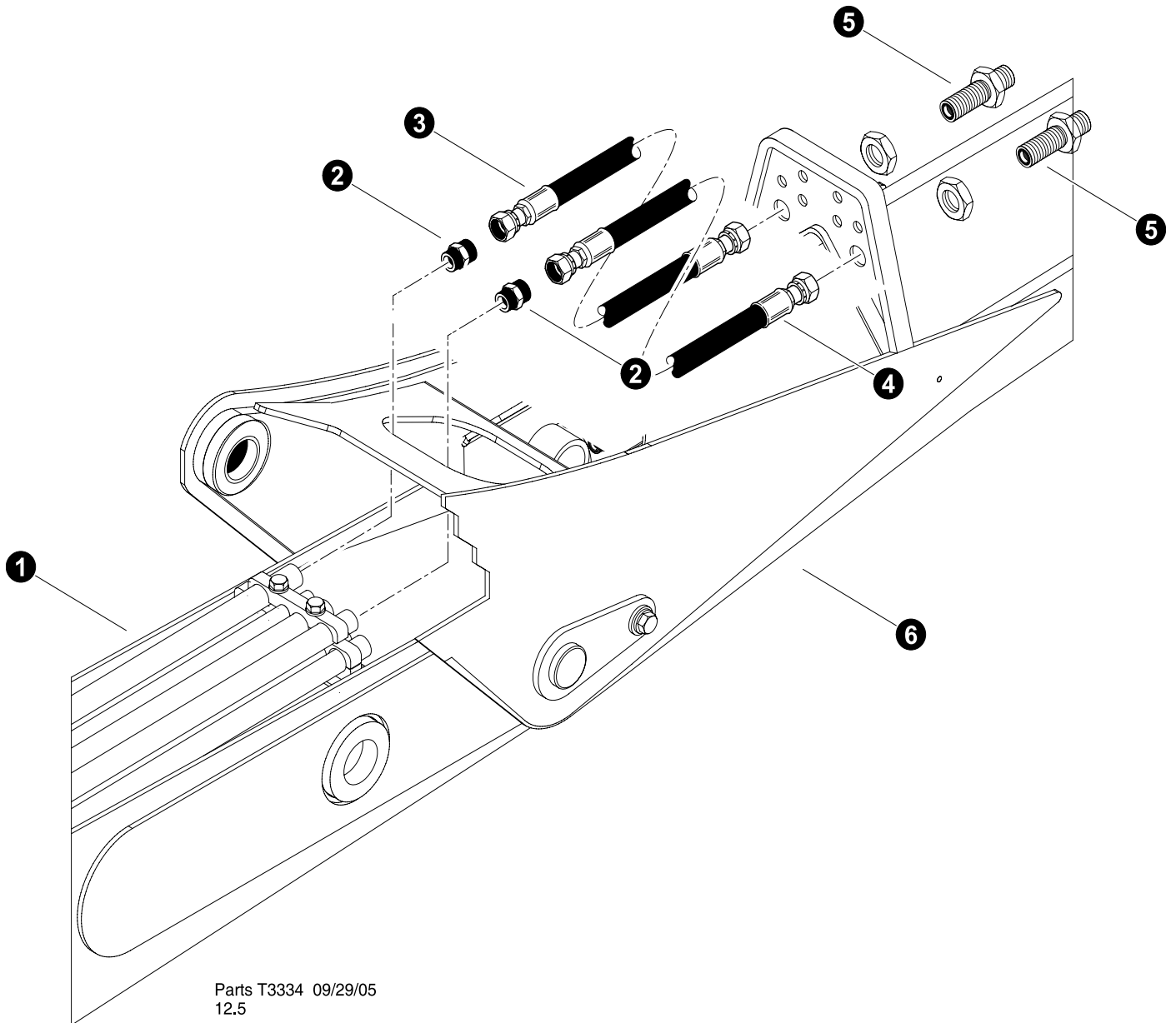
### (Main Boom - Pressure and Tank Connections)

#### Return Line

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                   | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                      | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2076-16-160S-1604 ( <i>Attachment Return to Return Tube</i> ) |             |
| 4   | 53182-LH | 1   |                                                                                   | FITTING, REDUCER TUBE END - 24-16                                             |             |
| 5   | REF.     | 1   |  | RETURN OIL TUBE.....                                                          | LH-2        |



See referenced page for component or assembly breakdown.



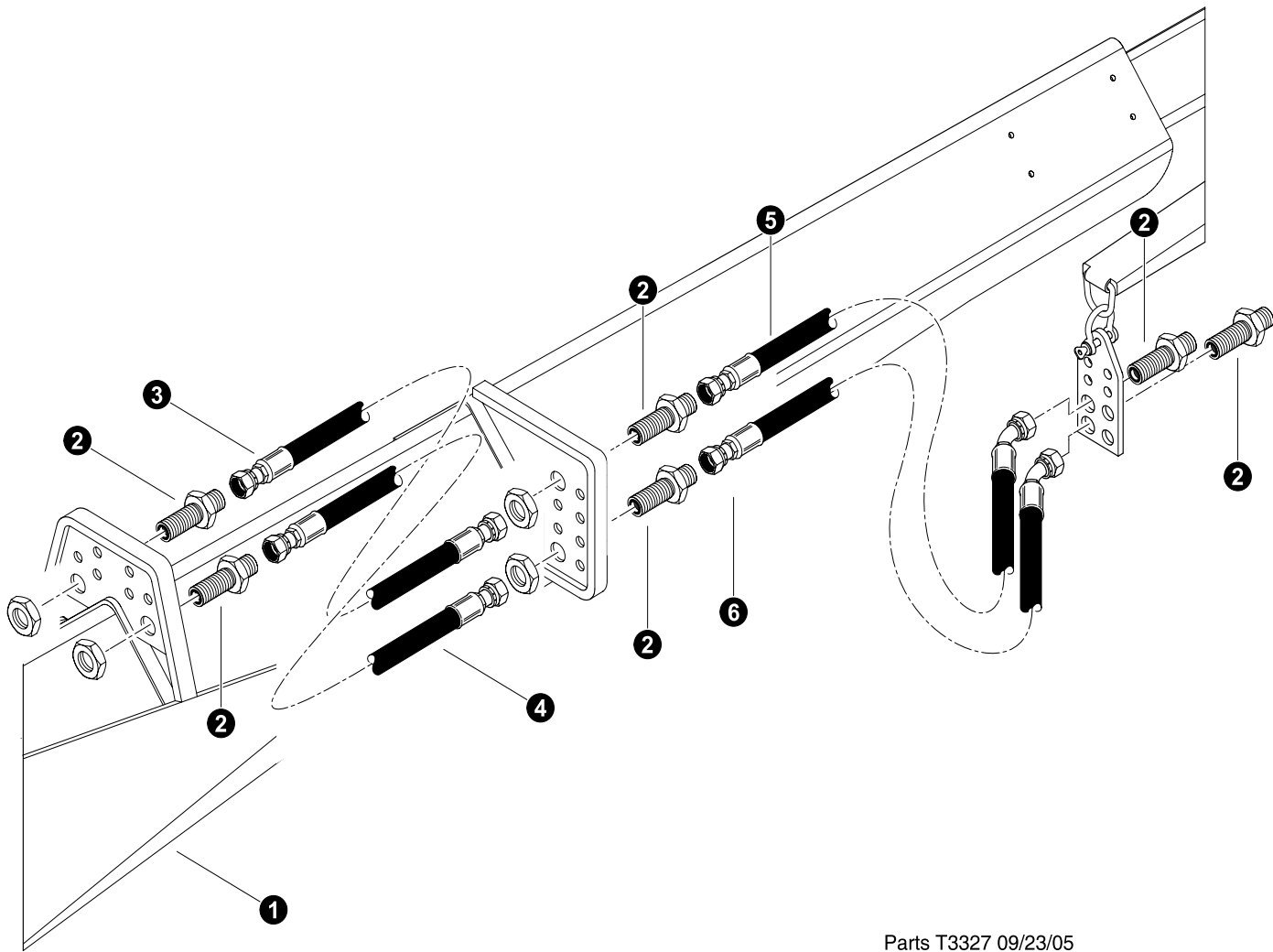
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Pressure and Tank Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                        | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                  |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-160S-160S ( <i>Main Boom tube line to Squirt Boom</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-160S-160S ( <i>Main Boom tube line to Squirt Boom</i> ) |             |
| 5   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                             |             |
| 6   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....                                                      | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3327 09/23/05  
12.5



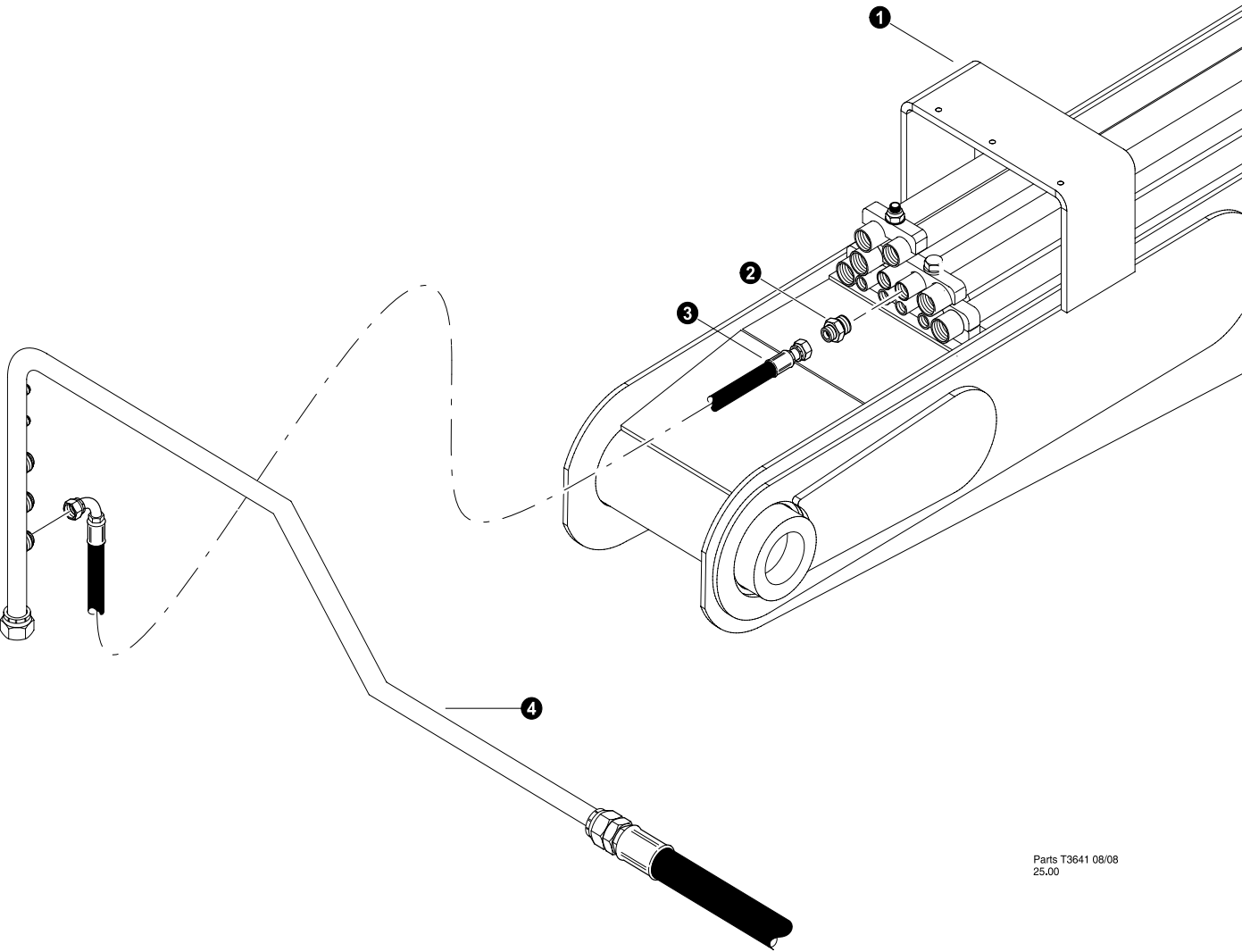
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Pressure and Tank Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                                           | LB-1        |
| 2   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                      |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039.5-16-160S-160S ( <i>Squirt Boom Pressure Hose</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4038-16-160S-160S ( <i>Squirt Boom Return Hose</i> )     |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4106-16-160S-1604 ( <i>Squirt Boom Pressure Hose</i> )   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4110-16-160S-1604 ( <i>Squirt Boom Return Hose</i> )     |             |



See referenced page for component or assembly breakdown.



Parts T3641 08/08  
25.00

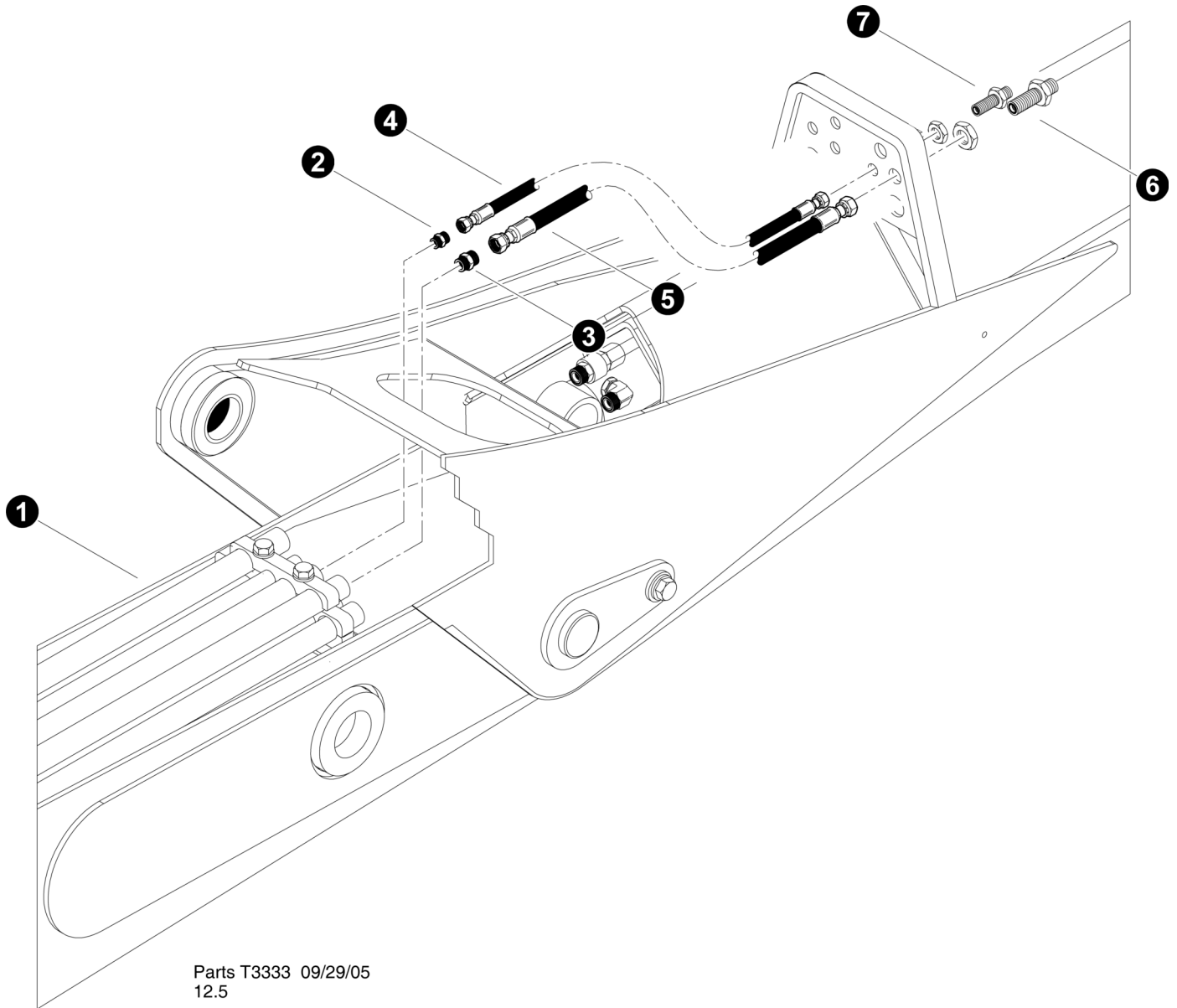
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main Boom - Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                            | LB-1        |
| 2   | 15238-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0812S                                                      |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2072-08-080S-08J9 ( <i>Main Boom tube line to Case Drain Tube</i> ) |             |
| 4   | REF.     | 1   |  | CASE DRAIN TUBE .....                                                               | LH-2        |



See referenced page for component or assembly breakdown.



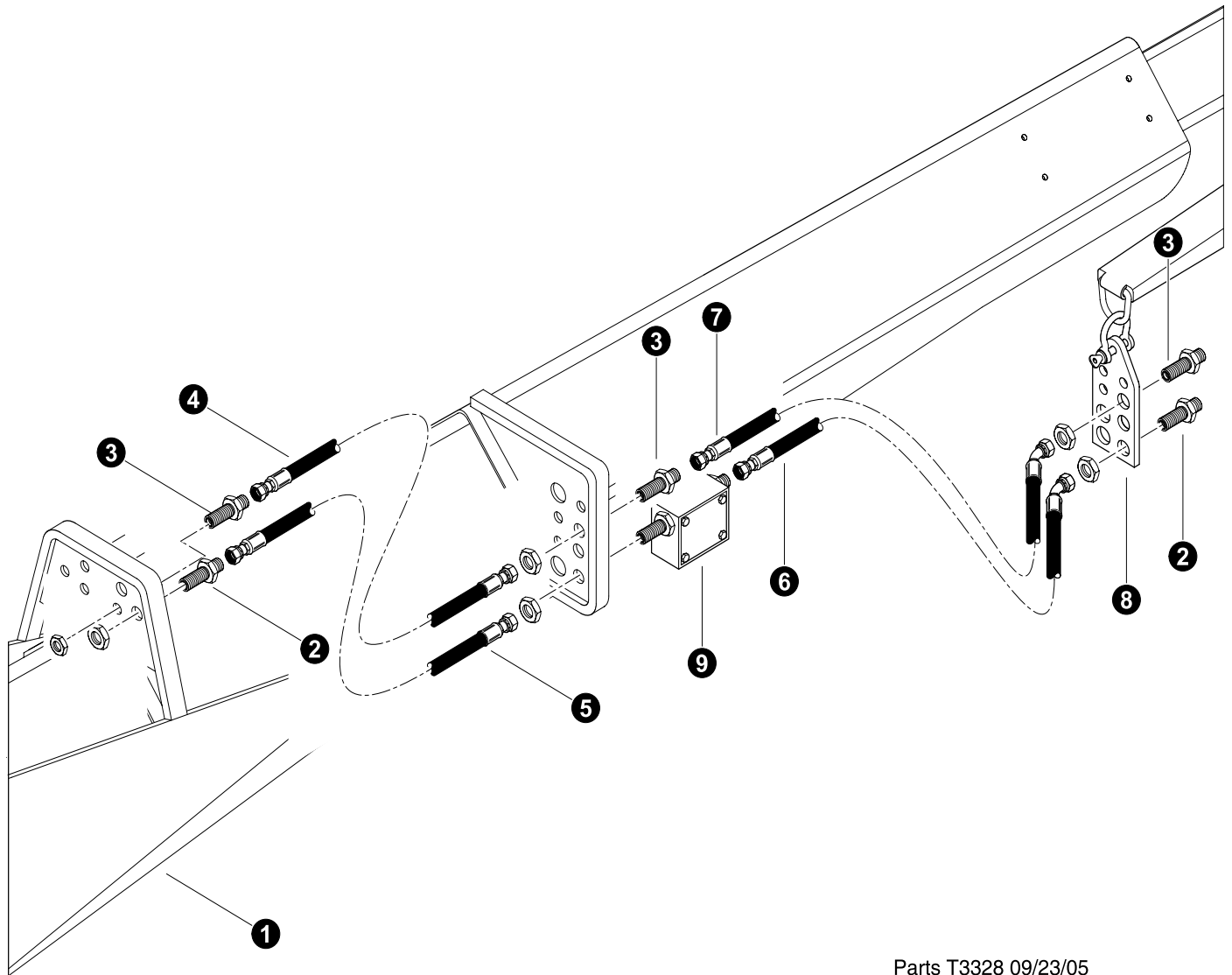
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Wire and Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                   | LB-1        |
| 2   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                             |             |
| 3   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                             |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-12-120S-120S ( <i>Case Drain Main Boom tube line to Squirt Boom</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2049-12-120S-120S ( <i>Wire tube line to Squirt Boom</i> )                 |             |
| 6   | 19754-LH | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - 12 WLO-WLNL-S                                                    |             |
| 7   | 19754-LH | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - 12 WLO-WLNL-S                                                    |             |



See referenced page for component or assembly breakdown.



Parts T3328 09/23/05  
12.5

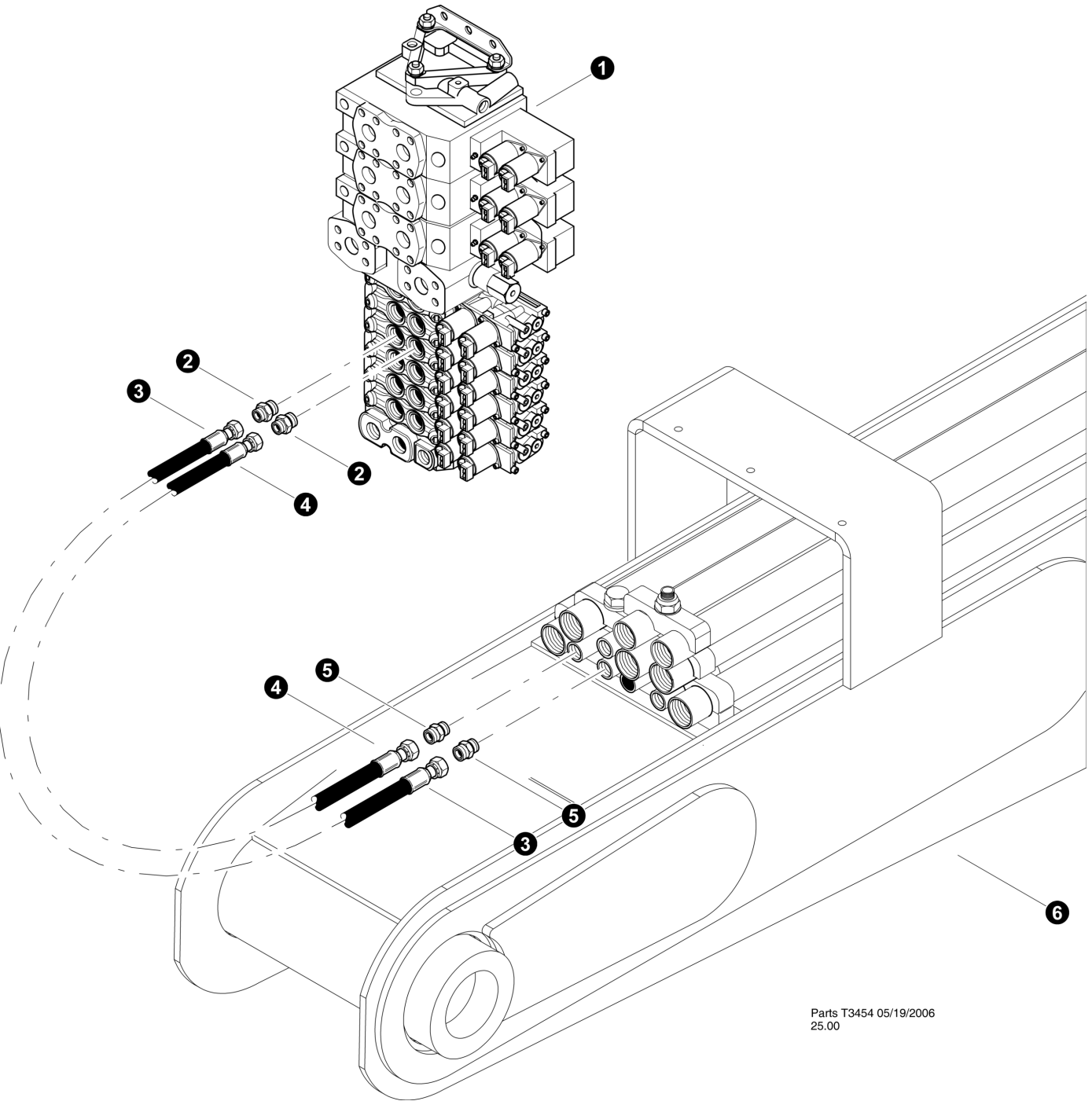
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Wire and Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                                             | LB-1        |
| 2   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                             |             |
| 3   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                             |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4038.5-12-120S-120S ( <i>Squirt Boom Case Drain Hose</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4038-12-120S-120S ( <i>Squirt Boom Wire Hose</i> )         |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4102-12-120S-1204 ( <i>Squirt Boom Wire Hose</i> )         |             |
| 7   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4110-12-120S-1204 ( <i>Squirt Boom Case Drain Hose</i> )   |             |
| 8   | 21065-LH | 1   |                                                                                   | PLATE, bulkhead stinger                                                    |             |
| 9   | 52613-LH | 1   |                                                                                   | BOX JUNCTION -ELECTRICAL CONN- HARVESTER                                   |             |



See referenced page for component or assembly breakdown.

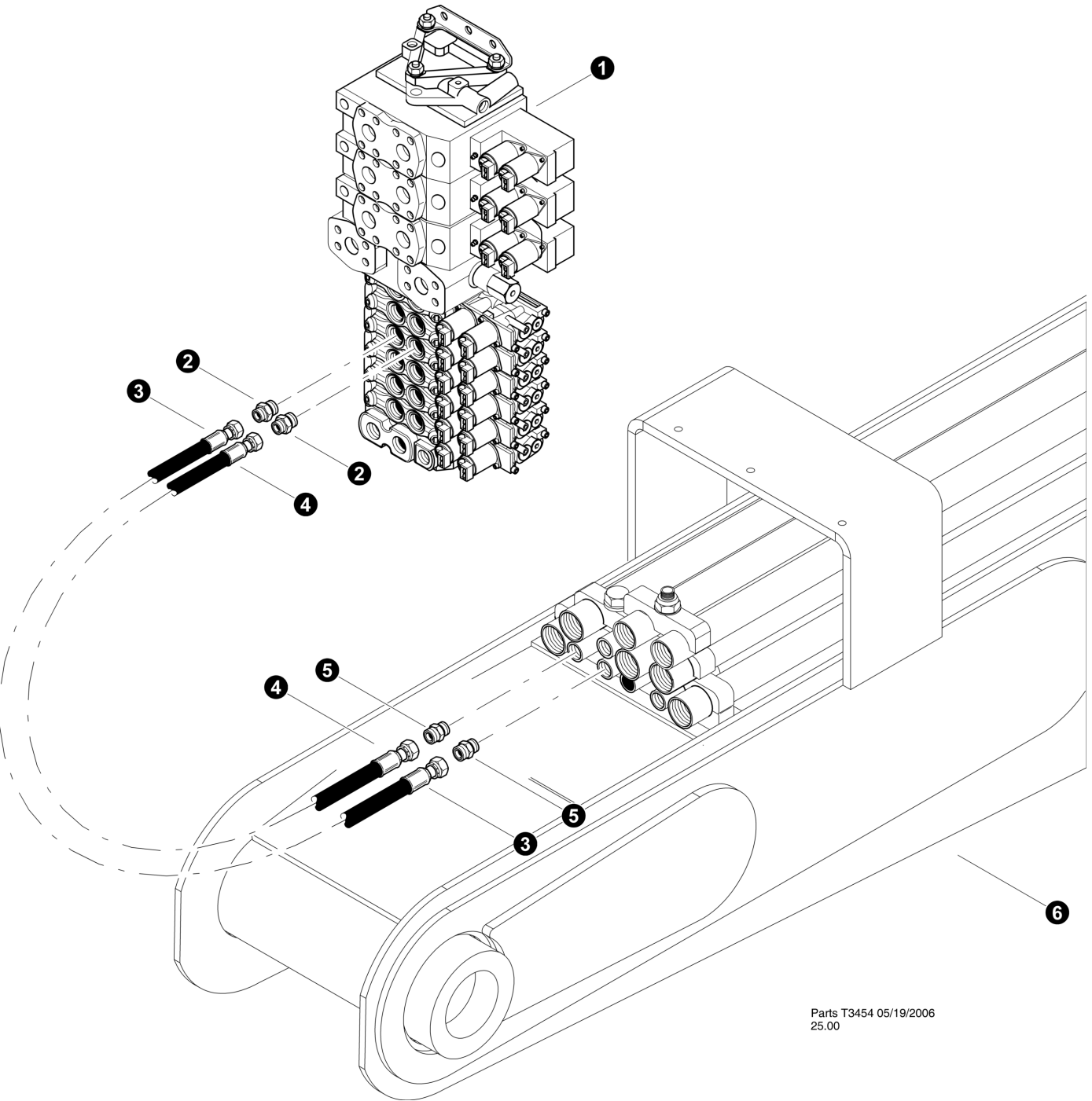


Parts T3454 05/19/2006  
25.00



**HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Head Rotate Connections)**  
830B-0244-021808 to 830B-0314-071609

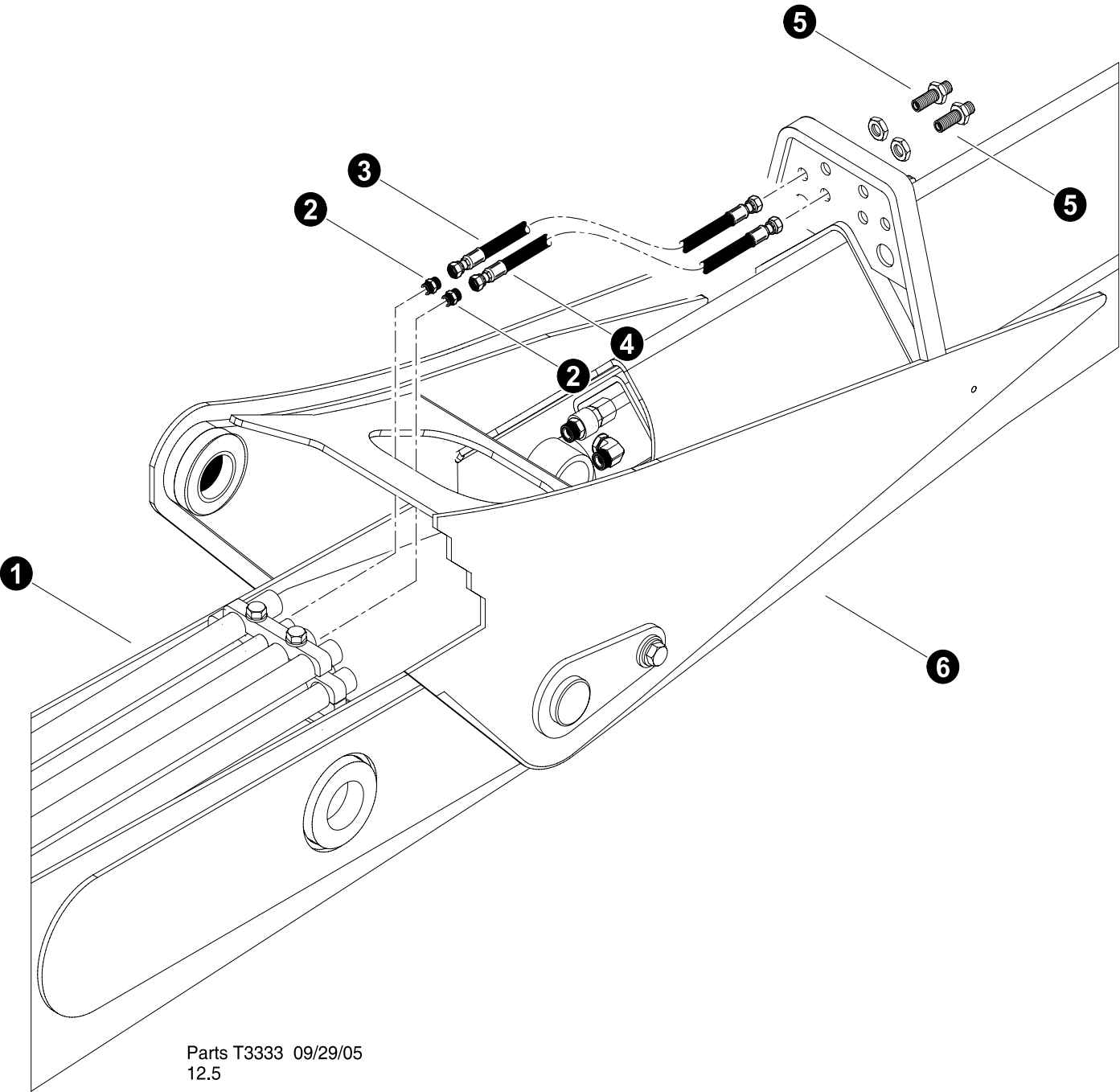
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                                            | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                 |             |
| 3   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4057-08-080S-080S ( <i>Rotate valve section work port "A" to main boom left inside tube line</i> )  |             |
| 4   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4056-08-080S-080S ( <i>Rotate valve section work port "B" to main boom left outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                      |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                                            | LB-1        |



Parts T3454 05/19/2006  
25.00

**HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Head Rotate Connections)**  
Machine 830B-0315-080609 and newer

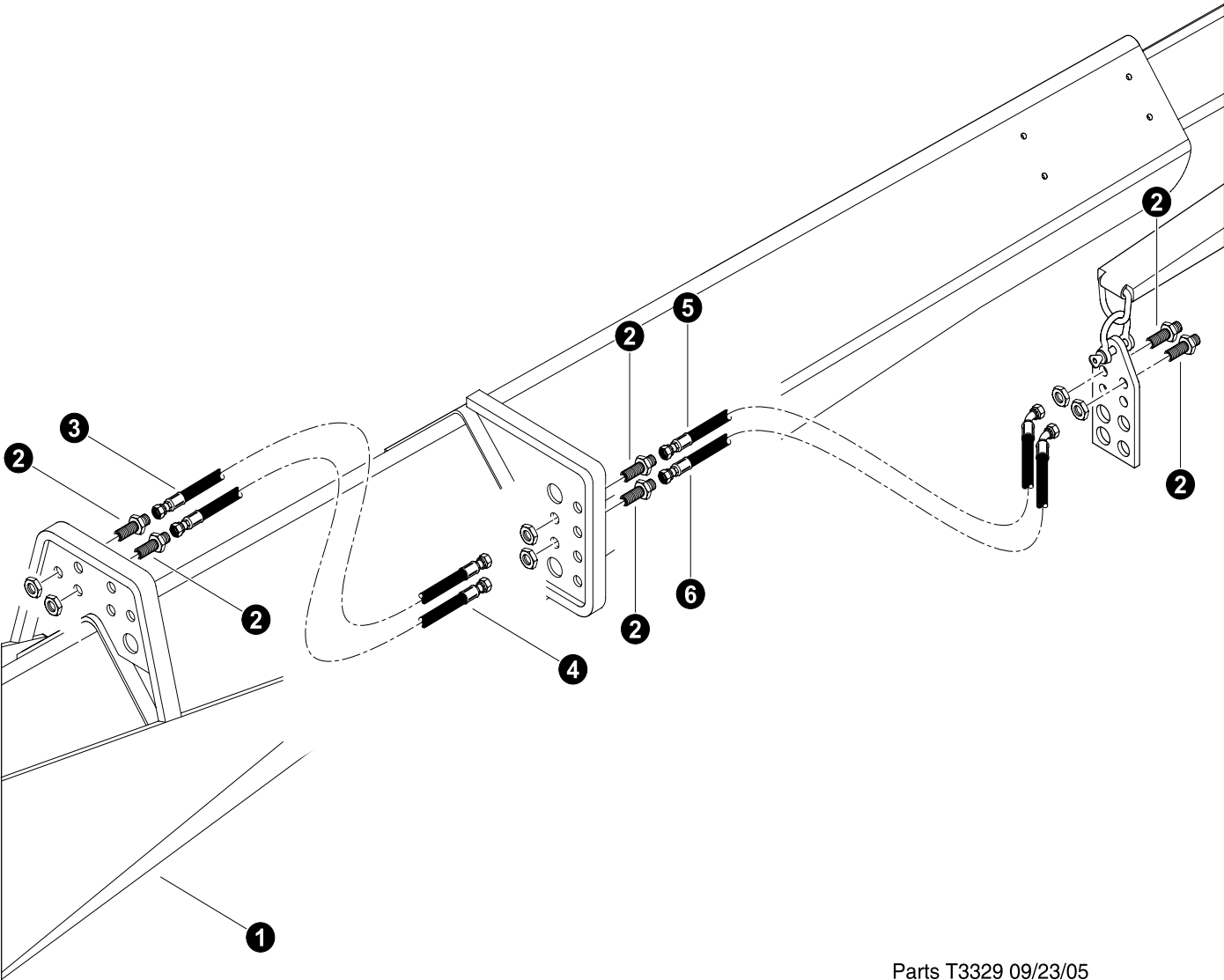
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                                            | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                 |             |
| 3   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4060-08-080S-080S ( <i>Rotate valve section work port "A" to main boom left inside tube line</i> )  |             |
| 4   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4063-08-080S-080S ( <i>Rotate valve section work port "B" to main boom left outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                      |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                                            | LB-1        |



## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Head Rotate Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                     | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                        | LB-1        |
| 2   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                  |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S ( <i>Main Boom tube line to Squirt Boom</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S ( <i>Main Boom tube line to Squirt Boom</i> ) |             |
| 5   | 20196-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - FF1994T-0808S                                         |             |
| 6   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....                                                      | LB-1        |



Parts T3329 09/23/05  
12.5

## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Head Rotate Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                                         | LB-1        |
| 2   | 20196-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - FF1994T-0808S                                |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4040-08-080S-080S ( <i>Squirt Boom Rotate Hose</i> )   |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4040.5-08-080S-080S ( <i>Squirt Boom Rotate Hose</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4110-08-080S-0804 ( <i>Squirt Boom Rotate Hose</i> )   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4110-08-080S-0804 ( <i>Squirt Boom Rotate Hose</i> )   |             |

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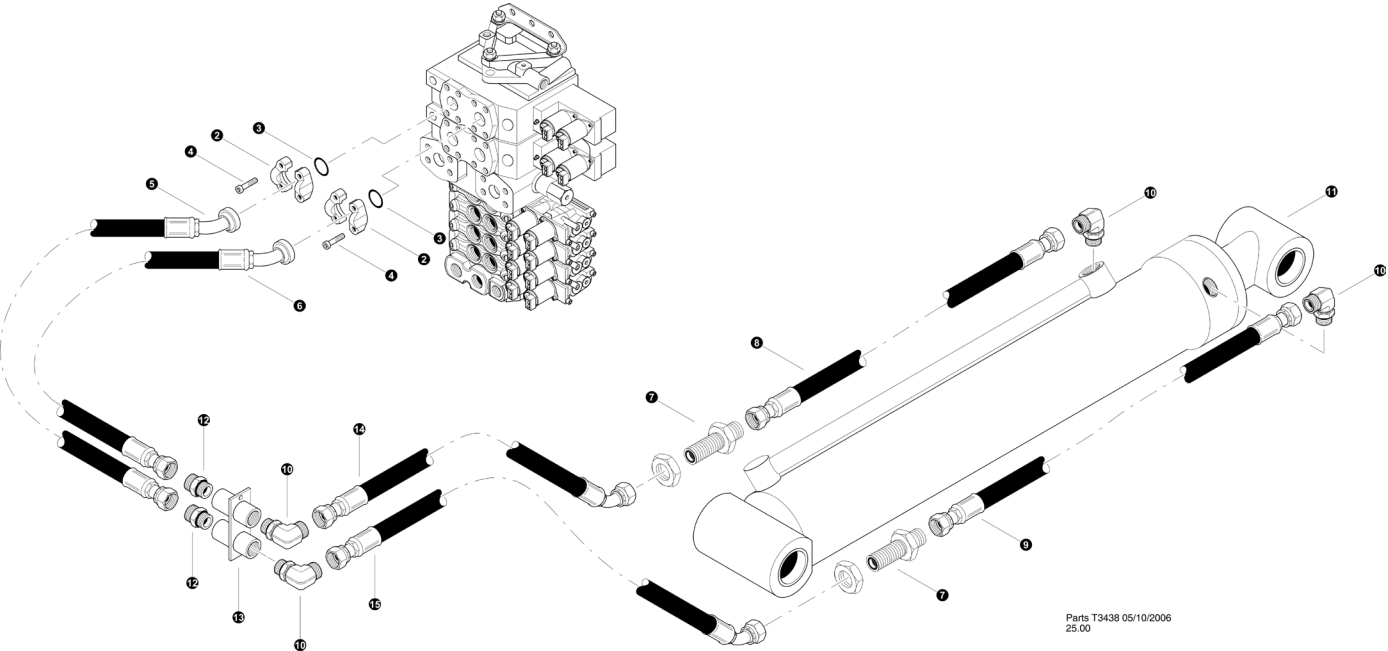
[illegible]



## ***Section LH-6***

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### ***Loader Boom Hydraulics - Implement Connections - Combo***



## MAIN BOOM CYLINDER FUNCTION

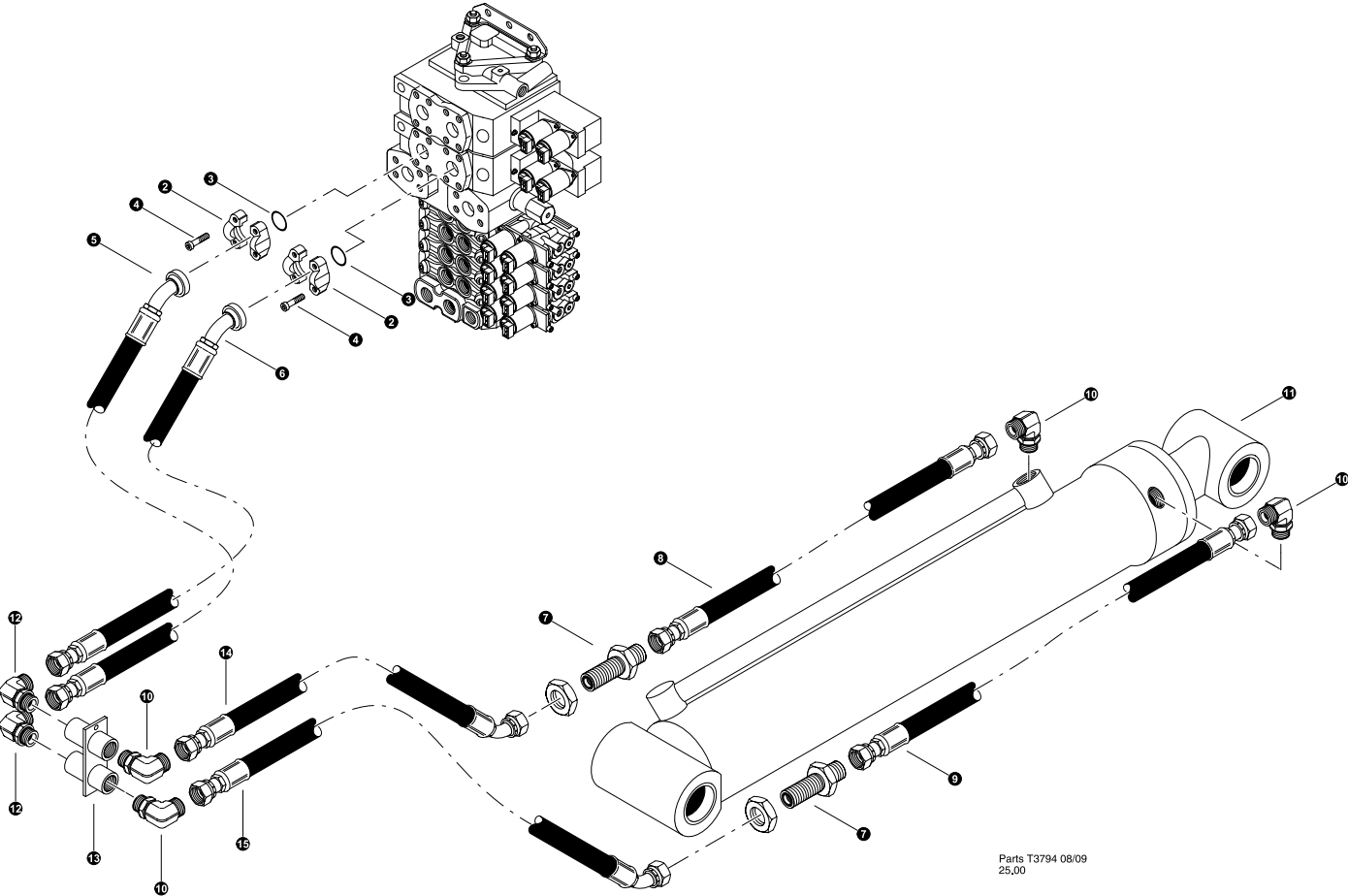
### (Main Control Valve To Main Boom (Hoist) Cylinder)

830B-0244-021808 to 830B-0314-071609

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                           | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                    |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                         |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                 |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4031-16-160S-16PA4 (Main boom valve<br>work port "B" to main boom cylinder bulkhead)   |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4029.5-16-160S-16PA4 (Main boom valve<br>work port "A" to main boom cylinder bulkhead) |             |
| 7   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                    |             |
| 8   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main<br>boom cylinder base port)              |             |
| 9   | 50864-LH | 1   |                                                                                   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main<br>boom cylinder rod port)               |             |
| 10  | 15228-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                                                              |             |
| 11  | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER . . . . .                                                                   | LB-3        |
| 12  | 15525-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                                         |             |
| 13  | -LH      | 1   |                                                                                   | BULKHEAD, UPPER MAIN CYL                                                                               |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to bulk-<br>head bracket "a" port)          |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to bulk-<br>head bracket "b" port)         |             |



See referenced page for component or assembly breakdown.



## MAIN BOOM CYLINDER FUNCTION

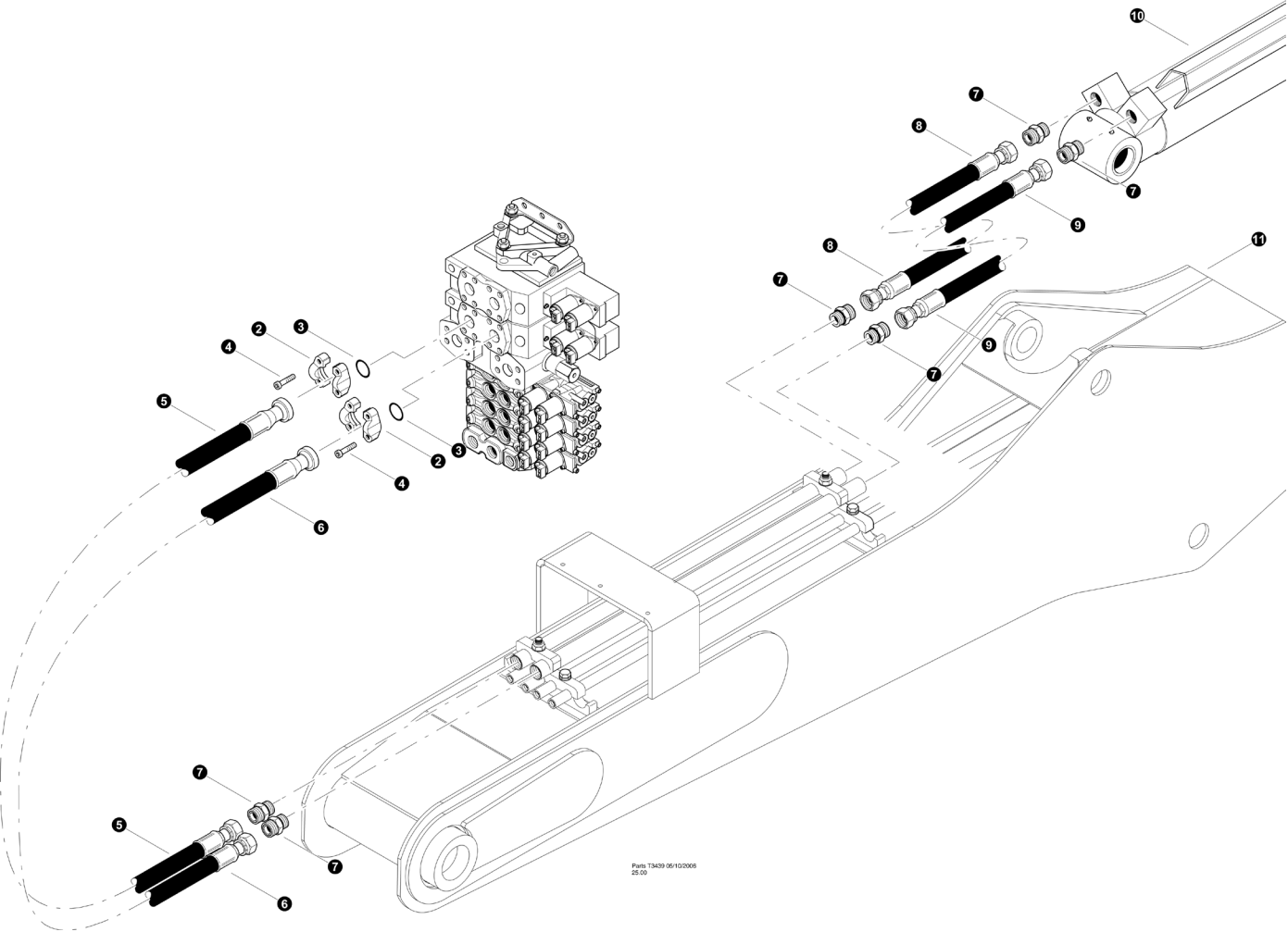
### (Main Control Valve To Main Boom (Hoist) Cylinder)

Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                         | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF (Code 61)                                                                  |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                       |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                               |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4020-16-160S-16PA4 (Main boom valve<br>work port "B" to main boom cylinder bulkhead) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019-16-160S-16PA4 (Main boom valve<br>work port "A" to main boom cylinder bulkhead) |             |
| 7   | 20033-LH | 2   |                                                                                   | CONNECTOR, STR BULKHEAD - 832-TT-16                                                                  |             |
| 8   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-160S-160S (main boom bulkhead to main<br>boom cylinder base port)            |             |
| 9   | 50864-LH | 1   |                                                                                   | HOSE ASSEMBLY - 4066-16-160S-160S (main boom bulkhead to main<br>boom cylinder rod port)             |             |
| 10  | 15228-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-1616S                                                                            |             |
| 11  | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER . . . . .                                                                 | LB-3        |
| 12  | 15525-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                                       |             |
| 13  | -LH      | 1   |                                                                                   | BULKHEAD, UPPER MAIN CYL                                                                             |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4039-16-160S-1604 (main boom base bulkhead to<br>bulkhead bracket "a" port)          |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4033.5-16-160S-1604 (main boom rod bulkhead to<br>bulkhead bracket "b" port)         |             |



See referenced page for component or assembly breakdown.



## STICK BOOM CYLINDER FUNCTION

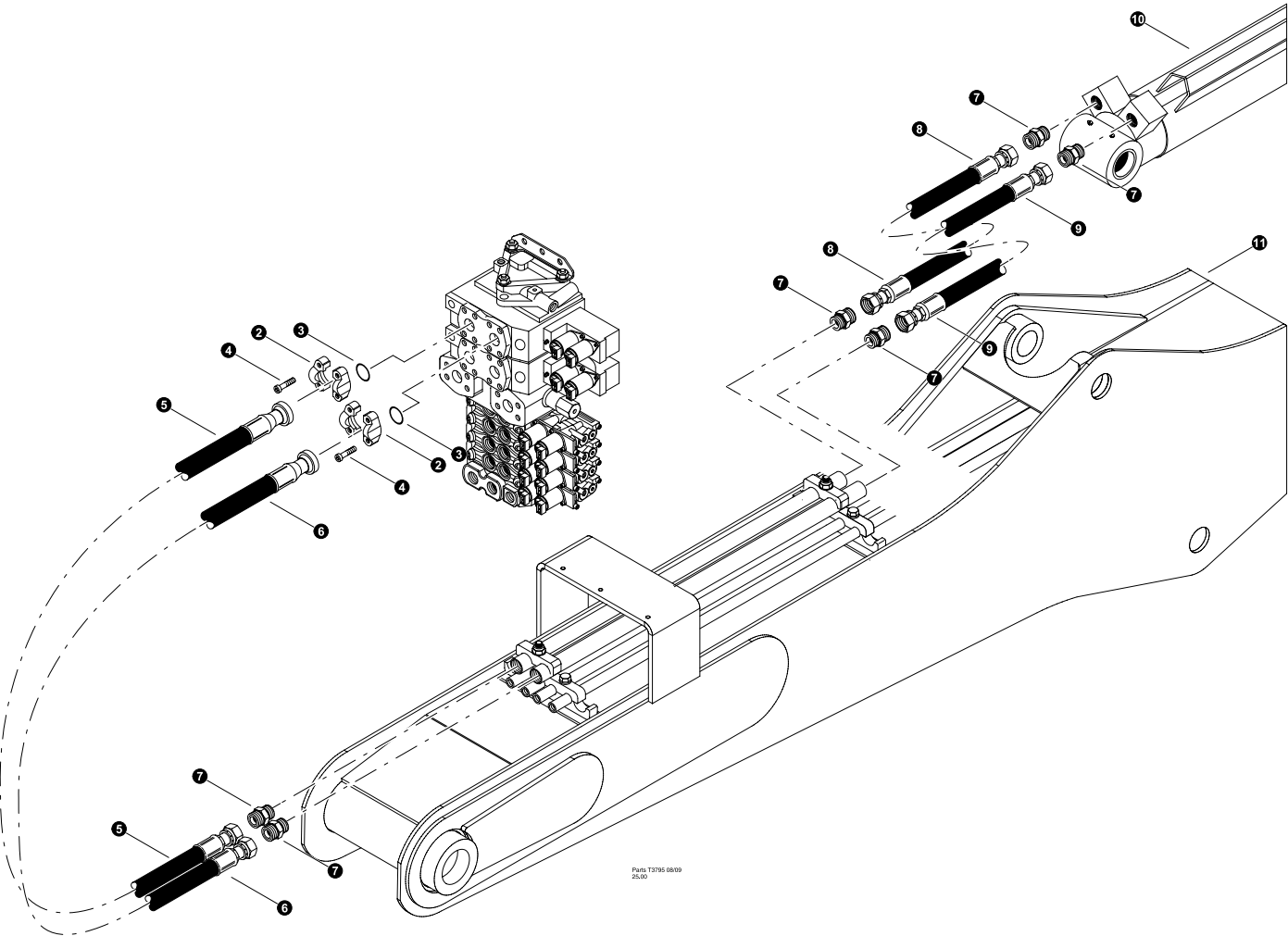
### (Main Control Valve To Main Boom Tube Lines)

830B-0244-021808 to 830B-0314-071609

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                 | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF ( <i>Code 61</i> )                                                                 |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                               |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                       |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1609-16PA ( <i>Stick boom valve work port "B" to main boom tube line base side</i> ) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA ( <i>Stick boom valve work port "A" to main boom tube line rod side</i> )  |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                               |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 ( <i>Stick Cylinder to main boom tube line base side</i> )               |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 ( <i>Stick Cylinder to main boom tube line rod side</i> )                |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                                | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                 | LB-1        |



See referenced page for component or assembly breakdown.





## STICK BOOM CYLINDER FUNCTION

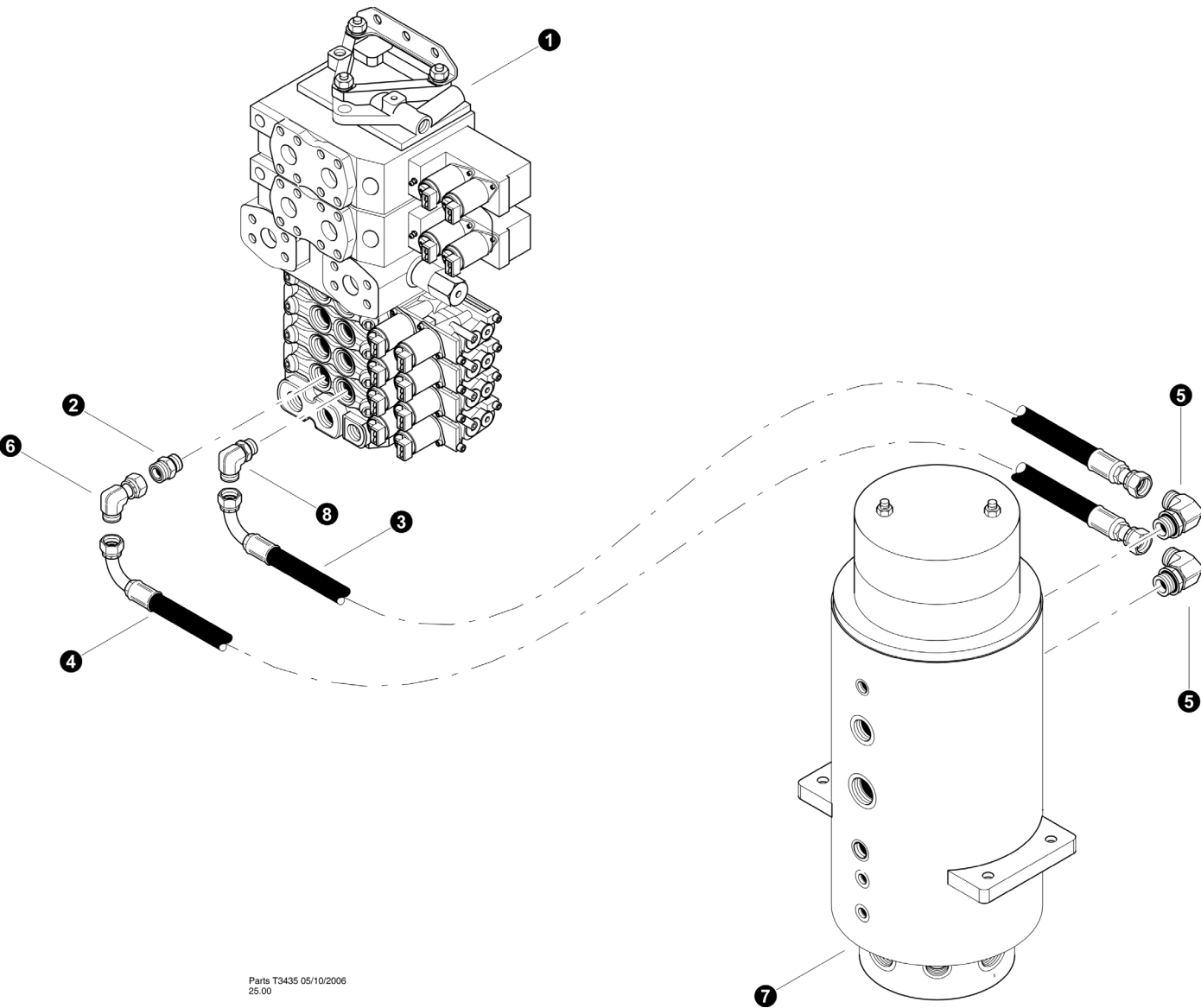
### (Main Control Valve To Main Boom Tube Lines)

Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                    | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                   | LH-1        |
| 2   | 15111-LH | 2   |  | KIT, split flange - 1" SF ( <i>Code 61</i> )                                                                   |             |
| 3   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                                                 |             |
| 4   | 18979-LH | 8   |                                                                                   | BOLT, allen M10 X 45MM                                                                                         |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4052.5-16-1609-16PA ( <i>Stick boom valve work port "B" to main boom tube line base side</i> ) |             |
| 6   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-16-1604-16PA ( <i>Stick boom valve work port "A" to main boom tube line rod side</i> )    |             |
| 7   | 18406-LH | 6   |  | CONNECTOR, STR - FF1852T-1612S                                                                                 |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-160S-16O4 ( <i>Stick Cylinder to main boom tube line base side</i> )                 |             |
| 9   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4019.5-16-16OS-16O4 ( <i>Stick Cylinder to main boom tube line rod side</i> )                  |             |
| 10  | REF.     | 1   |  | STICK BOOM CYLINDER . . . . .                                                                                  | LB-3        |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                   | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3435 05/10/2006  
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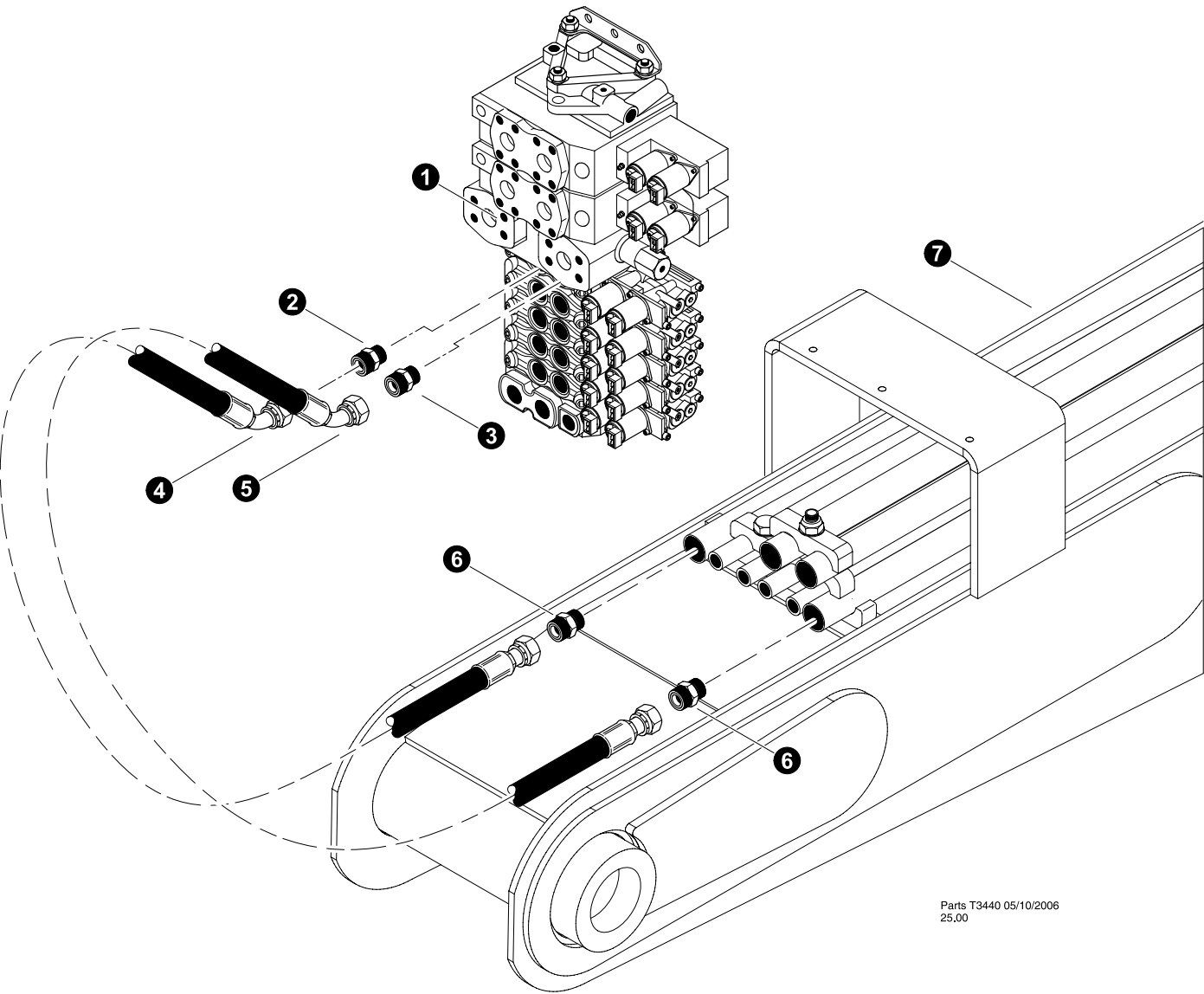
## STEER FUNCTION LINES

### (Main Control Valve To Upper Rotary Manifold Ports)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                | LH-1        |
| 2   | 50039-LH | 2   |                                                                                   | CONNECTOR, STR - 848-TTO-10X10                                                                              |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4034.5-10-100S-1009( <i>Steer valve section work port "B" to rotary manifold #11 port</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4036-10-100S-1009( <i>Steer valve section work port "A" to rotary manifold #9 port</i> )    |             |
| 5   | 50036-LH | 3   |                                                                                   | ELBOW, 90 - 849-TTO-10X12                                                                                   |             |
| 6   | 51882-LH | 3   |                                                                                   | ELBOW, 90 - SWIVEL (10 C6L0-S)                                                                              |             |
| 7   | REF.     | 1   |  | ROTARY MANIFOLD ASSEMBLY . . . . .                                                                          | UP-1        |
| 8   | 51881-LH | 3   |                                                                                   | ELBOW, 90 - (10 C50L0-S)                                                                                    |             |



See referenced page for component or assembly breakdown.



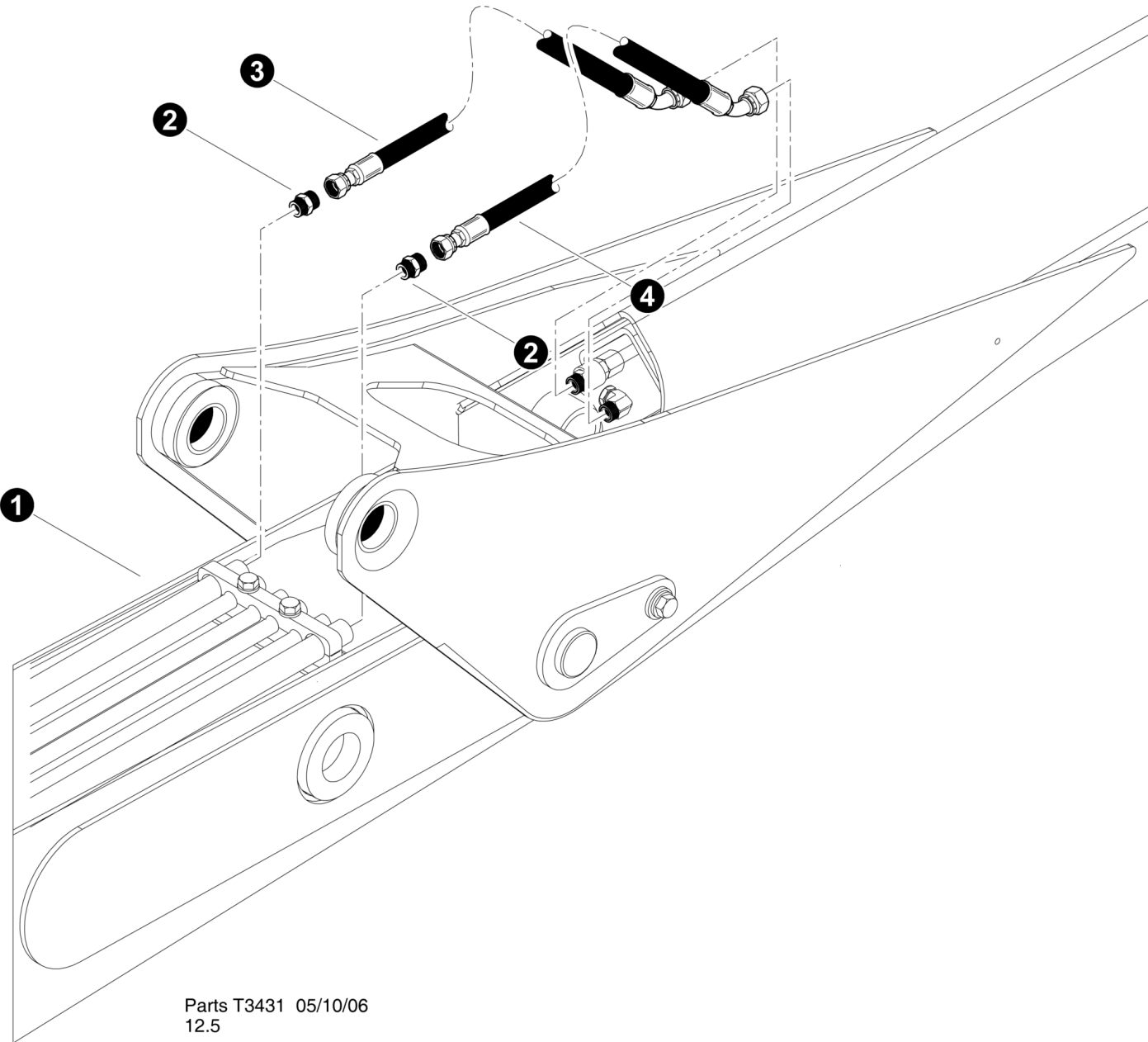
Parts T3440 05/10/2006  
25,00

**“Optional” SQUIRT BOOM CONNECTIONS**  
**(Main Control Valve To Squirt Cylinder tube lines)**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE (with optional squirt/tele) . . . . .                              | LH-1        |
| 2   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 3   | 16851-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-1210S                                                        |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4051-12-120S-1204 ( <i>Squirt Boom Section“A” port to Main Boom</i> ) |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4053-12-120S-1204 ( <i>Squirt Boom Section“B” port to Main Boom</i> ) |             |
| 6   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                        |             |
| 7   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                          | LB-1        |



See referenced page for component or assembly breakdown.



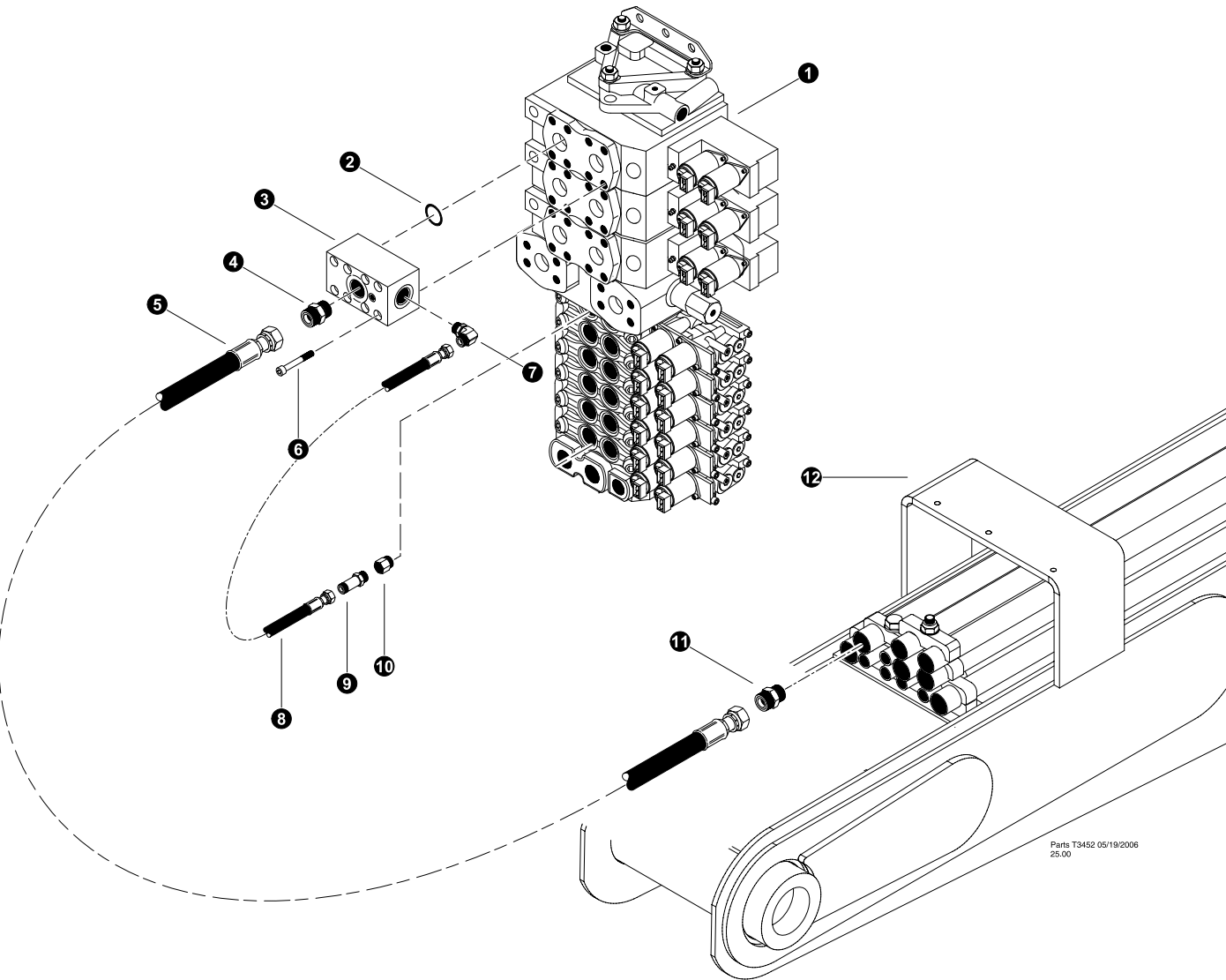
## “Optional” SQUIRT BOOM CONNECTIONS

### (Main Boom To Squirt Cylinder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                              | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN / SQUIRT BOOM ASSEMBLY . . . . .                                                    | LB-1        |
| 2   | 15152-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1212S                                                           |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4042-12-120S-1204 ( <i>Main Boom tube line to Squirt Boom Cylinder</i> ) |             |



See referenced page for component or assembly breakdown.



Parts T3452 05/19/2006  
25.00



## HARVESTER WITH SQUIRT BOOM CONNECTIONS

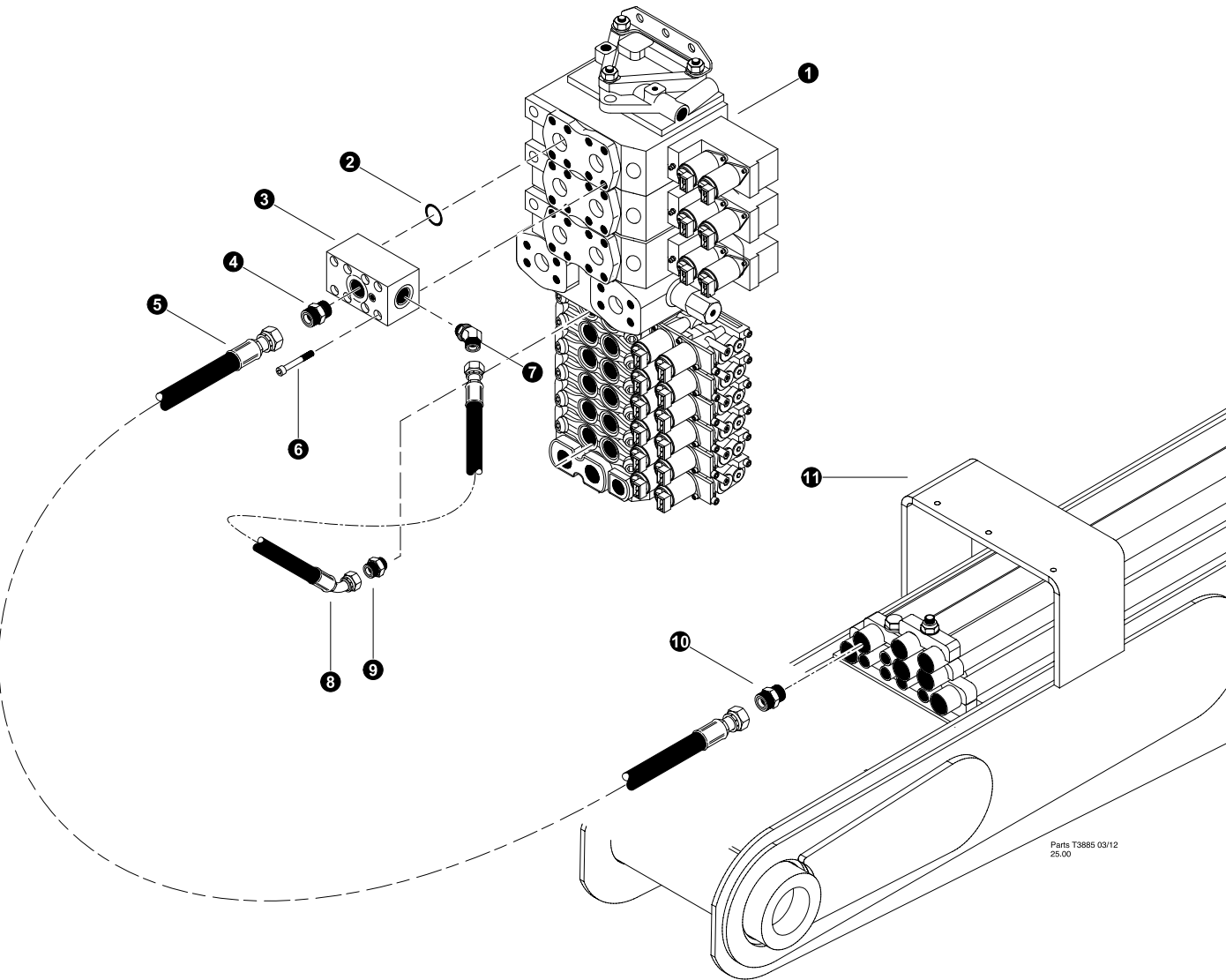
### (Pressure and Tank Connections)

#### Pressure Line

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                | LH-2        |
| 2   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                          |             |
| 3   | 51807-LH | 1   |                                                                                   | MANIFOLD, COMBINED FLOW - VOAC COMBO                                                    |             |
| 4   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4046-16-160S-160S ( <i>Combined flow block to Main Boom</i> )           |             |
| 6   | 50117-LH | 8   |                                                                                   | BOLT, ALLEN HEAD - 10MM-1.5P X 75MM                                                     |             |
| 7   | 15372-LH | 1   |                                                                                   | ELBOW, 90 - FF1868T-0812S                                                               |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4023-08-080S-080S ( <i>L90 processor valve to combined flow block</i> ) |             |
| 9   | 19091-LH | 1   |                                                                                   | CONNECTOR, STR LONG - 848L-TTO-08X08                                                    |             |
| 10  | 19290-LH | 1   |                                                                                   | BUSHING, REDUCER - 6410-10-8                                                            |             |
| 11  | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 12  | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                | LB-1        |



See referenced page for component or assembly breakdown.

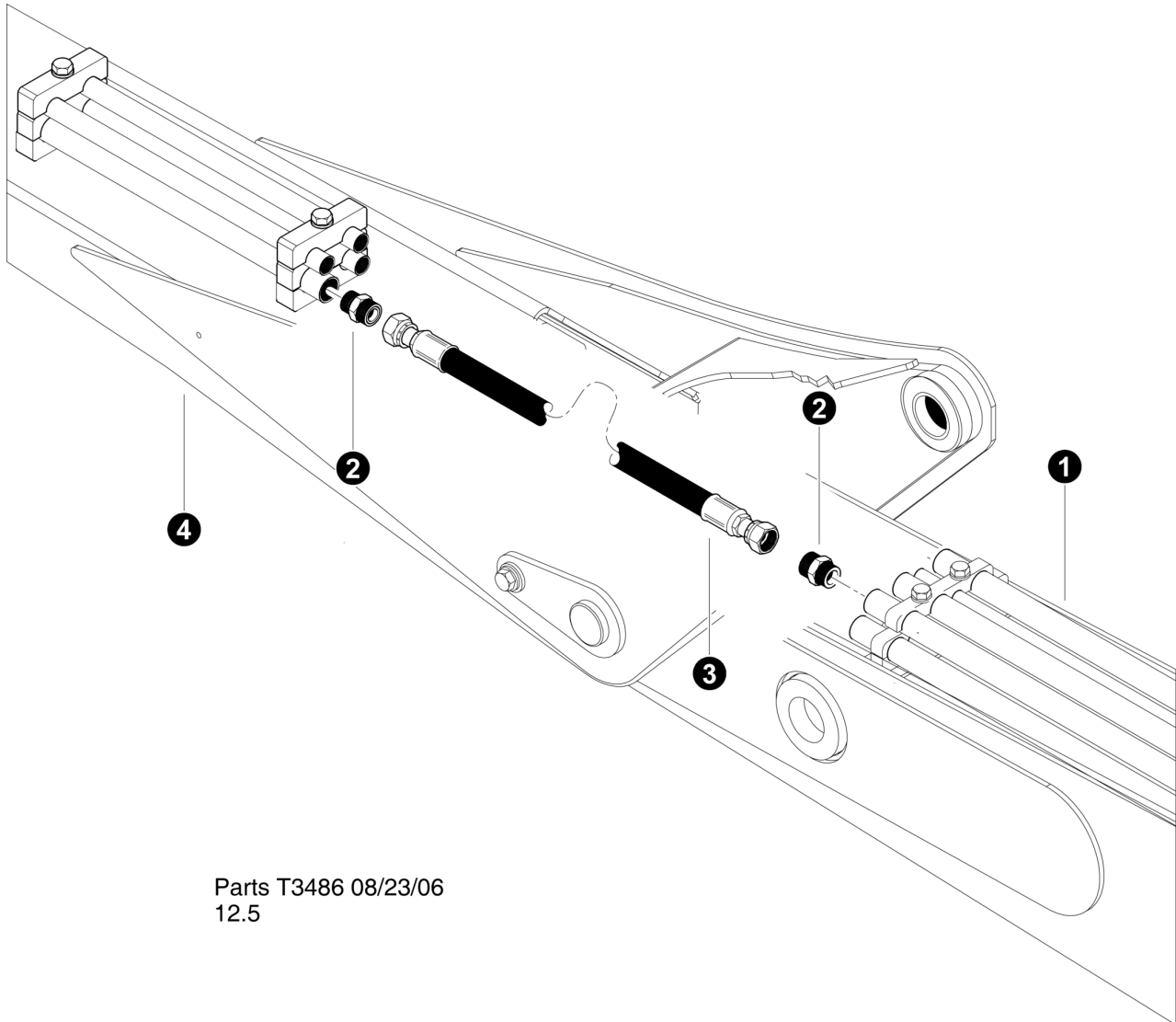


**HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Pressure and Tank Connections)**  
**Pressure Line - \*UPDATED 2011\***

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                | LH-2        |
| 2   | 15377-LH | 2   |                                                                                   | O-RING - 1" SF                                                                          |             |
| 3   | 51807-LH | 1   |                                                                                   | MANIFOLD, COMBINED FLOW - VOAC COMBO                                                    |             |
| 4   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4046-16-160S-160S ( <i>Combined flow block to Main Boom</i> )           |             |
| 6   | 50117-LH | 8   |                                                                                   | BOLT, ALLEN HEAD - 10MM-1.5P X 75MM                                                     |             |
| 7   | 19127-LH | 1   |                                                                                   | ELBOW, 45 - 1212                                                                        |             |
| 8   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4034-12-120S-1204 ( <i>L90 processor valve to combined flow block</i> ) |             |
| 9   | 16851LH  | 1   |                                                                                   | CONNECTOR, STR 12-10                                                                    |             |
| 10  | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                          |             |
| 11  | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                | LB-1        |



See referenced page for component or assembly breakdown.



Parts T3486 08/23/06  
12.5

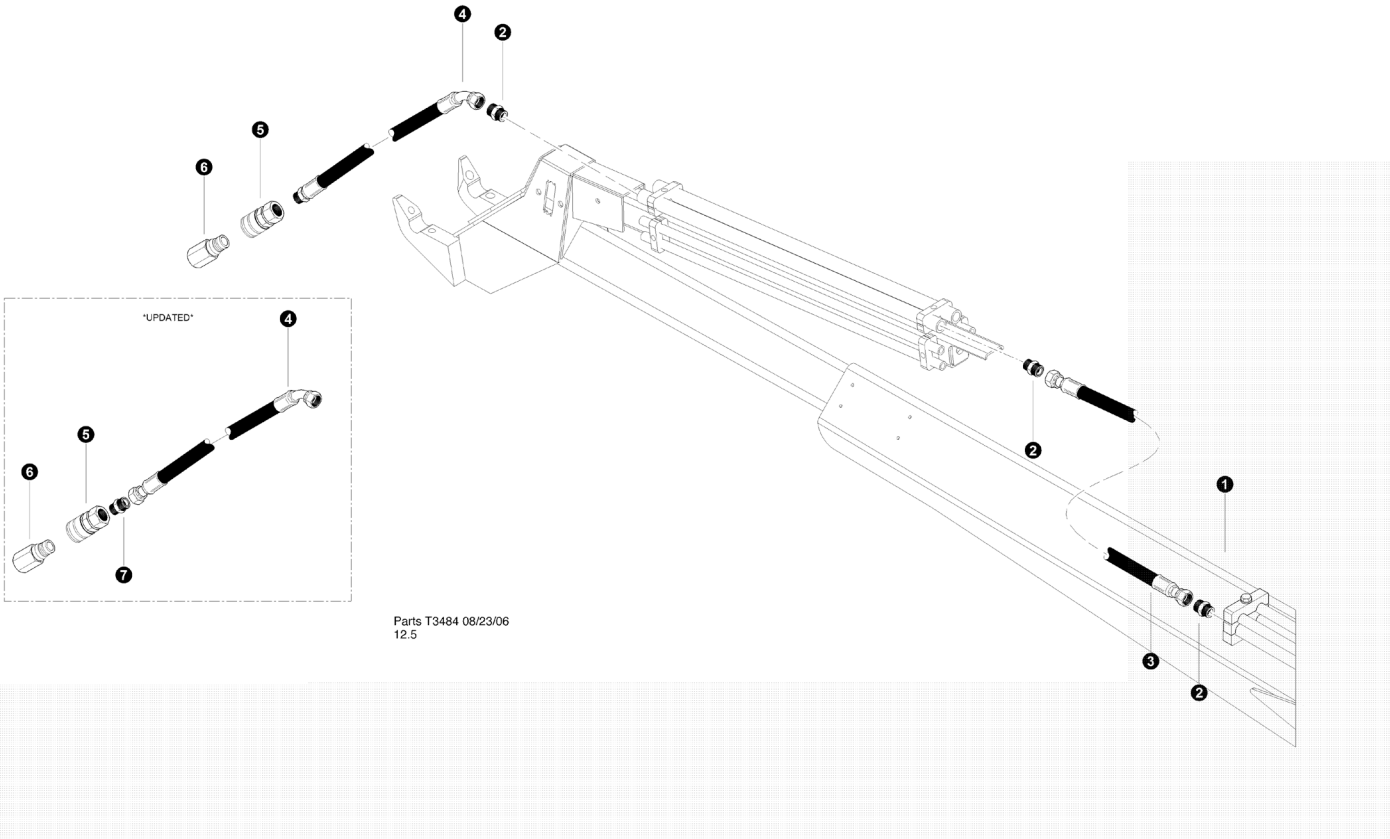
## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Pressure Connection)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4054-16-160S-160S |             |
| 4   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |



See referenced page for component or assembly breakdown.



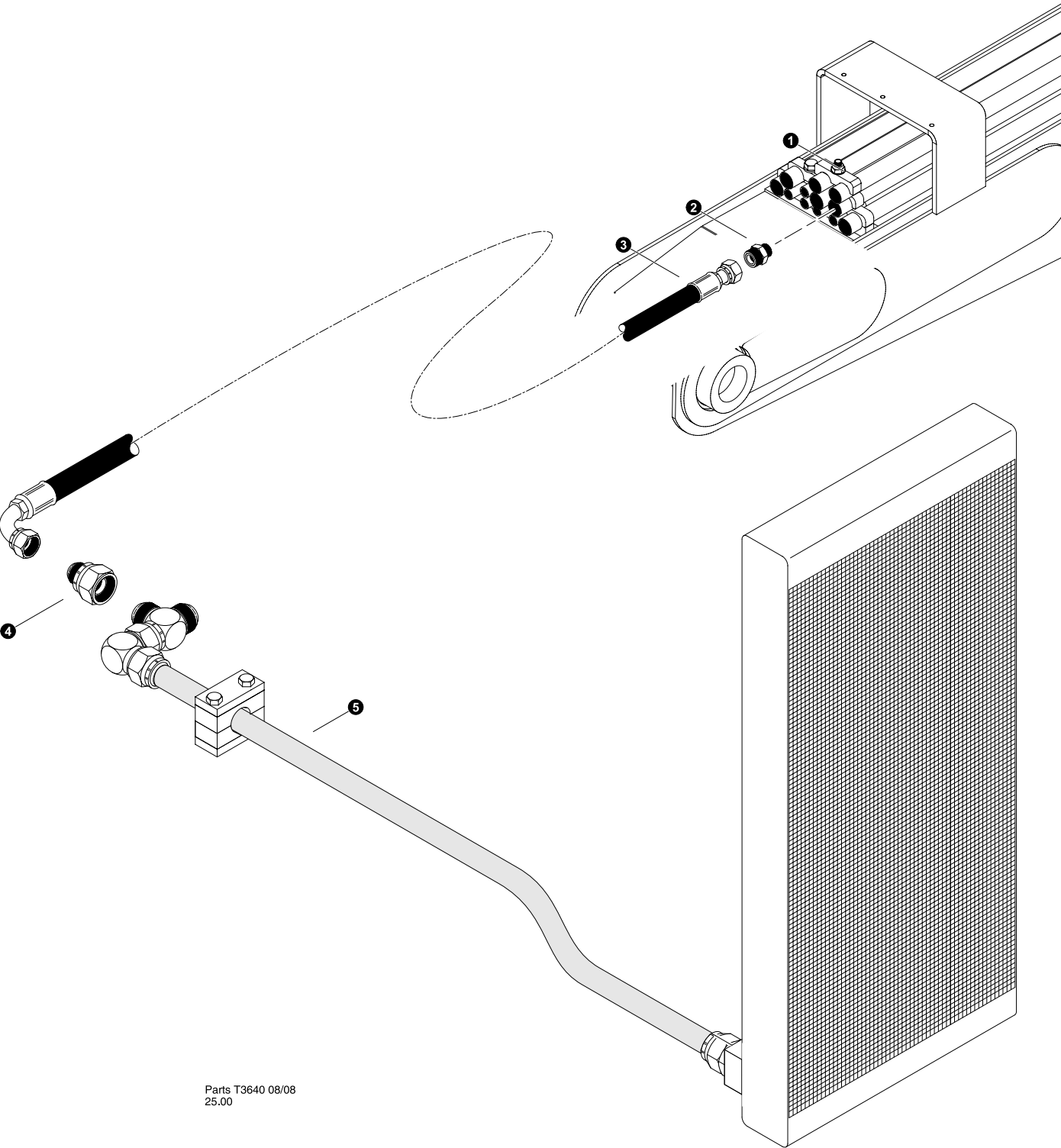
## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Pressure Connection)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....                   | LB-2        |
| 2   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S               |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-16-160S-160S            |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4024-16-16RA -1604           |             |
|     | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4024-16-16OS -1604 *UPDATED* |             |
| 5   | 51271-LH | 1   |                                                                                   | QUICK DISCONNECT - 1"FEM X 1"PORT            |             |
| 6   | 24862-LH | 1   |                                                                                   | QUICK DISCONNECT - 1" MALE X 1" PORT         |             |
| 7   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S               |             |



See referenced page for component or assembly breakdown.



Parts T3640 08/08  
25.00

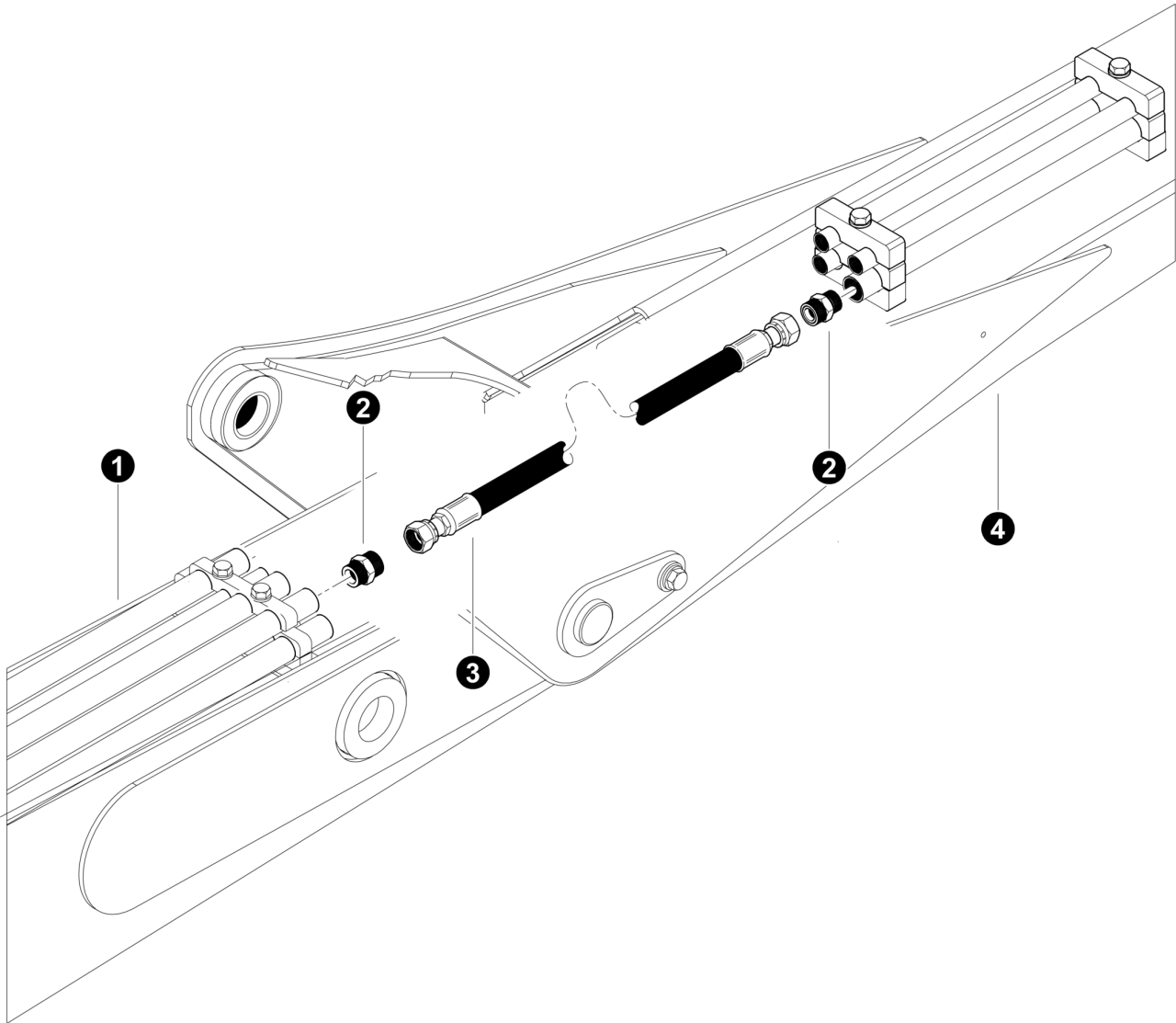


**HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Pressure and Tank Connections)**  
**Return Line**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                   | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                      | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S                                                |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2076-16-160S-1604 ( <i>Attachment Return to Return Tube</i> ) |             |
| 4   | 53182-LH | 1   |                                                                                   | FITTING, REDUCER TUBE END - 24-16                                             |             |
| 5   | REF.     | 1   |  | RETURN OIL TUBE.....                                                          | LH-2        |



See referenced page for component or assembly breakdown.



Parts T3485 08/23/06  
12.5

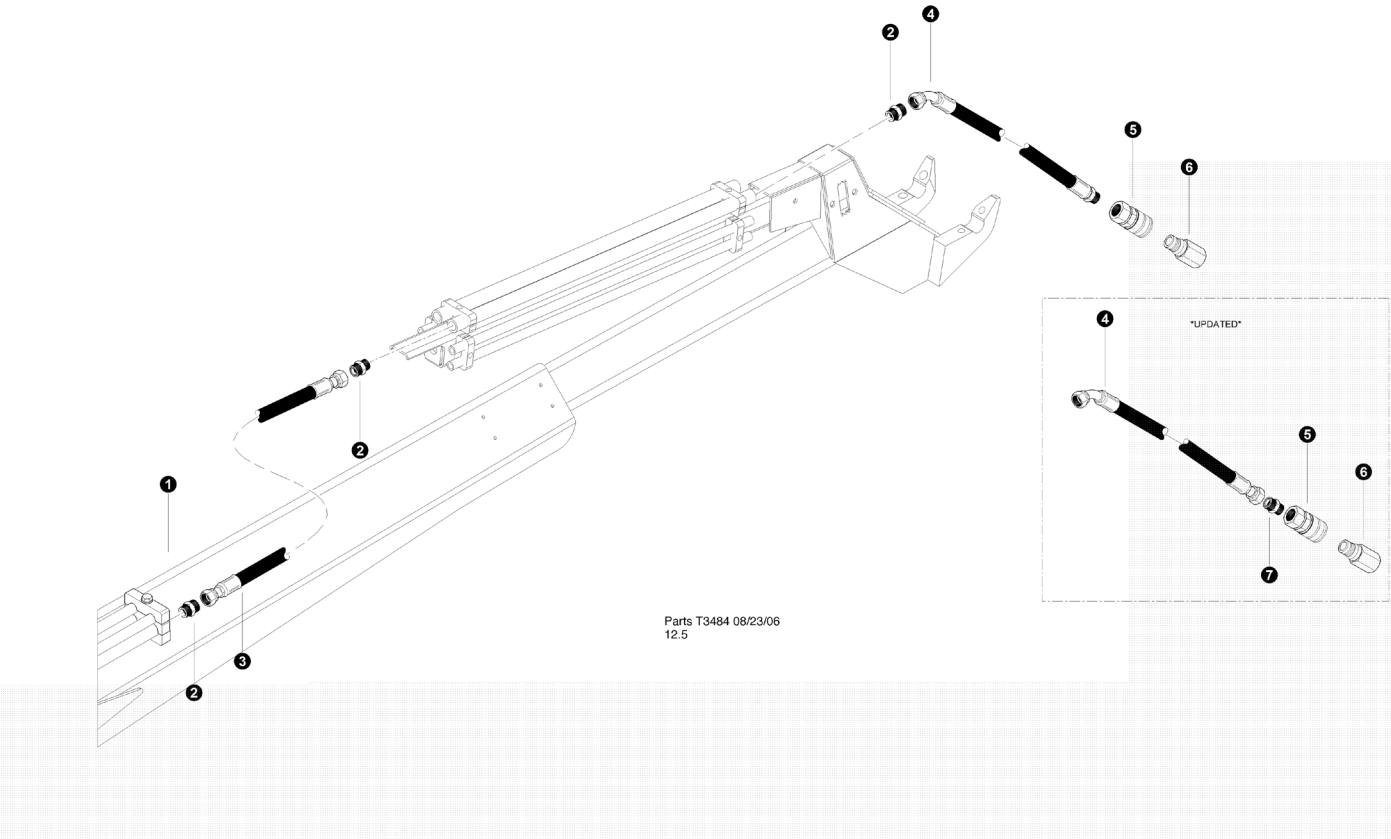
## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Return Connection)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4054-16-160S-160S |             |
| 4   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |



See referenced page for component or assembly breakdown.

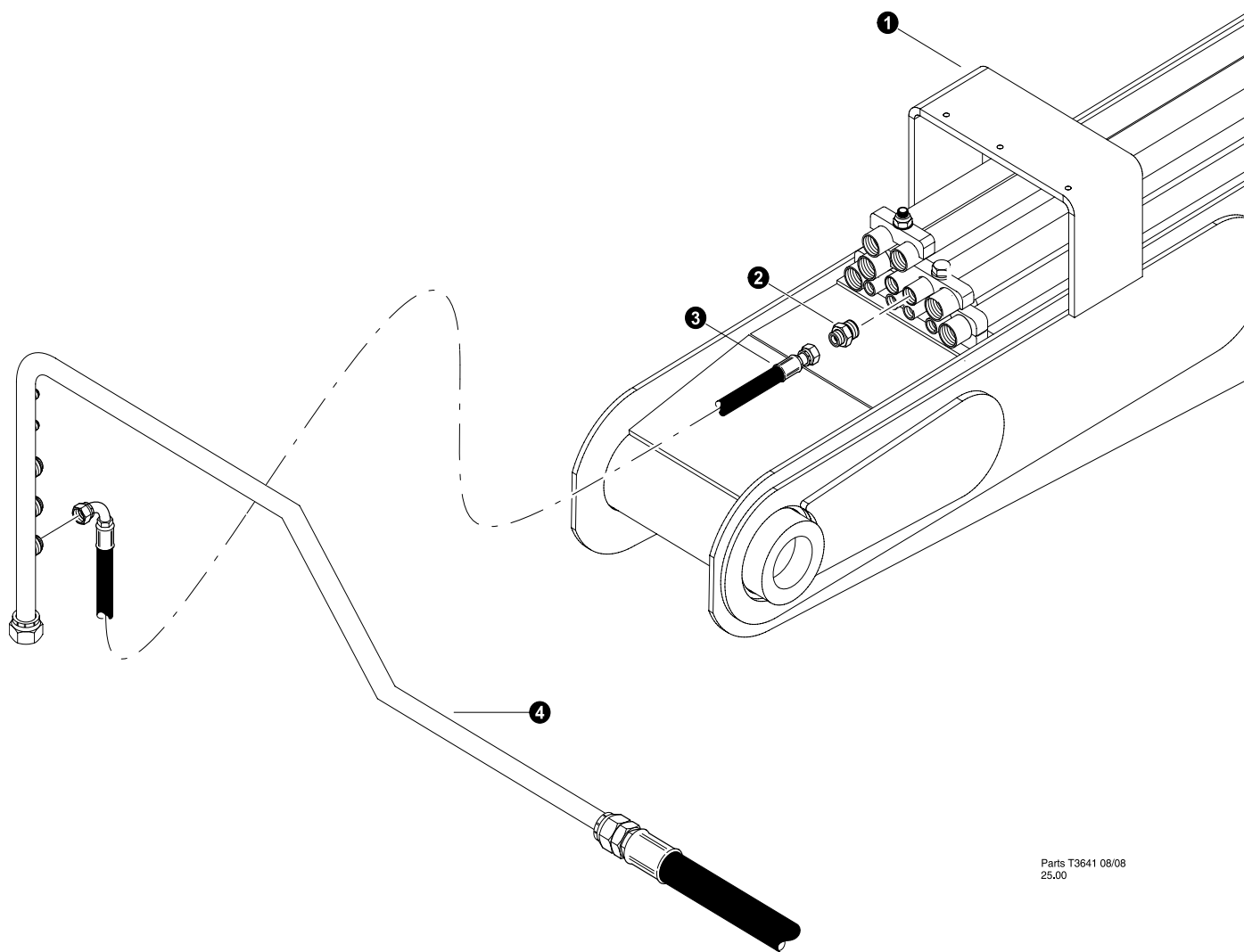


## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS (Squirt Boom - Return Connection)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....                   | LB-2        |
| 2   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S               |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-16-160S-160S            |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4020-16-16RA -1604           |             |
|     | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4020-16-16RA -1604 *UPDATED* |             |
| 5   | 51271-LH | 1   |                                                                                   | QUICK DISCONNECT - 1"FEM X 1"PORT            |             |
| 6   | 24862-LH | 1   |                                                                                   | QUICK DISCONNECT - 1" MALE X 1" PORT         |             |
| 7   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S               |             |



See referenced page for component or assembly breakdown.



Parts T3641 08/08  
25.00

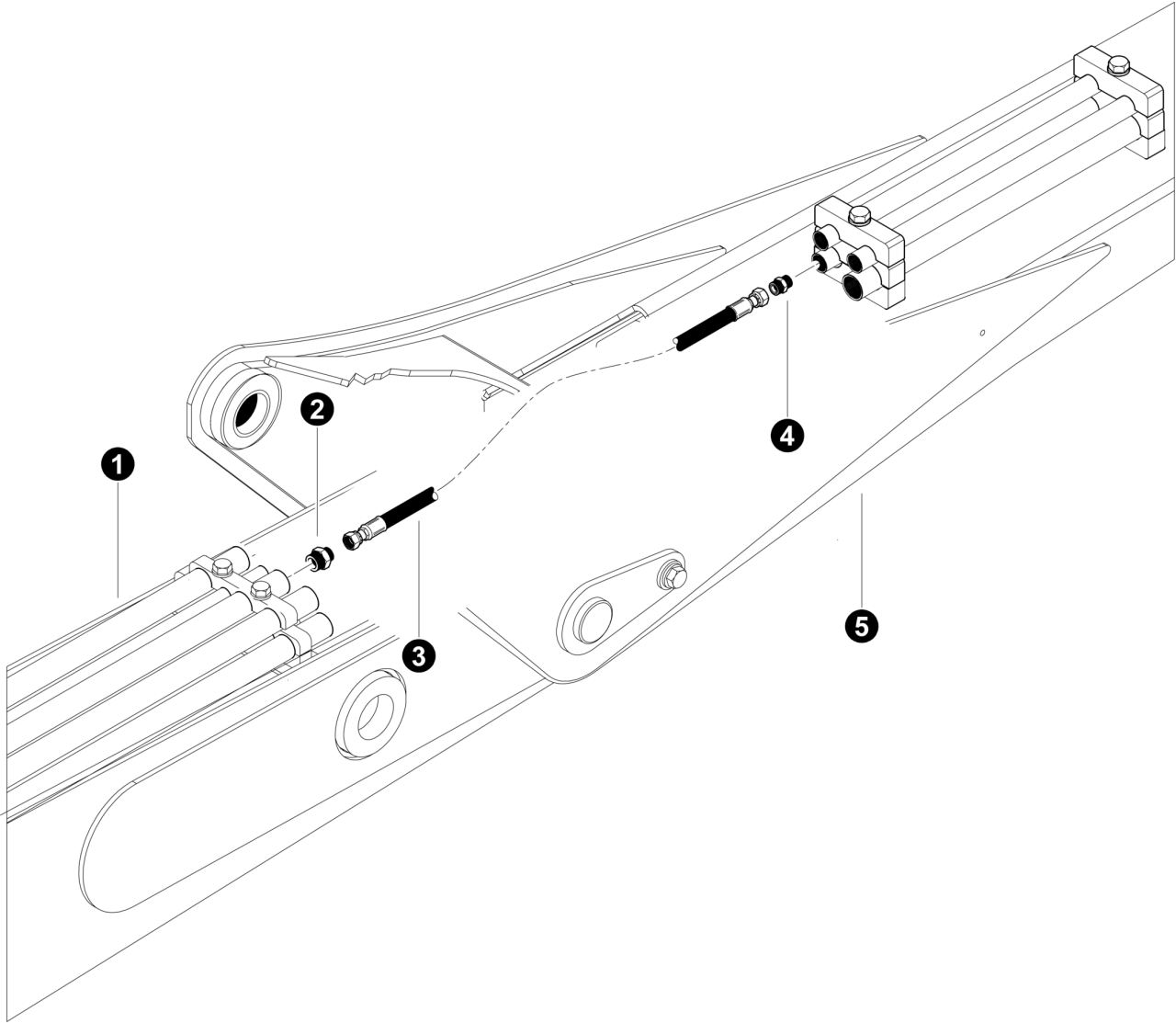
## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main Boom - Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                            | LB-1        |
| 2   | 15238-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0812S                                                      |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2072-08-080S-08J9 ( <i>Main Boom tube line to Case Drain Tube</i> ) |             |
| 4   | REF.     | 1   |  | CASE DRAIN TUBE .....                                                               | LH-2        |



See referenced page for component or assembly breakdown.



Parts T3489 08/23/06  
12.5



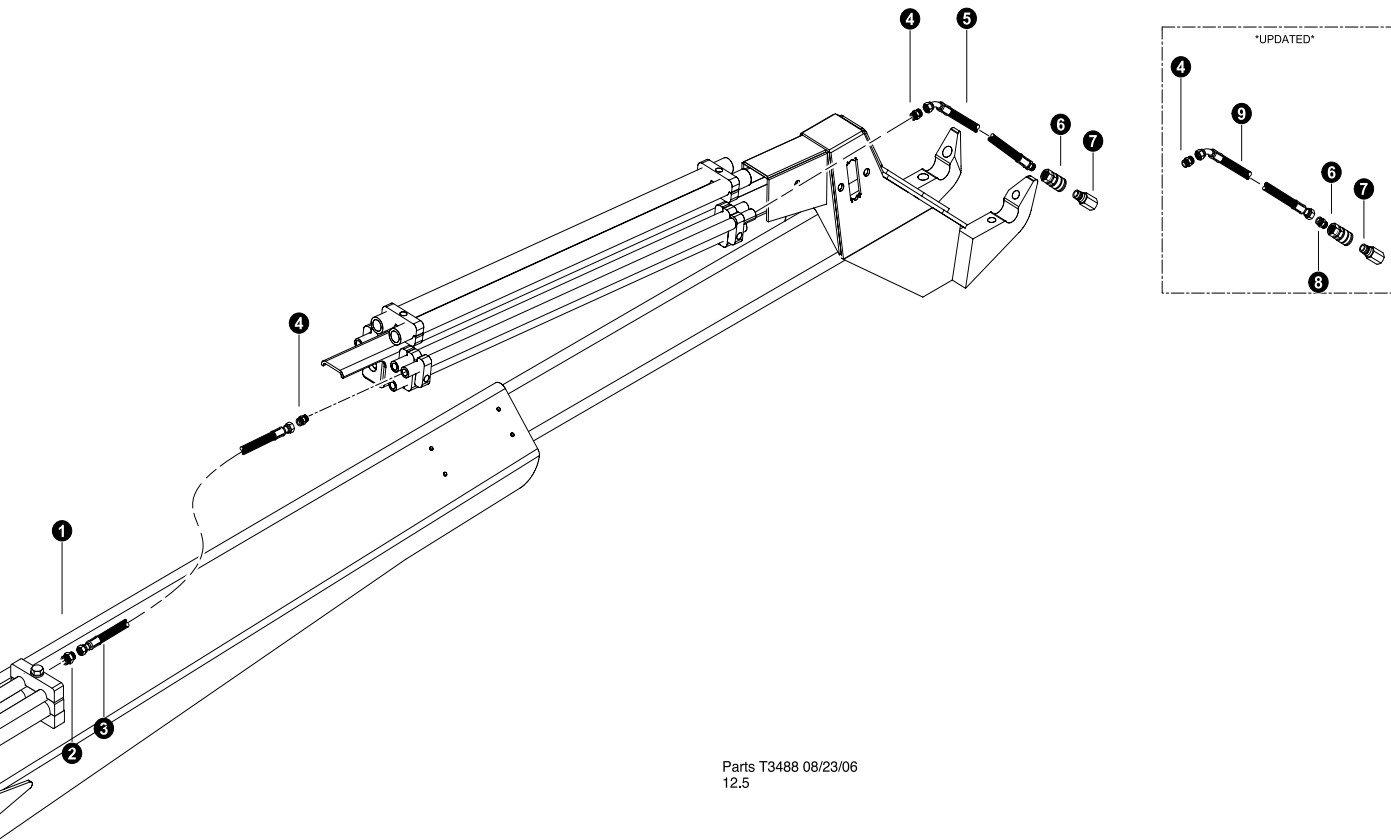
## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15238-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0812S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S |             |
| 4   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S    |             |
| 5   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |



See referenced page for component or assembly breakdown.



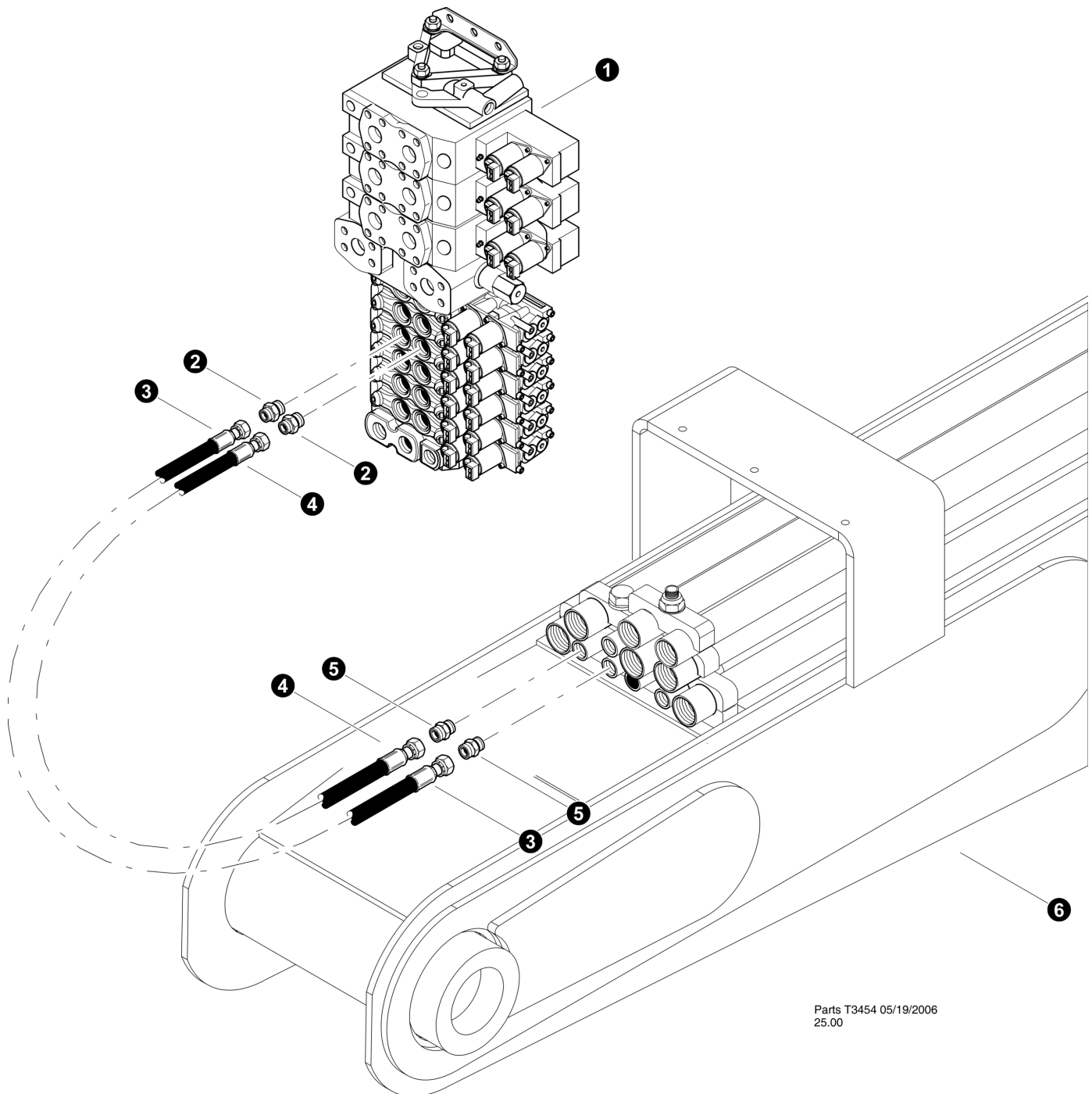
Parts T3488 08/23/06  
12.5

## HARVESTER WITH SQUIRT BOOM CONNECTIONS (Squirt Boom - Case Drain Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                        | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                     | LB-2        |
| 2   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                     |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-08-080S-080S                  |             |
| 4   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                     |             |
| 5   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4024-08-080S -08RA                 |             |
|     | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4024-08-080S -080S *updated*       |             |
| 6   | 51272-LH | 1   |                                                                                   | QUICK DISCONNECT - .5"FEM X .75 PORT               |             |
|     | 52873-LH | 1   |                                                                                   | QUICK DISCONNECT- .75" FEMALE CASE DRAIN *updated* |             |
| 7   | 24864-LH | 1   |                                                                                   | QUICK DISCONNECT - .5" MALE X .75" PORT            |             |
|     | 52874-LH | 1   |                                                                                   | QUICK DISCONNECT- .75" MALE CASE DRAIN *updated*   |             |
| 8   | 15238-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0812S                     |             |



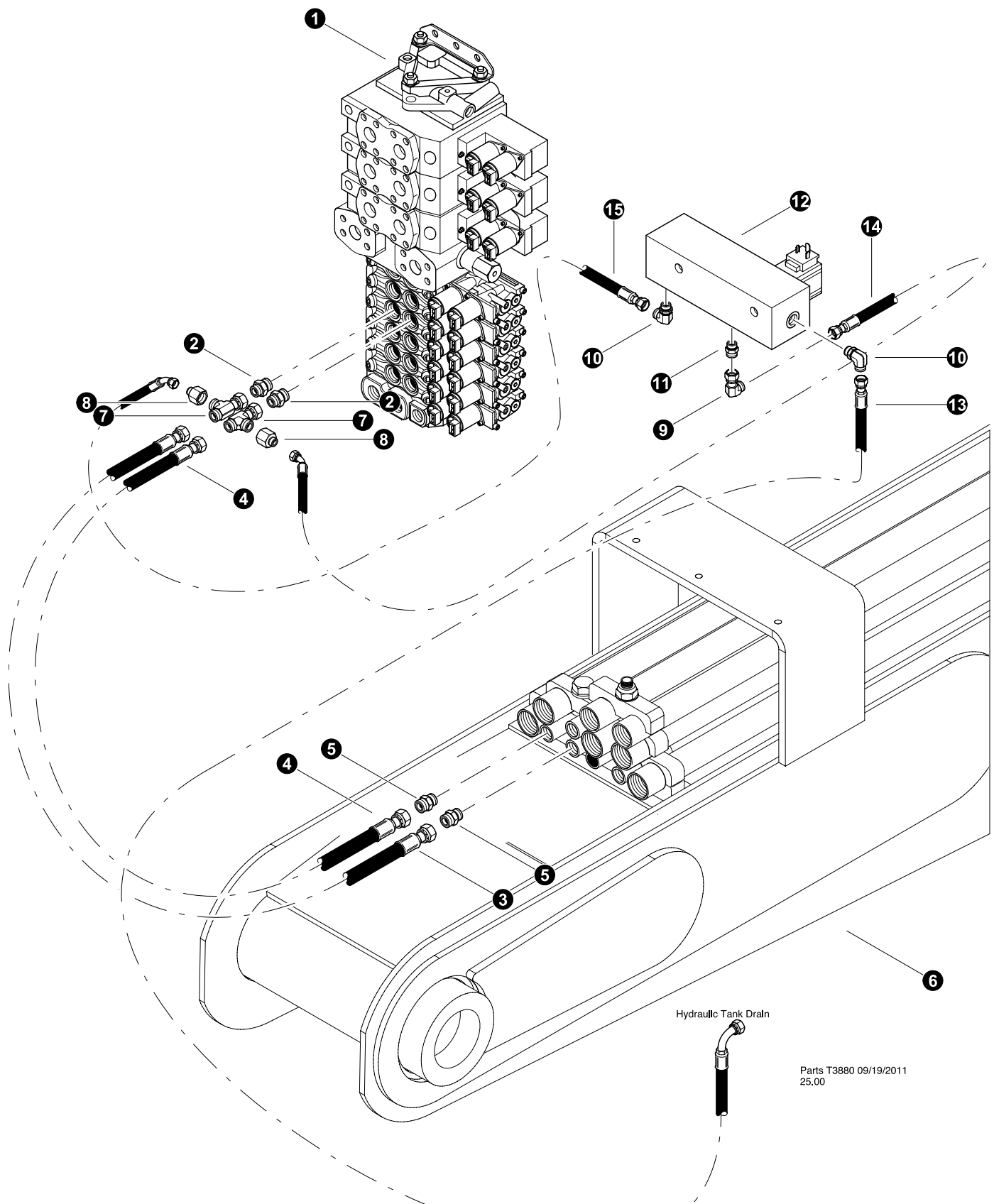
See referenced page for component or assembly breakdown.



Parts T3454 05/19/2006  
25.00

**COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Head Rotate Connections)**  
 830B-0244-021808 to 830B-0314-071609

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE .....                                                                                            | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                 |             |
| 3   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4057-08-080S-080S ( <i>Rotate valve section work port "A" to main boom left inside tube line</i> )  |             |
| 4   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4056-08-080S-080S ( <i>Rotate valve section work port "B" to main boom left outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                      |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                                                                                            | LB-1        |



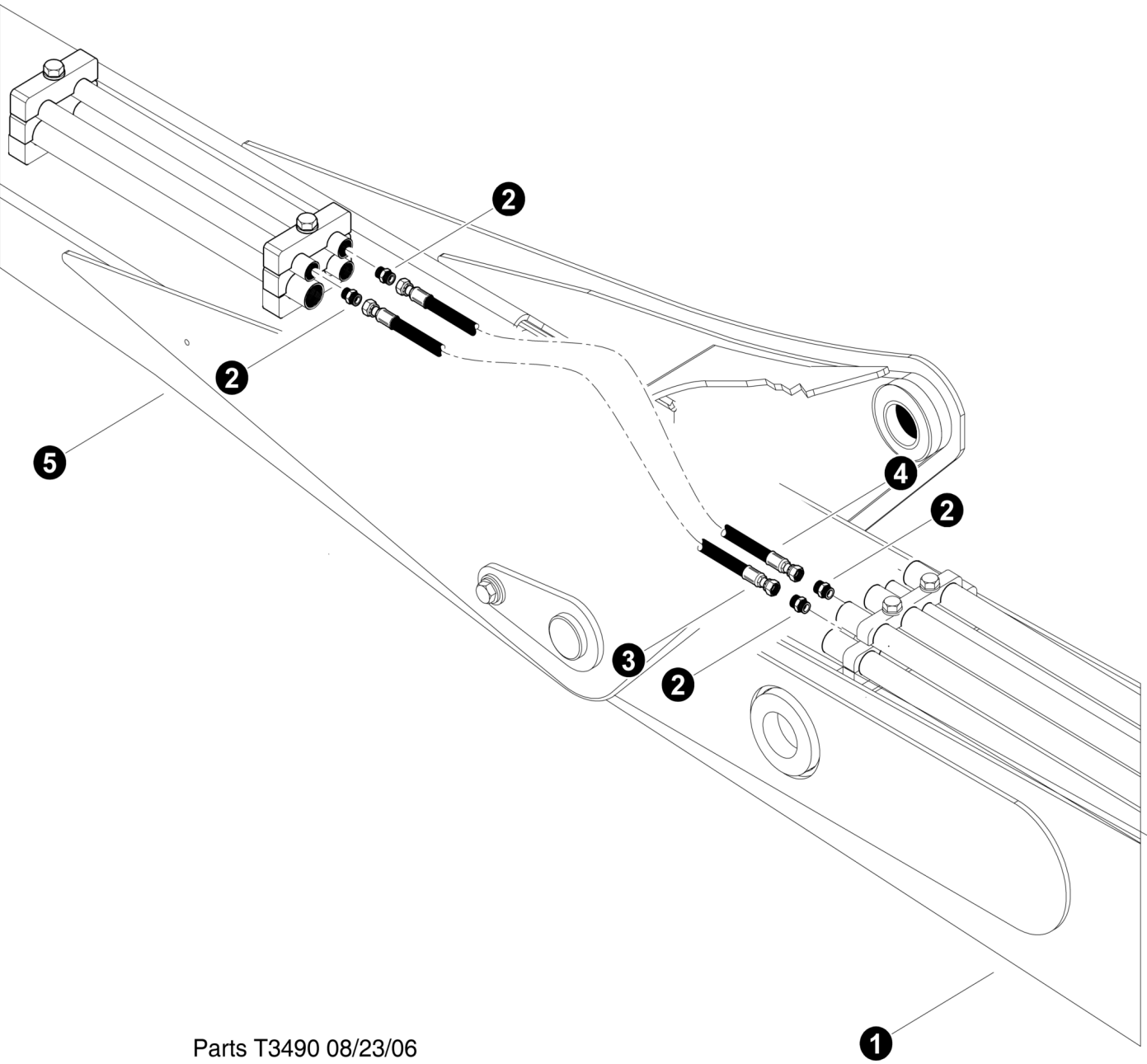
Parts T3880 09/19/2011  
25,00

## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main Boom - Head Rotate Connections)

Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                        | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                 |             |
| 3   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4063-08-080S-080S ( <i>Rotate valve section work port "A" to main boom left inside tube line</i> )  |             |
| 4   | -LB      | 1   |                                                                                   | HOSE ASSEMBLY - 4060-08-080S-080S ( <i>Rotate valve section work port "B" to main boom left outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                      |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                        | LB-1        |
| 7   | 24186-LH | 2   |                                                                                   | TEE - FF1898T-0808S                                                                                                 |             |
| 8   | 19221-LH | 2   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                                                                              |             |
| 9   | 15145-LH | 1   |                                                                                   | ELBOW, 90 SWIVEL - FF2098T-0404S                                                                                    |             |
| 10  | 15133-LH | 2   |                                                                                   | ELBOW, 90 - FF1868T-0406S                                                                                           |             |
| 11  | 15124-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0406S                                                                                      |             |
| 12  | 52912-LH | 1   |                                                                                   | VALVE, COMBO DRAIN . . . . .                                                                                        | LH-1        |
| 13  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2110-04-040S-0409                                                                                   |             |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2040-04-040S-0404                                                                                   |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2032-04-040S-0409                                                                                   |             |



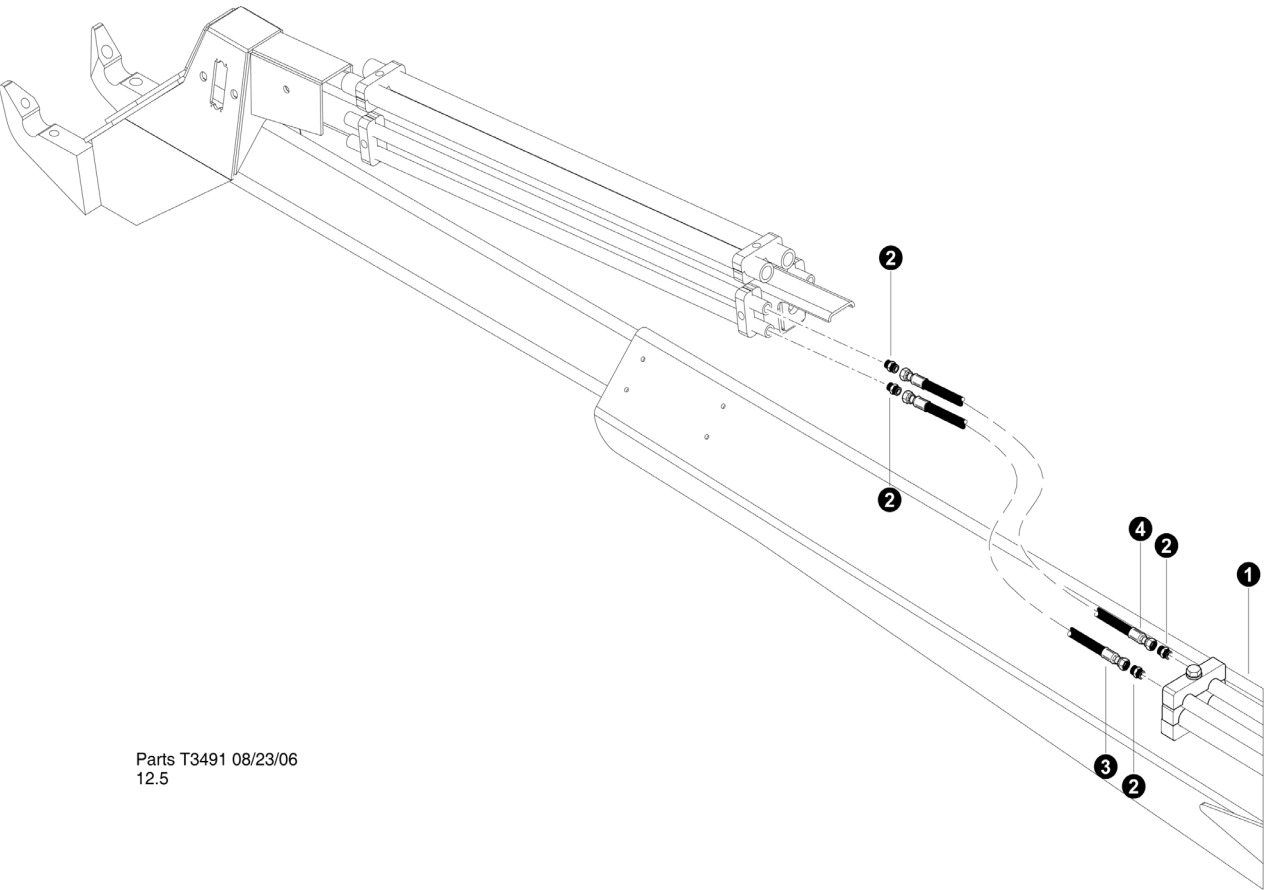
Parts T3490 08/23/06  
12.5



## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Head Rotate Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S |             |
| 5   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |

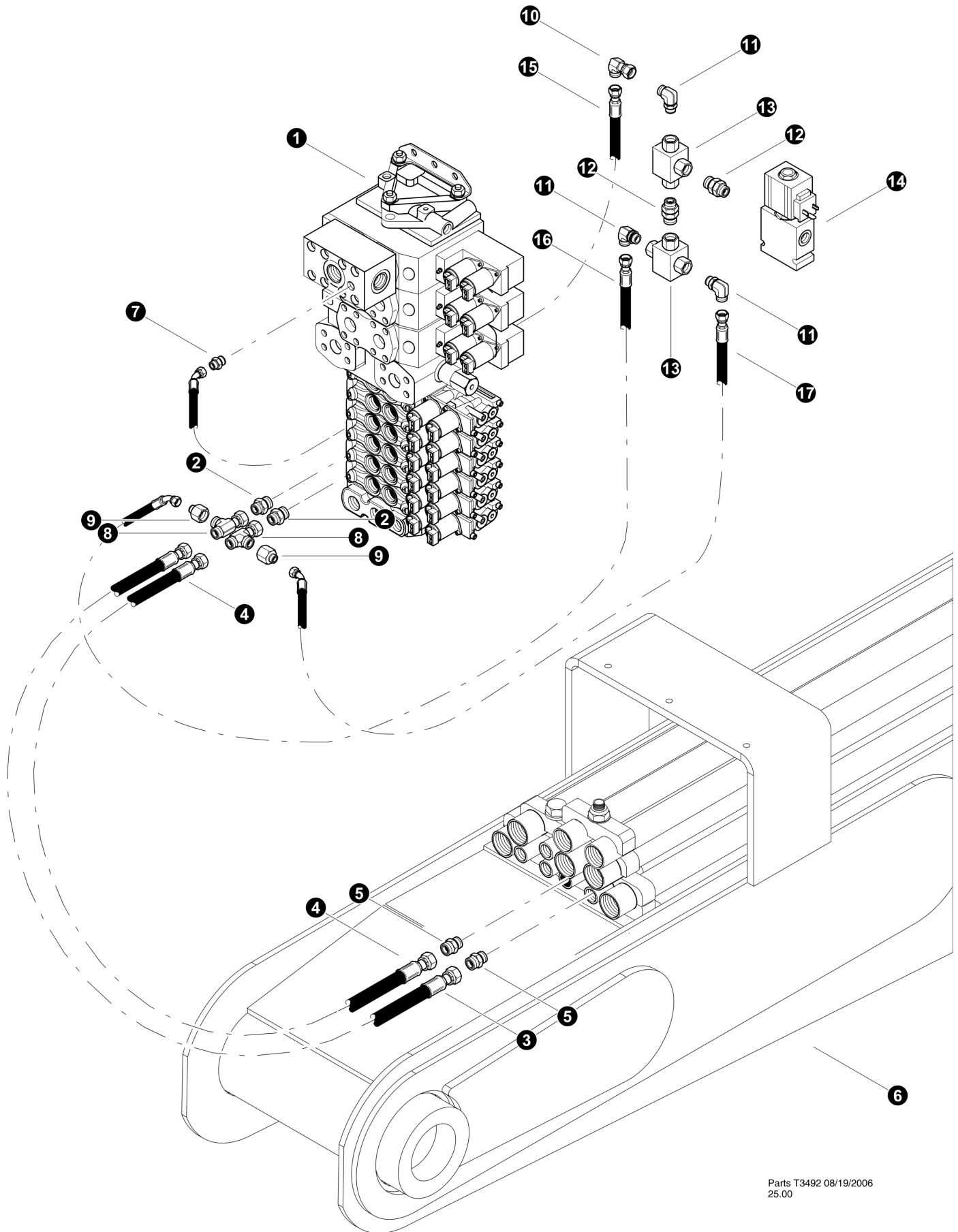


Parts T3491 08/23/06  
12.5

## HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Head Rotate Connections)

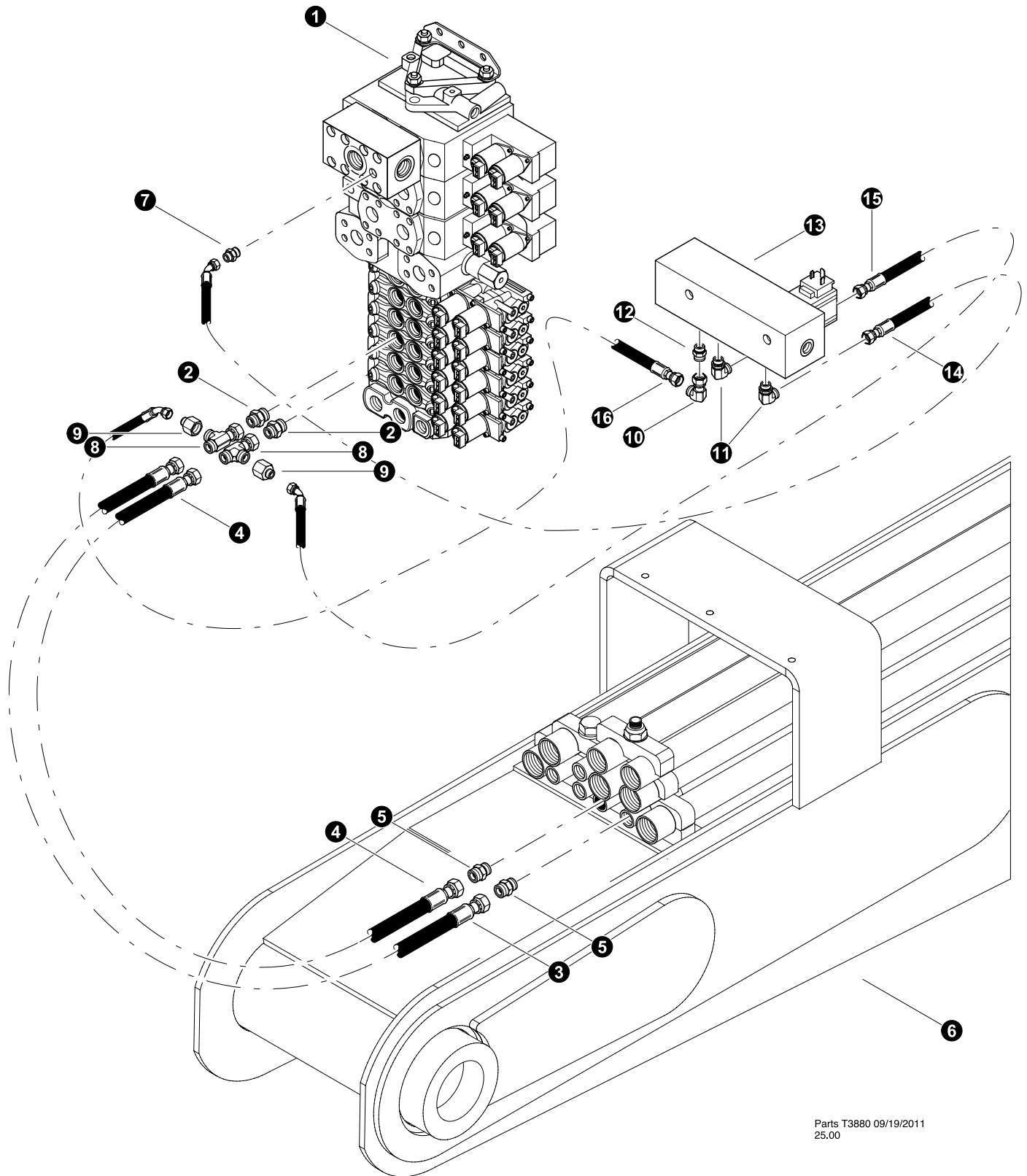
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |
| 2   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-08-080S-080S |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-08-080S-080S |             |



Parts T3492 08/19/2006  
25.00

**COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Grapple Open & Close Connections)**  
830B-0244-021808 to 830B-0314-071609

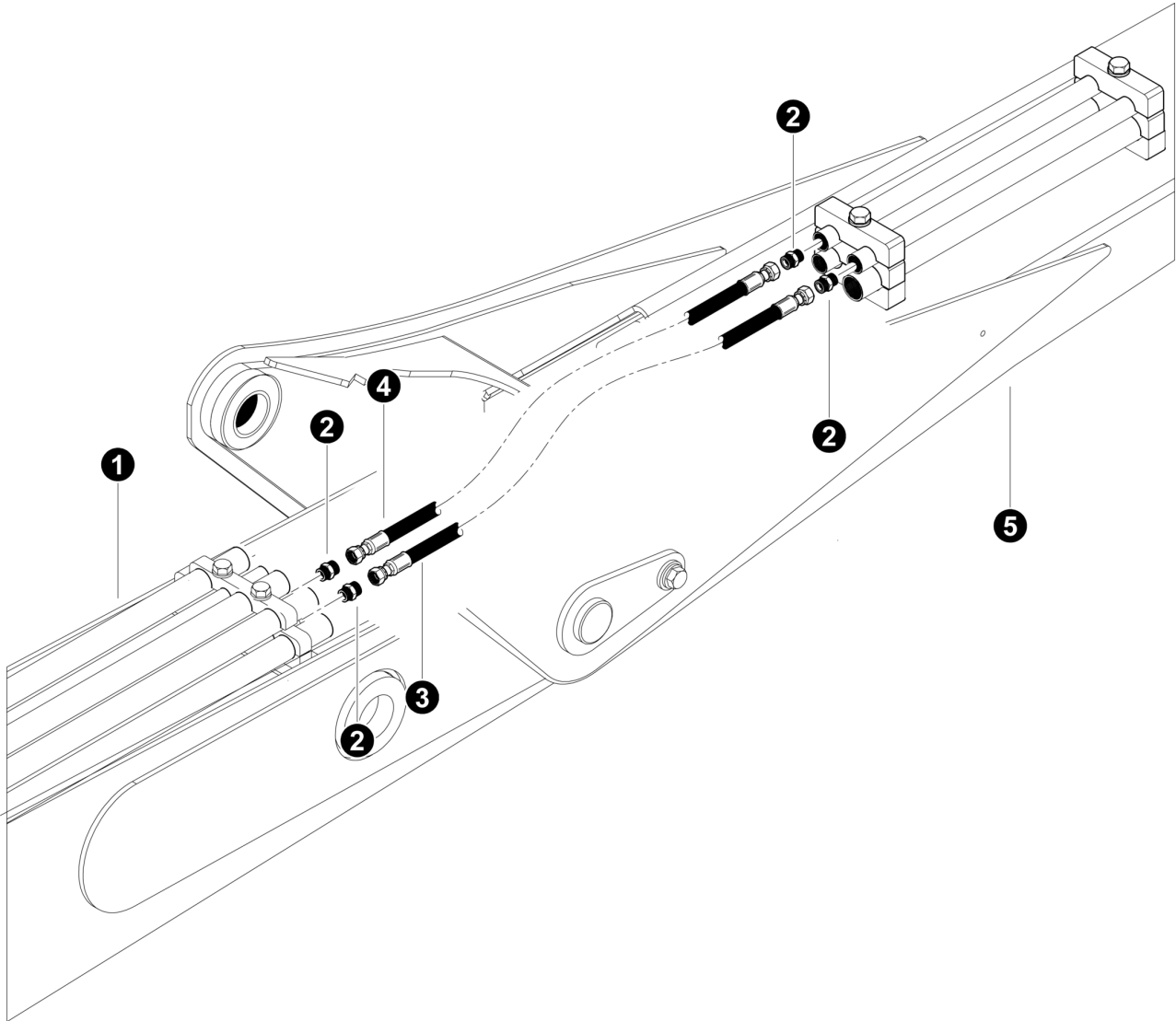
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                          | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4059-08-080S-080S ( <i>Grapple valve section work port "A" to main boom Right inside tube line</i> )  |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4058-08-080S-080S ( <i>Grapple valve section work port "B" to main boom Right outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                        |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                          | LB-1        |
| 7   | 16541-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0404S                                                                                        |             |
| 8   | 24186-LH | 2   |                                                                                   | TEE - FF1898T-0808S                                                                                                   |             |
| 9   | 19221-LH | 2   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                                                                                |             |
| 10  | 15145-LH | 1   |                                                                                   | ELBOW, 90 SWIVEL - FF2098T-0404S                                                                                      |             |
| 11  | 15133-LH | 3   |                                                                                   | ELBOW, 90 - FF1868T-0406S                                                                                             |             |
| 12  | 19366-LH | 2   |                                                                                   | CONNECTOR, STR - 6403-NWO-6                                                                                           |             |
| 13  | 50690-LH | 2   |                                                                                   | VALVE, SHUTTLE - LS SIGNAL (CURRENT)                                                                                  |             |
| 14  | 24255-LH | 1   |                                                                                   | VALVE, LOAD SENSE/PARK BRAKE 2POS/3WAY24                                                                              |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2057-04-040S-0404                                                                                     |             |
| 16  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2029-04-040S-0404                                                                                     |             |
| 17  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2028-04-040S-0409                                                                                     |             |



Parts T3880 09/19/2011  
25.00

**COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS**  
**(Main Boom - Grapple Open & Close Connections)**  
Machine 830B-0315-080609 and newer

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN CONTROL VALVE . . . . .                                                                                          | LH-2        |
| 2   | 15115-LH | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                                   |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4065-08-080S-080S ( <i>Grapple valve section work port "A" to main boom Right inside tube line</i> )  |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4065-08-080S-080S ( <i>Grapple valve section work port "B" to main boom Right outside tube line</i> ) |             |
| 5   | 15117-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                                                        |             |
| 6   | REF.     | 1   |  | MAIN BOOM ASSEMBLY . . . . .                                                                                          | LB-1        |
| 7   | 16541-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0404S                                                                                        |             |
| 8   | 24186-LH | 2   |                                                                                   | TEE - FF1898T-0808S                                                                                                   |             |
| 9   | 19221-LH | 2   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                                                                                |             |
| 10  | 15145-LH | 1   |                                                                                   | ELBOW, 90 SWIVEL - FF2098T-0404S                                                                                      |             |
| 11  | 15133-LH | 3   |                                                                                   | ELBOW, 90 - FF1868T-0406S                                                                                             |             |
| 12  | 19366-LH | 2   |                                                                                   | CONNECTOR, STR - 6403-NWO-6                                                                                           |             |
| 13  | 52912-LH | 1   |                                                                                   | VALVE, COMBO DRAIN . . . . .                                                                                          | LH-1        |
| 14  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2057-04-040S-0404                                                                                     |             |
| 15  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2032-04-040S-0404                                                                                     |             |
| 16  | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2023-04-040S-0409                                                                                     |             |



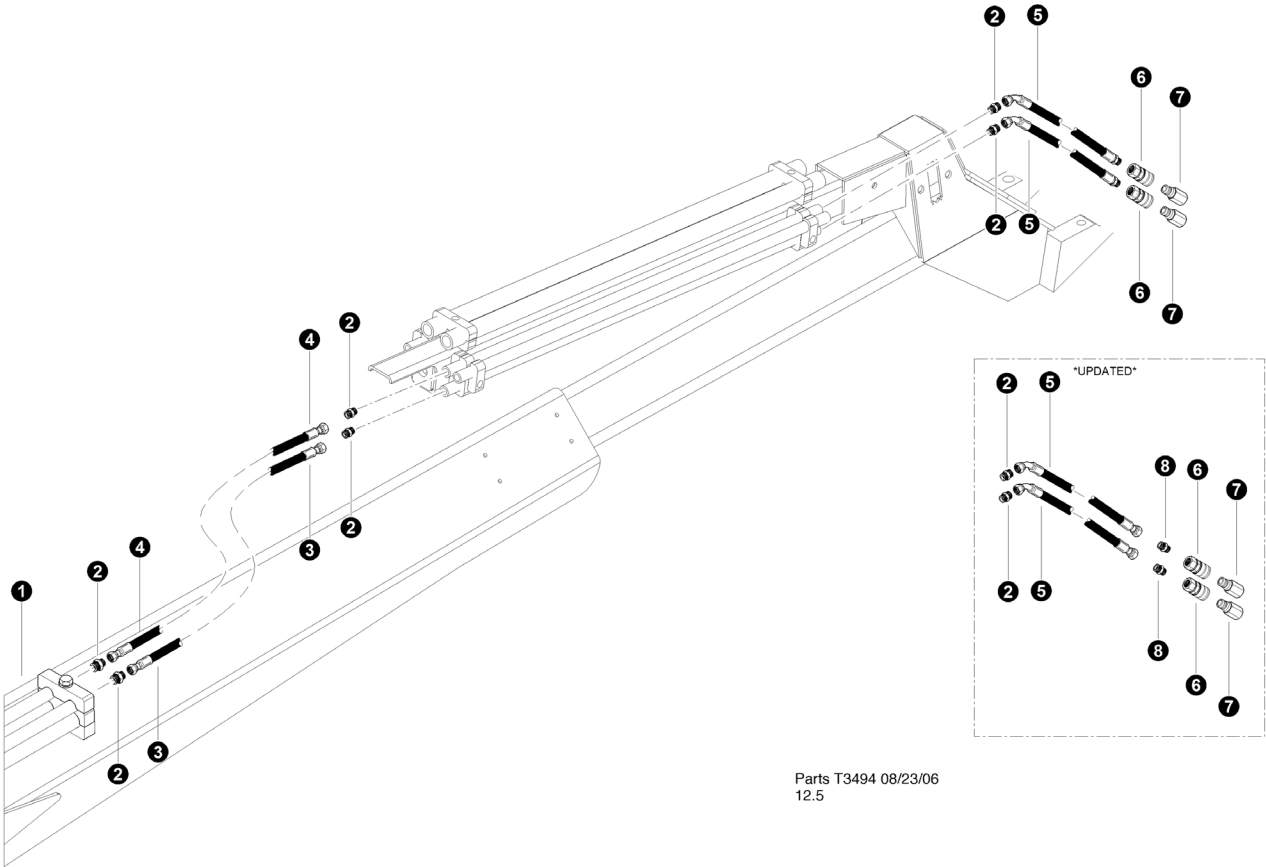
Parts T3485 08/23/06  
12.5



## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Grapple Open & Close Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4049-08-080S-080S |             |
| 5   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |

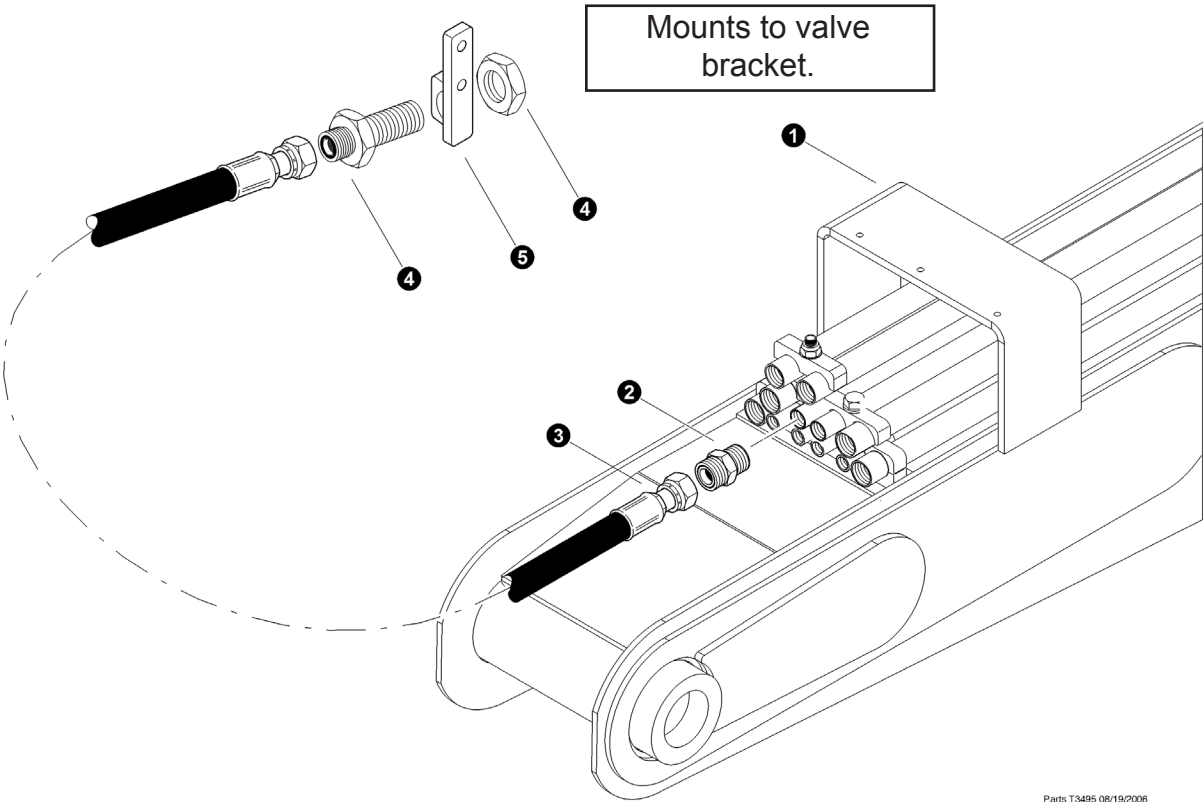


Parts T3494 08/23/06  
12.5

## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Grapple Open & Close Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....                   | LB-2        |
| 2   | 15117-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S               |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-08-080S-080S            |             |
| 4   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-08-080S-080S            |             |
| 5   | -LH      | 2   |                                                                                   | HOSE ASSEMBLY - 4024-08-080S -08RA           |             |
|     | -LH      | 2   |                                                                                   | HOSE ASSEMBLY - 4024-08-080S -080S *UPDATED* |             |
| 6   | 51272-LH | 1   |                                                                                   | QUICK DISCONNECT - .5"FEM X .75 PORT         |             |
| 7   | 24864-LH | 1   |                                                                                   | QUICK DISCONNECT - .5" MALE X .75" PORT      |             |
| 8   | 15238-LH | 2   |                                                                                   | CONNECTOR, STR - 1208S                       |             |

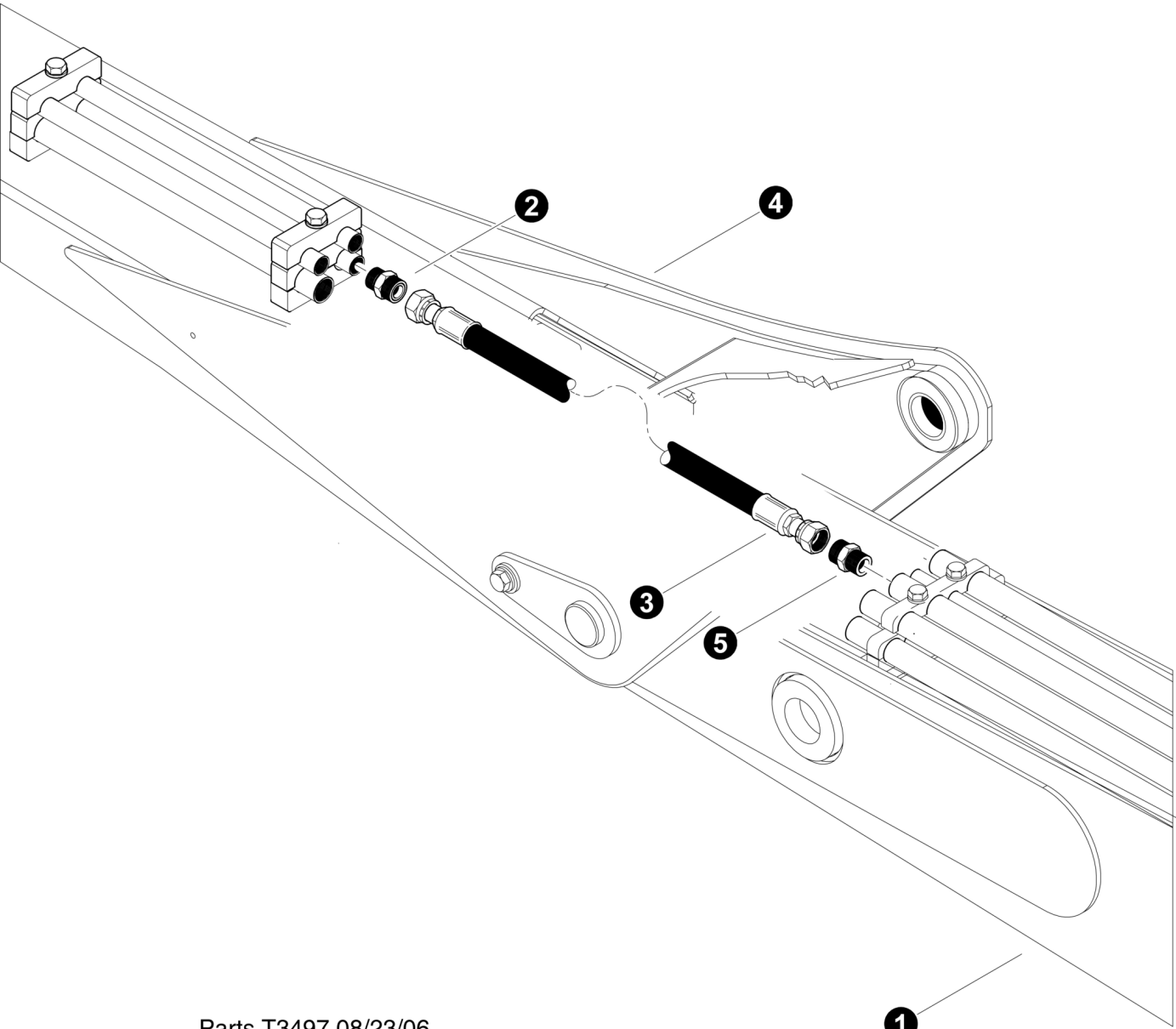


Parts T3495 08/19/2006  
25.00

## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main Boom - Harvester Wire Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....            | LB-1        |
| 2   | 15152-LH | 1   |                                                                                   | CONNECTOR, STR - 12-12              |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 2072-12-120S-120S   |             |
| 4   | 50037-LH | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - 12        |             |
| 5   | 53053-LH | 1   |                                                                                   | BRACKET, ELECTRICAL CORD CUT. HEADS |             |

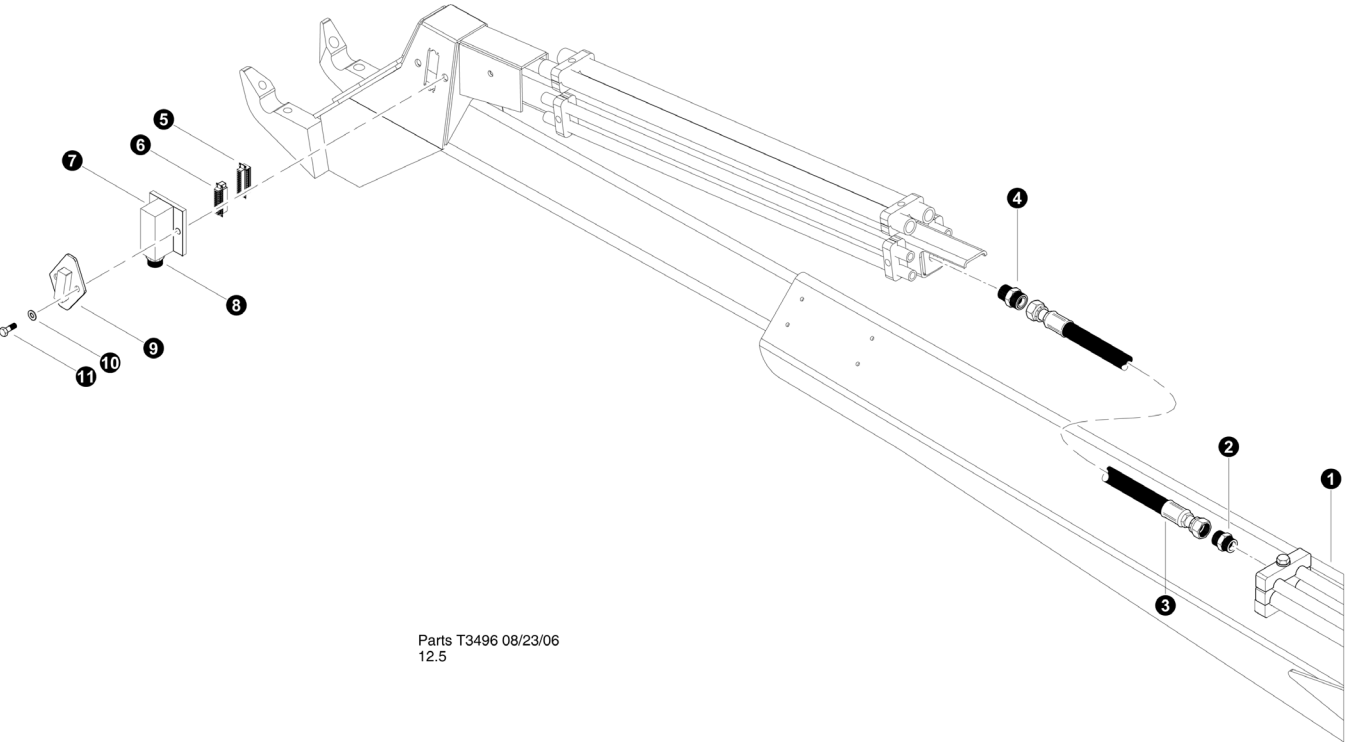


Parts T3497 08/23/06  
12.5

## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Main to Squirt Boom - Wire Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....          | LB-1        |
| 2   | 15225-LH | 2   |                                                                                   | CONNECTOR, STR - FF1852T-1616S    |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4054-16-160S-160S |             |
| 4   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....        | LB-2        |
| 5   | 11303-LH | 1   |                                                                                   | CONNECTOR, STR - 2404-16-16       |             |



Parts T3496 08/23/06  
12.5



## COMBO HARVESTER WITH SQUIRT BOOM CONNECTIONS

### (Squirt Boom - Wire Connections)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------|-------------|
| 1   | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY .....             | LB-2        |
| 2   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S         |             |
| 3   | -LH      | 1   |                                                                                   | HOSE ASSEMBLY - 4092-16-160S-160S      |             |
| 4   | 11303-LH | 1   |                                                                                   | CONNECTOR, STR - 2404-16-16            |             |
| 5   | 50479-LH | 1   |                                                                                   | CONNECTOR, ELECTRICAL - 24PIN (FEMALE) |             |
| 6   | 50478-LH | 1   |                                                                                   | CONNECTOR, ELECTRICAL - 24PIN (MALE)   |             |
| 7   | 40681-LH | 1   |                                                                                   | COVER, QUICK CHANGE ELEC CONNECTOR     |             |
| 8   | 15225-LH | 3   |                                                                                   | CONNECTOR, STR - FF1852T-1616S         |             |
| 9   | 40703-LH | 1   |                                                                                   | COVER, ELECTRICAL (quick change)       |             |
| 10  | 15534-LH | 2   |                                                                                   | WASHER, SAE FLAT - .5"                 |             |
| 11  | 10783-LH | 2   |                                                                                   | BOLT - .5" X 1"                        |             |

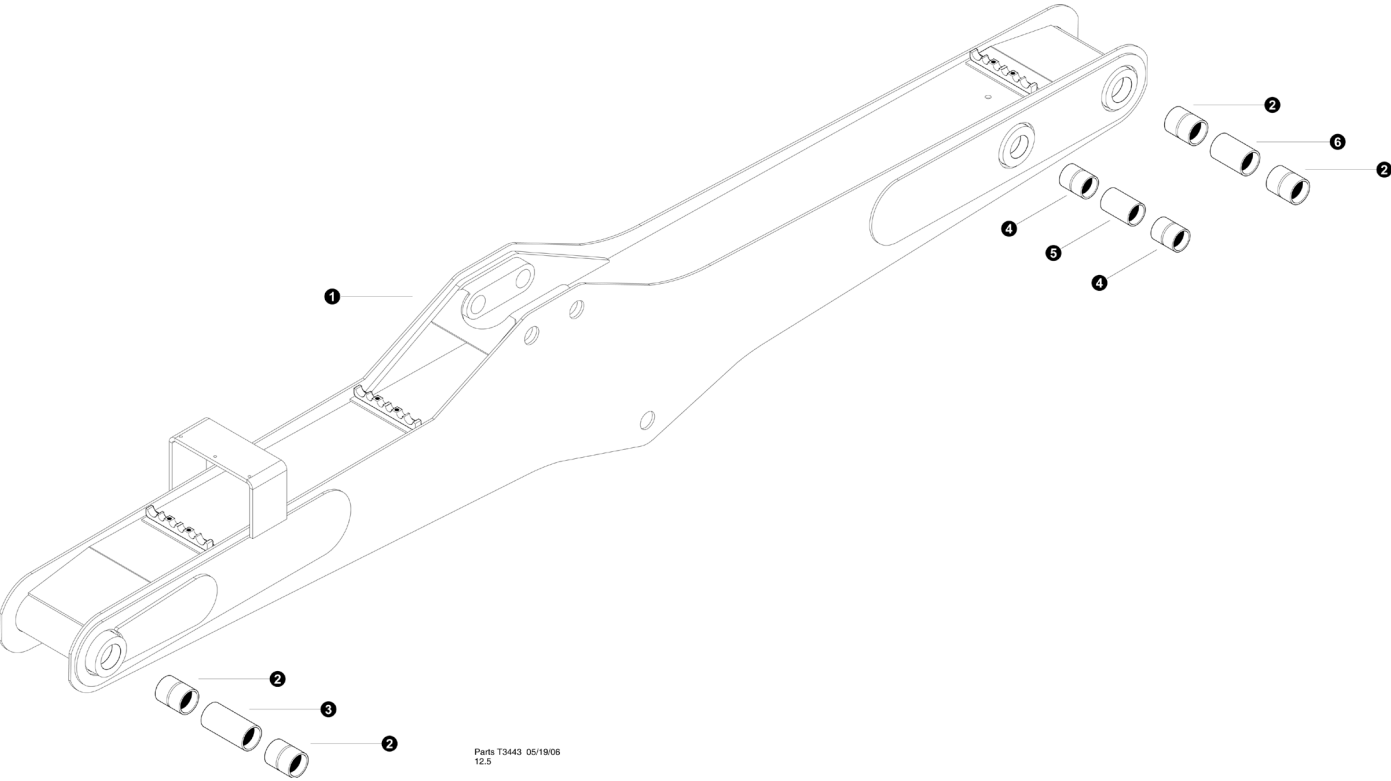
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# ***Section LB-1***

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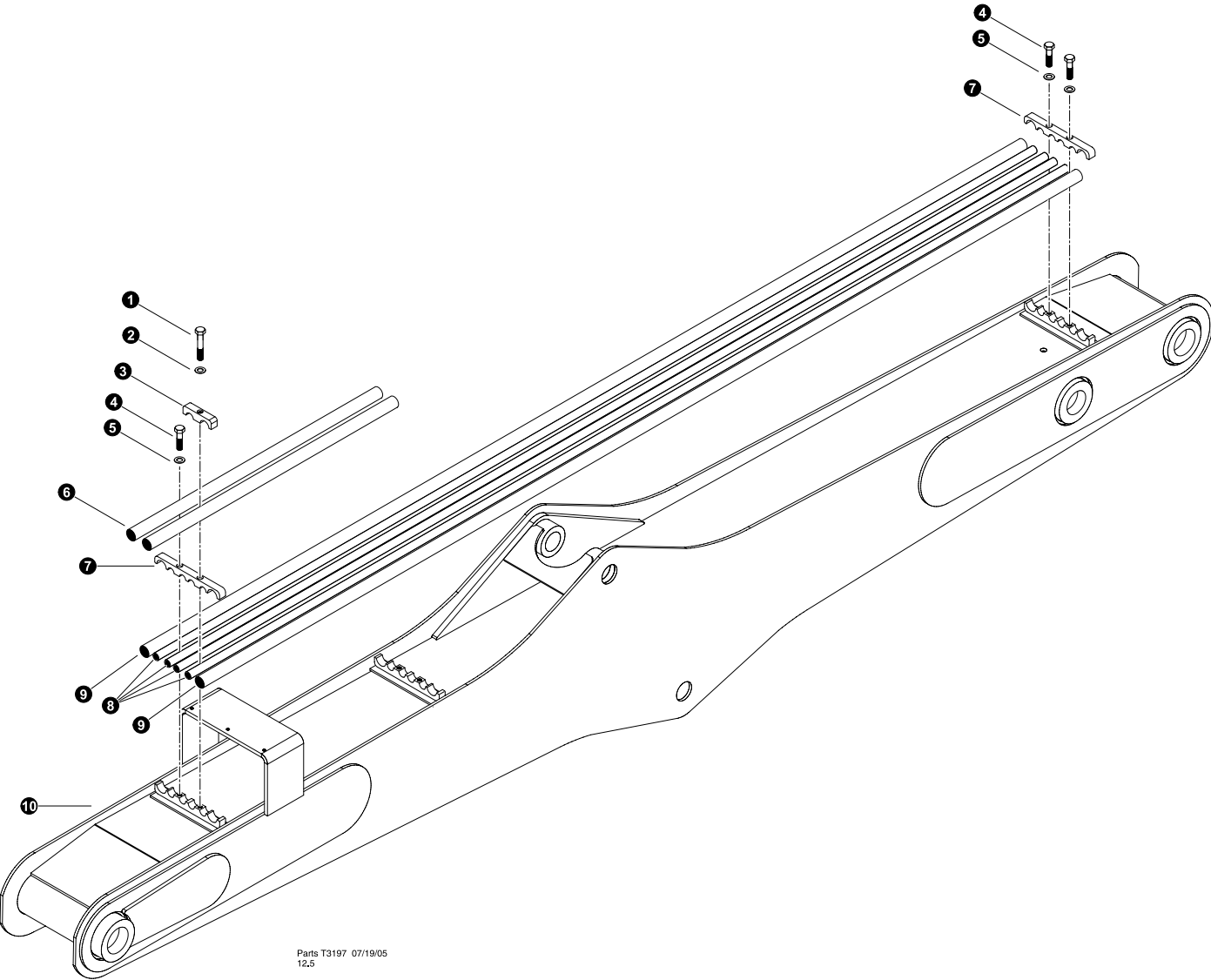
## ***Loader Booms - Main Boom***



## MAIN BOOM ASSEMBLY (Forwarder)

| REF | PART #   | QTY |                          | DESCRIPTION                              | SEE SECTION |
|-----|----------|-----|--------------------------|------------------------------------------|-------------|
| 1   | 52748-LB | 1   | <input type="checkbox"/> | WELDMENT, MAIN BOOM STR 810/830/840/630  |             |
| 2   | 42485-LB | 4   |                          | BUSHING - 3.5" X 3.0" X 4.25" UNDERSIZE  |             |
| 3   | 12365-LB | 1   |                          | SPACER, BASE - 3" X 7.44"                |             |
| 4   | 42482-LB | 2   |                          | BUSHING - 3" X 2.5" X 4.25" UNDERSIZE    |             |
| 5   | 42265-LB | 1   |                          | SPACER, NOSE - 2.5" ID X 5.438"(NEW BOOM |             |
| 6   | 42185-LB | 1   |                          | SPACER, NOSE                             |             |

☐ Kit or Assembly - includes all items indented underneath.

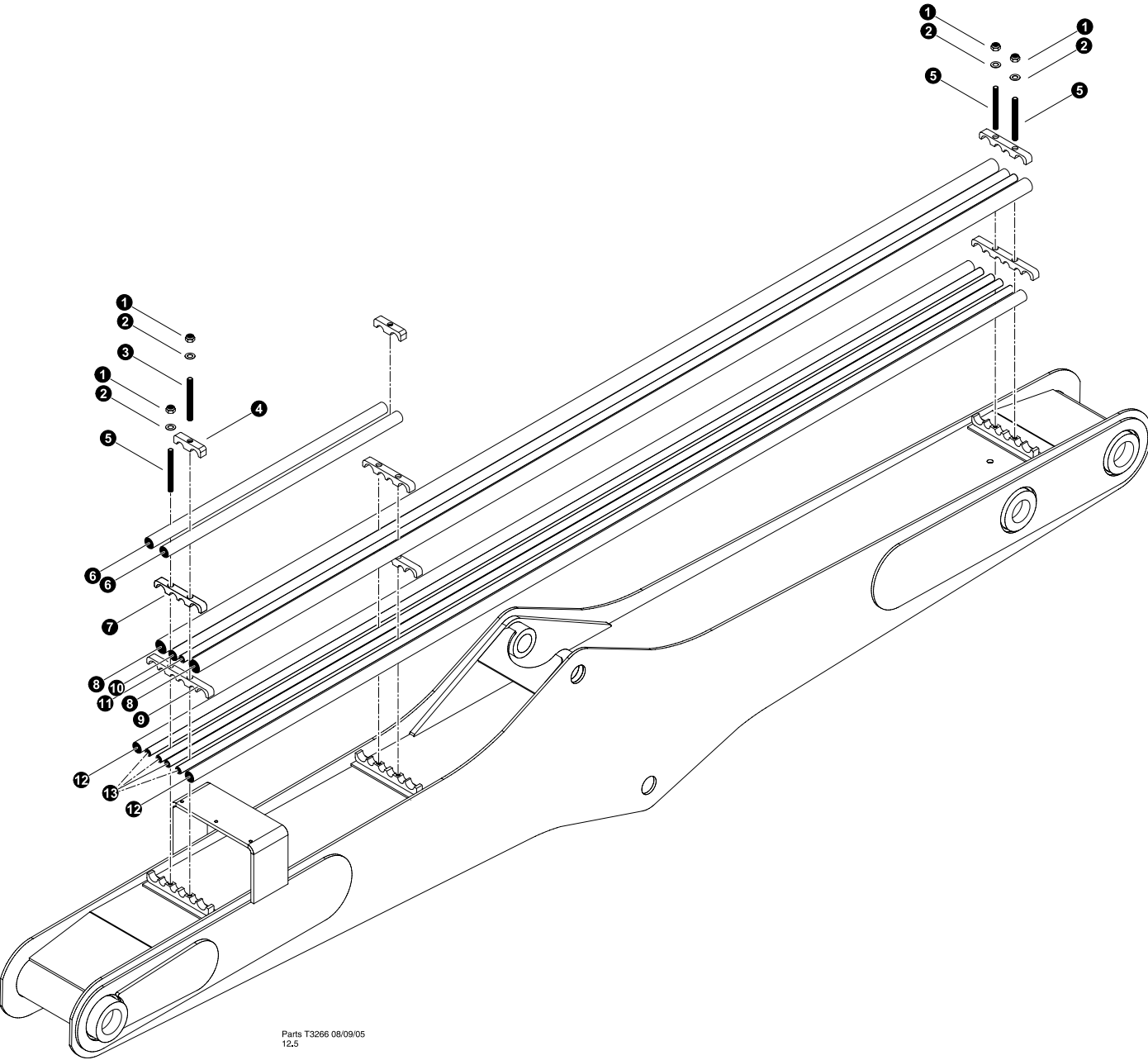


## MAIN BOOM TUBE LINES (Forwarder)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 10773LB  | 2   | BOLT - .625" X 3.5"                                                                                       |             |
| 2   | 10771-LB | 3   | WASHER, SAE flat - 5/8"                                                                                   |             |
| 3   | 19324-LB | 2   | CLAMP, tubeline - 3/4" x 3/4"                                                                             |             |
| 4   | 15681-LB | 3   | BOLT - .625" X 2.25"                                                                                      |             |
| 5   | 10771-LB | 3   | WASHER, SAE flat - 5/8"                                                                                   |             |
| 6   | 51785-LB | 2   | TUBELINE - .75" x 42" FWD MAIN                                                                            |             |
| 7   | 42236-LB | 3   | CLAMP, MAIN BOOM FORWARDER TOP                                                                            |             |
| 8   | 51782-LB | 4   | TUBELINE - .5" x 148" FWD MAIN                                                                            |             |
| 9   | 51783-LB | 2   | TUBELINE - .75" x 148" (OPTIONAL FOR SQUIRT)                                                              |             |
| 10  | REF      | 1   |  MAIN BOOM ASSEMBLY..... | LB-1        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



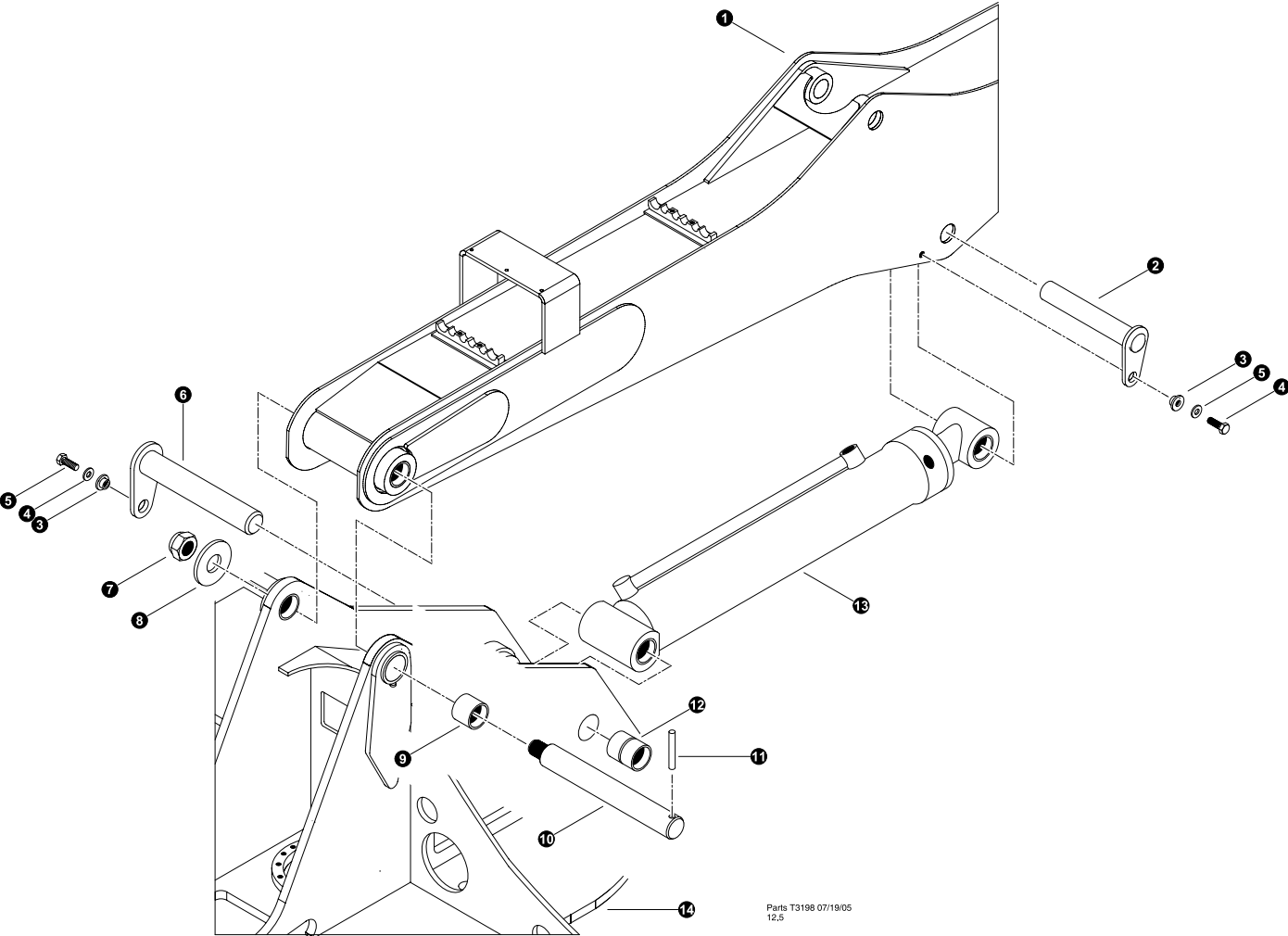


## MAIN BOOM TUBE LINES (Harvester and Combo Machine)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 15563-LB | 6   | NUT, nylock - 5/8"                                                                                        |             |
| 2   | 10771-LB | 6   | WASHER, SAE flat - 5/8"                                                                                   |             |
| 3   | 17062-LB | 2   | STUD - .625" X 8"                                                                                         |             |
| 4   | 19324-LB | 2   | CLAMP, tubeline - 3/4" x 3/4"                                                                             |             |
| 5   | 15672-LB | 4   | STUD - 5/8" x 5-1/4"                                                                                      |             |
| 6   | 51785-LB | 2   | TUBELINE - .75" x 42" FWD MAIN                                                                            |             |
| 7   | 42512-LB | 3   | CLAMP, MAIN COMBO                                                                                         |             |
| 8   | 51784-LB | 1   | TUBELINE - 1" x 148" FWD MAIN - T830                                                                      |             |
| 9   | 42236-LB | 3   | CLAMP, MAIN BOOM FORWARDER                                                                                |             |
| 10  | 52173-LB | 1   | TUBELINE - BLACK PIPE (ELECTRICAL)                                                                        |             |
| 11  | 51782-LB | 1   | TUBELINE - .5" x 148" FWD MAIN                                                                            |             |
| 12  | 51783-LB | 2   | TUBELINE - .75" x 148" (OPTIONAL FOR SQUIRT)                                                              |             |
| 13  | 51782-LB | 4   | TUBELINE - .5" x 148" FWD MAIN                                                                            |             |
| 14  | REF      | 1   |  MAIN BOOM ASSEMBLY..... | LB-1        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

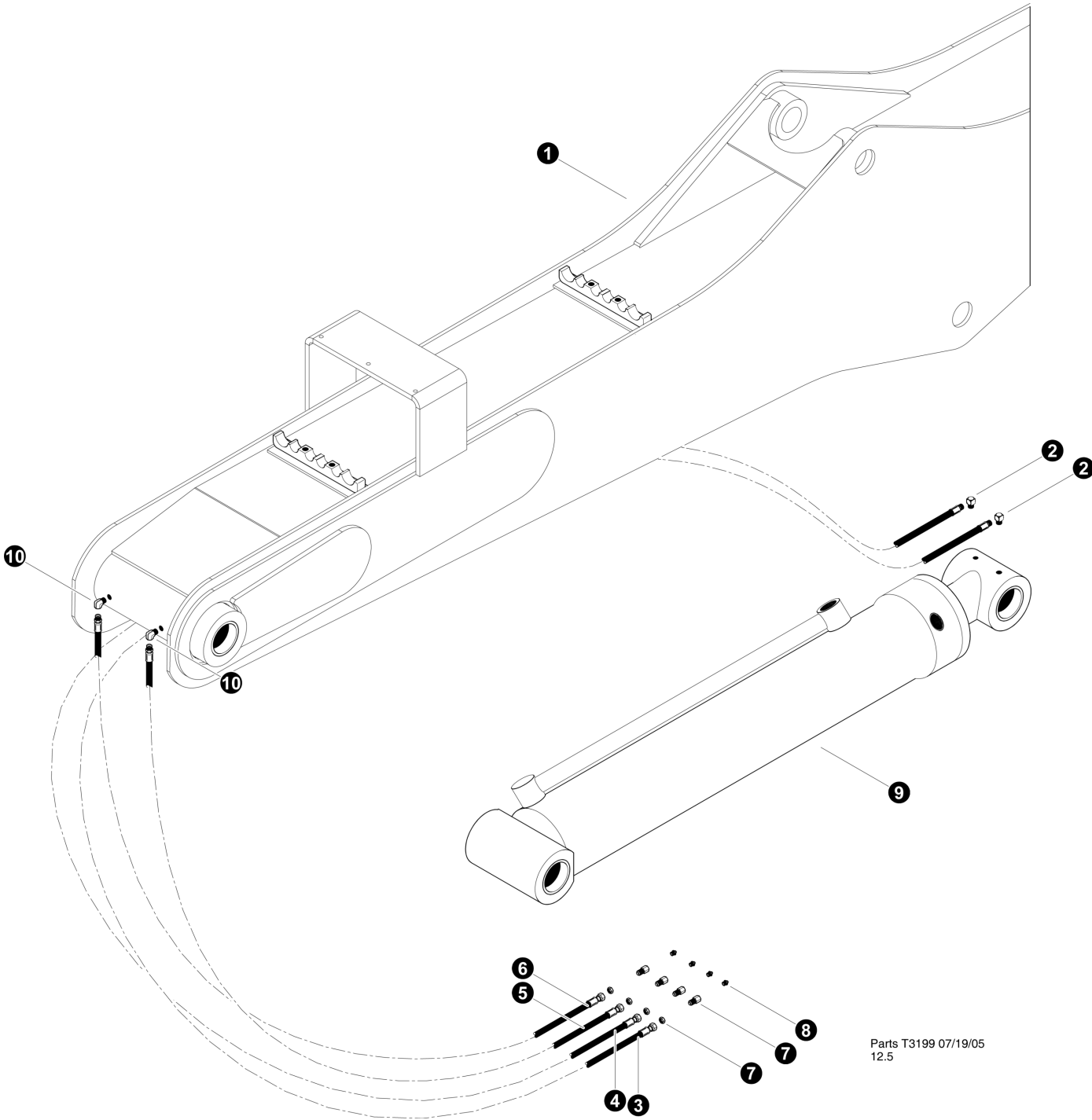


## MAIN BOOM AND CYLINDER INSTALLATION (Forwarder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------|-------------|
| 1   | REF      | 1   |  | MAIN BOOM ASSEMBLY . . . . .                         | LB-1        |
| 2   | 51653-LB | 1   |                                                                                   | PIN ASSEMBLY, 2.99 DIA X 14.25"                      |             |
| 3   | 18570-LB | 2   |                                                                                   | WASHER, PIN RETAINING                                |             |
| 4   | 15550-LB | 2   |                                                                                   | WASHER, SAE FLAT - .75"                              |             |
| 5   | 15549-LB | 2   |                                                                                   | BOLT - .75" X 2.0                                    |             |
| 6   | 51575-LB | 1   |                                                                                   | PIN ASSEMBLY, 2.99 DIA X 18.63"                      |             |
| 7   | 10728-LB | 1   |                                                                                   | NUT, NYLOCK - 2" (ZINC PLATED)                       |             |
| 8   | 19384-LB | 1   |                                                                                   | WASHER, BURNED - 2.12" ID X 6" OD X .5"              |             |
| 9   | 42484-LB | 2   |                                                                                   | BUSHING - 3.5" X 3.0" X 2.0" UNDERSIZE               |             |
| 10  | 51952-LB | 1   |                                                                                   | PIN ASSEMBLY, 2.99 DIA X 24.63"                      |             |
| 11  | 51953-LB | 1   |                                                                                   | PIN, DOWEL 1 DIA X 5 LG                              |             |
| 12  | 42485-LB | 2   |                                                                                   | BUSHING - 3.5" X 3.0" X 4.25" UNDERSIZE              |             |
| 13  | REF.     | 1   |                                                                                   | MAIN BOOM CYLINDER (FORWARDER / HARVESTER) . . . . . | LB-4        |
| 14  | REF.     | 1   |  | UPPER TURNTABLE WELDMENT . . . . .                   | UP-1        |



See referenced page for component or assembly breakdown.



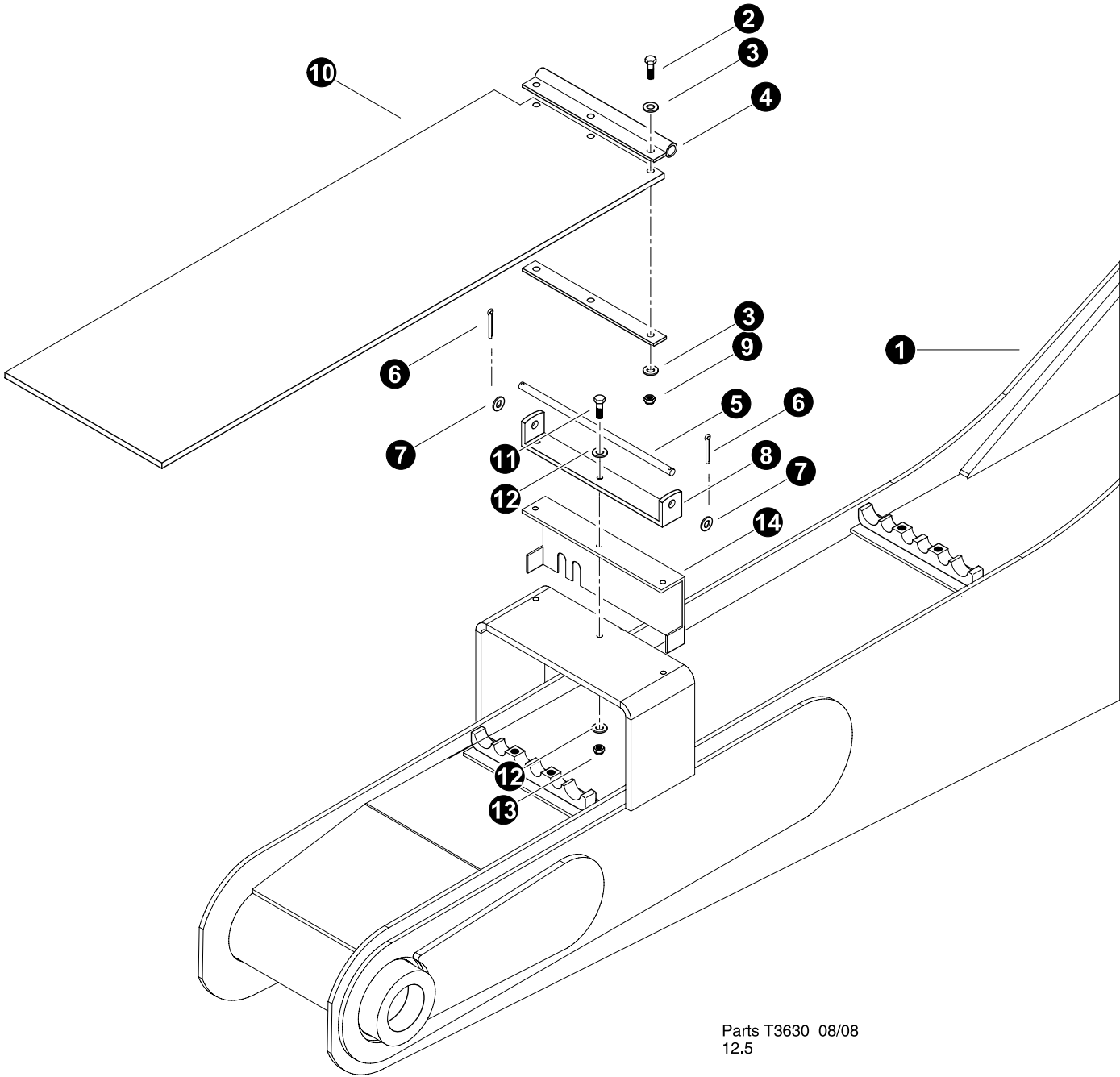
Parts T3199 07/19/05  
12.5

## MAIN BOOM AND CYLINDER GREASE LINES (Forwarder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM.....                                         | LB-1        |
| 2   | 22281-LB | 2   |                                                                                   | ELBOW, 90 - 5546132                                    |             |
| 3   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2143-02-02PS-04JS (part of kit # 51978) |             |
| 4   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2143-02-02PS-04JS (part of kit # 51978) |             |
| 5   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2069-02-02PS-04JS (part of kit # 51978) |             |
| 6   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2069-02-02PS-04JS (part of kit # 51978) |             |
| 7   | 15658-LB | 4   |                                                                                   | CONNECTOR, STR BULKHEAD - 2239-2-4S                    |             |
| 8   | 10704-LB | 4   |                                                                                   | FITTING, GREASE - .125 NPT - STR                       |             |
| 9   | REF.     | 1   |  | MAIN BOOM (HOIST) CYLINDER.....                        | LB-4        |
| 10  | 22281-LB | 2   |                                                                                   | ELBOW, 90 - 5546132                                    |             |



See referenced page for component or assembly breakdown.



Parts T3630 08/08  
12.5

**MAIN BOOM - DEBRIS SHIELD**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM.....                   | LB-1        |
| 2   | 10731-LB | 3   |                                                                                   | BOLT - .375" X 1.5"              |             |
| 3   | 15528-LB | 6   |                                                                                   | WASHER, SAE FLAT - .375"         |             |
| -   | 52820-LB | 1   |  | HINGE, DEBRIS GUARD              |             |
| 4   | 43315-LB | 1   |                                                                                   | SUBASSEMBLY, HINGE TUBE          |             |
| 5   | 43311-LB | 1   |                                                                                   | PIN, HINGE                       |             |
| 6   | -LB      | 2   |                                                                                   | PIN, cotter 3/16 X 1.5"          |             |
| 7   | 15550-LB | 2   |                                                                                   | WASHER, SAE FLAT - .75"          |             |
| 8   | 43312-LB | 1   |                                                                                   | PLATE, CHANNEL                   |             |
| 9   | 15507-LB | 3   |                                                                                   | NUT, NYLOCK - .375"              |             |
| 10  | 52838-LB | 1   |                                                                                   | BELTING, GULLWING TO BOOM HINGED |             |
| 11  | 20084-LB | 3   |                                                                                   | BOLT - .375" X 1.75"             |             |
| 12  | 15528-LB | 6   |                                                                                   | WASHER, SAE FLAT - .375"         |             |
| 13  | 15507-LB | 3   |                                                                                   | NUT, NYLOCK - .375"              |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

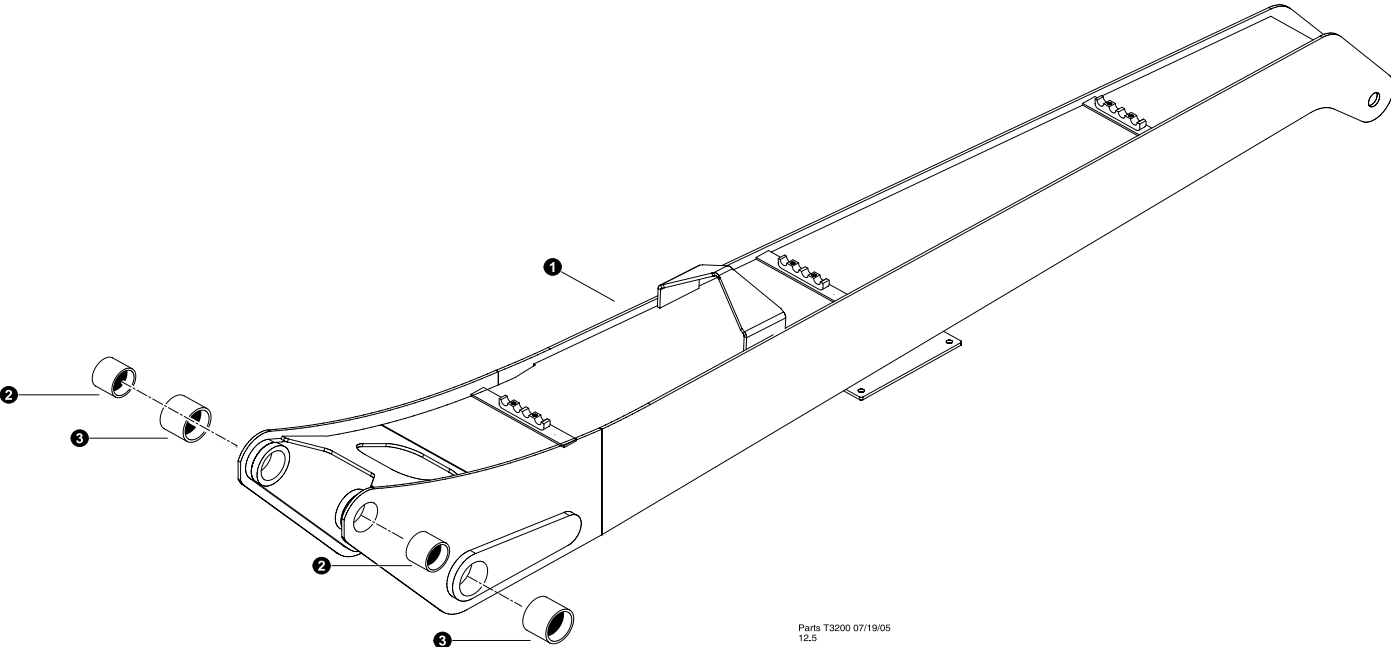
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## ***Section LB-2***

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### ***Loader Booms - Stick & Squirt (Tele) Booms***



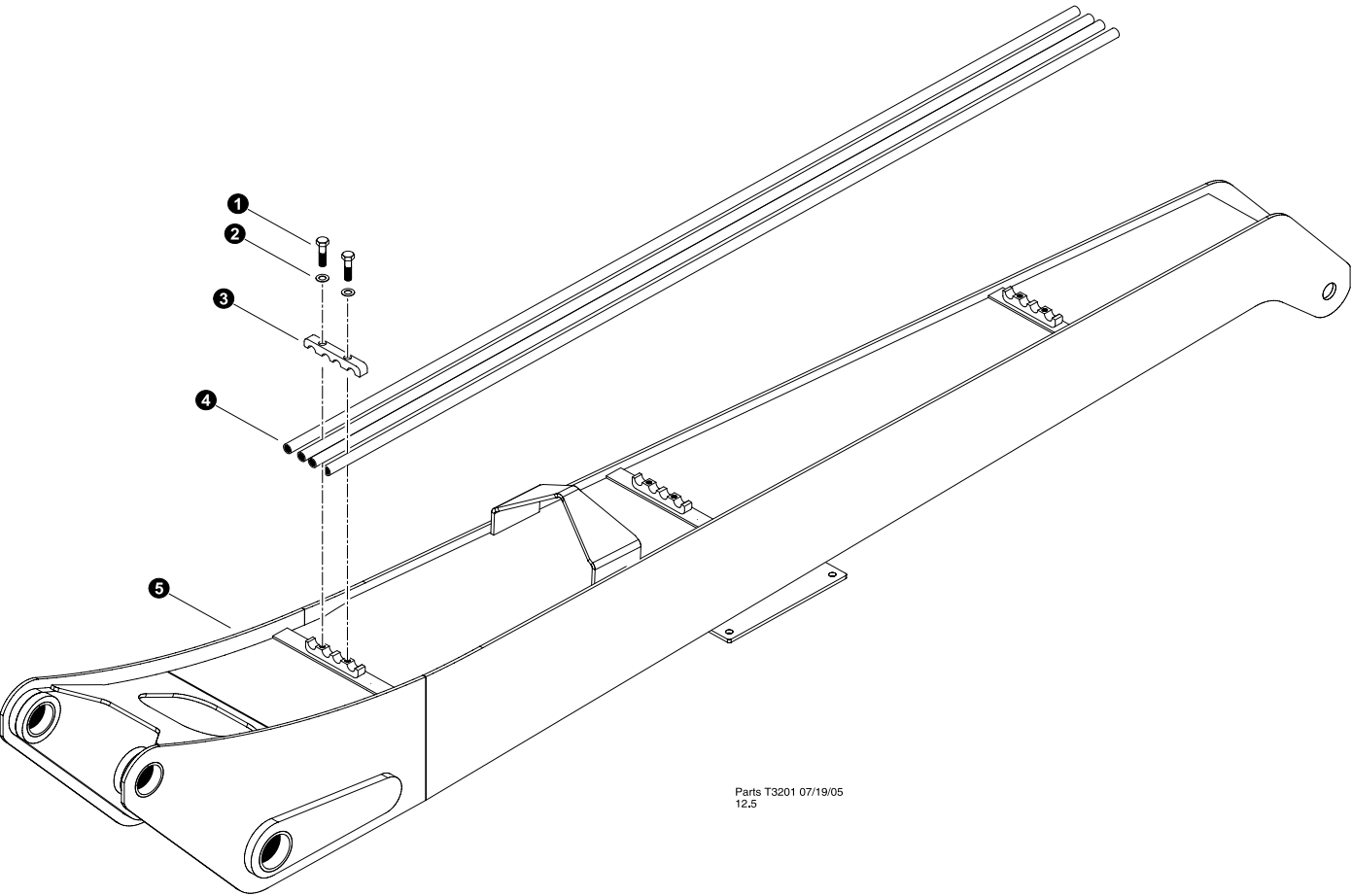
Parts T3200 07/19/05  
12.5

## STICK BOOM COMPONENTS

### (Used on Machine built 05/18/09 and Before)

| REF | PART #   | QTY |                          | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|--------------------------|---------------------------------------------------------------------|-------------|
| 1   | 51536-LB | 1   | <input type="checkbox"/> | WELDMENT, STICK BOOM TF830 1.75" - (0307-051809 <b>and Before</b> ) |             |
| 1   | 53908-LB | 1   | <input type="checkbox"/> | WELDMENT, STICK BOOM TF830 2" - (0308-060409 <b>and After</b> )     |             |
| 2   | 42515-LB | 2   |                          | BUSHING - 3" X 2.5" X 2.0" UNDERSIZE                                |             |
| 3   | 42484-LB | 2   |                          | BUSHING - 3.5" X 3.0" X 2.0" UNDERSIZE                              |             |

☐ Kit or Assembly - includes all items indented underneath.



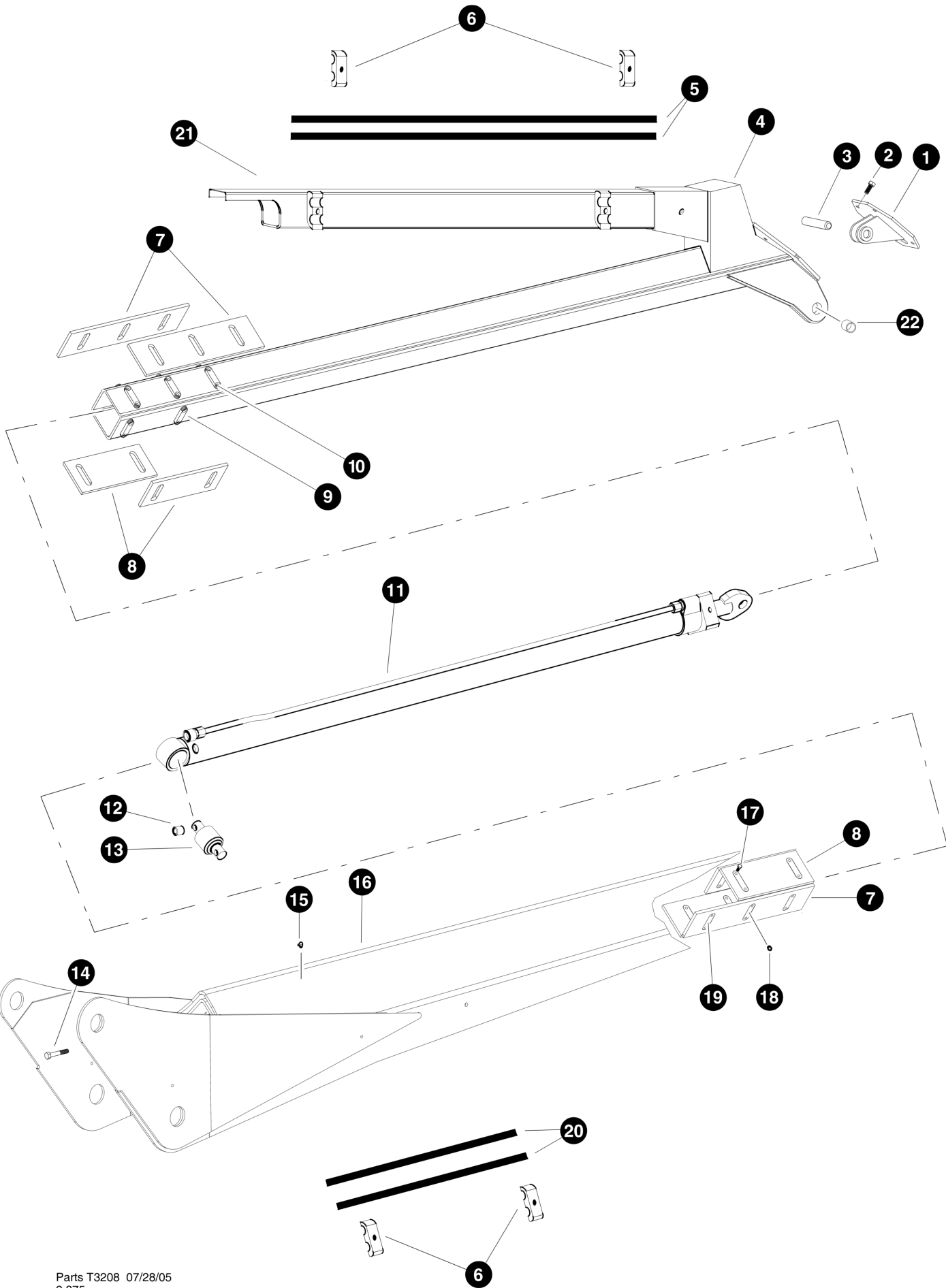
Parts T3201 07/19/05  
12.5

## STICK BOOM TUBELINE INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| 1   | 15526-LB | 6   |                                                                                   | BOLT - 5/8" x 2"                        |             |
| 2   | 10771-LB | 6   |                                                                                   | WASHER, SAE flat - 5/8"                 |             |
| 3   | 42571-LB | 3   |                                                                                   | CLAMP, TUBELINE 1/2"                    |             |
| 4   | 51815-LB |     |                                                                                   | TUBELINE - .5" X 108" (STICK BOOM -830) |             |
| 5   | REF      | 1   |  | STICK BOOM ASSEMBLY .....               | LB-2        |



See referenced page for component or assembly breakdown.

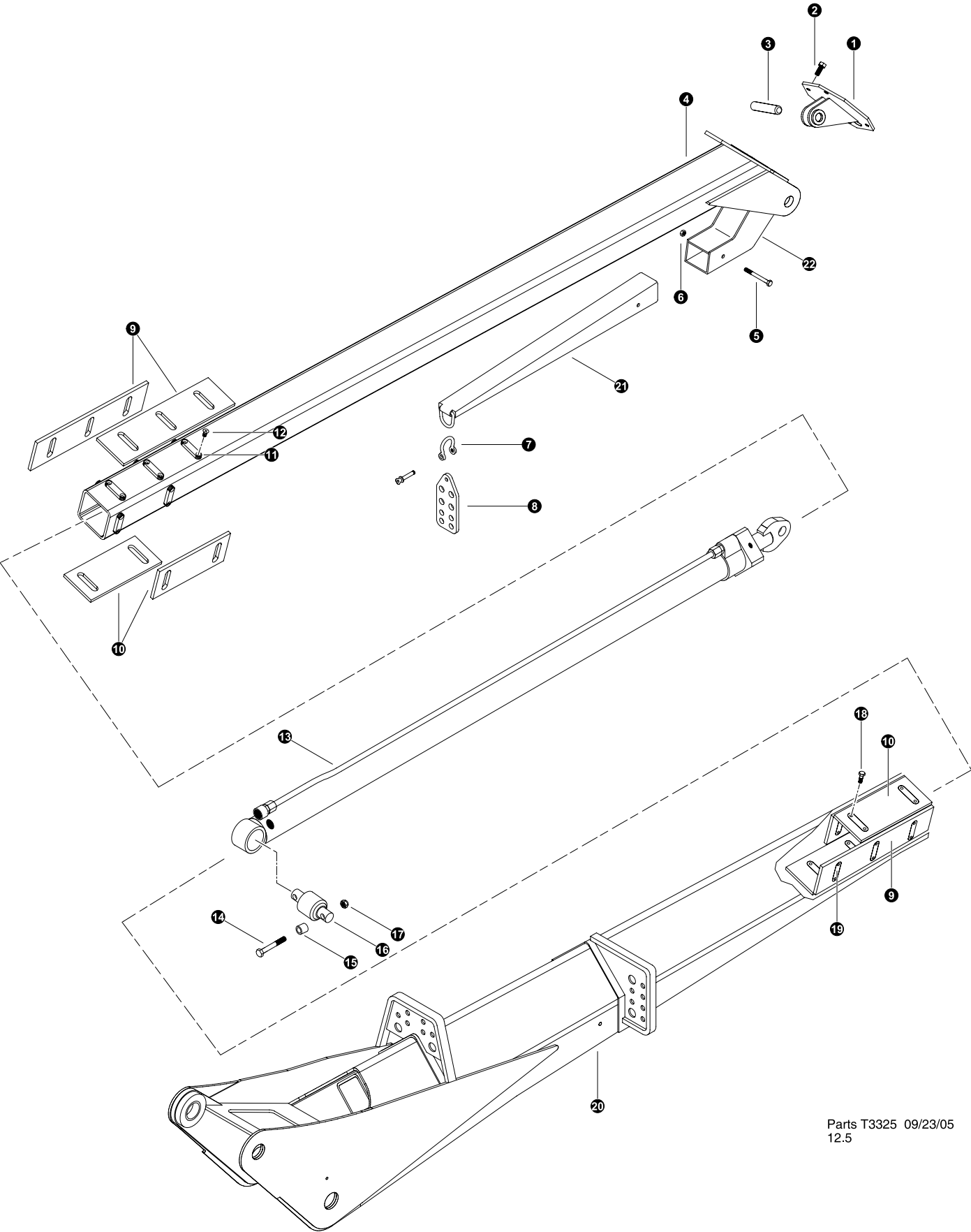


Parts T3208 07/28/05  
9.375

## SQUIRT BOOM COMPONENTS (Forwarder - Heavy Duty 8" Tube)

| REF | PART #      | QTY | DESCRIPTION                                                      | SEE SECTION |
|-----|-------------|-----|------------------------------------------------------------------|-------------|
|     | 52087STD-LB | 1   | <input type="checkbox"/> BOOM, SQUIRT - Standard Stinger         |             |
| 1   | ---         | 1   | CYLINDER ANCHOR (XB2017) before Boom SN 52087-132                |             |
| 1   | ---         | 1   | CYLINDER ANCHOR (XB2017R1) SN 52087-132 and After                |             |
| 2   | 15502-LB    | 4   | BOLT, 5/8 X 1.5                                                  |             |
| 3   | ---         | 1   | PIN (XB2015) before Boom SN 52087-132                            |             |
| 3   | ---         | 1   | PIN (XB2016) SN 52087-132 and After                              |             |
| 4   | -LB         | 1   | SLIDE, SQUIRT 6" Tube Forwarder (0307-051809 and <b>Before</b> ) |             |
| 4   | -LB         | 1   | SLIDE, SQUIRT 8" Tube Forwarder (0308-060409 <b>and After</b> )  |             |
| 5   | 19679-LB    | 4   | TUBELINE, 1/2" X 48"                                             |             |
| 6   | 15272-LB    | 8   | CLAMP, saddle 1/2 x 1/2                                          |             |
| 7   | ---         | 4   | WEAR PAD, long (XB3016)                                          |             |
| -   | ---         | 4   | SHIM, long wear pad (XB3016S)                                    |             |
| 8   | ---         | 4   | WEAR PAD, short (XB3015)                                         |             |
| -   | ---         | 4   | SHIM, long wear pad (XB3015S)                                    |             |
| 9   | ---         | 10  | PUCKS, retaining - countersunk (XB3021)                          |             |
| 10  | ---         | 20  | SCREWS, 3/8 X 3/4 brass (XB5001)                                 |             |
| 11  | REF         | 1   | CYLINDER, squirt boom 6' ..... LB-3                              |             |
| 12  | ---         | 2   | SPACER, squirt cylinder mount (XB4081)                           |             |
| 13  | ---         | 1   | BUSHING, squirt cyl rear (HEN 44695)                             |             |
| 14  | 10719-LB    | 2   | BOLT, 5/8 X 4"                                                   |             |
| 15  | 15682-LB    | 2   | FITTING, grease .125 - 90                                        |             |
| 16  | 52198-LB    | 1   | SHELL, SQUIRT HD 8" 4-bar STD                                    |             |
| 17  | ---         | 20  | BOLT, 3/8 X 7/8 bronze (XB5007)                                  |             |
| 18  |             |     |                                                                  |             |
| 19  | ---         | 8   | PUCKS, retaining - (XB3020)                                      |             |
| -   | ---         | 2   | PUCKS, retaining - tapped for grease zerk(XB3020 Z)              |             |
| 20  | 19495-LB    | 4   | TUBELINE, 1/2" X 24"                                             |             |
| 21  | 52194-LB    | 1   | WELDMENT, STINGER 6' forwarder                                   |             |
| 22  | 19117-LB    | 2   | BUSHING - 1.75" X 1.5" (Nose)                                    |             |

☐ Kit or Assembly - includes all items indented underneath.



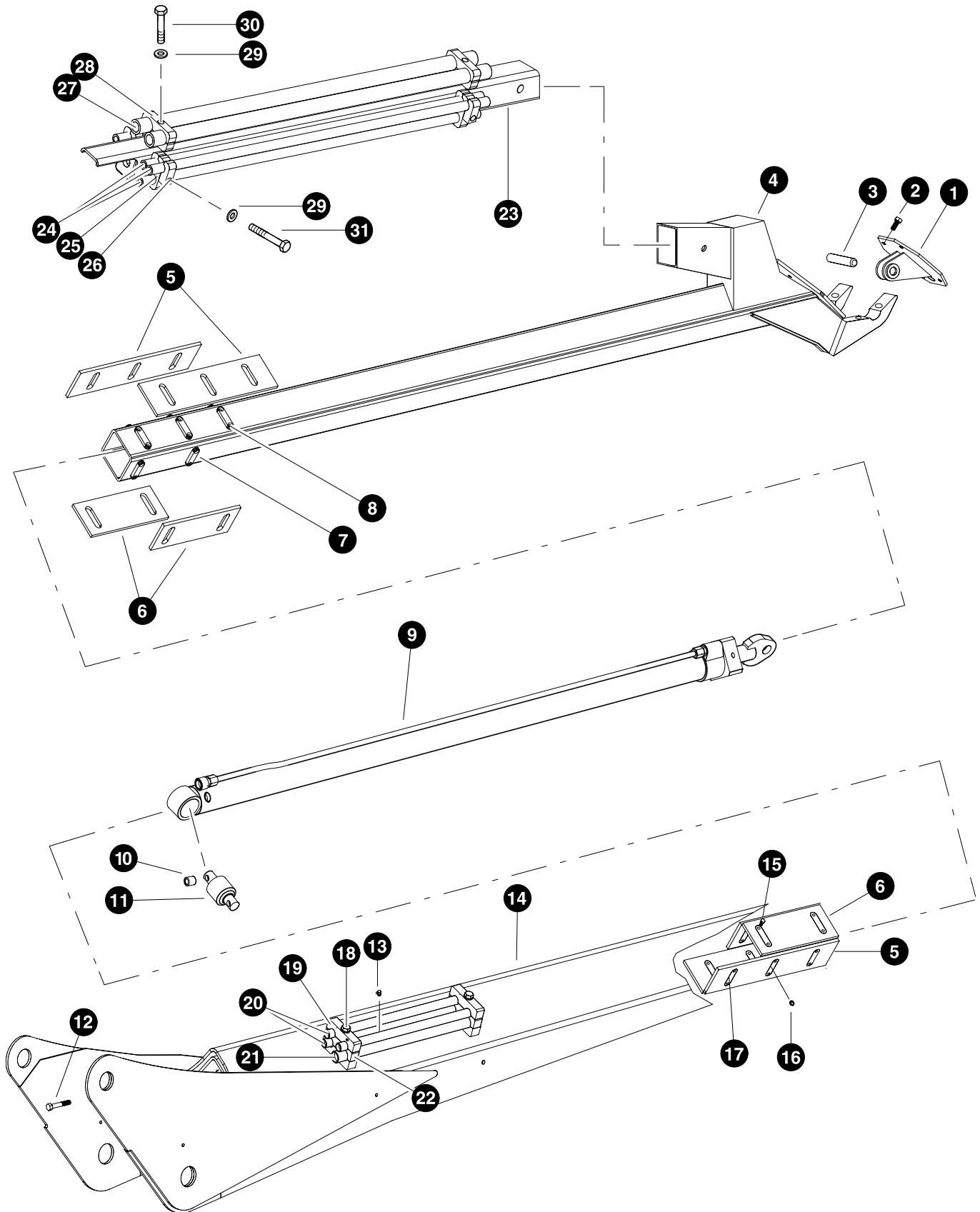
Parts T3325 09/23/05  
12.5



## SQUIRT BOOM COMPONENTS (Harvester - Heavy Duty 8" Tube)

| REF | PART #      | QTY |                          | DESCRIPTION                                         | SEE SECTION |
|-----|-------------|-----|--------------------------|-----------------------------------------------------|-------------|
|     | 52087HAR-LB | 1   | <input type="checkbox"/> | BOOM, SQUIRT - Harvester Stinger                    |             |
| 1   | ---         | 1   |                          | CYLINDER ANCHOR (XB2017) before Boom SN 52087-132   |             |
| 1   | ---         | 1   |                          | CYLINDER ANCHOR (XB2017R1) SN 52087-132 and After   |             |
| 2   | 15502-LB    | 4   |                          | BOLT, 5/8 X 1.5                                     |             |
| 3   | ---         | 1   |                          | PIN (XB2015) before Boom SN 52087-132               |             |
| 3   | ---         | 1   |                          | PIN (XB2016) SN 52087-132 and After                 |             |
| 4   | -LB         | 1   |                          | SLIDE, SQUIRT HD 8" 4-Bar Harvester Stinger         |             |
| 5   | 10815-LB    | 1   |                          | NUT, lock 1/2"                                      |             |
| 6   | 10836-LB    | 1   |                          | BOLT - 1/2" x 5-1/2"                                |             |
| 7   | 21065-LB    | 1   |                          | PLATE, bulkhead stinger                             |             |
| 8   | 21064-LB    | 1   |                          | SHACKLE, screw pin anchor 1/2"                      |             |
| 9   | ---         | 4   |                          | WEAR PAD, long (XB3016)                             |             |
| -   | ---         | 4   |                          | SHIM, long wear pad (XB3016S)                       |             |
| 10  | ---         | 4   |                          | WEAR PAD, short (XB3015)                            |             |
| -   | ---         | 4   |                          | SHIM, long wear pad (XB3015S)                       |             |
| 11  | ---         | 20  |                          | SCREWS, 3/8 X 3/4 brass (XB5001)                    |             |
| 12  | ---         | 10  |                          | PUCKS, retaining - countersunk (XB3021)             |             |
| 13  | REF         | 1   |                          | CYLINDER, squirt boom 6' . . . . .                  | LB-3        |
| 14  | 10719-LB    | 2   |                          | BOLT, 5/8 X 4"                                      |             |
| 15  | ---         | 2   |                          | SPACER, squirt cylinder mount (XB4081)              |             |
| 16  | ---         | 1   |                          | BUSHING, squirt cyl rear (HEN 44695)                |             |
| 17  | 10816-LB    | 2   |                          | NUT, LOCK - .625"                                   |             |
| 18  | ---         | 20  |                          | BOLT, 3/8 X 7/8 bronze (XB5007)                     |             |
| 19  | ---         | 8   |                          | PUCKS, retaining - (XB3020)                         |             |
| -   | ---         | 2   |                          | PUCKS, retaining - tapped for grease zerk(XB3020 Z) |             |
| 20  | 52198-LB    | 1   |                          | SHELL, SQUIRT HD 8" 4-bar STD                       |             |
| 21  | 21063-LB    | 1   |                          | WELDMENT, squirt boom stinger (XB2008)              |             |
| 22  | ---         | 1   |                          | BRACKET, stinger mount - weld on (XB2009)           |             |

☐ Kit or Assembly - includes all items indented underneath.

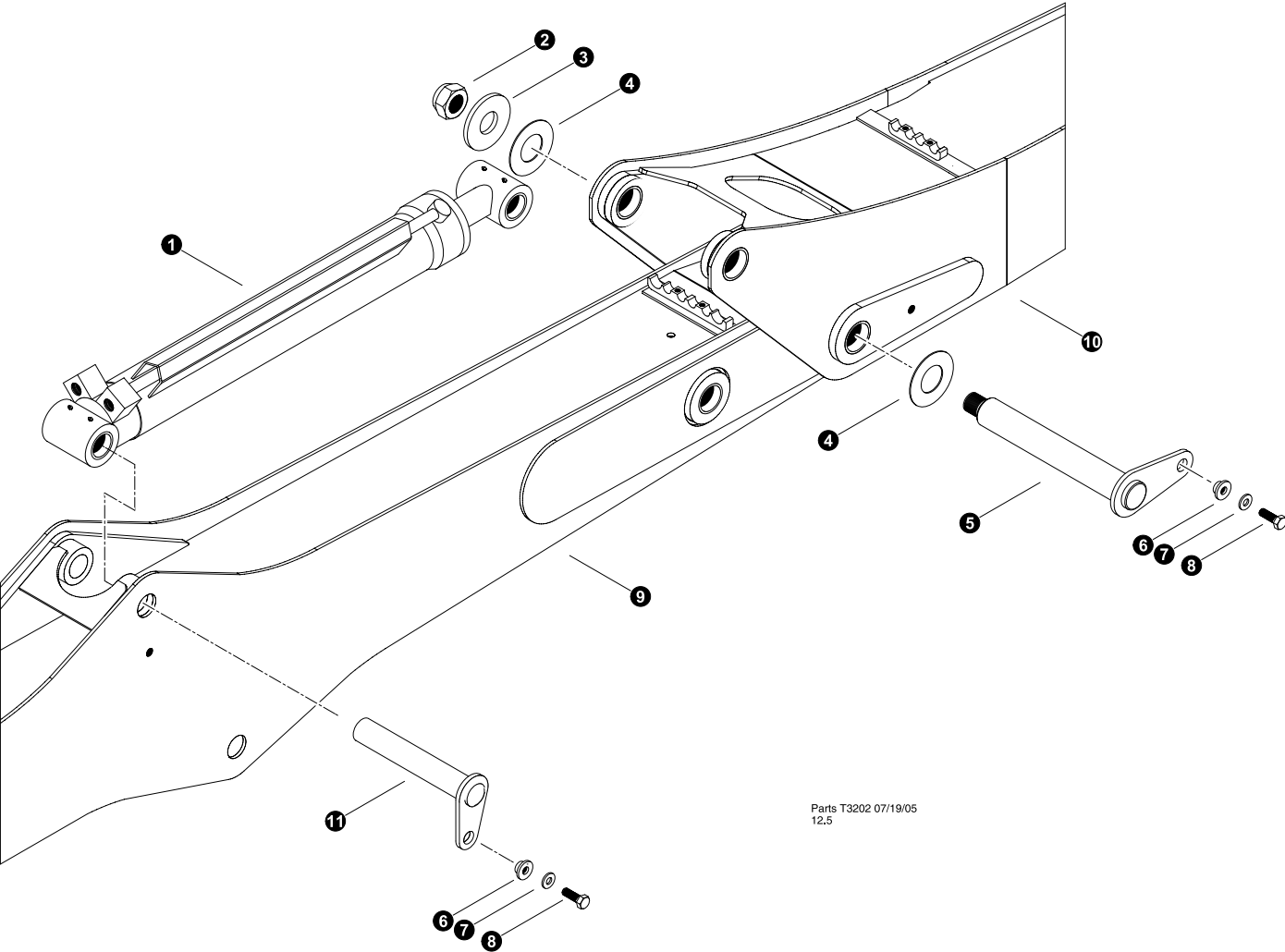


Parts T3331 10/01/05  
9,375

## SQUIRT BOOM COMPONENTS (Combo Harvester - Heavy Duty 8" Tube)

| REF | PART #      | QTY |                                                                                   | DESCRIPTION                                                | SEE SECTION |
|-----|-------------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------|-------------|
|     | 52087COM-LB | 1   | <input type="checkbox"/>                                                          | BOOM, SQUIRT - Combo Stinger                               |             |
| 1   | ---         | 1   |                                                                                   | CYLINDER ANCHOR (XB2017) before Boom SN 52087-132          |             |
| 1   | ---         | 1   |                                                                                   | CYLINDER ANCHOR (XB2017R1) SN 52087-132 and After          |             |
| 2   | 15502-LB    | 4   |                                                                                   | BOLT, 5/8 X 1.5                                            |             |
| 3   | ---         | 1   |                                                                                   | PIN (XB2015) before Boom SN 52087-132                      |             |
| 3   | ---         | 1   |                                                                                   | PIN (XB2016) SN 52087-132 and After                        |             |
| 4   | 52189-LB    | 1   |                                                                                   | SLIDE, SQUIRT 4-Bar COMBO (0307-051809 and <b>Before</b> ) |             |
| 4   | 53912-LB    | 1   |                                                                                   | SLIDE, SQUIRT 4-Bar COMBO (0308-060409 <b>and After</b> )  |             |
| 5   | ---         | 4   |                                                                                   | WEAR PAD, long (XB3016)                                    |             |
| -   | ---         | 4   |                                                                                   | SHIM, long wear pad (XB3016S)                              |             |
| 6   | ---         | 4   |                                                                                   | WEAR PAD, short (XB3015)                                   |             |
| -   | ---         | 4   |                                                                                   | SHIM, long wear pad (XB3015S)                              |             |
| 7   | ---         | 10  |                                                                                   | PUCKS, retaining - countersunk (XB3021)                    |             |
| 8   | ---         | 20  |                                                                                   | SCREWS, 3/8 X 3/4 brass (XB5001)                           |             |
| 9   | REF.        | 1   |  | CYLINDER, squirt boom 6' . . . . .                         | LB-3        |
| 10  | ---         | 2   |                                                                                   | SPACER, squirt cylinder mount (XB4081)                     |             |
| 11  | ---         | 1   |                                                                                   | BUSHING, squirt cyl rear (HEN 44695)                       |             |
| 12  | 10719-LB    | 2   |                                                                                   | BOLT, 5/8 X 4"                                             |             |
| 13  | 15682-LB    | 2   |                                                                                   | FITTING, grease .125 - 90                                  |             |
| 14  | 52190-LB    | 1   |                                                                                   | SHELL, SQUIRT HD 8" 4-bar COMBO                            |             |
| 15  | ---         | 20  |                                                                                   | BOLT, 3/8 X 7/8 bronze (XB5007)                            |             |
| 16  | 10704-LB    | 2   |                                                                                   | FITTING, grease .125 - str.                                |             |
| 17  | ---         | 8   |                                                                                   | PUCKS, retaining - (XB3020)                                |             |
| -   | ---         | 2   |                                                                                   | PUCKS, retaining - tapped for grease zerk(XB3020 Z)        |             |
| 18  | 15526-LB    | 4   |                                                                                   | BOLT - .625" X 2"                                          |             |
| 19  | 15272-LB    | 4   |                                                                                   | CLAMP, SADDLE TOP TUBE - .5" & .5"                         |             |
| 20  | 19495-LB    | 5   |                                                                                   | TUBELINE - .5" X 24"                                       |             |
| 21  | 19497-LB    | 2   |                                                                                   | TUBELINE - 1" X 24"                                        |             |
| 22  | 40953-LB    | 4   |                                                                                   | CLAMP, SADDLE - DRILLED - .5" X 1"                         |             |
| 23  | 52193-LB    | 1   |                                                                                   | STINGER TUBE, ATTACHMENT ASSEMBLY (quick change)           |             |
| 24  | 19679-LB    | 5   |                                                                                   | TUBELINE - .5" X 48"                                       |             |
| 25  | 15272-LB    | 4   |                                                                                   | CLAMP, SADDLE TOP TUBE - .5" & .5"                         |             |
| 26  | 42237-LB    | 2   |                                                                                   | CLAMP, SADDLE TOP TUBE - .5"                               |             |
| 27  | 19681-LB    | 2   |                                                                                   | TUBELINE - 1" X 48"                                        |             |
| 28  | 12447-LB    | 2   |                                                                                   | CLAMP, SADDLE TOP TUBE - 1" & 1"                           |             |
| 29  | 10771-LB    | 6   |                                                                                   | WASHER, SAE FLAT - .625"                                   |             |
| 30  | 15681-LB    | 4   |                                                                                   | BOLT - .625" X 2.25"                                       |             |
| 31  | 10720-LB    | 2   |                                                                                   | BOLT - .625" X 3"                                          |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T3202 07/19/05  
12.5

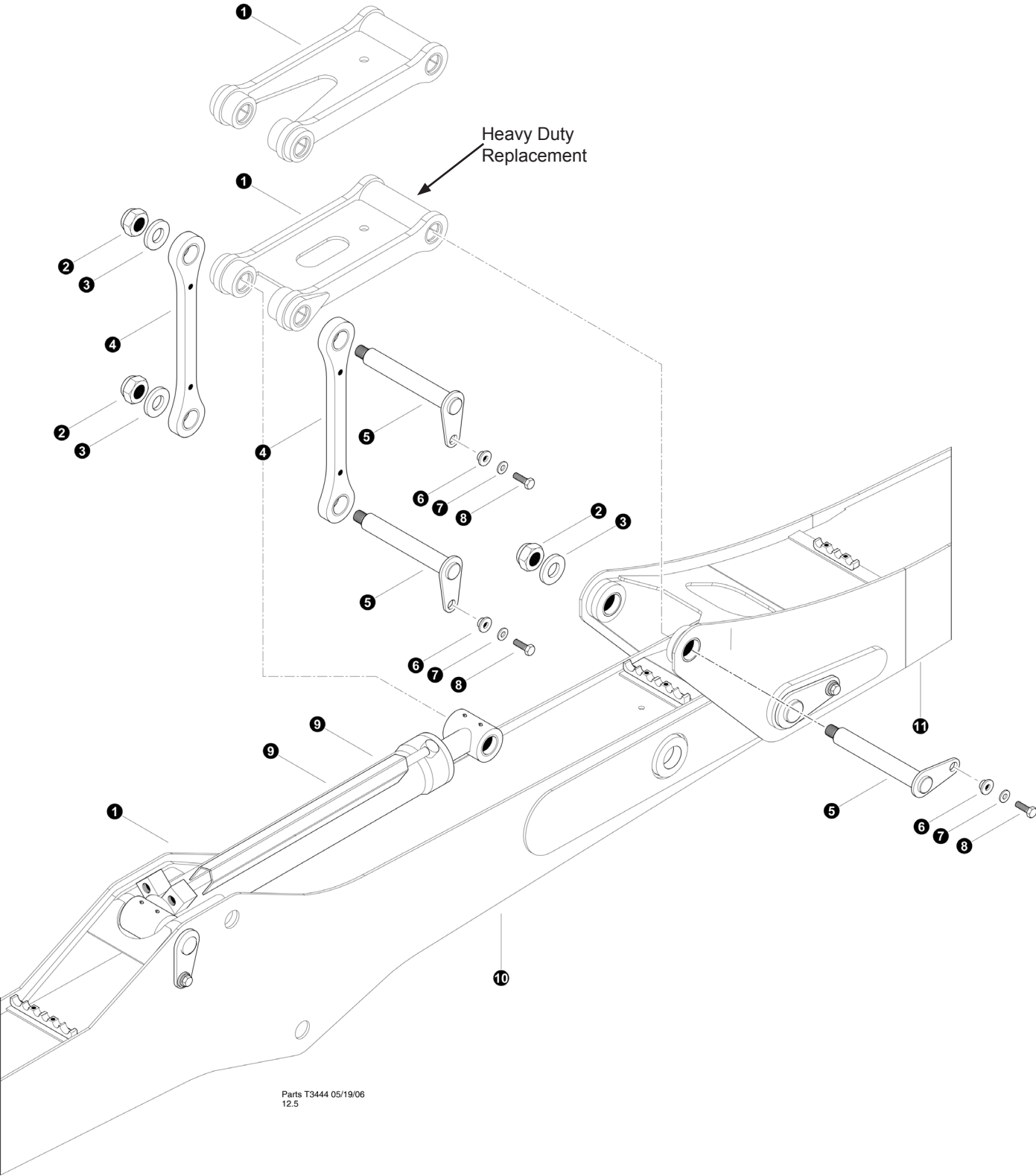
## STICK BOOM INSTALLATION

(Installation the same for squirt boom)

| REF | PART #   | QTY | DESCRIPTION                                                                                                | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF      | 1   | STICK BOOM CYLINDER.....                                                                                   | LB-3        |
| 2   | 10728-LB | 1   | NUT, nylock - 2"                                                                                           |             |
| 3   | 19384-LB | 1   | WASHER, burned                                                                                             |             |
| 4   | 19150-LB | AR  | SHIM - 1/4" thick                                                                                          |             |
|     | 16633-LB | AR  | SHIM - 7 gauge                                                                                             |             |
|     | 16637-LB | AR  | SHIM - 10 gauge                                                                                            |             |
|     | 16638-LB | AR  | SHIM - 14 gauge                                                                                            |             |
| 5   | 51440-LB | 1   | PIN ASSEMBLY, 2.99 DIA X 21.5 (2" NUT)                                                                     |             |
| 6   | 18570-LB | 1   | WASHER, pin retaining                                                                                      |             |
| 7   | 15550-LB | 1   | WASHER, SAE flat - 3/4"                                                                                    |             |
| 8   | 15549-LB | 1   | BOLT - 3/4" x 2"                                                                                           |             |
| 9   | REF.     | 1   |  MAIN BOOM ASSEMBLY ..... | LB-1        |
| 10  | REF.     | 1   |  STICK BOOM ASSEMBLY..... | LB-2        |
| 11  | 51643-LB | 1   | PIN ASSEMBLY, 2.49 DIA X 13.13"                                                                            |             |



See referenced page for component or assembly breakdown.



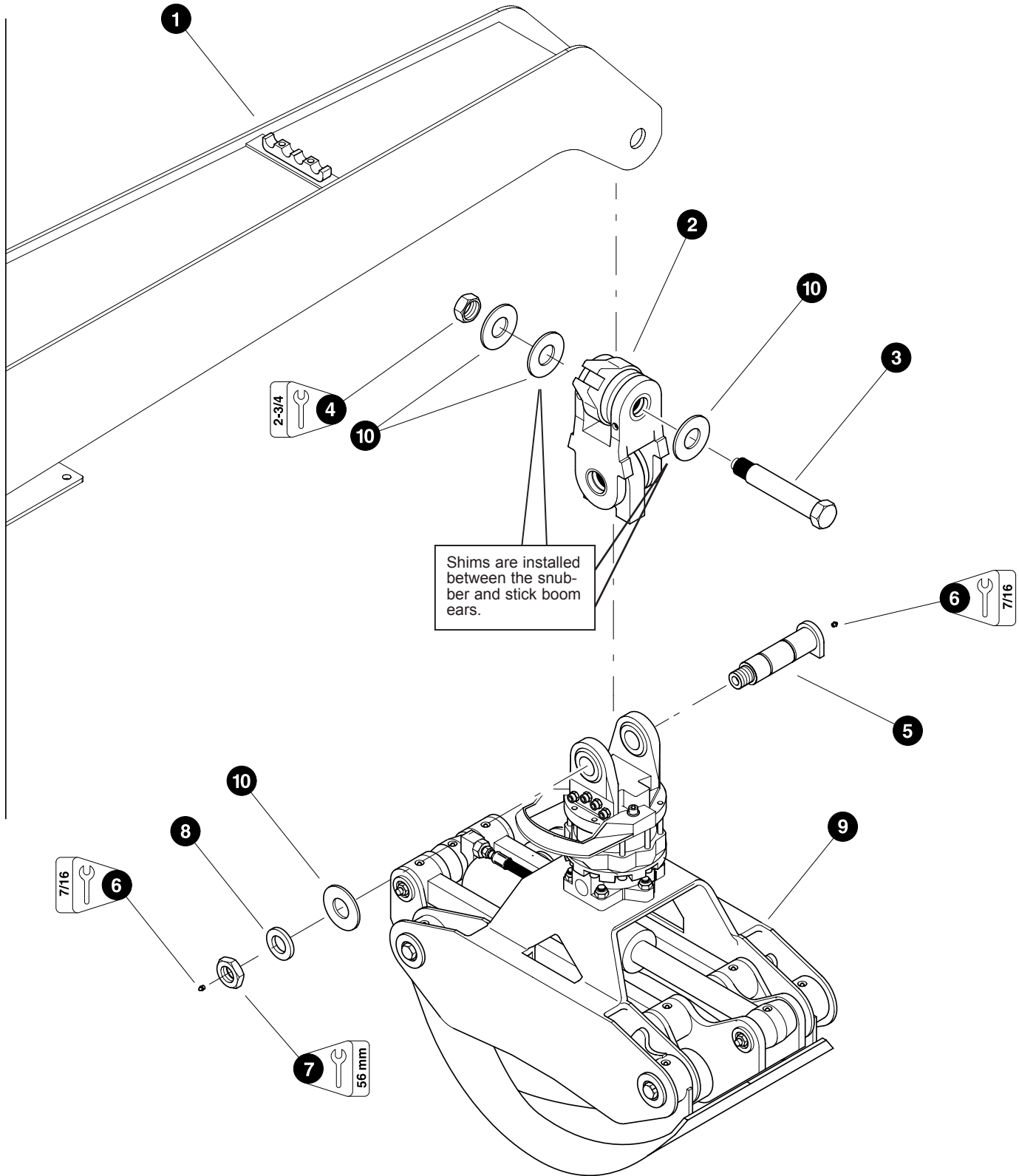
## STICK BOOM 4 - BAR LINK INSTALLATION

(Installation the same for squirt boom)

| REF | PART #   | QTY | DESCRIPTION                                                                                                      | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 52150-LB | 1   | LINK, CYLINDER 28.5"                                                                                             |             |
| -   | 42245-LB | 1   | LINK, CYLINDER HEAVY DUTY                                                                                        |             |
| 2   | 10728-LB | 1   | NUT, nylock - 2"                                                                                                 |             |
| 3   | 12021-LB | 3   | WASHER, BURNED                                                                                                   |             |
| 4   | 52151-LB | 2   | LINK, DOGBONE 27"                                                                                                |             |
| 5   | 52721-LB | 3   | PIN ASSEMBLY, 2.49 DIA X 19.13 (2" NUT)                                                                          |             |
| 6   | 18570-LB | 3   | WASHER, pin retaining                                                                                            |             |
| 7   | 15550-LB | 3   | WASHER, SAE flat - 3/4"                                                                                          |             |
| 8   | 15549-LB | 3   | BOLT - 3/4" x 2"                                                                                                 |             |
| 9   | REF      | 1   | STICK BOOM CYLINDER 45" Stroke . . . . .                                                                         | LB-3        |
| 10  | REF.     | 1   |  MAIN BOOM ASSEMBLY . . . . .   | LB-1        |
| 11  | REF.     | 1   |  SQUIRT BOOM ASSEMBLY . . . . . | LB-2        |



See referenced page for component or assembly breakdown.



Parts T3205 07/14/05  
12.50



## HULTDINS SUPERGRIP 360S GRAPPLE INSTALLATION

(With Optional QUADCO Snubber)

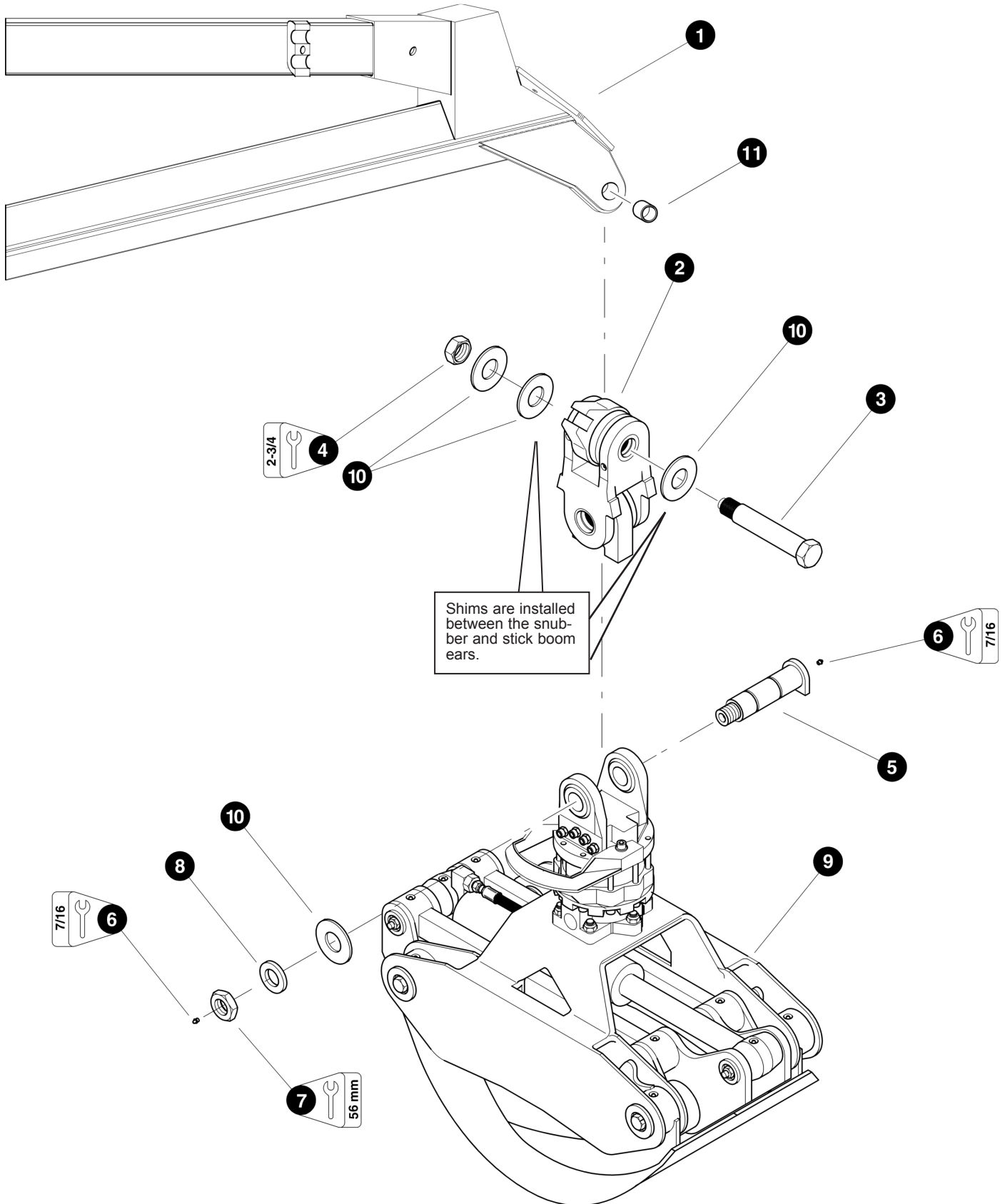
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....                                | LB-2        |
| 2   | REF.     | 1   |  | SNUBBER, Quadco .....                                   | LB-2        |
| 3   | 23528-LB | 1   |                                                                                   | PIN - 1-3/4" x 10-3/4" (0307-051809 and <b>Before</b> ) |             |
| 3   | 53720-LB | 1   |                                                                                   | PIN - 2" x 10-3/4" (0308-060409 and <b>After</b> )      |             |
| 4   | 20811-LB | 1   |                                                                                   | NUT, nylock - 1-1/2"                                    |             |
| 5   | 19789-LB | 1   |  | PIN, grapple mount                                      |             |
| 6   | 10704-LB | 2   |                                                                                   | FITTING, grease - 1/8" pipe thread                      |             |
| 7   | 50281-LB | 1   |                                                                                   | NUT, grapple mount pin                                  |             |
| 8   | 50282-LB | 1   |                                                                                   | WASHER, grapple mount pin                               |             |
| 9   | REF.     | 1   |  | GRAPPLE - Hultdins 360S (See Manufacturer's Manual)     |             |
| 10  | 19682-LB | 4   |                                                                                   | SHIM, 1.75 X .075                                       |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T2750 07/14/03  
12.50

## HULTDINS SUPERGRIP 360S GRAPPLE INSTALLATION

### (Optional Squirt Boom Instalation)

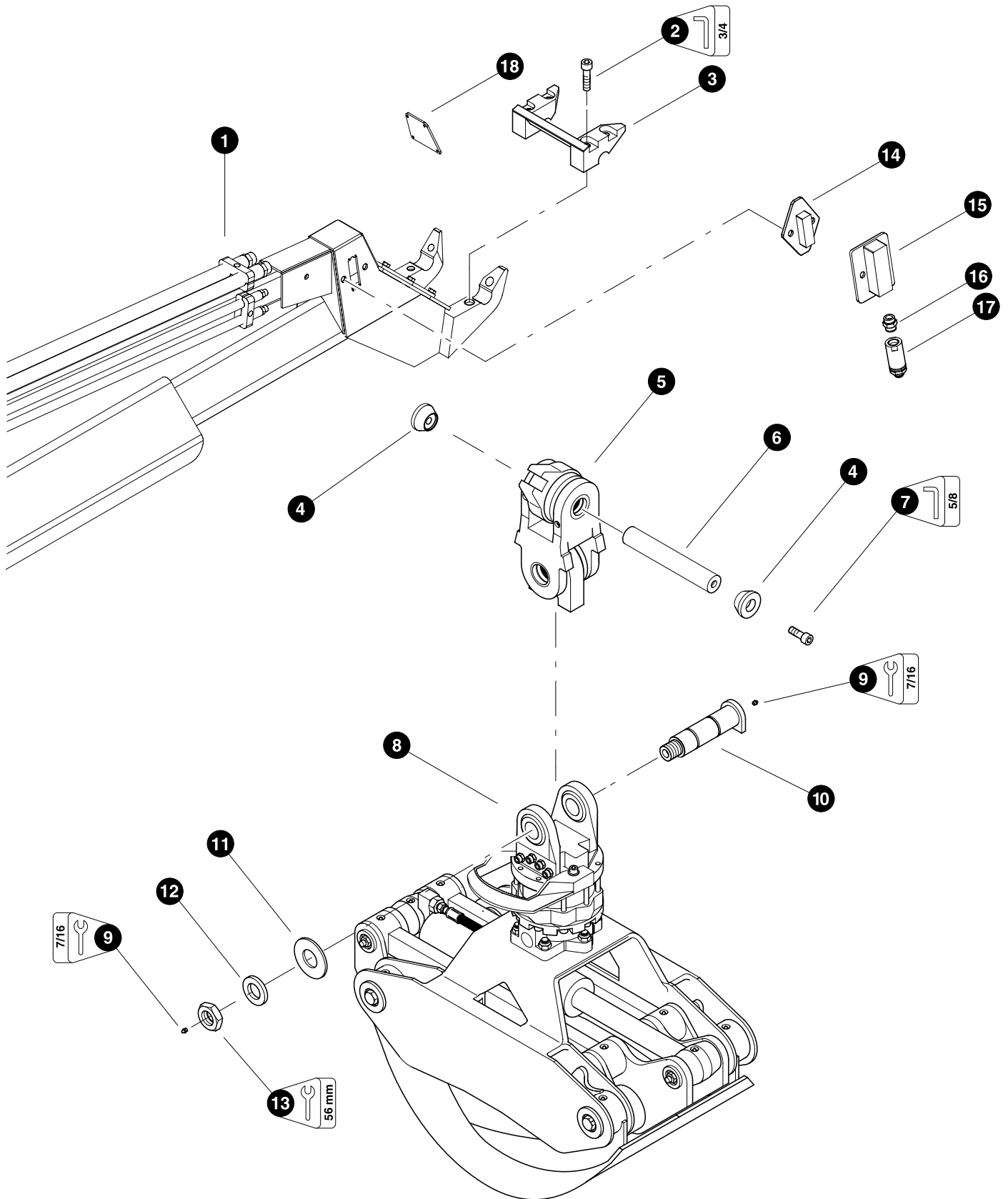
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                  | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....                                     | LB-2        |
| 2   | REF.     | 1   |  | SNUBBER, Quadco .....                                        | LB-2        |
| 3   | 23528-LB | 1   |                                                                                   | PIN - 1-3/4" x 10-3/4" (0307-051809 <b>and Before</b> )      |             |
| 3   | 53720-LB | 1   |                                                                                   | PIN - 2" x 10-3/4" (0308-060409 <b>and After</b> )           |             |
| 4   | 20811-LB | 1   |                                                                                   | NUT, nylock - 1-1/2"                                         |             |
| 5   | 19789-LB | 1   |  | PIN, grapple mount                                           |             |
| 6   | 10704-LB | 2   |                                                                                   | FITTING, grease - 1/8" pipe thread                           |             |
| 7   | 50281-LB | 1   |                                                                                   | NUT, grapple mount pin                                       |             |
| 8   | 50282-LB | 1   |                                                                                   | WASHER, grapple mount pin                                    |             |
| 9   | REF.     | 1   |  | GRAPPLE - Hultdins 360S ( <i>See Manufacturer's Manual</i> ) |             |
| 10  | 19682-LB | 4   |                                                                                   | SHIM, 1.75 X .075                                            |             |
| 11  | 19117-LB | 2   |                                                                                   | BUSHING - 1.75" X 1.5"                                       |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T2917 10/01/03  
12.50

**HULTDINS SUPERGRIP 360S GRAPPLE INSTALLATION****(Optional - Combo Squirt Boom Instalation)**

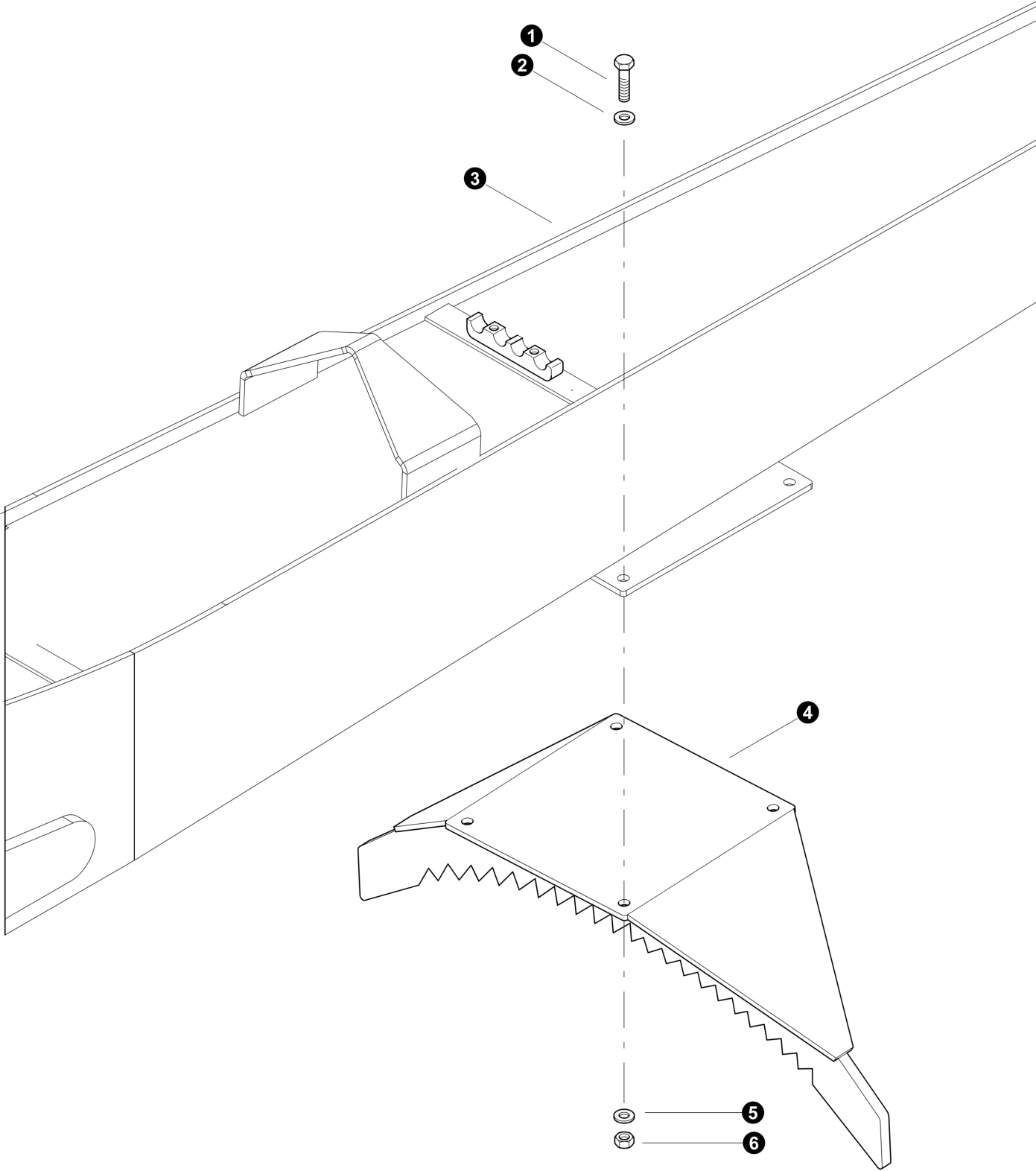
| REF      | PART #   | QTY |                                                                                   | DESCRIPTION                                                | SEE SECTION |
|----------|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------|-------------|
| 1        | REF.     | 1   |  | SQUIRT BOOM ASSEMBLY . . . . .                             | LB-2        |
| 2        | 51218-LB | 4   |                                                                                   | BOLT, ALLEN HEAD - .875" X 3.5"                            |             |
| 3        | 51219-LB | 1   |                                                                                   | CLAMP, QUICK CHANGE (TOP) (0307-051809 <b>and Before</b> ) |             |
| <b>3</b> | 53913-LB | 1   |                                                                                   | CLAMP, QUICK CHANGE (TOP) (0308-060409 <b>and After</b> )  |             |
| 4        | 40674-LB | 2   |                                                                                   | TAPPER, Quick Change Pin (0307-051809 <b>and Before</b> )  |             |
| 4        | 53722-LB | 2   |                                                                                   | TAPPER, Quick Change Pin (0308-060409 <b>and After</b> )   |             |
| 5        | REF.     | 1   |  | SNUBBER, Quadco . . . . .                                  | LB-2        |
| 6        | 40673-LB | 2   |                                                                                   | PIN, 1.75" (quick change) (0307-051809 <b>and Before</b> ) |             |
| 6        | 53721-LB | 2   |                                                                                   | PIN, 2" (quick change) (0308-060409 <b>and After</b> )     |             |
| 7        | 51217-LB | 4   |                                                                                   | BOLT, ALLEN HEAD - .875" X 2"                              |             |
| 8        | REF.     | 1   |  | GRAPPLE - Hultdins 360S . . . . .                          | LB-4        |
| 9        | 10704-LB | 2   |                                                                                   | FITTING, grease - 1/8" pipe thread                         |             |
| 10       | 19789-LB | 1   |                                                                                   | PIN, grapple mount                                         |             |
| 11       | 19682-LB | 4   |                                                                                   | SHIM, 1.75 X .075                                          |             |
| 12       | 50282-LB | 1   |                                                                                   | WASHER, grapple mount pin                                  |             |
| 13       | 50281-LB | 1   |                                                                                   | NUT, grapple mount pin                                     |             |
| 14       | 40704-LB | 1   |                                                                                   | COVER, FRONT PLATE (quick change)                          |             |
| 15       | 40681-LB | 1   |                                                                                   | COVER, QUICK CHANGE ELEC CONNECTOR                         |             |
| 16       | 19473-LB | 1   |                                                                                   | CONNECTOR, STR - 6403-16                                   |             |
| 17       | 19541-LB | 1   |                                                                                   | SWIVEL, INLINE                                             |             |
| 18       | 40703-LB | 1   |                                                                                   | COVER, ELECTRICAL (quick change)                           |             |



See referenced page for component or assembly breakdown.



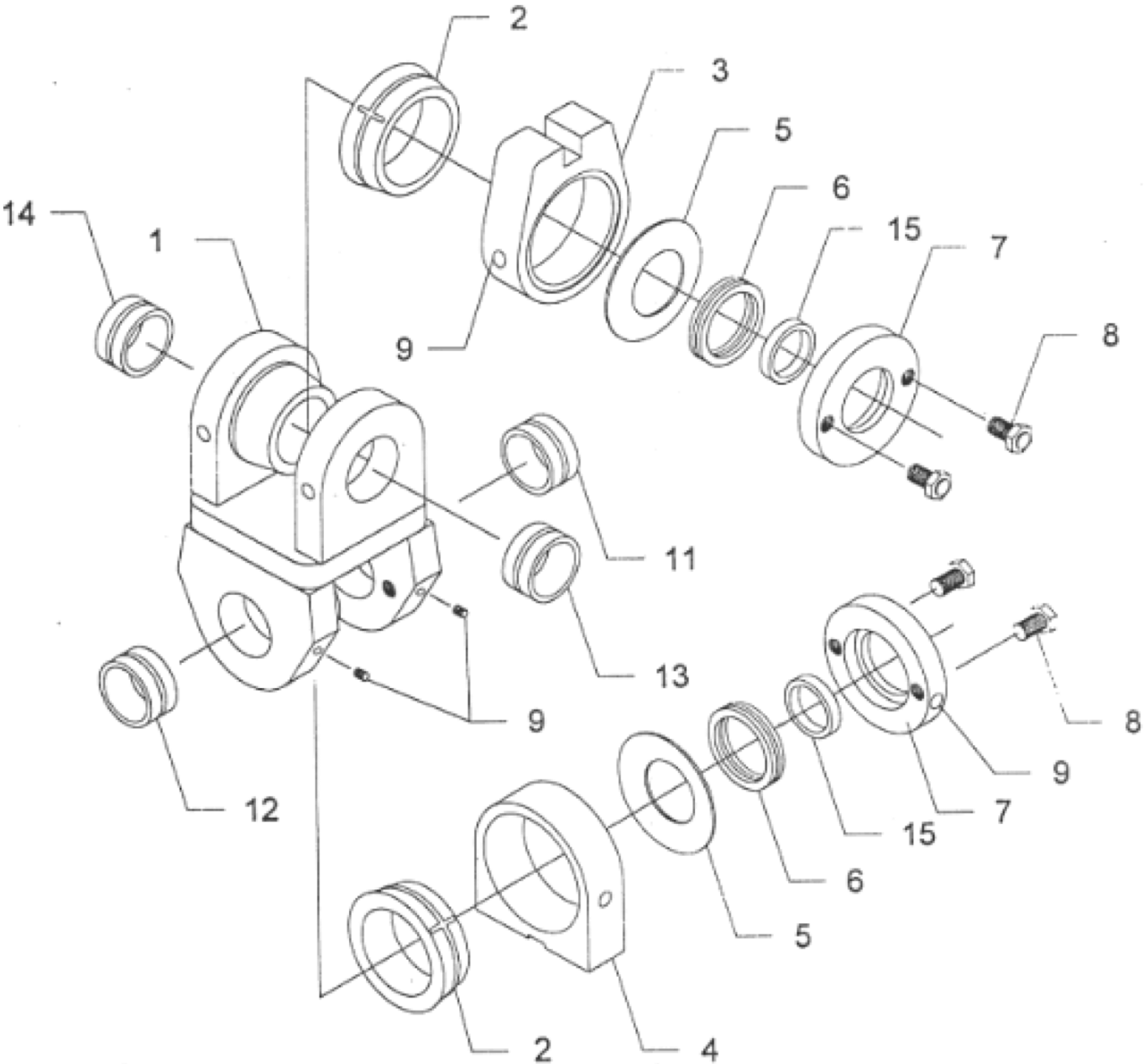
Kit or Assembly - includes all items indented underneath.



OPTIONAL STICK BOOM MOUNTED HEEL

| REF | PART #   | QTY |                                                                                   | DESCRIPTION               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------|-------------|
| 1   | 10736-LB | 4   |                                                                                   | BOLT - 1/2" x 2"          |             |
| 2   | 15534-LB | 8   |                                                                                   | WASHER, SAE flat - 1/2"   |             |
| 3   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....  | LB-2        |
| 4   | 51565-LB | 1   |                                                                                   | WELDMENT, stick boom heel |             |
| 5   | 10815-LB | 4   |                                                                                   | NUT, lock - 1/2"          |             |

 See referenced page for component or assembly breakdown.





## QUADCO SNUBBER BREAKDOWN

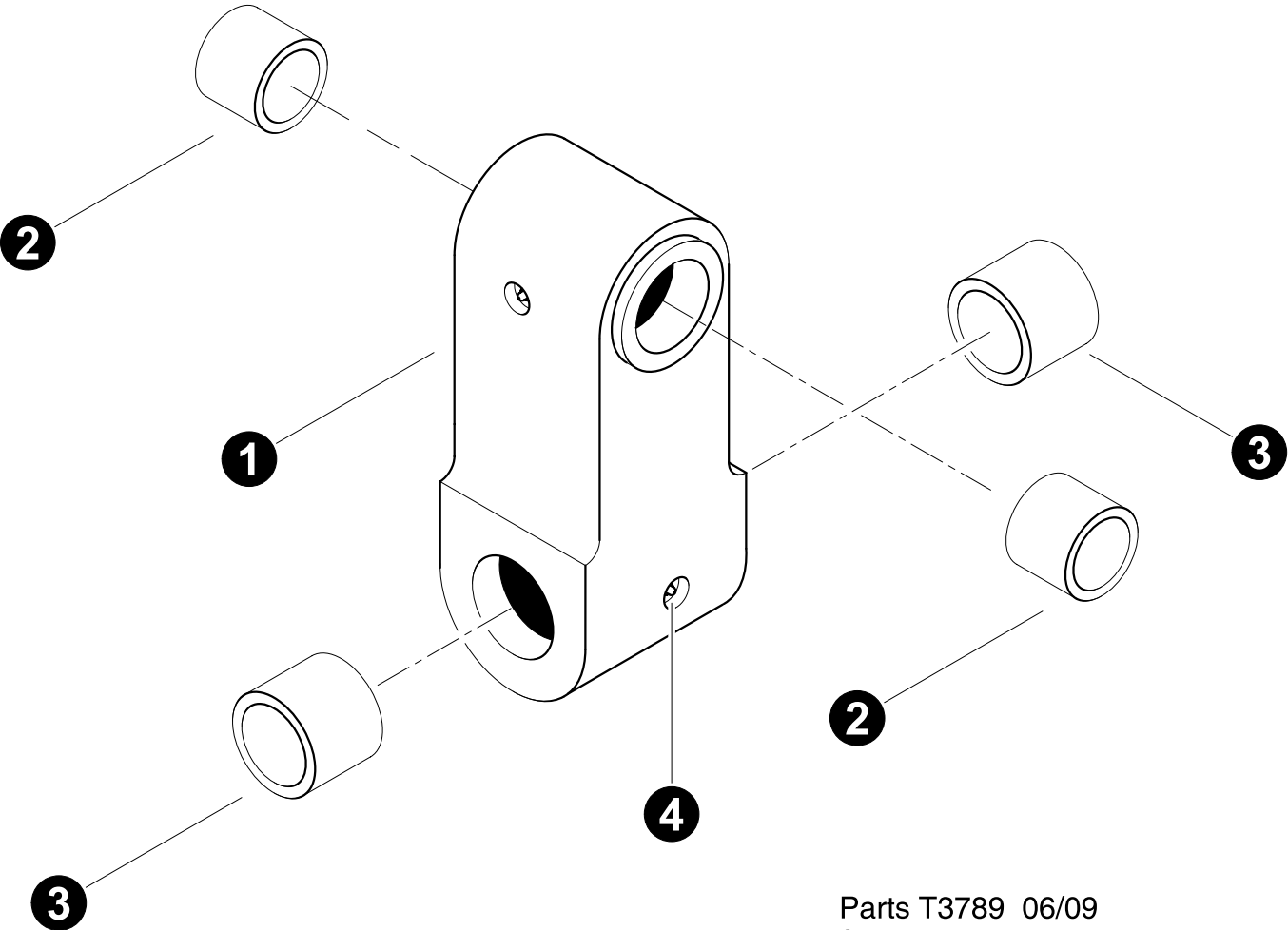
| REF | PART #   | QTY |                          | DESCRIPTION                                                     | SEE SECTION |
|-----|----------|-----|--------------------------|-----------------------------------------------------------------|-------------|
| -   | 19790-LB | 1   | <input type="checkbox"/> | SNUBBER (Quadco) (0307-051809 <b>and Before</b> )               |             |
| -   | 53855-LB | 1   | <input type="checkbox"/> | SNUBBER, (Quadco) (0308-060409 <b>and After</b> )               |             |
| 1   | -LB      | 1   |                          | LINK ASSEMBLY - HEAVY DUTY                                      |             |
| 2   | -LB      | 2   |                          | FRICTION SLEEVE (COMPOSITE MATERIAL) (B3T-1015G)                |             |
| 2   | -LB      | 2   |                          | FRICTION SLEEVE (ZINC ALLOY) (B3T-1175) - optional              |             |
| 3   | -LB      | 1   |                          | SLOT HOUSING (B3T-1135)                                         |             |
| 4   | -LB      | 1   |                          | FOOT HOUSING (B3T-1140)                                         |             |
| 5   | -LB      | 2   |                          | SPRING WASHER (B3T-1030)                                        |             |
| 6   | -LB      | 2   |                          | BEARING (B3T-1035)                                              |             |
| 7   | -LB      | 2   |                          | PRESSURE PLATE (B3T-1040)                                       |             |
| 8   | -LB      | 4   |                          | ADJUSTING BOLT (B3T-1045)                                       |             |
| 9   | -LB      | 10  |                          | ZERK (B3T-1130)                                                 |             |
| 11  | -LB      | 1   |                          | BUSHING - 2.06" ID X 1.125" (B3T-1150S)                         |             |
| 12  | -LB      | 1   |                          | BUSHING - 2.06" ID X 2.45" (B3T-1085S)                          |             |
| 13  | -LB      | 1   |                          | BUSHING - 1.758" ID(B3T-1165S) (0307-051809 <b>and Before</b> ) |             |
| 13  | -LB      | 1   |                          | BUSHING - 2.008" ID() (0308-060409 <b>and After</b> )           |             |
| 14  | -LB      | 1   |                          | BUSHING - 1.758" ID X 2.45" (B3T-1125S)                         |             |
| 15  | -LB      | 2   |                          | BEARING SEAL (B3T-1180)                                         |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3789 06/09  
25

## ADAPTER LINK BREAKDOWN

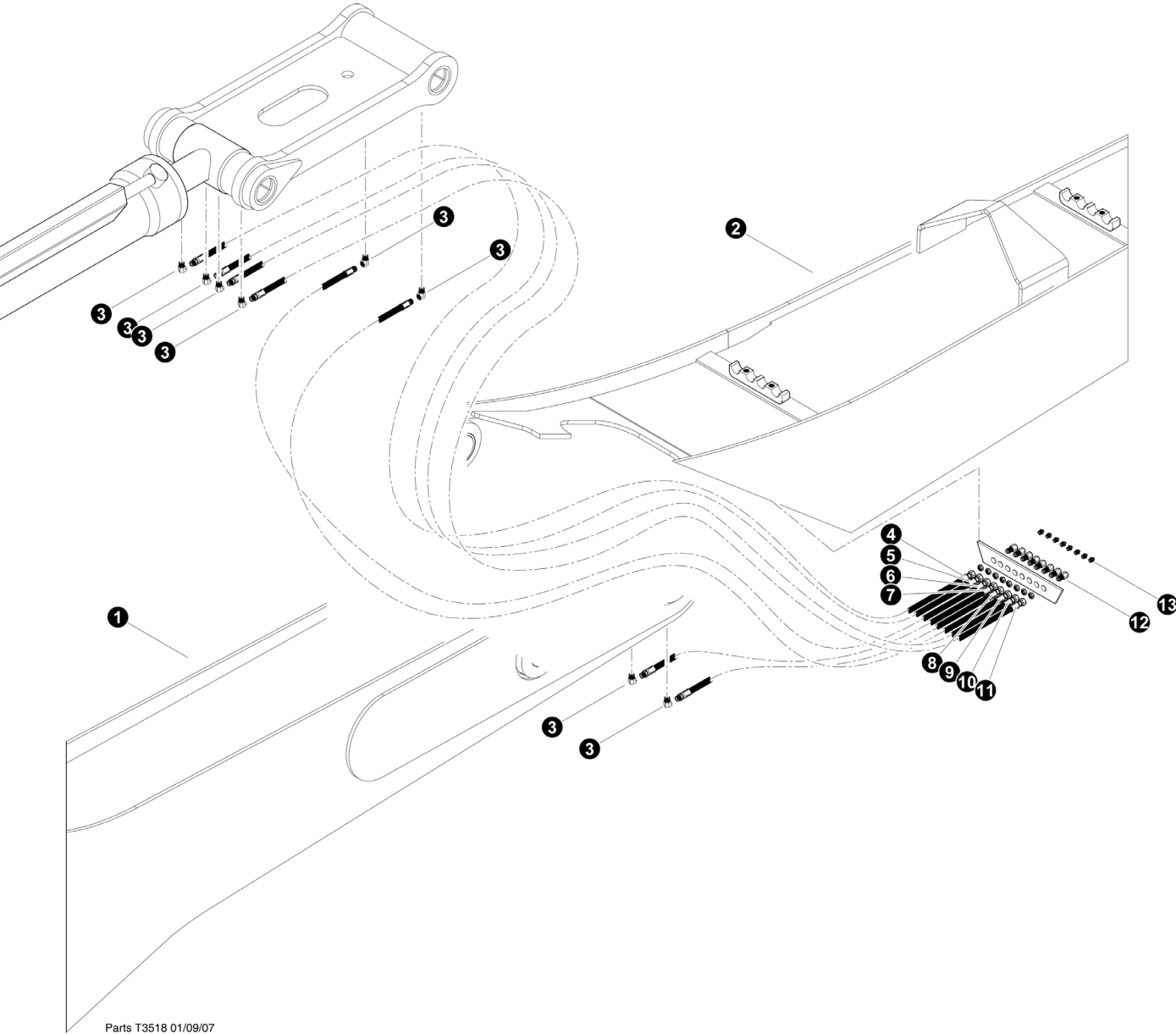
| REF | PART #   | QTY | DESCRIPTION                                              | SEE SECTION |
|-----|----------|-----|----------------------------------------------------------|-------------|
| 1   | 52492-LB | 1   | ADAPTER, DANGLE - GV-2.05 x 1.75                         |             |
| 1   | 53910-LB | 1   | ADAPTER, DANGLE - GV-2.05 x 2.0                          |             |
| 2   | 53633-LB | 2   | BUSHING - 1.75 X 2.25 - (0307-051809 <b>and Before</b> ) |             |
| 2   | 53894-LB | 2   | BUSHING - 2 X 2.25 - (0308-060409 <b>and After</b> )     |             |
| 3   | 52493-LB | 2   | BUSHING - 2.058" X 2"                                    |             |
| 4   | 10704-LB | 2   | FITTING, GREASE - .125 NPT - STR                         |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Parts T3518 01/09/07  
12.5

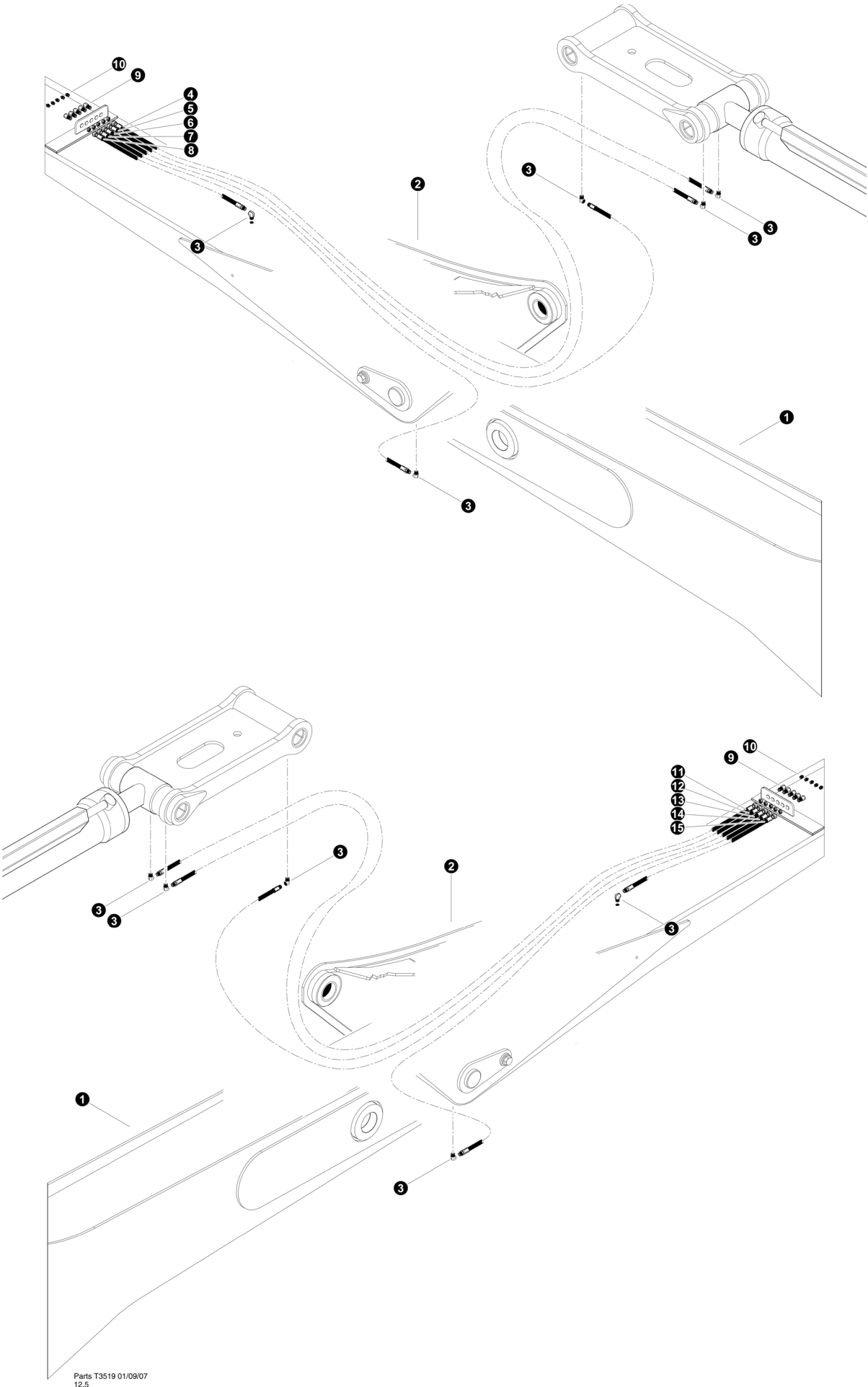
## Grease Lines Installation

### (4-Bar Link and Standard Stick Boom)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                               | LB-1        |
| 2   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....                               | LB-2        |
| 3   | 22281-LB | 8   |                                                                                   | ELBOW, 90 - 5546132                                    |             |
| 4   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2061-02-02PS-04JS (part of kit # 51978) |             |
| 5   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2061-02-02PS-04JS (part of kit # 51978) |             |
| 6   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2041-02-02PS-04JS (part of kit # 51978) |             |
| 7   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2030-02-02PS-04JS (part of kit # 51978) |             |
| 8   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2030-02-02PS-04JS (part of kit # 51978) |             |
| 9   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2041-02-02PS-04JS (part of kit # 51978) |             |
| 10  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2061-02-02PS-04JS (part of kit # 51978) |             |
| 11  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2061-02-02PS-04JS (part of kit # 51978) |             |
| 12  | 15658-LB | 8   |                                                                                   | CONNECTOR, STR BULKHEAD - 2239-2-4S                    |             |
| 13  | 10704-LB | 8   |                                                                                   | FITTING, GREASE - .125 NPT - STR 5                     |             |



See referenced page for component or assembly breakdown.



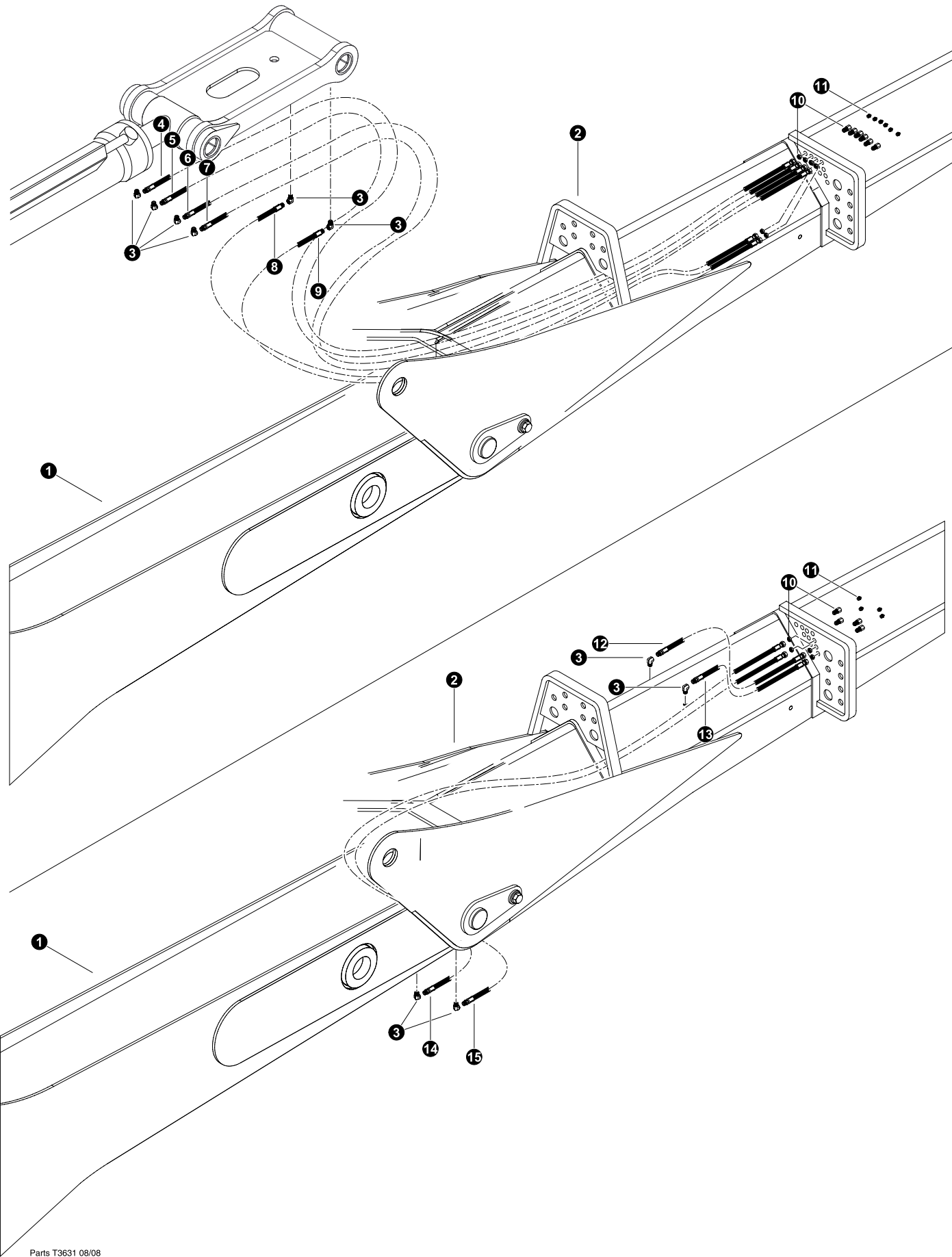
## Grease Lines Installation

### (4-Bar Link and Forwarder Squirt Boom)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                               | LB-1        |
| 2   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....                               | LB-2        |
| 3   | 22281-LB | 8   |                                                                                   | ELBOW, 90 - 5546132                                    |             |
| 4   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 5   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 6   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2092-02-02PS-04JS (part of kit # 52205) |             |
| 7   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2075-02-02PS-04JS (part of kit # 52205) |             |
| 8   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2039-02-02PS-04JS (part of kit # 52205) |             |
| 9   | 15658-LB | 8   |                                                                                   | CONNECTOR, STR BULKHEAD - 2239-2-4S                    |             |
| 10  | 10704-LB | 8   |                                                                                   | FITTING, GREASE - .125 NPT - STR 5                     |             |
| 11  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 12  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 13  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2092-02-02PS-04JS (part of kit # 52205) |             |
| 14  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2075-02-02PS-04JS (part of kit # 52205) |             |
| 15  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2039-02-02PS-04JS (part of kit # 52205) |             |



See referenced page for component or assembly breakdown.



Parts T3631 08/08  
12.5



## Grease Lines Installation

### (4-Bar Link and Harvester Squirt Boom)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                            | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | MAIN BOOM ASSEMBLY .....                               | LB-1        |
| 2   | REF.     | 1   |  | STICK BOOM ASSEMBLY.....                               | LB-2        |
| 3   | 22281-LB | 8   |                                                                                   | ELBOW, 90 - 5546132                                    |             |
| 4   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 5   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 6   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 7   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2108-02-02PS-04JS (part of kit # 52205) |             |
| 8   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2092-02-02PS-04JS (part of kit # 52205) |             |
| 9   |          | 1   |                                                                                   | HOSE ASSEMBLY, 2092-02-02PS-04JS (part of kit # 52205) |             |
| 10  | 15658-LB | 8   |                                                                                   | CONNECTOR, STR BULKHEAD - 2239-2-4S                    |             |
| 11  | 10704-LB | 8   |                                                                                   | FITTING, GREASE - .125 NPT - STR 5                     |             |
| 12  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2039-02-02PS-04JS (part of kit # 52205) |             |
| 13  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2032-02-02PS-04JS (part of kit # 52205) |             |
| 14  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2075-02-02PS-04JS (part of kit # 52205) |             |
| 15  |          | 1   |                                                                                   | HOSE ASSEMBLY, 2075-02-02PS-04JS (part of kit # 52205) |             |



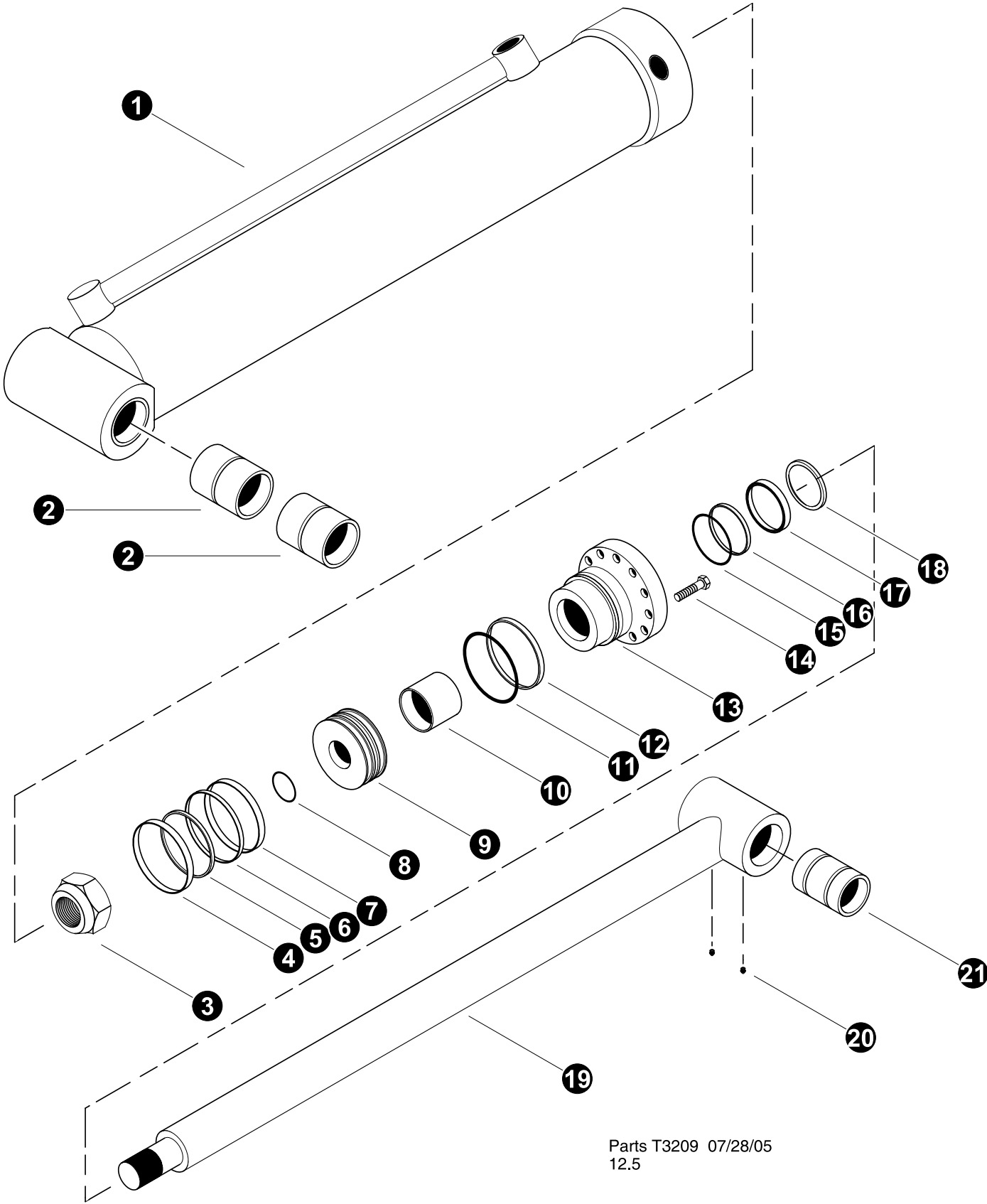
See referenced page for component or assembly breakdown.

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## ***Section LB-3***

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### ***Loader Booms - Cylinders***



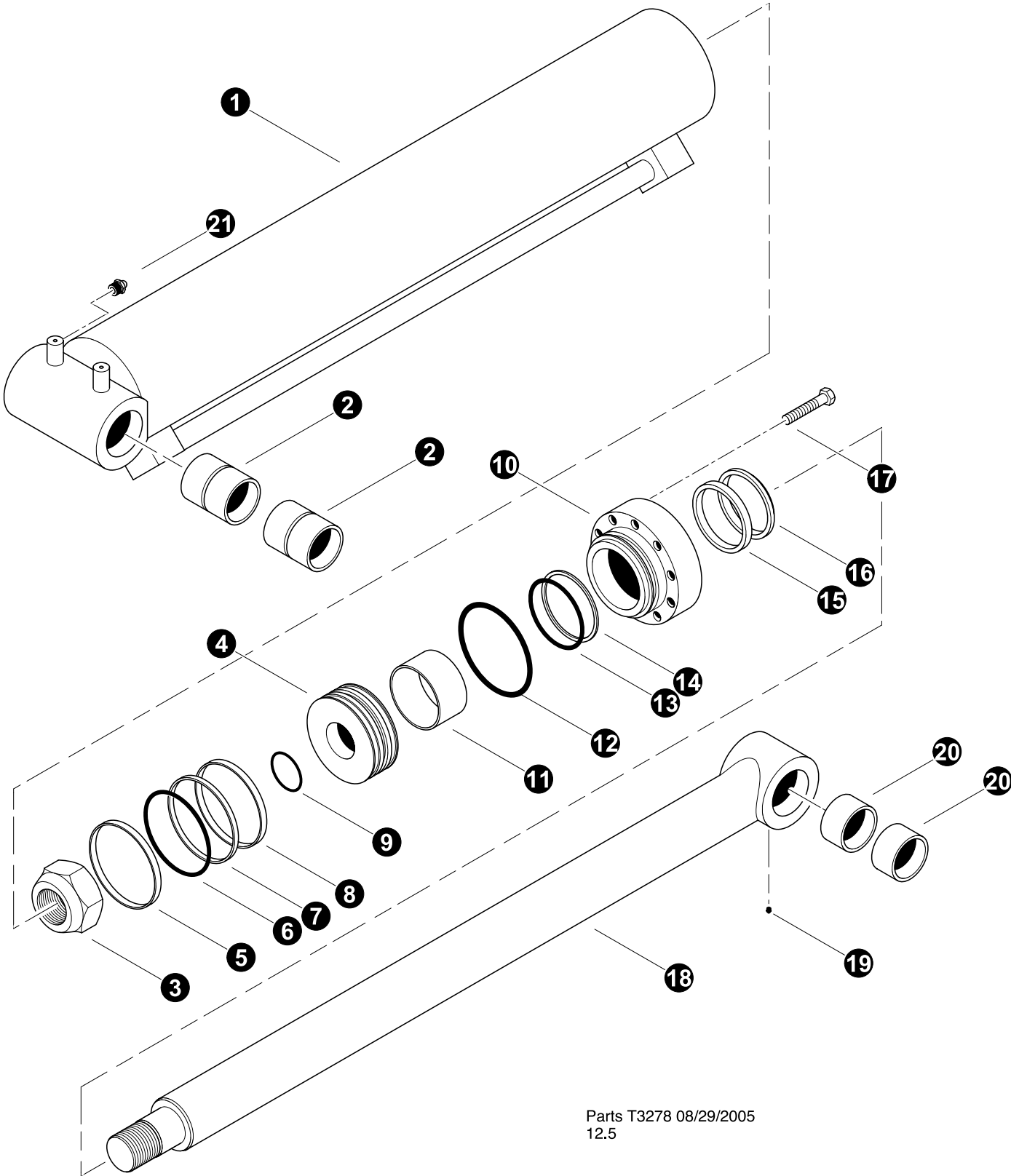
Parts T3209 07/28/05  
12.5

## FORWARDER / HARVESTER MAIN BOOM (HOIST) CYLINDER (5.5" - 54" stroke)

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #   | QTY |   | DESCRIPTION                                                                               | SEE PAGE |
|-----|----------|-----|---|-------------------------------------------------------------------------------------------|----------|
| -   | 52732-LB | 1   | ☐ | CYLINDER, MAIN - FWD 830 (5.5" / 54.0")                                                   |          |
| 1   | -LB      | 1   | ☐ | BARREL ASSEMBLY (203455B)                                                                 |          |
| 2   | 11706-LB | 2   |   | BUSHING - 3" x 4-1/4"                                                                     |          |
| 3   | 15287-LB | 1   |   | NUT, cylinder rod - 2" NF ( <b>Torque to 2700 +/- 200 ft.lbs.<br/>(3600 +/- 265 Nm)</b> ) |          |
| 4   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 5   | NSS      | 1   | ⌘ | RING, backup piston                                                                       |          |
| 6   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 7   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 8   | NSS      | 1   | ⌘ | O-RING, piston                                                                            |          |
| 9   | 23206-LB | 1   |   | PISTON (400619B)                                                                          |          |
| 10  | NSS      | 1   | ⌘ | RING, rod bearing wear                                                                    |          |
| 11  | NSS      | 1   | ⌘ | O-RING, rod bearing                                                                       |          |
| 12  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                                 |          |
| 13  | -LB      | 1   |   | BEARING, rod (500860B)                                                                    |          |
| 14  | -LB      | 12  |   | BOLT - 5/8" ( <b>Torque to 175 ft.lbs (233 Nm)</b> )                                      |          |
| 15  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                                 |          |
| 16  | NSS      | 1   | ⌘ | RING, rod bearing                                                                         |          |
| 17  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                                                        |          |
| 18  | NSS      | 1   | ⌘ | WIPER, rod                                                                                |          |
| 19  | -LB      | 1   | ☐ | ROD ASSEMBLY (302140B)                                                                    |          |
| 20  | 10704-LB | 1   |   | FITTING, straight grease - 1/8" pipe thread                                               |          |
| 21  | -LB      | 1   |   | BUSHING                                                                                   |          |
| -   | 52113-LB | 1   | ⌘ | KIT, SEAL REPAIR - MAIN CYL 830/630                                                       |          |

- ☐ Kit or Assembly - includes all items indented underneath.  
 ⌘ Included in seal repair kit Part # 52113-LB.



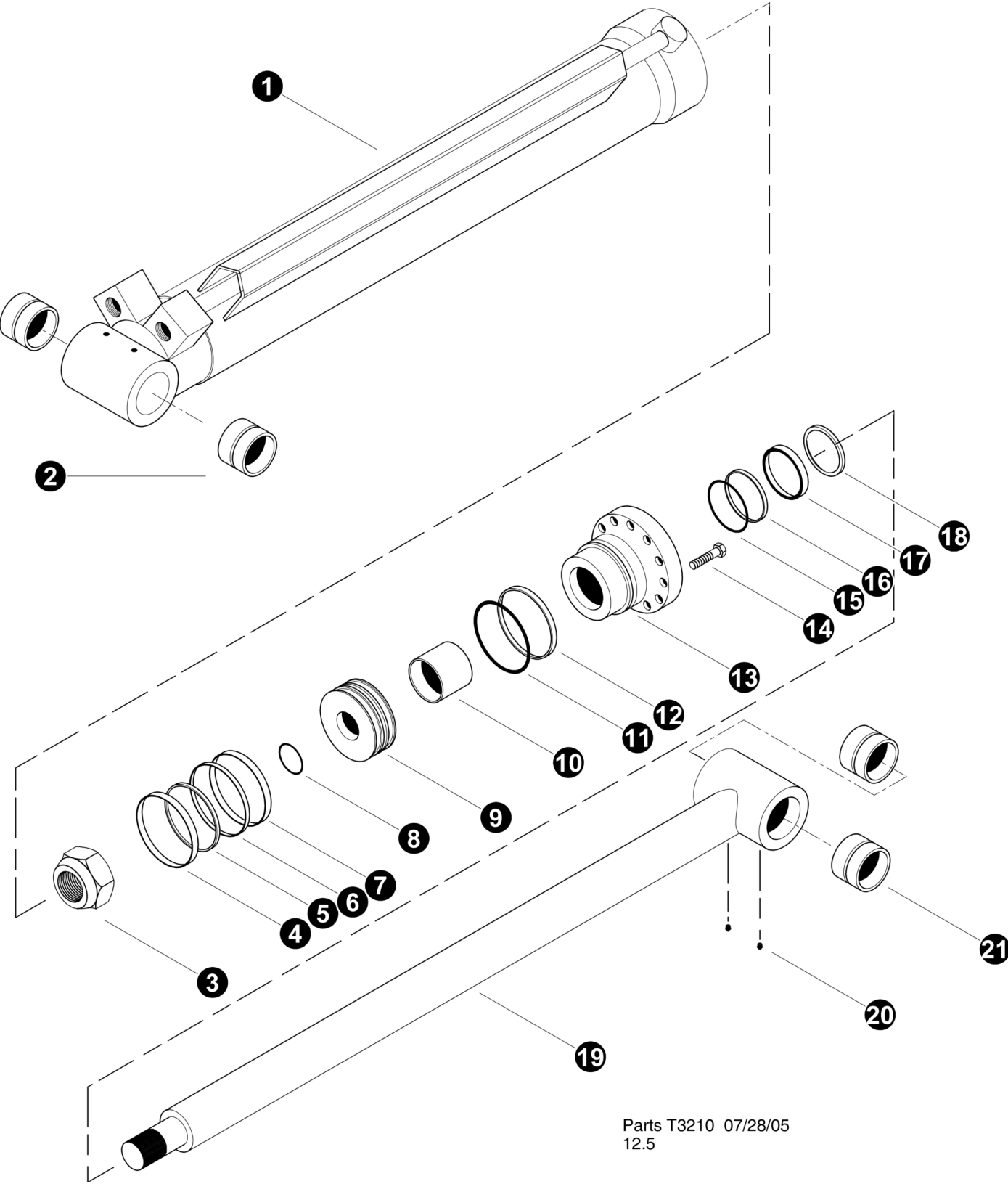
## LIVE HEEL / FELLER BUNCHER MAIN BOOM (HOIST) CYLINDER (6" Dia - 54" Stroke)

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #   | QTY |   | DESCRIPTION                                           | SEE PAGE |
|-----|----------|-----|---|-------------------------------------------------------|----------|
| -   | 51975-LB | 1   | ☐ | MAIN BOOM CYLINDER ASSEMBLY 6" x 54" Stroke           |          |
| 1   | -LB      | 1   | ☐ | BARREL ASSEMBLY (203314B)                             |          |
| 2   | 11706-LB | 2   |   | BUSHING - 3" x 4-1/4"                                 |          |
| 3   | -LB      | 1   |   | NUT, (712096A) ( <b>Torque to ft.lbs.<br/>( Nm)</b> ) |          |
| 4   | -LB      | 1   | ☐ | PISTON ASSEMBLY (400990B)                             |          |
| 5   | NSS      | 1   | ⌘ | RING, piston wear                                     |          |
| 6   | NSS      | 1   | ⌘ | O-RING, piston seal backup                            |          |
| 7   | NSS      | 1   | ⌘ | RING, piston seal                                     |          |
| 8   | NSS      | 1   | ⌘ | RING, piston wear                                     |          |
| 9   | NSS      | 1   | ⌘ | O-RING, piston seal                                   |          |
| 10  | -LB      | 1   | ☐ | BEARING, rod (501040B)                                |          |
| 11  | NSS      | 1   | ⌘ | RING, rod bearing wear                                |          |
| 12  | NSS      | 1   | ⌘ | O-RING, backup                                        |          |
| 13  | NSS      | 1   | ⌘ | RING, rod bearing seal                                |          |
| 14  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                    |          |
| 15  | NSS      | 1   | ⌘ | WIPER, rod                                            |          |
| 16  | 15681-LB | 12  |   | BOLT - 5/8" x 2-1/4" ( <b>175 ft.lbs (233 Nm)</b> )   |          |
| 17  | -LB      | 1   | ☐ | ROD ASSEMBLY (301981B)                                |          |
| 18  | 10704-LB | 1   |   | FITTING, straight grease - 1/8" pipe thread           |          |
| 19  | 11706-LB | 1   |   | BUSHING - 3" x 4-1/4"                                 |          |
| -   | 52125-LB | 1   |   | KIT, seal repair - main boom cylinder                 |          |

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 52125-LB.



Parts T3210 07/28/05  
12.5



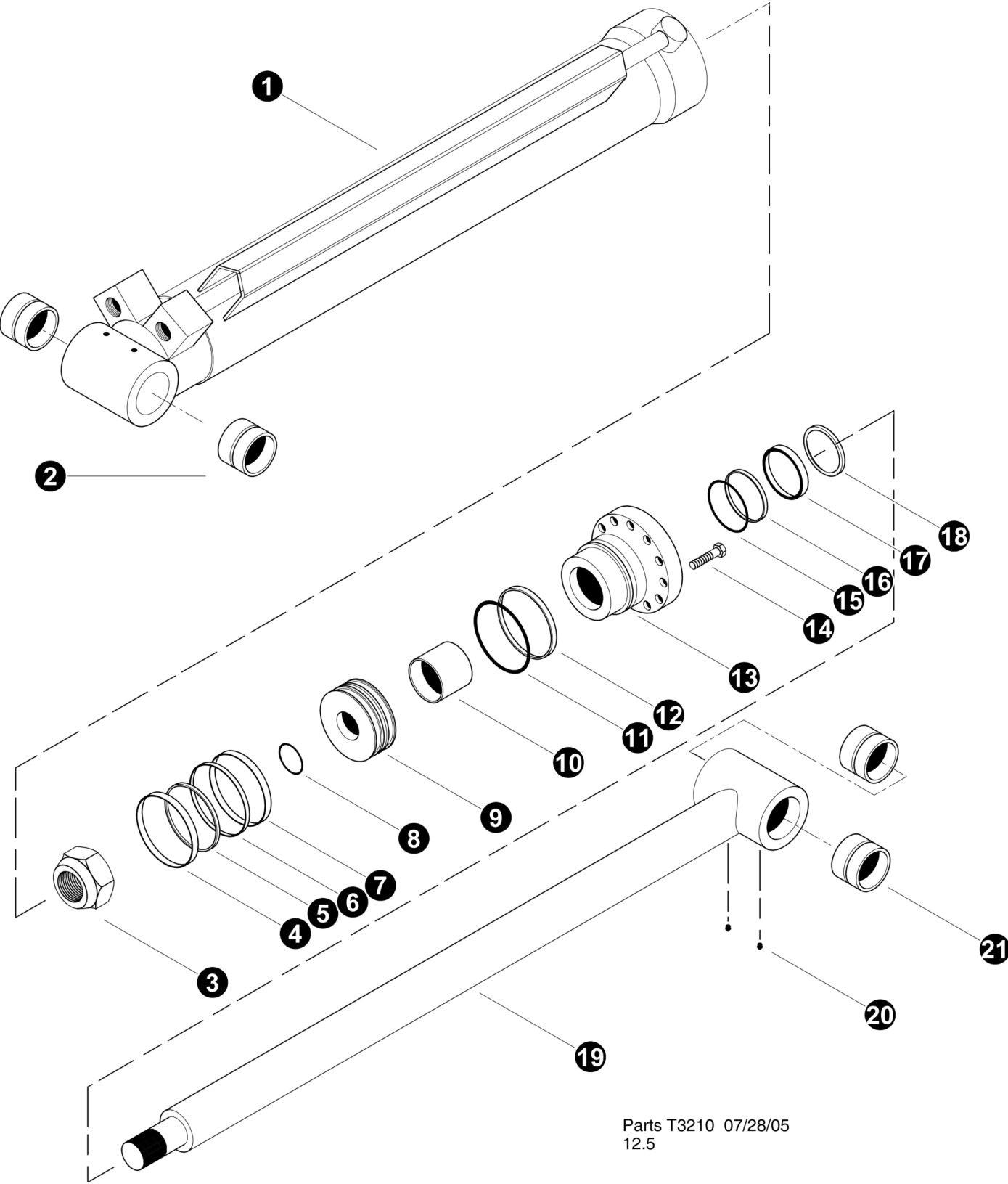
## FORWARDER / HARVESTER STICK BOOM (JIB) CYLINDER (5.5" Dia - 45" Stroke)

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #   | QTY |   | DESCRIPTION                                                                               | SEE PAGE |
|-----|----------|-----|---|-------------------------------------------------------------------------------------------|----------|
| -   | 52338-LB | 1   | ☐ | CYLINDER, STICK - FWD 4/BAR (HD 5.5" DIA)                                                 |          |
| 1   | -LB      | 1   | ☐ | BARREL ASSEMBLY ()                                                                        |          |
| 2   | 14241-LB | 2   |   | BUSHING 2.5" X 3"                                                                         |          |
| 3   | 15287-LB | 1   |   | NUT, cylinder rod - 2" NF ( <b>Torque to 2700 +/- 200 ft.lbs.<br/>(3600 +/- 265 Nm)</b> ) |          |
| 4   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 5   | NSS      | 1   | ⌘ | RING, backup piston                                                                       |          |
| 6   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 7   | NSS      | 1   | ⌘ | RING, piston                                                                              |          |
| 8   | NSS      | 1   | ⌘ | O-RING, piston                                                                            |          |
| 9   | 23206-LB | 1   |   | PISTON ASSY (400619B)                                                                     |          |
| 10  | NSS      | 1   | ⌘ | RING, rod bearing wear                                                                    |          |
| 11  | NSS      | 1   | ⌘ | O-RING, rod bearing                                                                       |          |
| 12  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                                 |          |
| 13  | -LB      | 1   |   | BEARING, rod (500860B)                                                                    |          |
| 14  | -LB      | 12  |   | BOLT - 5/8" ( <b>Torque to 175 ft.lbs (233 Nm)</b> )                                      |          |
| 15  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                                 |          |
| 16  | NSS      | 1   | ⌘ | RING, rod bearing                                                                         |          |
| 17  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                                                        |          |
| 18  | NSS      | 1   | ⌘ | WIPER, rod                                                                                |          |
| 19  | -LB      | 1   | ☐ | ROD ASSEMBLY ()                                                                           |          |
| 20  | 10704-LB | 1   |   | FITTING, straight grease - 1/8" pipe thread                                               |          |
| 21  | 14241-LB | 2   |   | BUSHING 2.5" X 3"                                                                         |          |
| -   | 52113-LB | 1   | ⌘ | KIT, SEAL REPAIR - STICK CYL 830/630                                                      |          |

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 52113-LB.



Parts T3210 07/28/05  
12.5

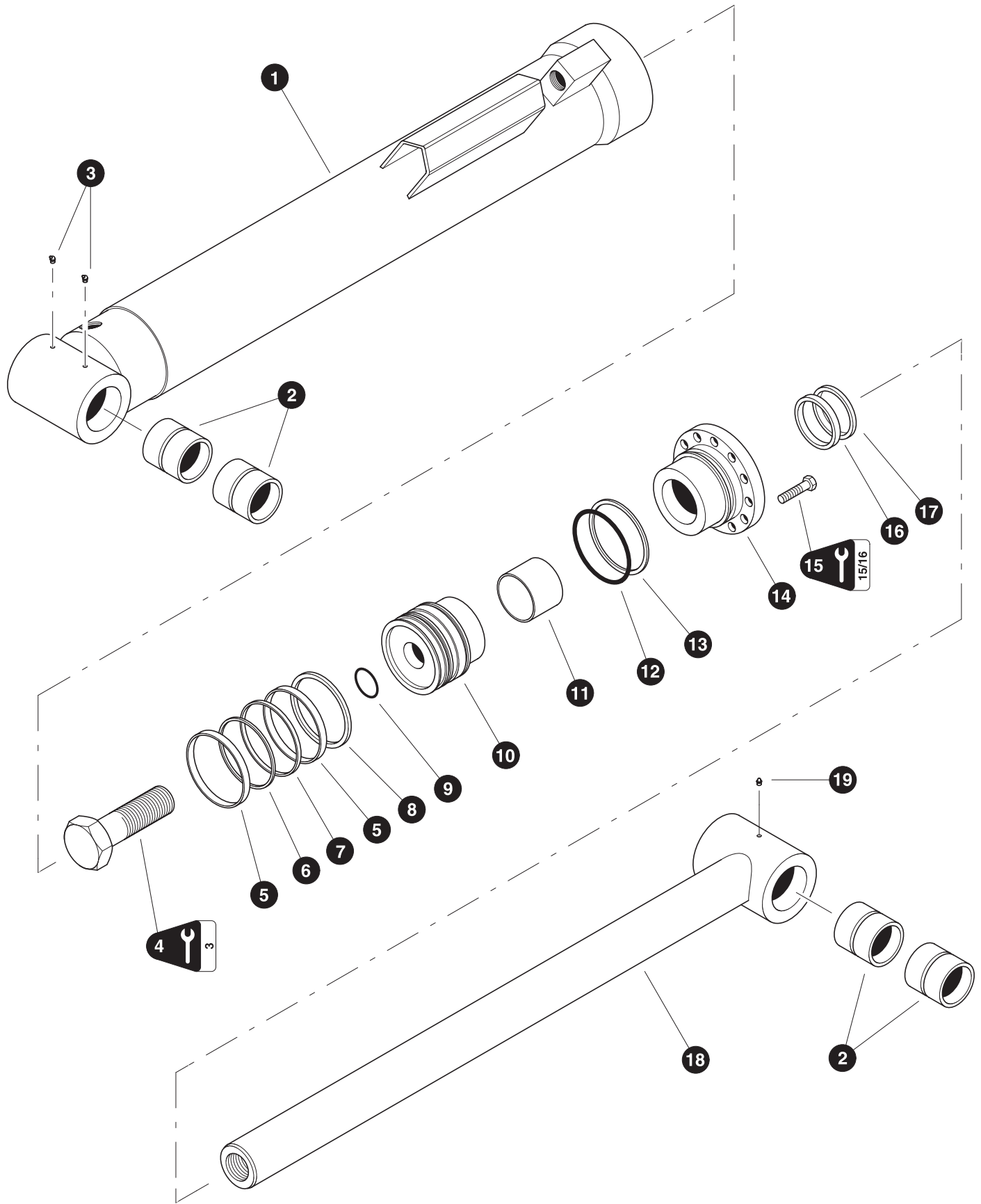
## LIVE HEEL / FELLER BUNCHER STICK BOOM (JIB) CYLINDER (6" Dia - 45" Stroke)

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #   | QTY |   | DESCRIPTION                                                                           | SEE PAGE |
|-----|----------|-----|---|---------------------------------------------------------------------------------------|----------|
| -   | 52725-LB | 1   | ☐ | CYLINDER, STICK - 4/BAR (HD 6" DIA)                                                   |          |
| 1   | -LB      | 1   | ☐ | BARREL ASSEMBLY (203454B)                                                             |          |
| 2   | 14241-LB | 2   |   | BUSHING 2.5" X 3"                                                                     |          |
| 3   | 15287-LB | 1   |   | NUT, cylinder rod - 2" NF ( <b>Torque to 2700 +/- 200 ft.lbs. (3600 +/- 265 Nm)</b> ) |          |
| 4   | NSS      | 1   | ⌘ | RING, piston                                                                          |          |
| 5   | NSS      | 1   | ⌘ | RING, backup piston                                                                   |          |
| 6   | NSS      | 1   | ⌘ | RING, piston                                                                          |          |
| 7   | NSS      | 1   | ⌘ | RING, piston                                                                          |          |
| 8   | NSS      | 1   | ⌘ | O-RING, piston                                                                        |          |
| 9   | -LB      | 1   |   | PISTON ASSY (401042B)                                                                 |          |
| 10  | NSS      | 1   | ⌘ | RING, rod bearing wear                                                                |          |
| 11  | NSS      | 1   | ⌘ | O-RING, rod bearing                                                                   |          |
| 12  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                             |          |
| 13  | -LB      | 1   |   | BEARING, rod (501107B)                                                                |          |
| 14  | -LB      | 16  |   | BOLT - 5/8" ( <b>Torque to 175 ft.lbs (233 Nm)</b> )                                  |          |
| 15  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                             |          |
| 16  | NSS      | 1   | ⌘ | RING, rod bearing                                                                     |          |
| 17  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                                                    |          |
| 18  | NSS      | 1   | ⌘ | WIPER, rod                                                                            |          |
| 19  | -LB      | 1   | ☐ | ROD ASSEMBLY (302061B)                                                                |          |
| 20  | 10704-LB | 1   |   | FITTING, straight grease - 1/8" pipe thread                                           |          |
| 21  | 14241-LB | 2   |   | BUSHING 2.5" X 3"                                                                     |          |
| -   | 52804-LB | 1   | ⌘ | KIT, SEAL REPAIR - STICK CYL 830/630                                                  |          |

☐ Kit or Assembly - includes all items indented underneath.

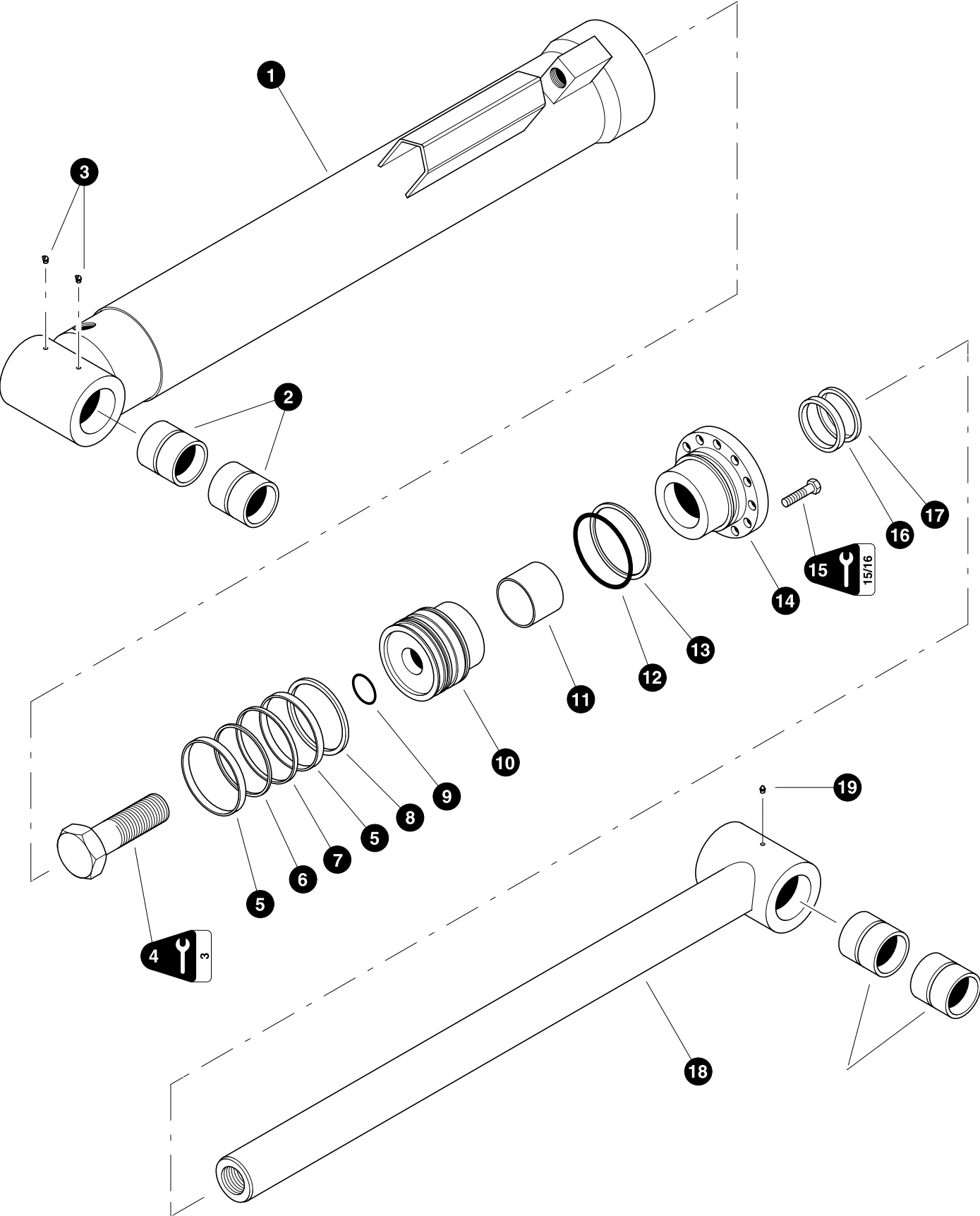
⌘ Included in seal repair kit Part # 52804-LB.



**LIVE HEEL / FELLER BUNCHER TOOL CYLINDER**  
**(40" Stroke / 5" Diameter)**  
**840B-0377-071511 and Before**

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #                                                    | QTY |   | DESCRIPTION                                                     | SEE PAGE |
|-----|-----------------------------------------------------------|-----|---|-----------------------------------------------------------------|----------|
| -   | 24006-HB                                                  | 1   | ☐ | CYLINDER, TOOL - FB (JARP)                                      |          |
| 1   | 22985-HB                                                  | 1   | ☐ | BARREL ASSEMBLY                                                 |          |
| 2   | 14241-HB                                                  | 2   |   | BUSHING - 2-1/2" x 3"                                           |          |
| 3   | 15683-HB                                                  | 2   |   | FITTING, 45 grease - 1/8" pipe thread                           |          |
| 4   | 24563-HB                                                  | 1   |   | BOLT, PISTON 2" <b>(4002 ft*lbs (3600 Nm) with Loctite 243)</b> |          |
| 5   | NSS                                                       | 2   | ⌘ | RING, piston wear                                               |          |
| 6   | NSS                                                       | 1   | ⌘ | RING, piston square                                             |          |
| 7   | NSS                                                       | 1   | ⌘ | RING, piston chem-cast                                          |          |
| 8   | NSS                                                       | 1   | ⌘ | RING, piston wear                                               |          |
| 9   | NSS                                                       | 1   | ⌘ | O-RING, piston                                                  |          |
| 10  | 22986-HB                                                  | 1   |   | PISTON                                                          |          |
| 11  | NSS                                                       | 1   | ⌘ | RING, rod bearing wear                                          |          |
| 12  | NSS                                                       | 1   | ⌘ | O-RING, rod bearing                                             |          |
| 13  | NSS                                                       | 1   | ⌘ | RING, rod bearing back-up                                       |          |
| 14  | 24562-HB                                                  | 1   |   | BEARING, rod                                                    |          |
| 15  | 15681-HB                                                  | 12  |   | BOLT - 5/8" x 2-1/4" <b>(175 ft.lbs (233 Nm))</b>               |          |
| 16  | NSS                                                       | 1   | ⌘ | U-CUP, rod bearing                                              |          |
| 17  | NSS                                                       | 1   | ⌘ | WIPER, rod                                                      |          |
| 18  | 22537-HB                                                  | 1   | ☐ | ROD ASSEMBLY                                                    |          |
| 19  | 10704-HB                                                  | 1   |   | FITTING, straight grease - 1/8" pipe thread                     |          |
| -   | 22988-HB                                                  | 1   |   | KIT, seal repair - tool tilt cylinder                           |          |
| ☐   | Kit or Assembly - includes all items indented underneath. |     |   |                                                                 |          |
| ⌘   | Included in seal repair kit Part # 22988-HB.              |     |   |                                                                 |          |



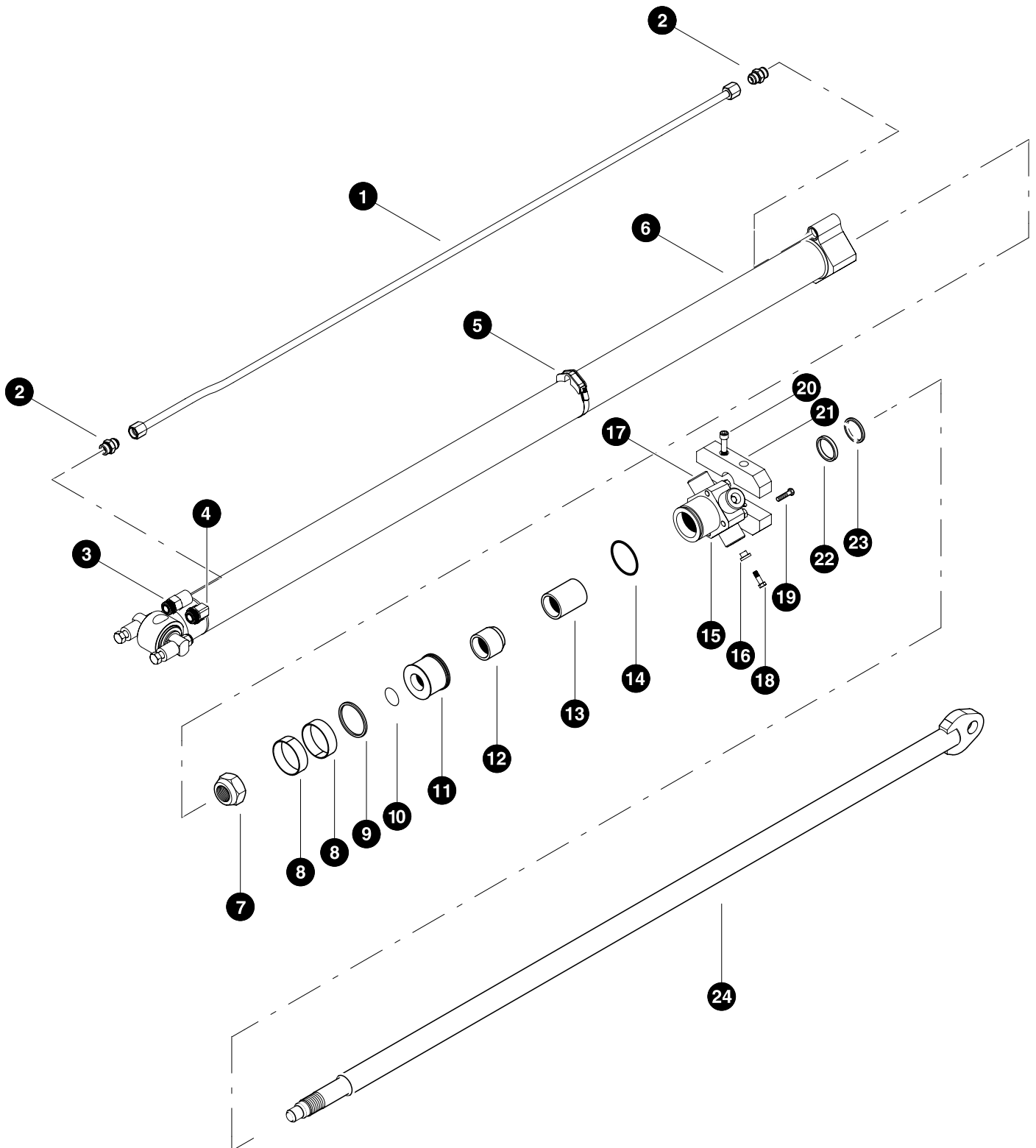
**TOOL TILT CYLINDER**  
**830B-0378-081711 and after**  
**(Used With 4-Bar Linkage)(Jarp)**

(Please Verify Part Number Stamped on Base End of Cylinder Before Ordering Parts)

| REF | PART #   | QTY |   | DESCRIPTION                                                            | SEE PAGE |
|-----|----------|-----|---|------------------------------------------------------------------------|----------|
| -   | 54398-FB | 1   | ☐ | CYLINDER, TOOL - FB (JARP)                                             |          |
| 1   | 22985-FB | 1   | ☐ | BARREL ASSEMBLY                                                        |          |
| 2   | 14241-FB | 2   |   | BUSHING - 2-1/2" x 3"                                                  |          |
| 3   | 15683-FB | 2   |   | FITTING, 45 grease - 1/8" pipe thread                                  |          |
| 4   | 24563-FB | 1   |   | BOLT, PISTON RETAINING <b>(4002 ft*lbs (3600 Nm) with Loctite 243)</b> |          |
| 5   | NSS      | 2   | ⌘ | RING, piston wear                                                      |          |
| 6   | NSS      | 1   | ⌘ | RING, piston square                                                    |          |
| 7   | NSS      | 1   | ⌘ | RING, piston chem-cast                                                 |          |
| 8   | NSS      | 1   | ⌘ | RING, piston wear                                                      |          |
| 9   | NSS      | 1   | ⌘ | O-RING, piston                                                         |          |
| 10  | 22986-FB | 1   |   | PISTON                                                                 |          |
| 11  | NSS      | 1   | ⌘ | RING, rod bearing wear                                                 |          |
| 12  | NSS      | 1   | ⌘ | O-RING, rod bearing                                                    |          |
| 13  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                              |          |
| 14  | 24562-FB | 1   |   | BEARING, rod                                                           |          |
| 15  | 15681-FB | 12  |   | BOLT - 5/8" x 2-1/4" <b>(175 ft.FBs (233 Nm))</b>                      |          |
| 16  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                                     |          |
| 17  | NSS      | 1   | ⌘ | WIPER, rod                                                             |          |
| 18  | 26675-FB | 1   | ☐ | ROD ASSEMBLY                                                           |          |
| 19  | 10704-FB | 1   |   | FITTING, straight grease - 1/8" pipe thread                            |          |
| 20  | 54397-FB | 2   |   | BUSHING - 3" x 3"                                                      |          |

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 22988-HB.



Parts T2754 07/14/2003  
12.50



## SQUIRT BOOM CYLINDER

(optional)

| REF | PART #   | QTY |   | DESCRIPTION                                                        | SEE PAGE |
|-----|----------|-----|---|--------------------------------------------------------------------|----------|
| -   | 51008-LB | 1   | □ | CYLINDER, 6' squirt                                                |          |
| 1   | ---      | 1   |   | TRANSFER TUBE (Jarp - 281266a)                                     |          |
| 2   | ---      | 1   |   | CONNNECTOR, STR 10 orb X 10 jic                                    |          |
| 3   | ---      | 1   |   | CONNNECTOR, STR                                                    |          |
| 4   | ---      | 1   |   | ELBOW, 90                                                          |          |
| 5   | ---      | 1   |   | CLAMP (ideal 6864)                                                 |          |
|     | ---      | 1   |   | GROMMET - (CAT #9R2004)                                            |          |
| 6   | 51028-LB | 1   |   | BARREL ASSEMBLY                                                    |          |
| 7   | 51032-LB | 1   |   | NUT (712118A)                                                      |          |
| 8   | ---      | 1   | ⌘ | RING, piston - wear                                                |          |
| 9   | ---      | 1   | ⌘ | RING, piston - square                                              |          |
| 10  | ---      | 1   | ⌘ | O-RING, piston                                                     |          |
| 11  | 51030-LB | 1   |   | PISTON                                                             |          |
| 12  | ---      | 1   |   | CUSHION SLEEVE                                                     |          |
| 13  | ---      | 1   |   | BUSHING, rod bearing (bronze)                                      |          |
| 14  | ---      | 1   | ⌘ | O-RING, rod bearing                                                |          |
| 15  | 51031-LB | 1   |   | BEARING, rod                                                       |          |
| 16  |          | 4   |   | Retainer sleeve (XB3019) (8" SLIDE TUBE)                           |          |
| 17  |          | 4   |   | puck - cylinder support 2"OD x ½" thick (XB3017) (6" SLIDE TUBE)   |          |
| 17  |          | 4   |   | puck - cylinder support 2"OD x 1.4" thick (XB3018) (8" SLIDE TUBE) |          |
| 18  |          | 4   |   | screw 3/8 x 3/4 FHCS brass (XB5001) (6" SLIDE TUBE)                |          |
| 18  |          | 4   |   | Capscrew 3/8"-16 x 1.5 hex head Gr 5 - (8" SLIDE TUBE)             |          |
| 19  | ---      | 4   |   | BOLT - (711206A)                                                   |          |
| 20  |          | 2   |   | Capscrew ½"-13 x 3 socket head                                     |          |
| 21  |          | 1   |   | truss - cylinder support (XB4079) (6" SLIDE TUBE)                  |          |
| 21  |          | 1   |   | truss - cylinder support (XB4080) (8" SLIDE TUBE)                  |          |
| 22  | ---      | 1   | ⌘ | U-CUP, rod bearing                                                 |          |
| 23  | ---      | 1   | ⌘ | WIPER, rod                                                         |          |
| 24  | 51029-LB | 1   |   | ROD ASSEMBLY                                                       |          |
| -   | 51033-LB | 1   |   | KIT, seal repair - boom extension cylinder                         |          |

□ Kit or Assembly - includes all items indented underneath.

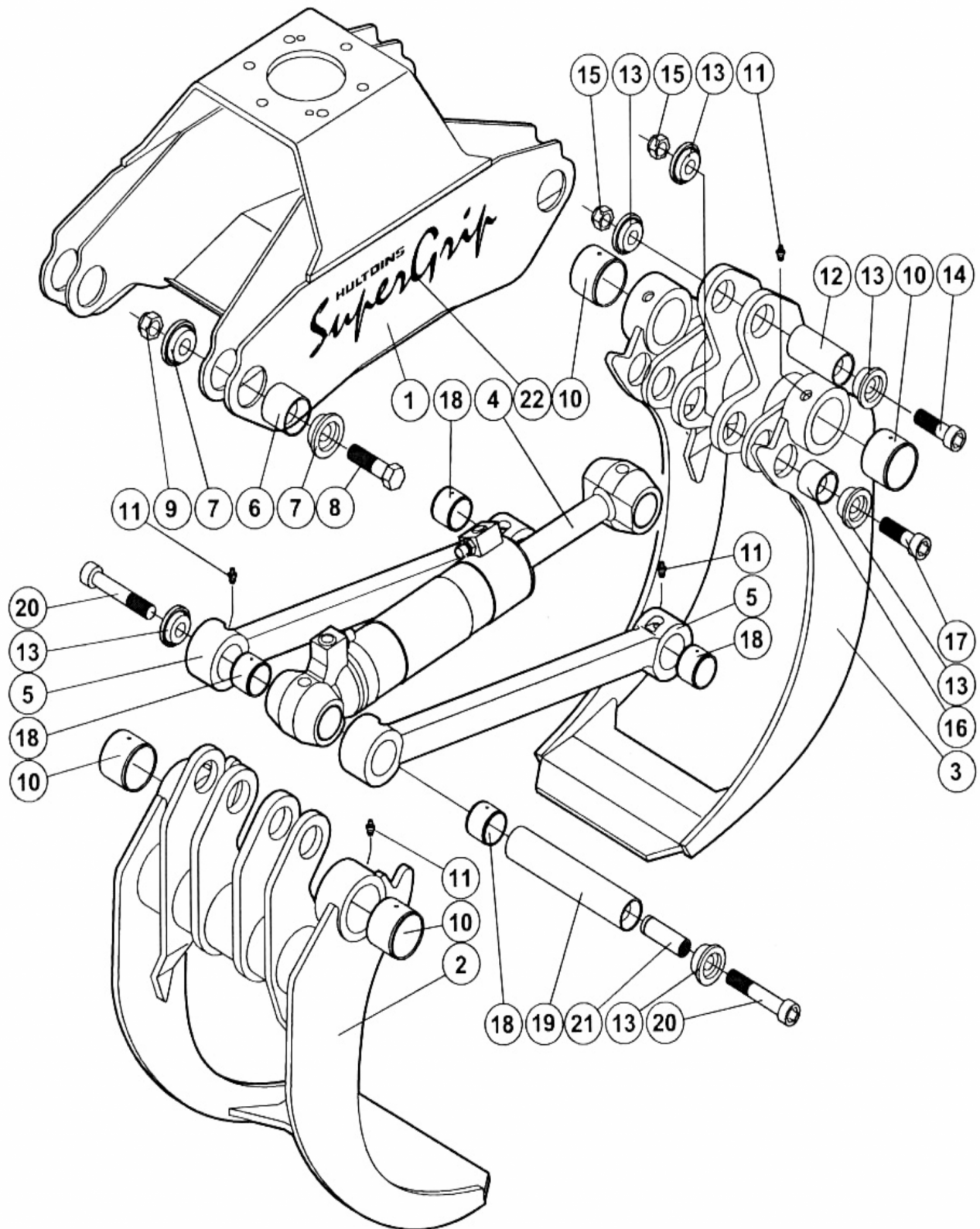
⌘ Included in seal repair kit Part # 51033-LB

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## ***Section LB-4***

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### ***Loader Booms - Hulldins Grapple***

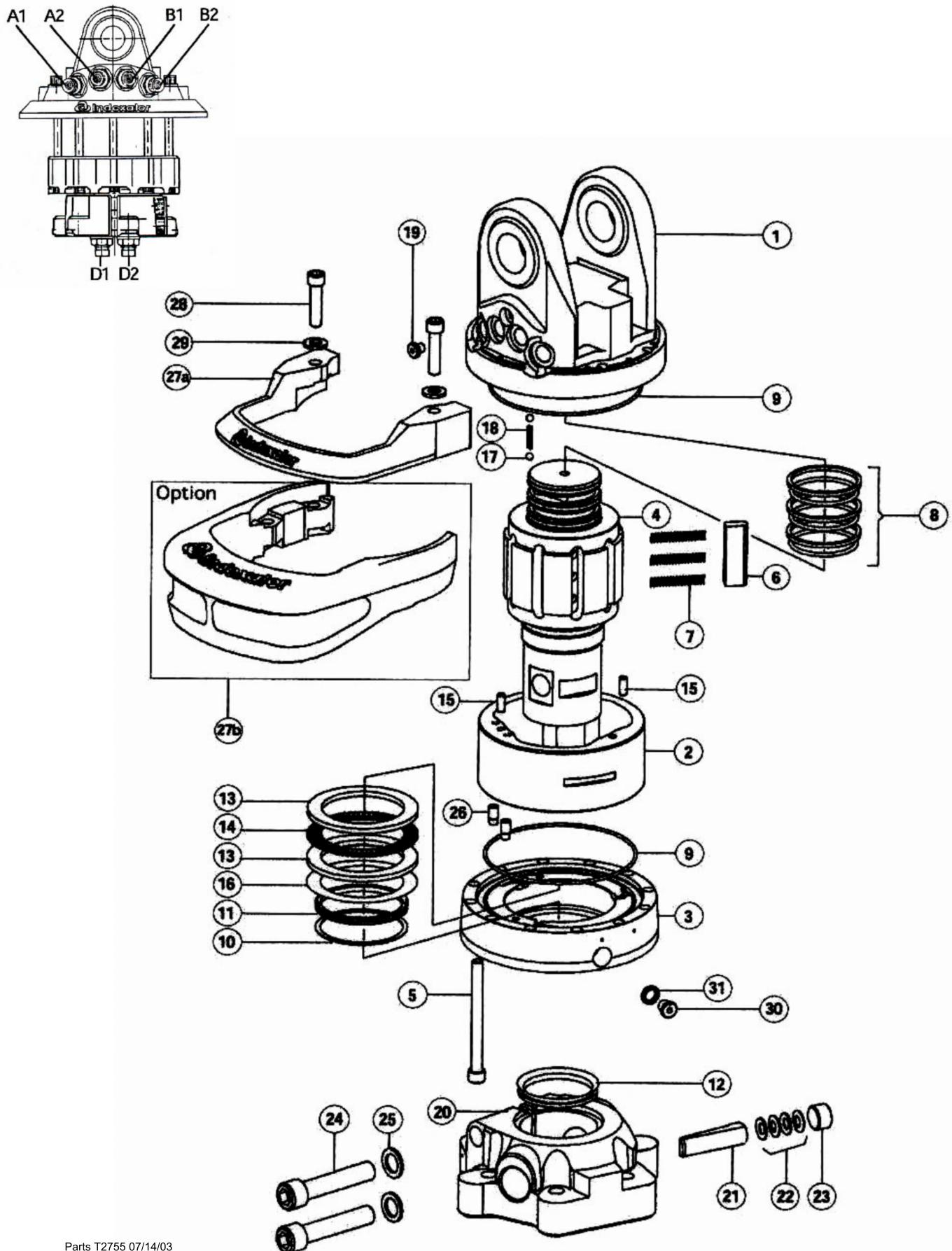


Parts T2757 07/14/03

**HULTDINS 360S GRAPPLE**

| REF | PART #   | QTY |                          | DESCRIPTION                      | SEE SECTION |
|-----|----------|-----|--------------------------|----------------------------------|-------------|
| -   | 22719-LB | 1   | <input type="checkbox"/> | GRAPPLE, Hultdins 360s w\GV 17us |             |
| 1   | ---      | 1   |                          | FRAME, (0680501)                 |             |
| 2   | ---      | 1   |                          | GRAPPLE ARM, female (0680508)    |             |
| 3   | ---      | 1   |                          | GRAPPLE ARM, male (0680507)      |             |
| 4   | ---      | 1   |                          | CYLINDER (0150016)               |             |
| 5   | ---      | 2   |                          | ROD (0680030)                    |             |
| 6   | ---      | 4   |                          | PIN (0680521)                    |             |
| 7   | ---      | 8   |                          | WASHER (0683021)                 |             |
| 8   | ---      | 4   |                          | SCREW, hex (0104634)             |             |
| 9   | ---      | 4   |                          | NUT (0106033)                    |             |
| 10  | ---      | 4   |                          | BUSHING, (0683071)               |             |
| 11  | ---      | 8   |                          | NIPPLE, grease (0114004)         |             |
| 12  | ---      | 1   |                          | PIN (0680077)                    |             |
| 13  | ---      | 8   |                          | WASHER (0680054)                 |             |
| 14  | ---      | 1   |                          | BOLT, allen (0104132)            |             |
| 15  | ---      | 3   |                          | NUT, (0106030)                   |             |
| 16  | ---      | 2   |                          | PIN, (0680015)                   |             |
| 17  | ---      | 2   |                          | BOLT, allen (0104502)            |             |
| 18  | ---      | 4   |                          | BUSHING, (0680072)               |             |
| 19  | ---      | 1   |                          | PIN, (0680075)                   |             |
| 20  | ---      | 1   |                          | BOLT, allen (0104502)            |             |
| 20  | ---      | 1   |                          | BOLT, allen (0104132)            |             |
| 21  | ---      | 1   |                          | NUT, (0660263)                   |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T2755 07/14/03

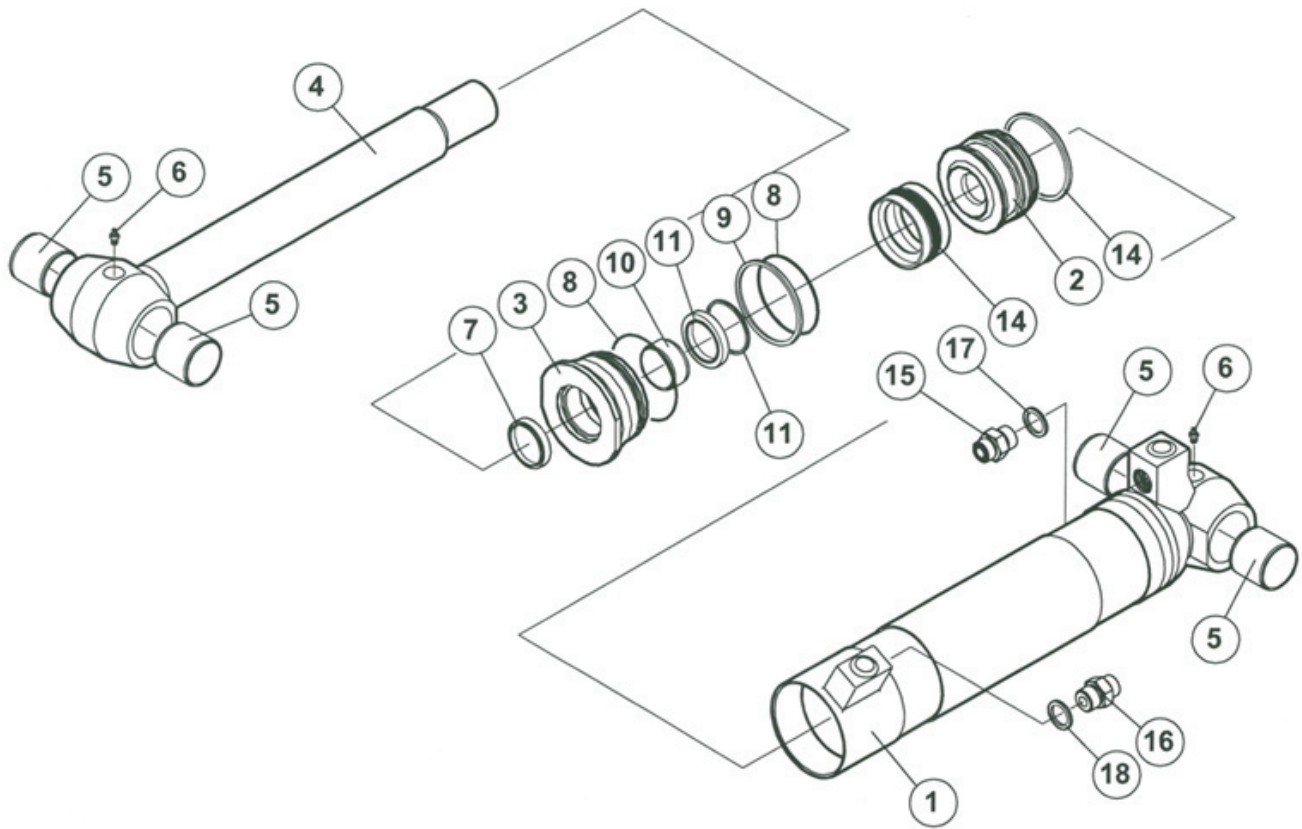
## HULTDINS 360S GRAPPLE (Indexator GV 17us Rotator)

| REF | PART #   | QTY |   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|---|---------------------------------------|-------------|
| -   | 50586-LB | 1   | □ | ROTATOR, GV 17us                      |             |
| 1   | ---      | 1   |   | STATOR PLATE, upper (5114178)         |             |
| 2   | ---      | 1   |   | STATOR FRAME (5114023)                |             |
| 3   | ---      | 1   |   | STATOR PLATE, lower (5114020)         |             |
| 4   | ---      | 1   |   | ROTATOR SHAFT, (5117027)              |             |
| 5   | ---      | 12  |   | SCREW, (1002120)                      |             |
| 6   | ---      | 9   |   | VANE, (5011160)                       |             |
| 7   | ---      | 27  |   | SPRING, (5006030)                     |             |
| 8   | ---      | 3   | ⌘ | GLIDE RING, (1005669)                 |             |
| 9   | ---      | 2   | ⌘ | O-RING (1013515)                      |             |
| 10  | ---      | 1   | ⌘ | RING, support (1015064)               |             |
| 11  | ---      | 1   | ⌘ | SEAL (1023753)                        |             |
| 12  | ---      | 1   | ⌘ | V-RING (1019470)                      |             |
| 13  | ---      | 2   |   | WASHER, (1018951)                     |             |
| 14  | ---      | 1   |   | BEARING, axial needle (1015080)       |             |
| 15  | ---      | 4   |   | PIN (1019900)                         |             |
| 16  | ---      | 1   |   | SHIM SET (5010081)                    |             |
| 17  | ---      | 2   |   | BALL (1005545)                        |             |
| 18  | ---      | 1   |   | SPRING (1020536)                      |             |
| 19  | ---      | 1   |   | PLUG, (5001381)                       |             |
| 20  | ---      | 1   |   | LINK, lower (5117022)                 |             |
| 21  | ---      | 1   |   | WEDGE, (5010038)                      |             |
| 22  | ---      | 4   |   | SPRING, cup (1015643)                 |             |
| 23  | ---      | 1   |   | SCREW, locking (5010039)              |             |
| 24  | ---      | 2   |   | SCREW, (1019488)                      |             |
| 25  | ---      | 2   |   | WASHER, (1019496)                     |             |
| 26  | ---      | 2   |   | RESTRICTOR, (5011107)                 |             |
| 27  | ---      | 1   |   | GUARD, hose (5011006)                 |             |
| 28  | ---      | 2   |   | SCREW, (1019926)                      |             |
| 29  | ---      | 2   |   | WASHER, (1017326)                     |             |
| 30  | ---      | 1   |   | PLUG, magnetic (1025709)              |             |
| 31  | ---      | 1   |   | SEAL, bonded (1019116)                |             |
| -   | 20276-LB | 1   |   | KIT, seal repair - GV 17 rotator      |             |
| A1  | 15115-LB | 1   |   | CONNECTOR, straight - 848 TTO 08X10   |             |
| A2  | 15115-LB | 1   |   | CONNECTOR, straight - 848 TTO 08X10   |             |
| B1  | 15115-LB | 1   |   | CONNECTOR, straight - 848 TTO 08X10   |             |
| B2  | 15115-LB | 1   |   | CONNECTOR, straight - 848 TTO 08X10   |             |
| D1  | 15117-LB | 1   |   | CONNECTOR, straight - 848 TTO 08 X 08 |             |
| D2  | 15117-LB | 1   |   | CONNECTOR, straight - 848 TTO 08 X 08 |             |

□ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 20276-LB.







## HULTDINS 360S GRAPPLE (Cylinder)

| REF | PART #   | QTY |   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|---|---------------------------------------|-------------|
| -   | 51524-LB | 1   | ☐ | CYLINDER, HULTDINS 360S GRAPPLE (CUR) |             |
| 1   | ---      | 1   |   | BARREL (0150505)                      |             |
| 2   | ---      | 1   |   | PISTON (0150506)                      |             |
| 3   | ---      | 1   |   | GLAND (0150507)                       |             |
| 4   | ---      | 1   |   | ROD (0150508)                         |             |
| 5   | ---      | 4   |   | BEARING, plain (0680073)              |             |
| 6   | ---      | 2   |   | FITTING, grease M6 (0114004)          |             |
| 7   | ---      | 1   | ⌘ | SEAL, dust                            |             |
| 8   | ---      | 2   | ⌘ | O-RING                                |             |
| 9   | ---      | 1   | ⌘ | RING, backup                          |             |
| 10  | ---      | 1   | ⌘ | RING, guide                           |             |
| 11  | ---      | 1   | ⌘ | SEAL, rod                             |             |
| 12  | ---      | 1   | ⌘ | RING, retainer                        |             |
| 13  | ---      | 1   | ⌘ | SEAL, piston                          |             |
| 14  | ---      | 1   |   | RING, piston (0150528)                |             |
| 15  | ---      | 1   |   | Fitting (0130 377)                    |             |
| 16  | ---      | 1   |   | Fitting (0130 377)                    |             |
| 17  | ---      | 1   |   | Seal (0106 584)                       |             |
| 18  | ---      | 1   |   | Seal (0106 577)                       |             |

- 24414-LB KIT, SEAL REPAIR - GRAP CYL (HULTDINS)

- ☐ Kit or Assembly - includes all items indented underneath.  
 ⌘ Included in seal repair kit Part #51034 -LB.

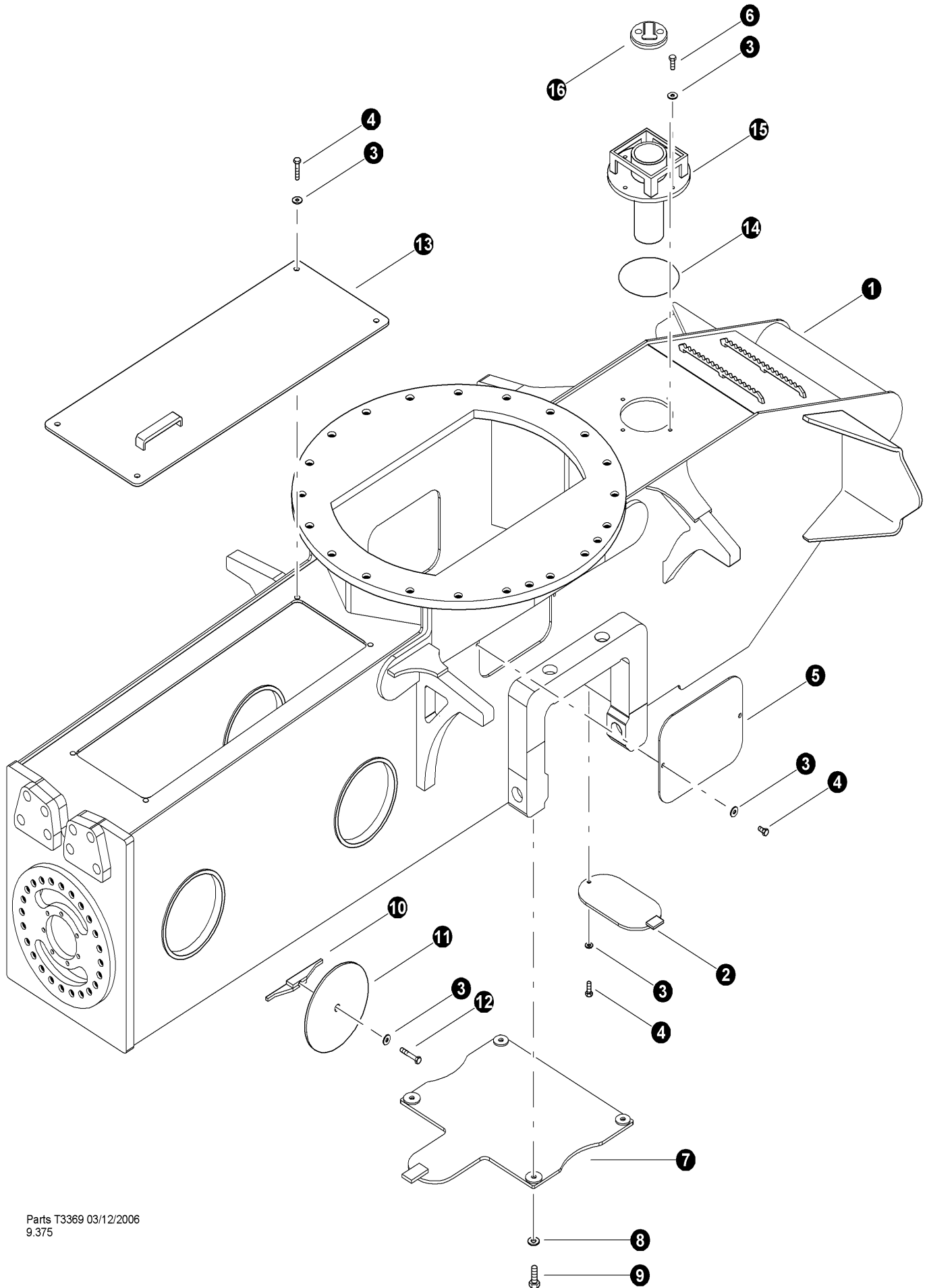
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# ***Section FF-1***

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



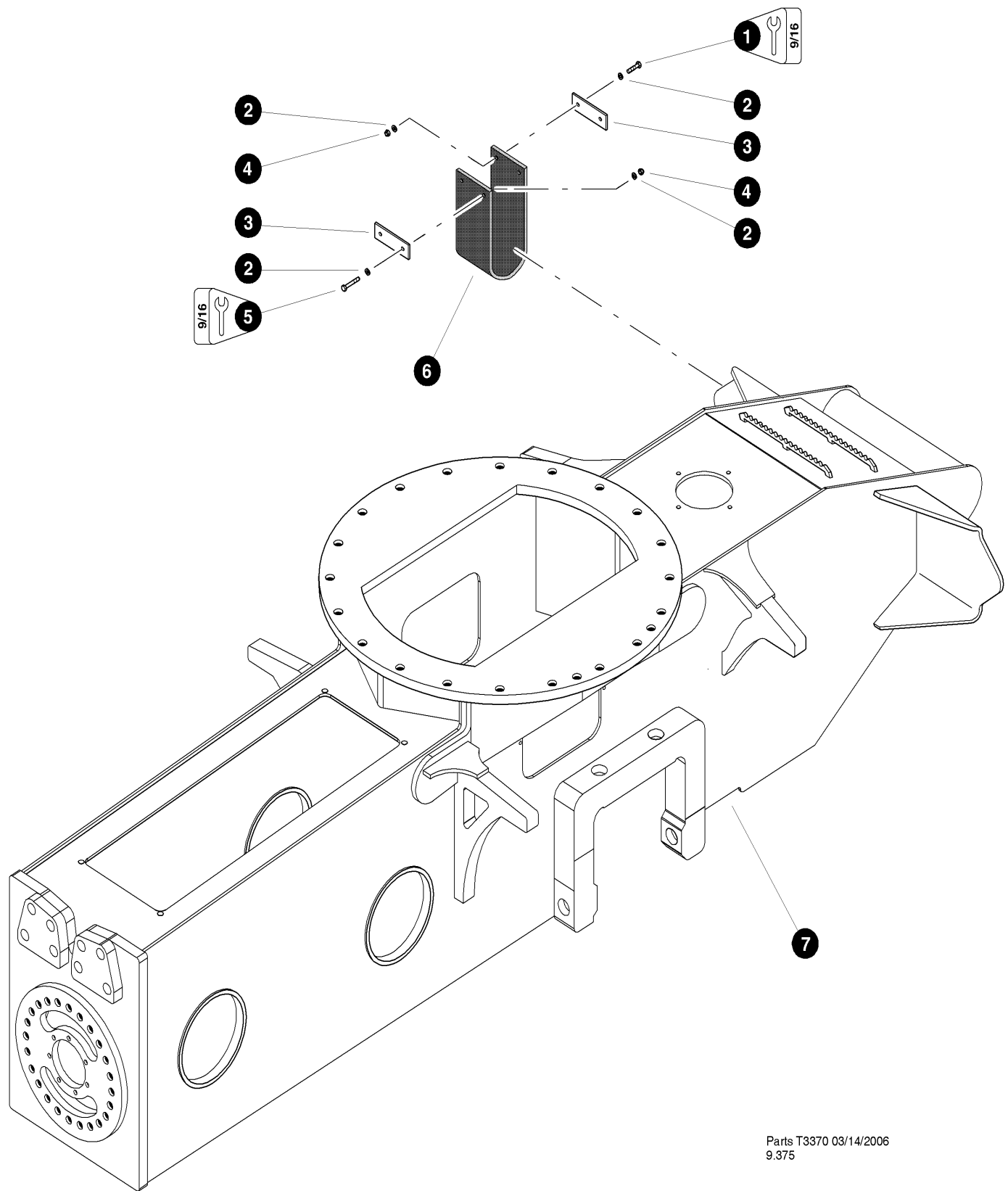
Parts T3369 03/12/2006  
9.375

## FRONT FRAME AND ACCESS COVERS (Covers and Brackets)

| 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 T3370 03/14/2006  
9.375

## FRAME STEPS INSTALLATION

| 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.

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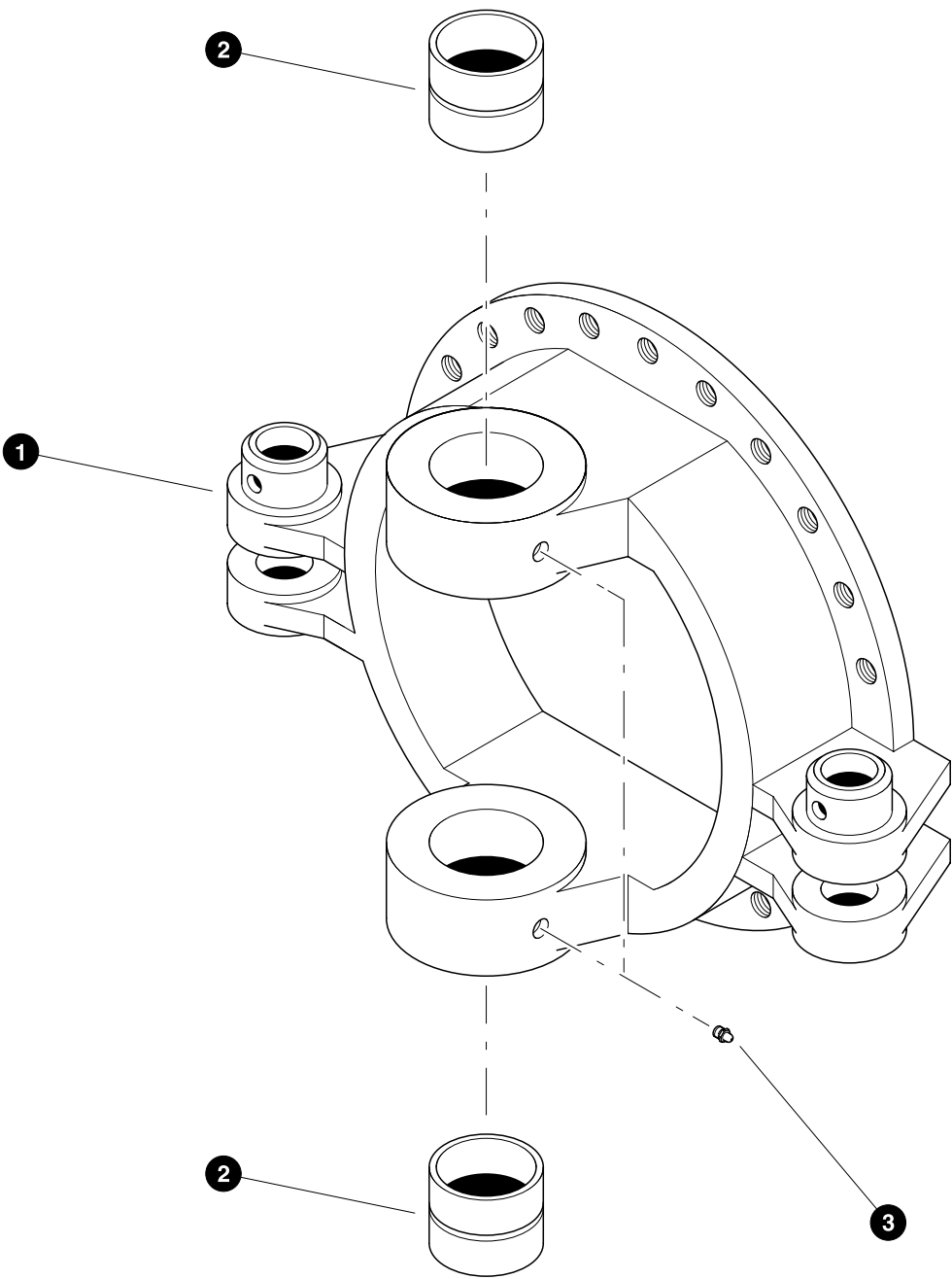
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## ***Section FF-2***

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### ***830/840 Front Frame - Component Installation***

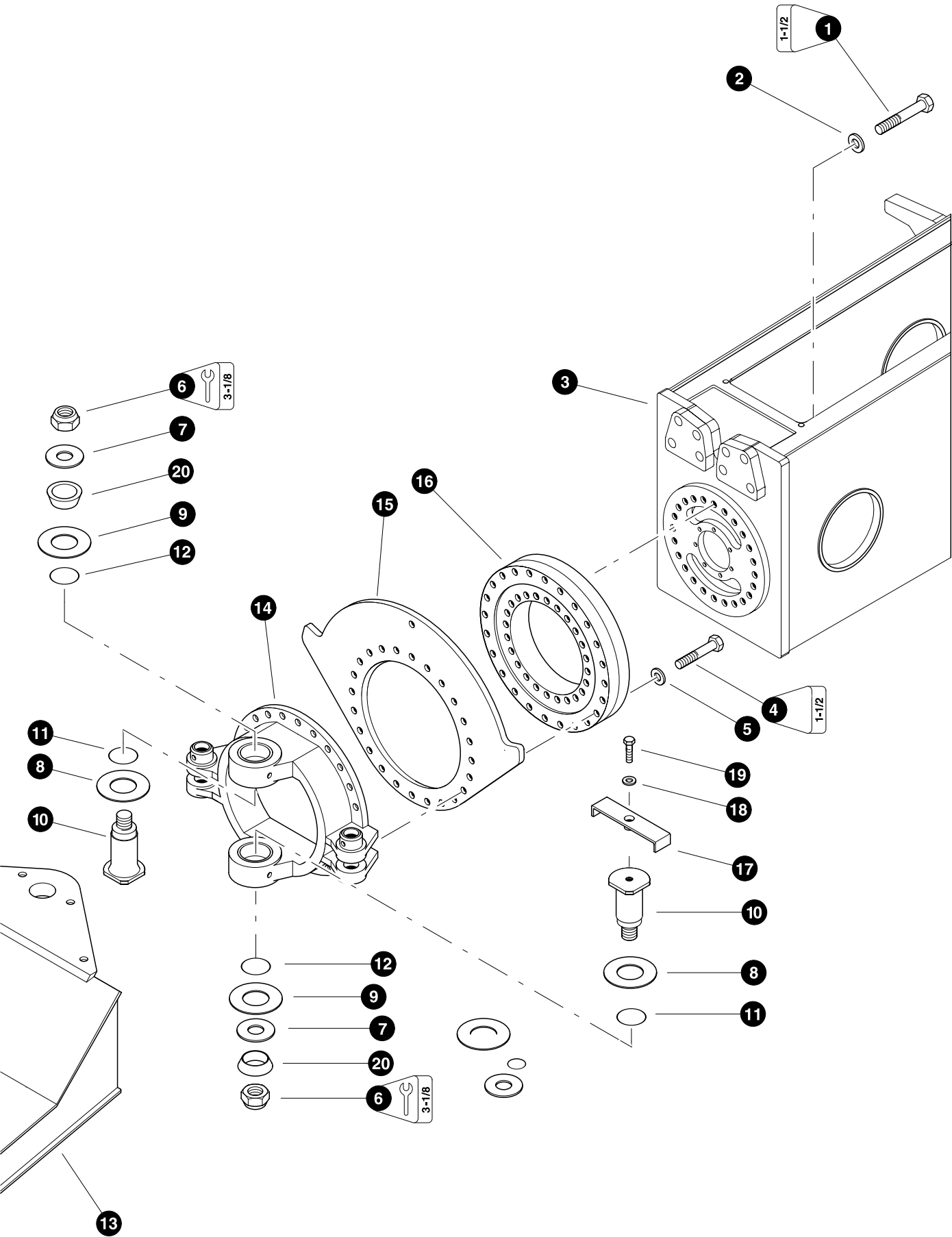


Parts 01720 07/27/2000  
25.00

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.



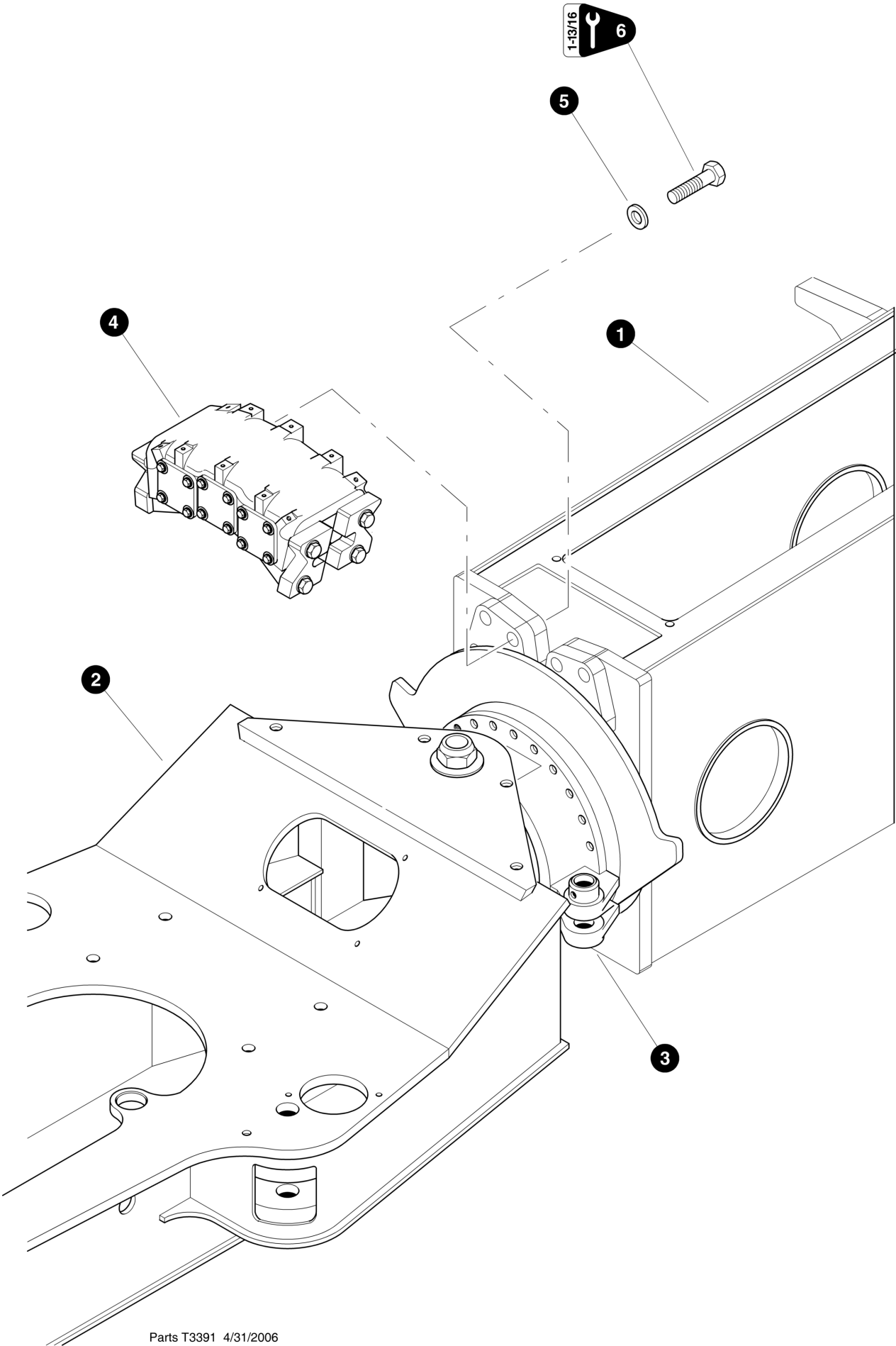
Parts T3642 08/08  
9.375

## 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.



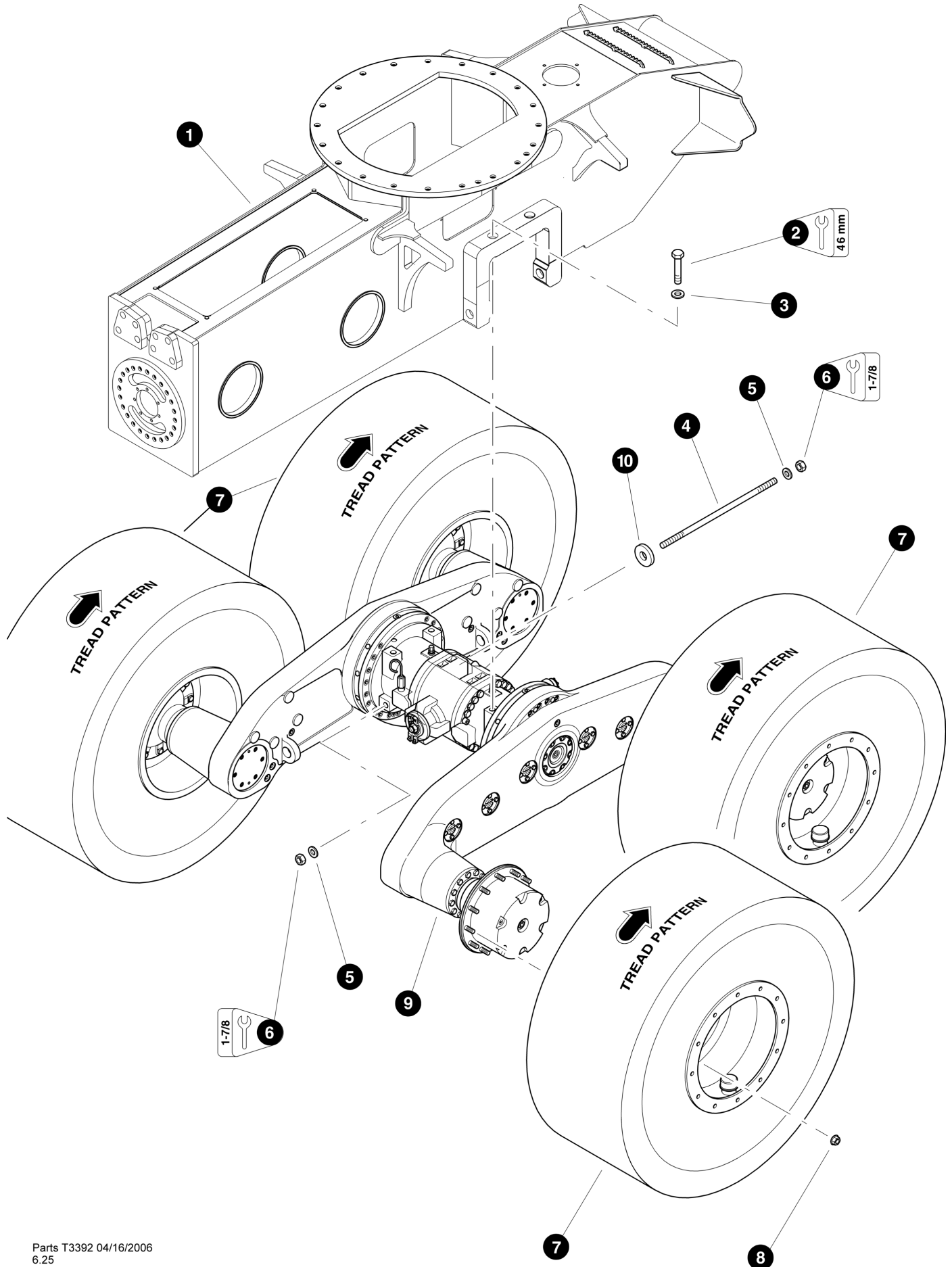
Parts T3391 4/31/2006  
12.50

## 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

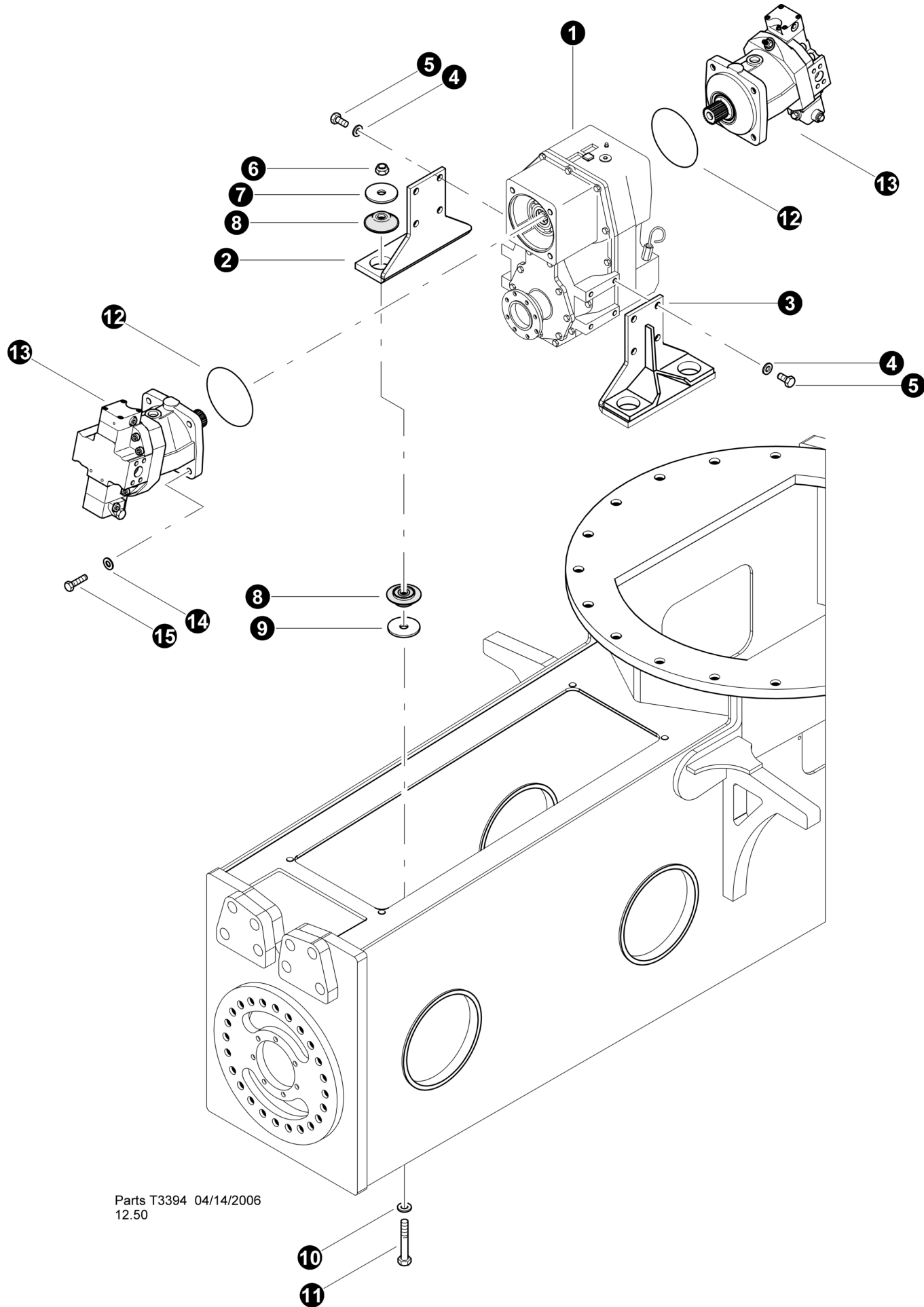


## FRONT AXLE INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                 | SEE PAGE |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------|----------|
| 1   | REF.     | 1   |  | 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.



**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 ( <b>Torque to 180 ft-lbs</b> ) (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) ( <b>Torque to 180 ft-lbs</b> )    |          |



See referenced page for component or assembly breakdown.



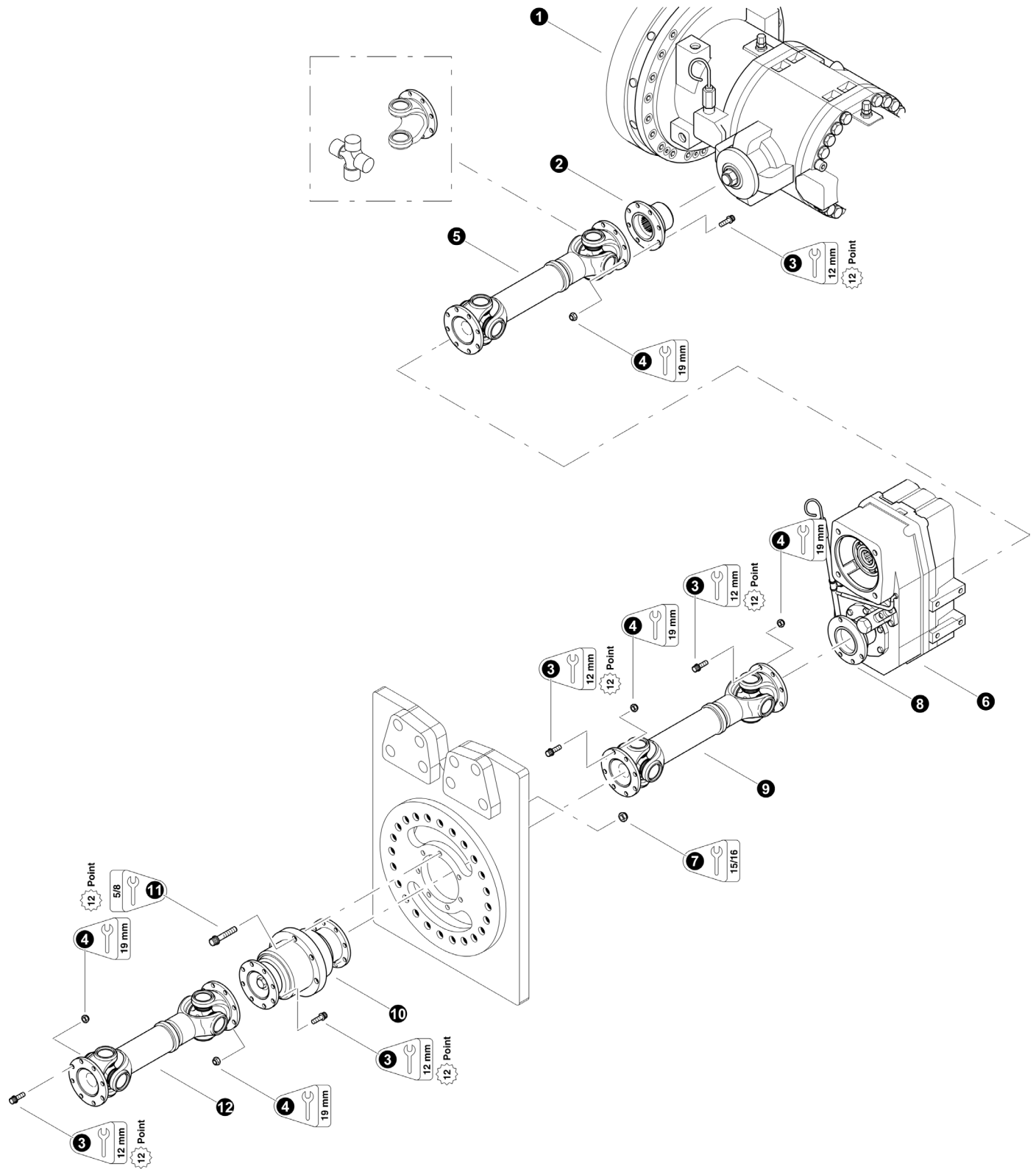
Kit or Assembly - includes all items indented underneath.

**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   | 23997-FF | 1   |                                                                                   | YOKE, companion flange - axle (Torque nut to 590 ft lbs.(800 Nm)<br>(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)<br>(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<br>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.

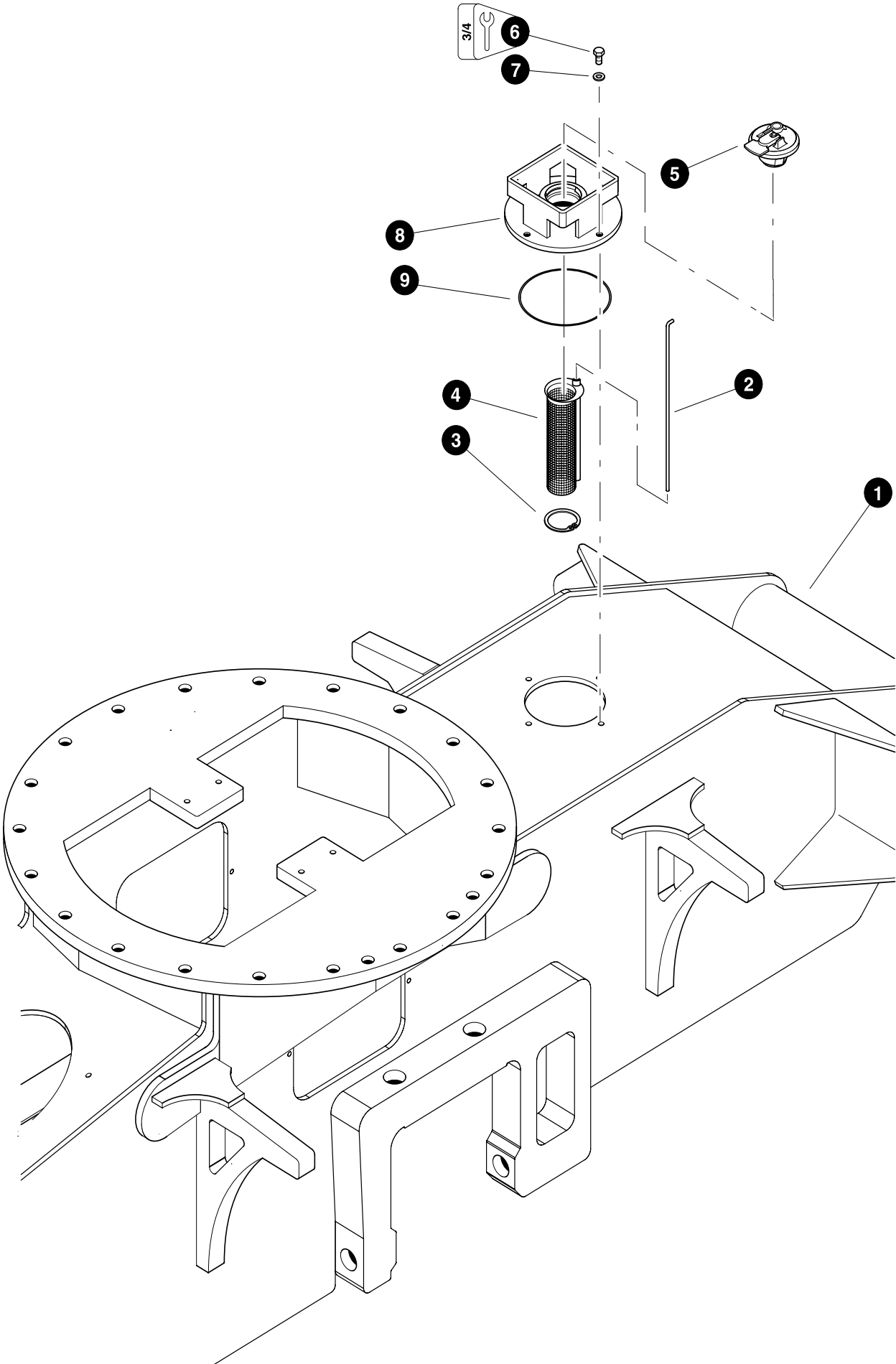
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## ***Section FF-3***

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### ***830 / 840 Front Frame - Fuel Tank Components***



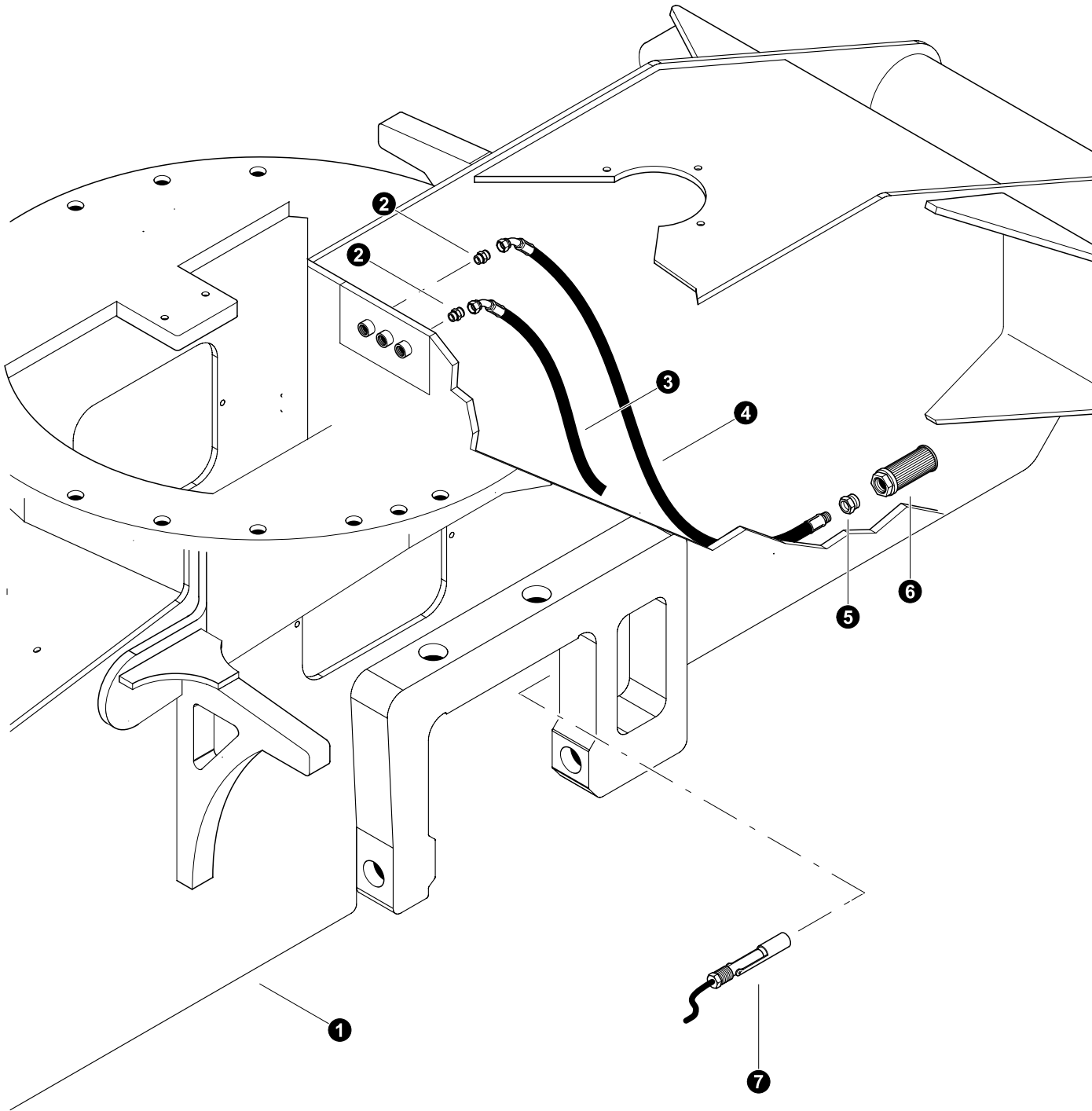


## FUEL FILL STRAINER INSTALLATION

| 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

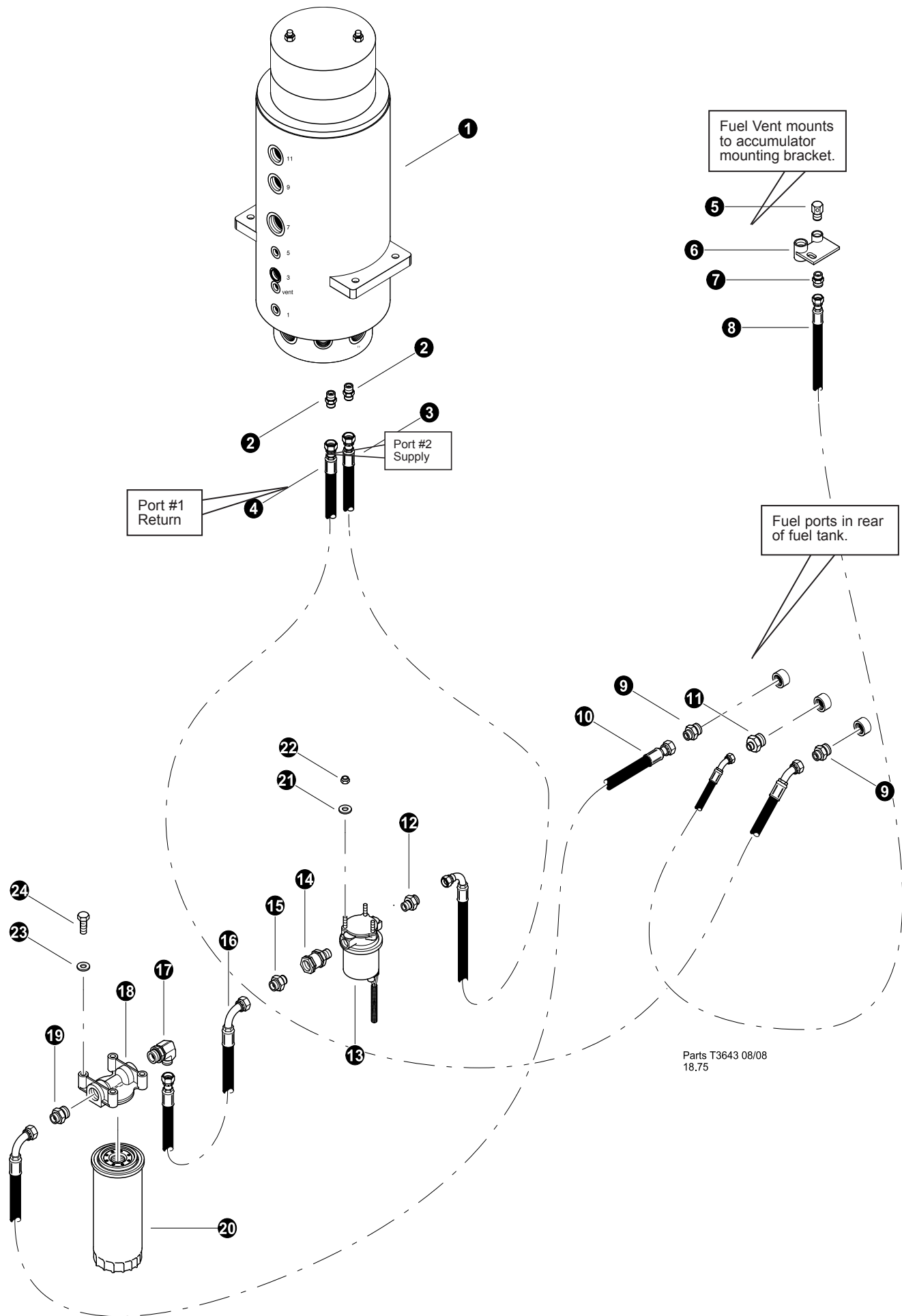
## FUEL LINES

(Supply & Return Lines Inside Fuel Tank)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                      | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | FRONT FRAME WELDMENT. ....                       | 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)

| 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"                                                                           |             |



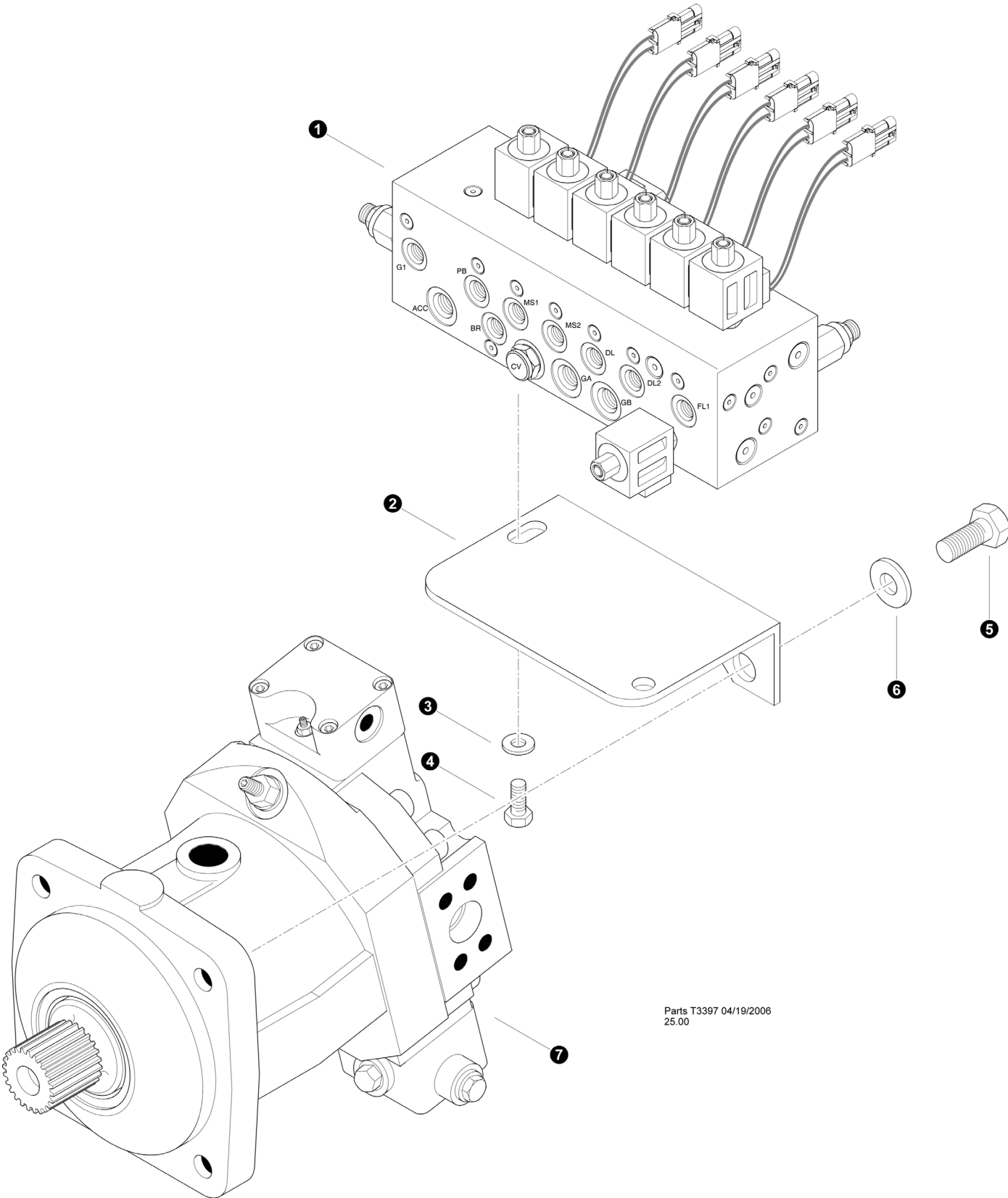
See referenced page for component or assembly breakdown.

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## ***Section FF-4***

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





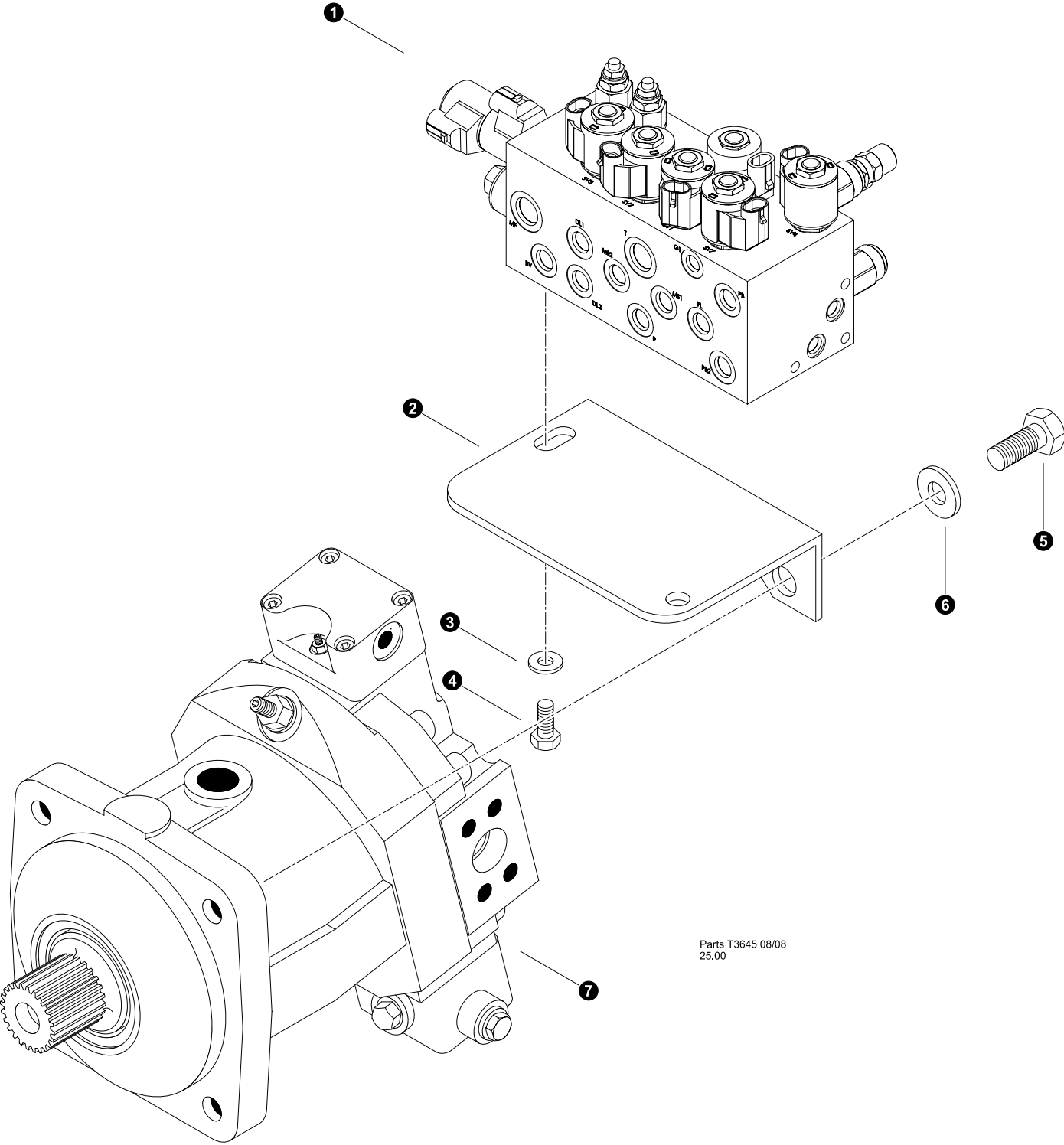
**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Lower Solenoid Manifold Mounting)  
SN - 0251 and before**

| 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) ( <i>Torque to 180 ft-lbs</i> ) |             |
| 6   | 42110-FR | 8   |                                                                                   | WASHER, FLAT - 20MM                                                      |             |

 See referenced page for component or assembly breakdown.

**Note #1:**

Use Loctite 242 (*BLUE*) during install.



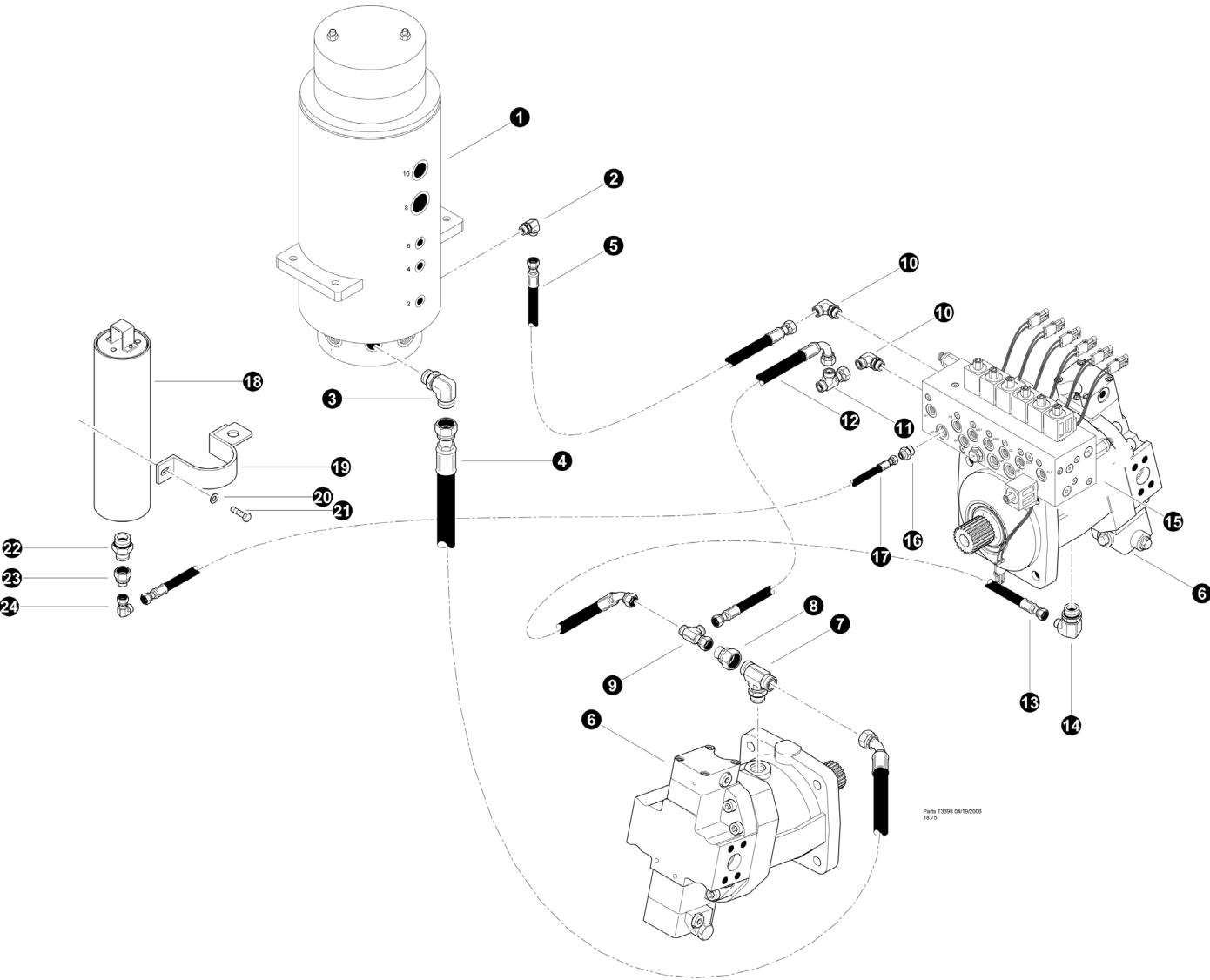
**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Lower Solenoid Manifold Mounting)  
SN - 0252 and After**

| 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) ( <i>Torque to 180 ft-lbs</i> ) |             |
| 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**

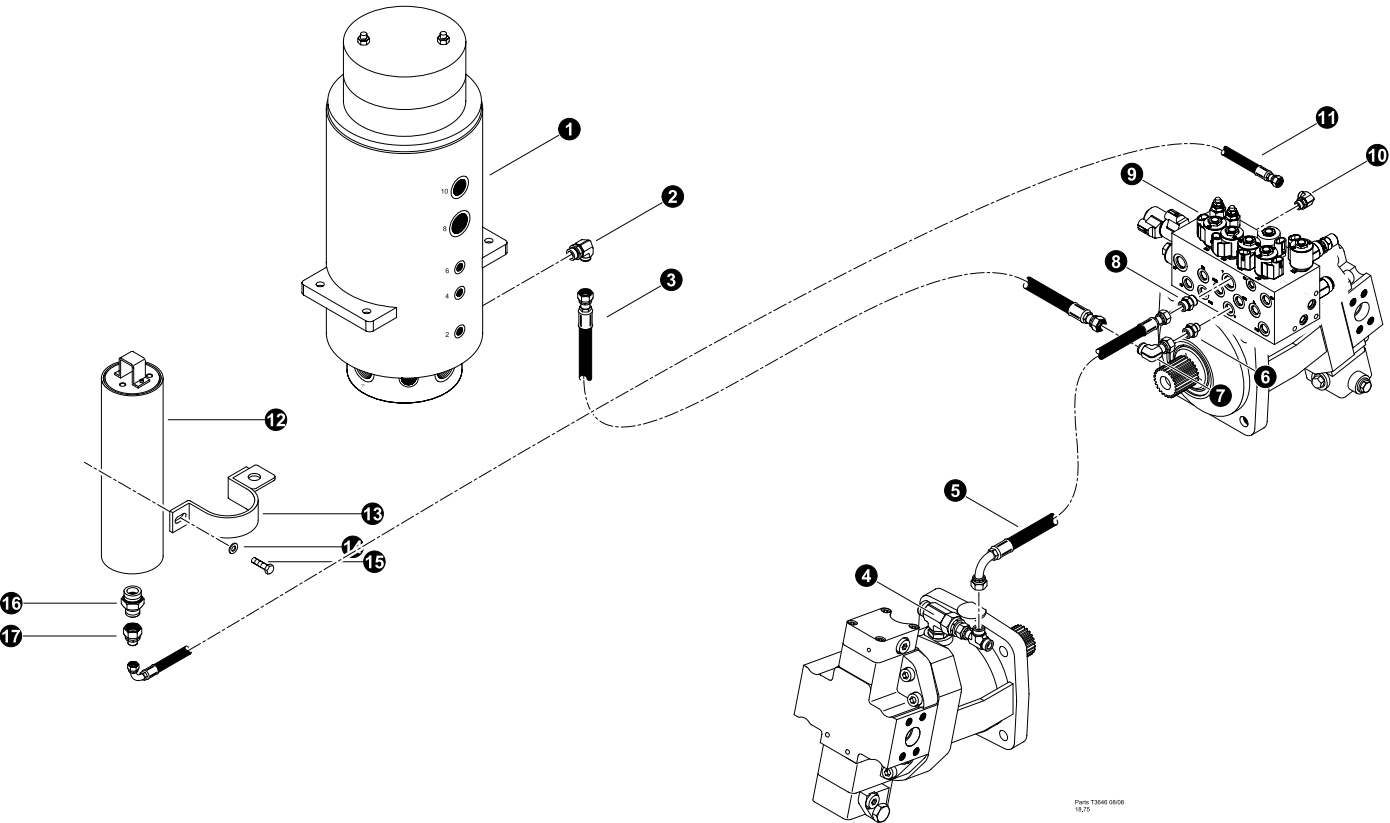
| REF | PART #   | QTY |                                                                                    | DESCRIPTION                                                                             | SEE PAGE |
|-----|----------|-----|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------|
| 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)**

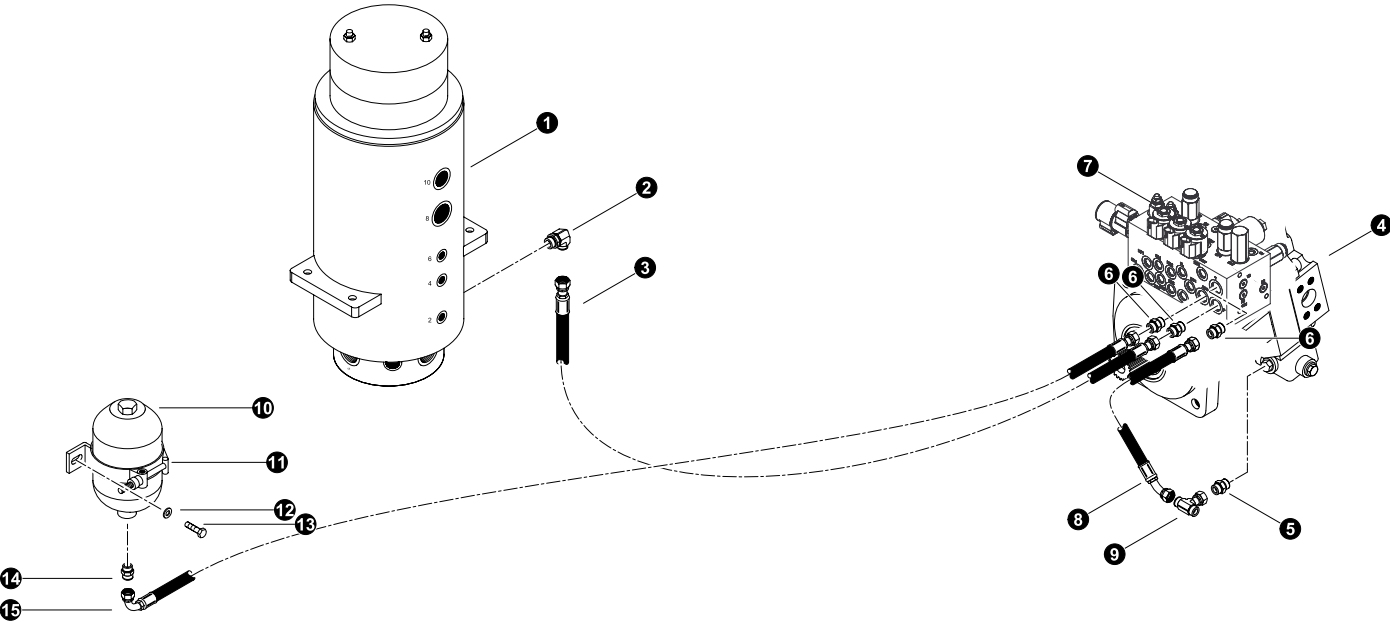
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                             | SEE PAGE |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------|
| 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 15000 08/08  
15/15



**Lower Solenoid Manifold Circuits  
and Components Breakdown**  
**(Lower Manifold - Pressure and Tank Connections)**  
**SN - 0322-112409 to 0354-011211 (including machine 0319)**

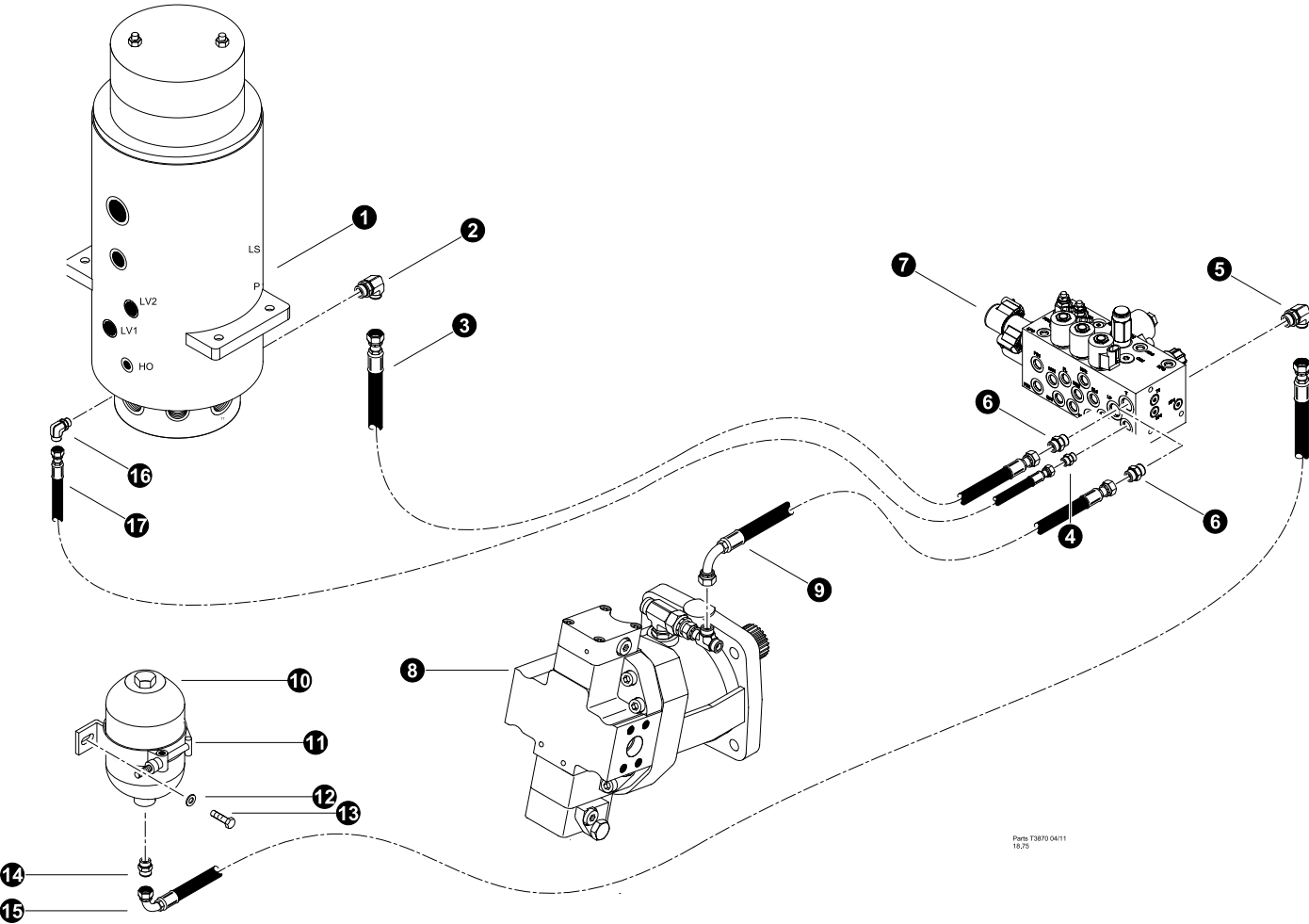
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                              | SEE PAGE |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------|
| 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  
(Lower Manifold - Pressure and Tank Connections)  
Machine 0355-020111 and after**

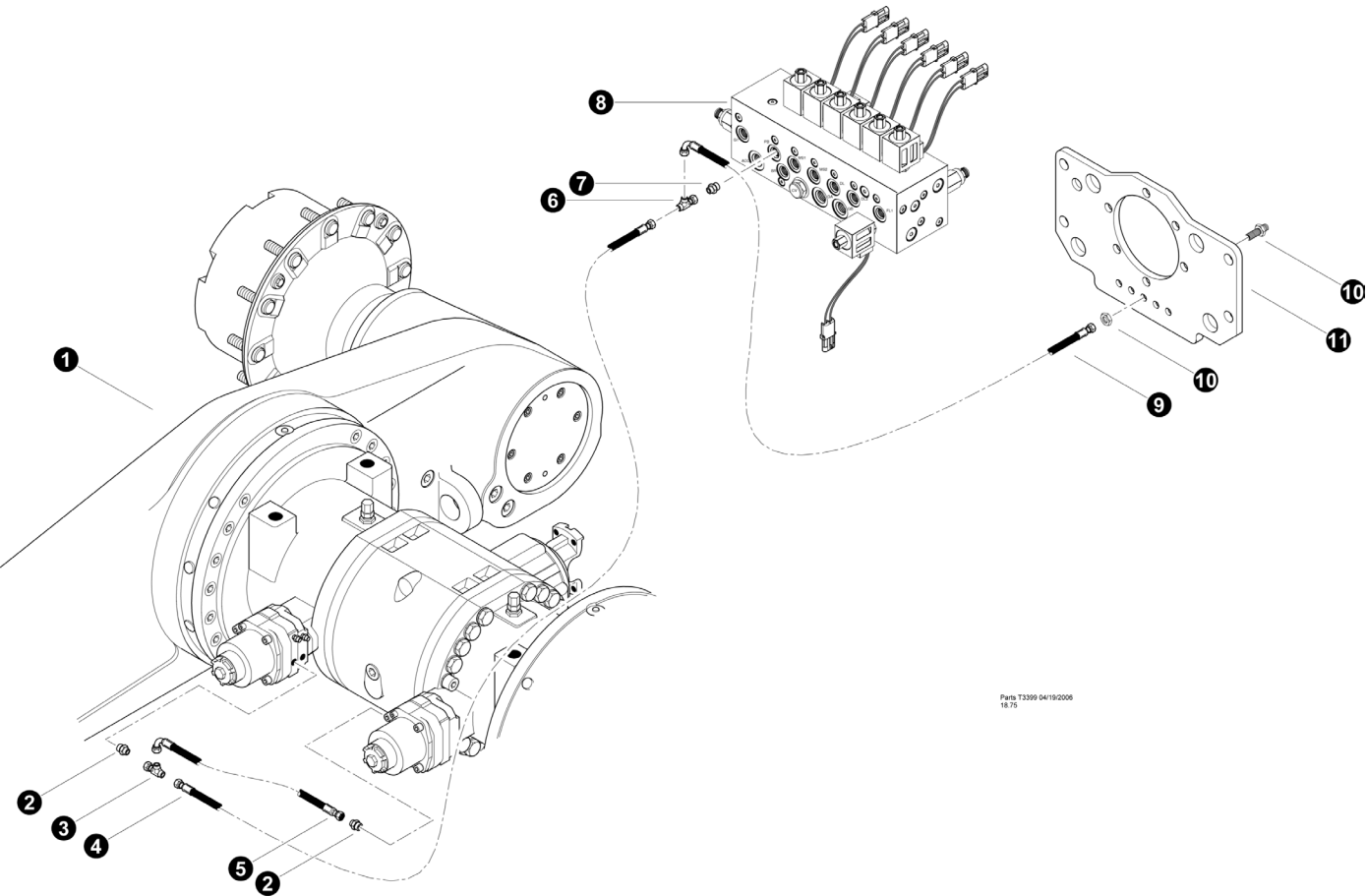
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                              | SEE PAGE |
|-----|----------|-----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------|
| 1   | REF.     | 1   |  | ROTARY MANIFOLD .....                                                                    | UP-1     |
| 2   | 22405-FF | 1   |                                                                                   | ELBOW, 90 - 8-6 C5OLO-S                                                                  |          |
| 3   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2068-08-08OS-08OS (Rotory Manifold Port "P" to Lower Manifold Port "LP") |          |
| 4   | 18034-FF | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0606S                                                           |          |
| 5   | 16360-FF | 1   |                                                                                   | ELBOW, 90 - FF1868T-0808S                                                                |          |
| 6   | 15117-FF | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0808S                                                           |          |
| 7   | REF.     | 1   |  | LOWER SOLENOID MANIFOLD .....                                                            | FF-4     |
| 8   | REF      | 1   |  | WHEEL DRIVE MOTOR CASE DRAIN .....                                                       | FF-5     |
| 9   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2046-08-08OS-08O4 (Tank to Case Drain Tee)                               |          |
| 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 - 2078-08-08OS-08O9 ("ACC" port to accumulator)                            |          |
| 16  | -FF      | 1   |                                                                                   | ELBOW, 90 - 8-6 C5OLO-S                                                                  |          |
| 17  | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2068-06-06OS-06OS ("HP" port to "HO" on RM)                              |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

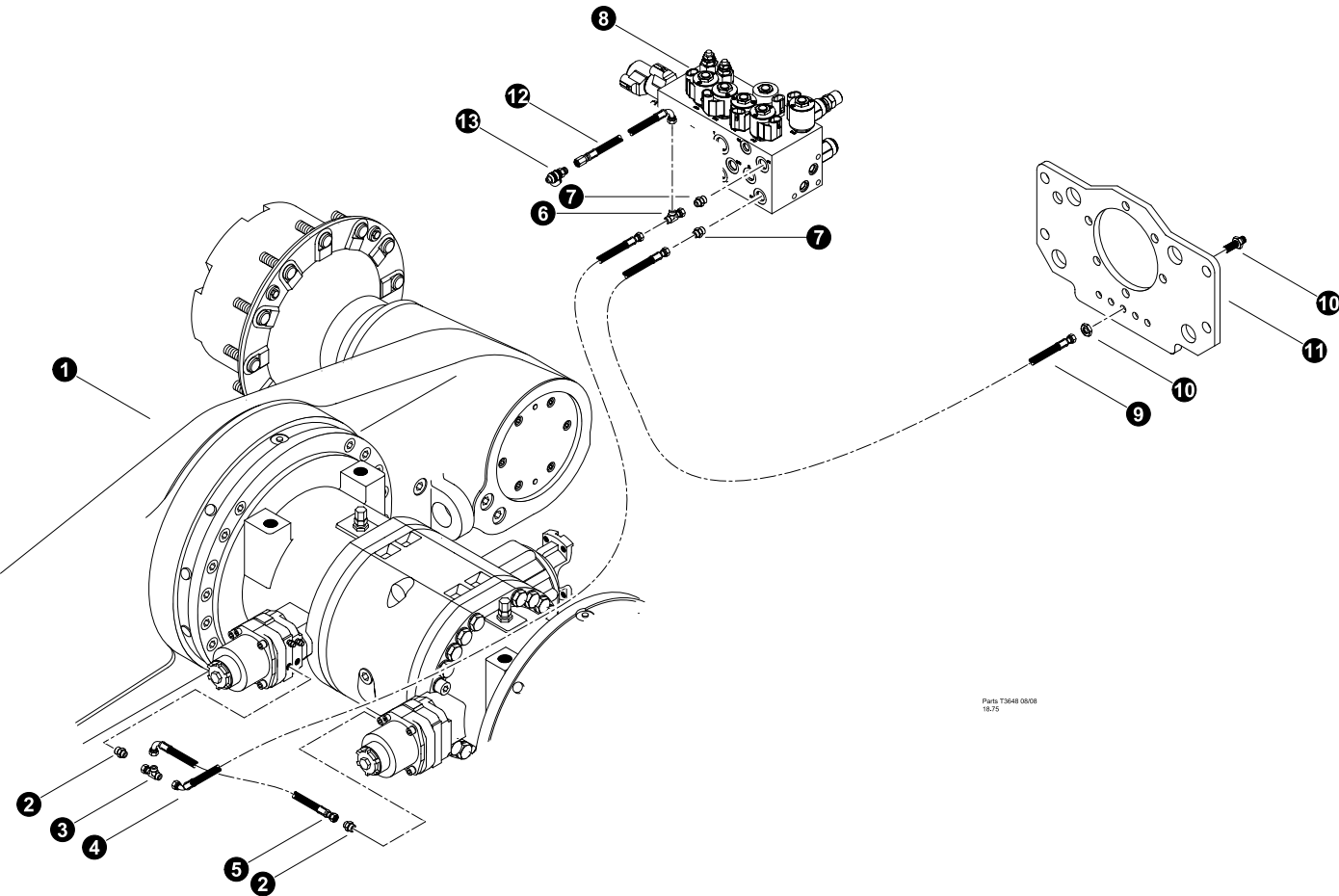


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Parking Brake Connections)  
SN - 0251 and before**

| 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<br>Manifold "PB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (Parking Brake Jumper)                                      |             |
| 6   | 15176-FF | 1   |                                                                                   | TEE - FF2114T-0404S                                                                             |             |
| 7   | 15124-FF |     |                                                                                   | 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<br>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.



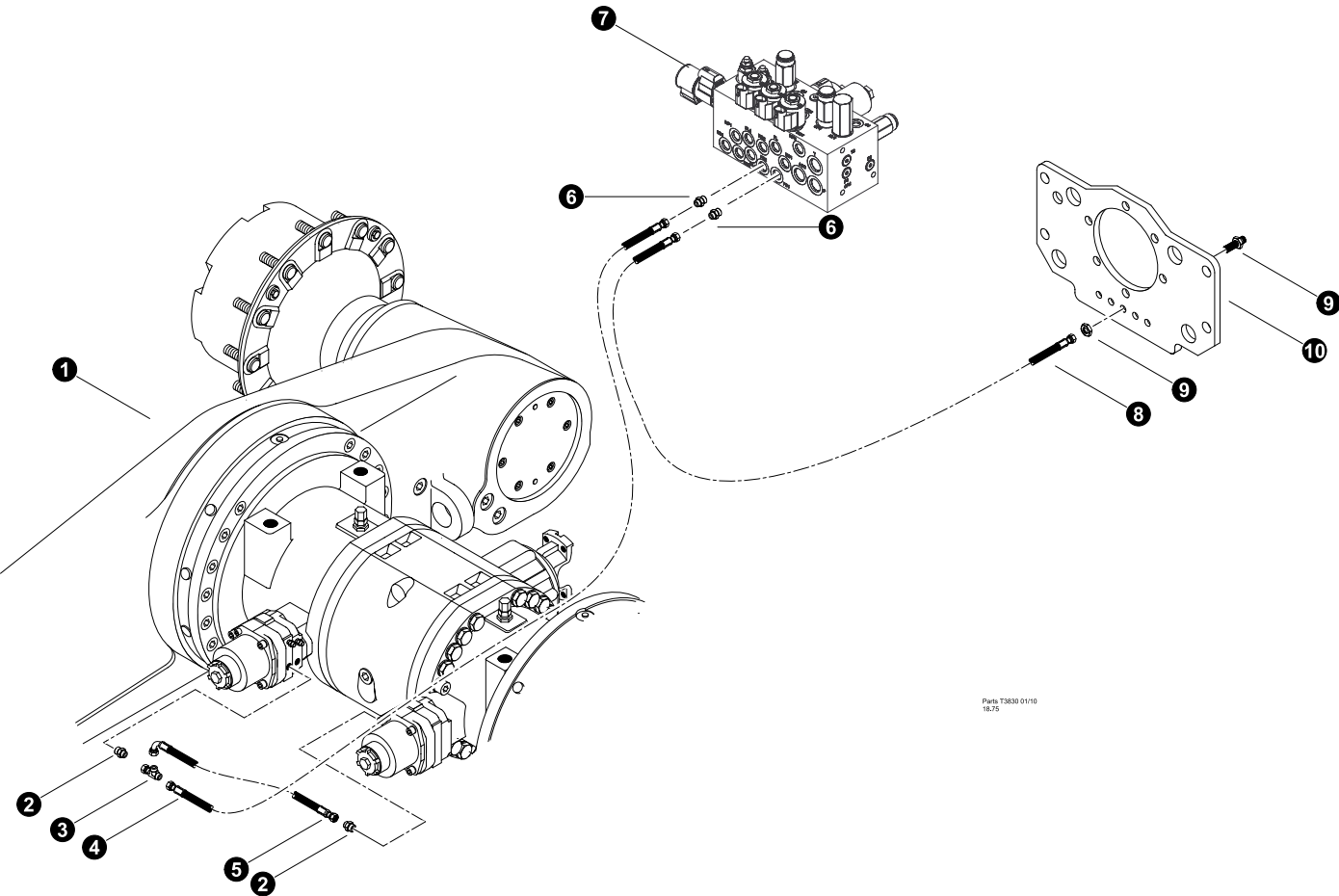
Parts T3648 08/08  
18.75

**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<br>Manifold "PB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (Parking Brake Jumper)                                      |             |
| 6   | 15176-FF | 1   |                                                                                   | TEE - FF2114T-0404S                                                                             |             |
| 7   | 15124-FF |     |                                                                                   | 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<br>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.



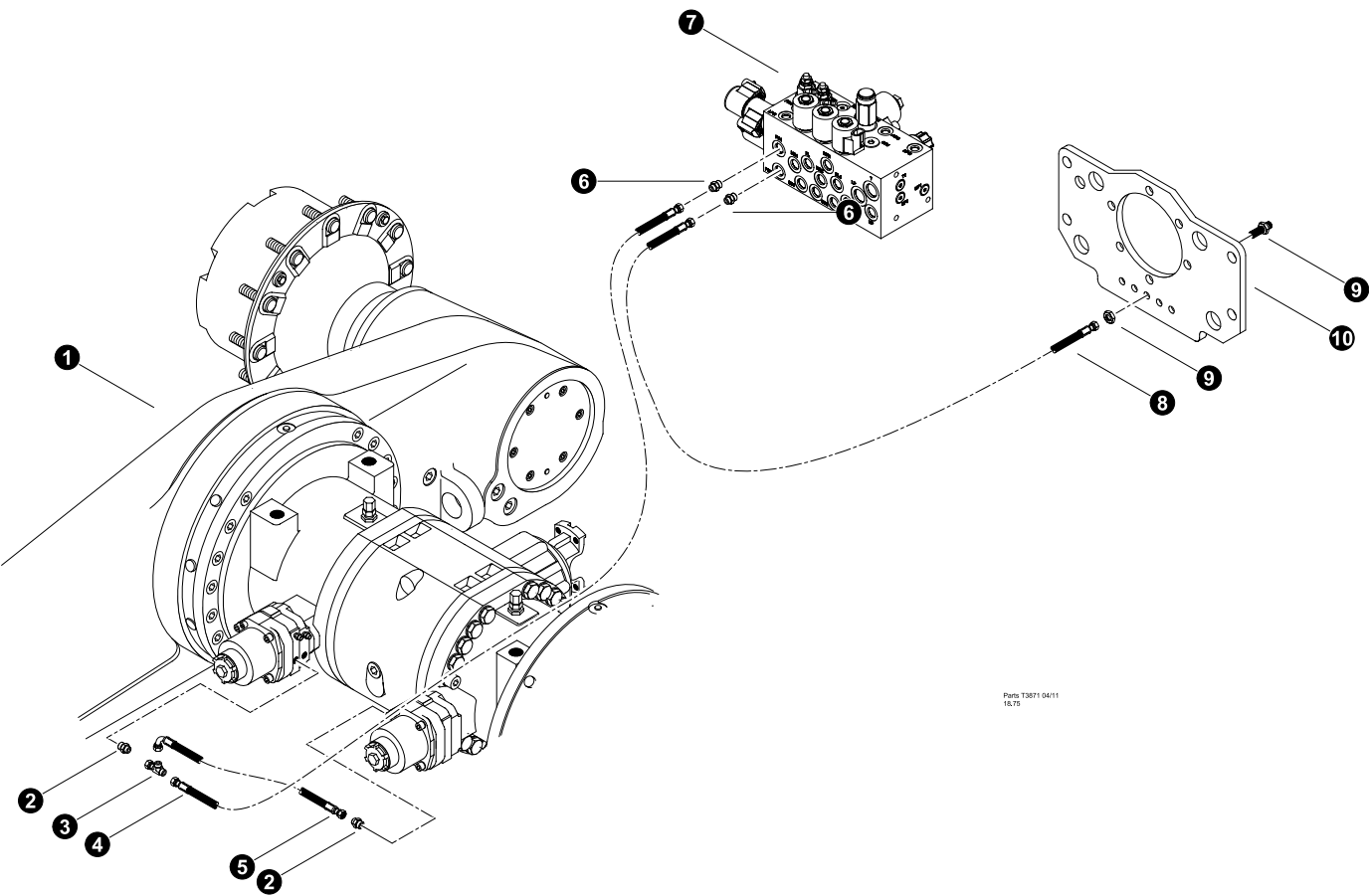


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Parking Brake Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>Lower Manifold "PB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (Parking Brake Jumper)                                        |             |
| 6   | 15124-FF |     |                                                                                   | 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<br>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.

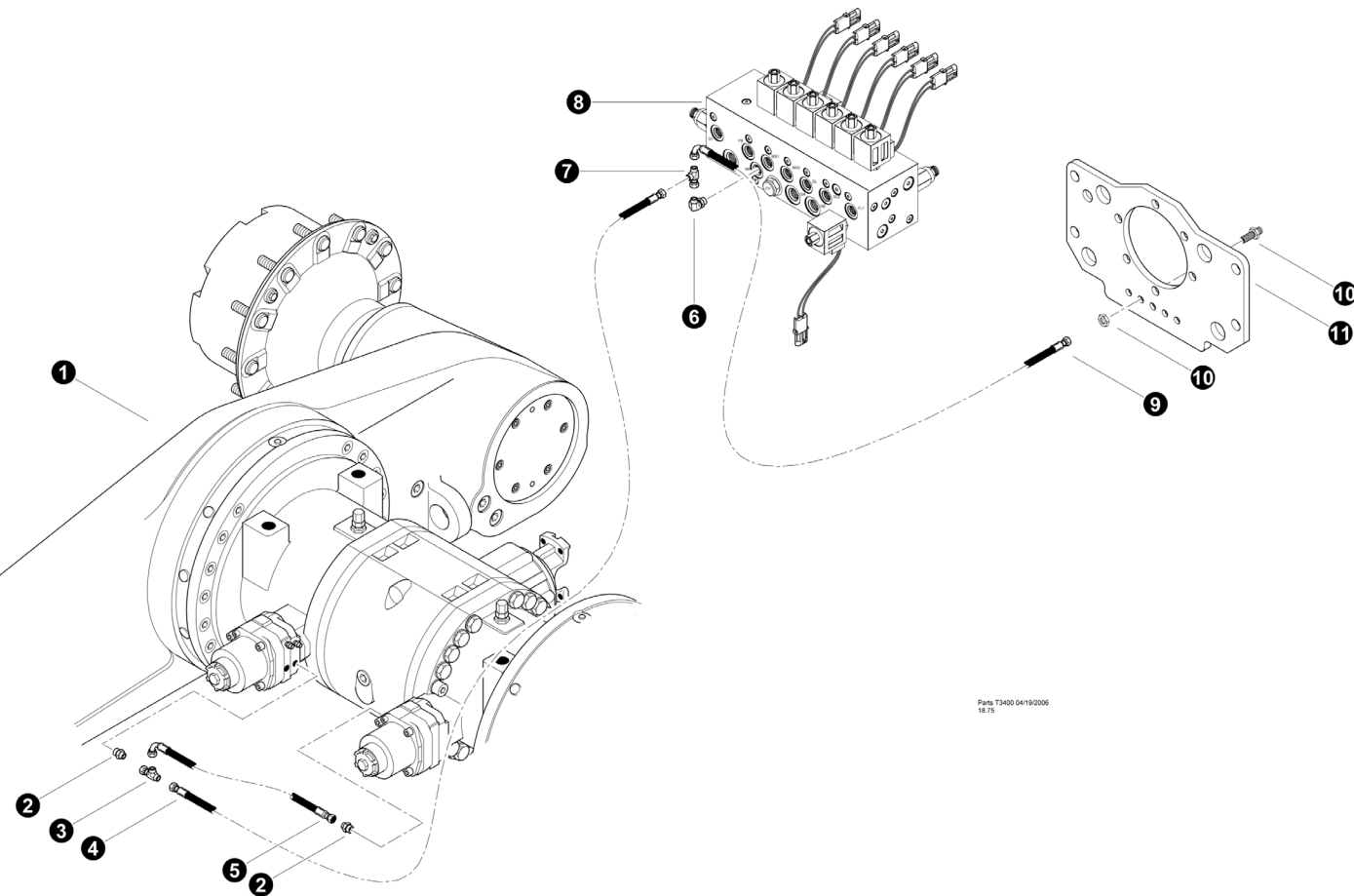


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Parking Brake Connections)  
Machine 0355-020111 and after**

| 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 - 2085.5-04-040S-040S (Front Axle Parking Brake to<br>Lower Manifold "PB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (Parking Brake Jumper)                                        |             |
| 6   | 15124-FF |     |                                                                                   | 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<br>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.

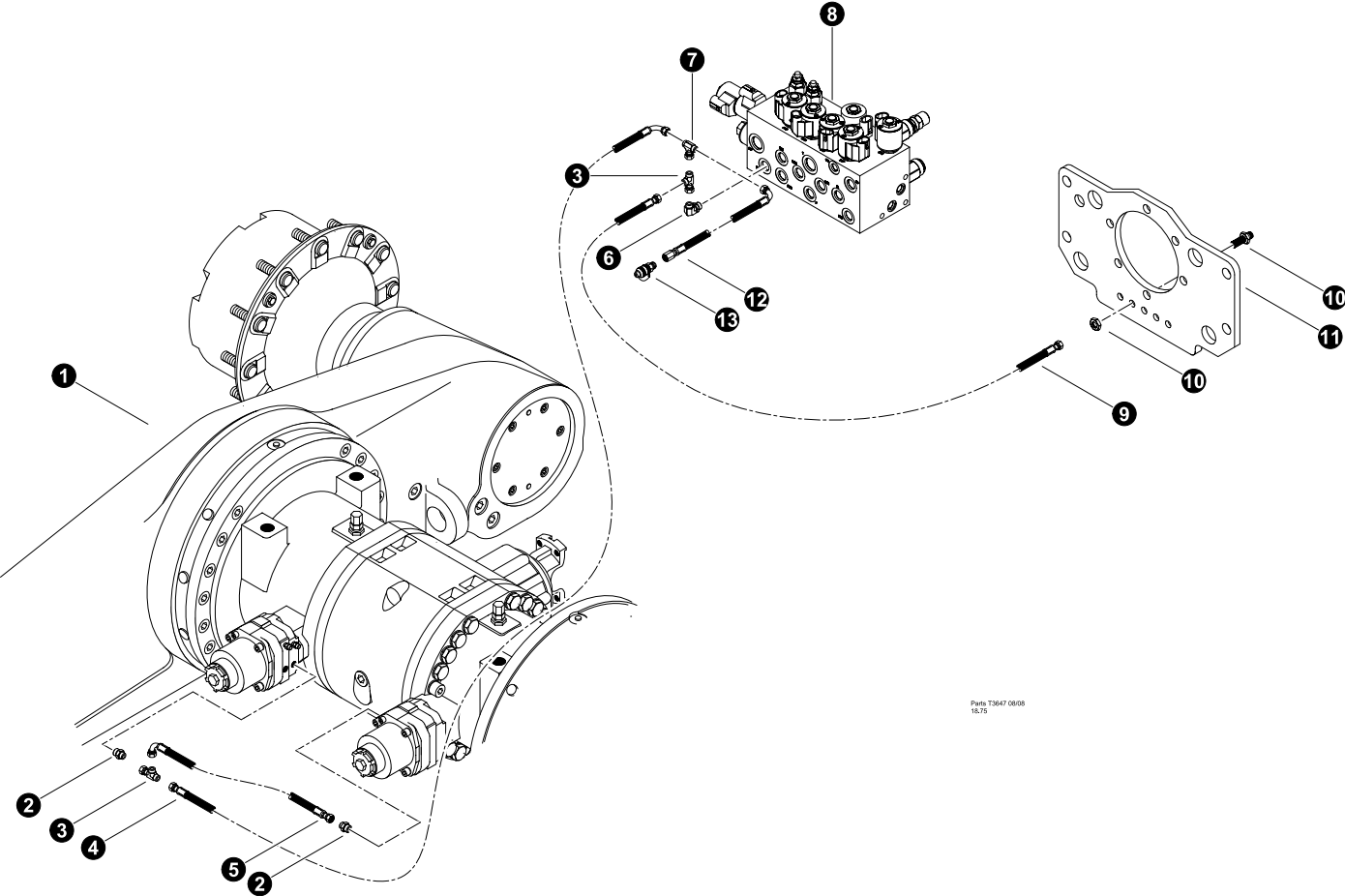


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Travel Brake Connections)  
SN - 0251 and before**

| 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<br>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<br>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.



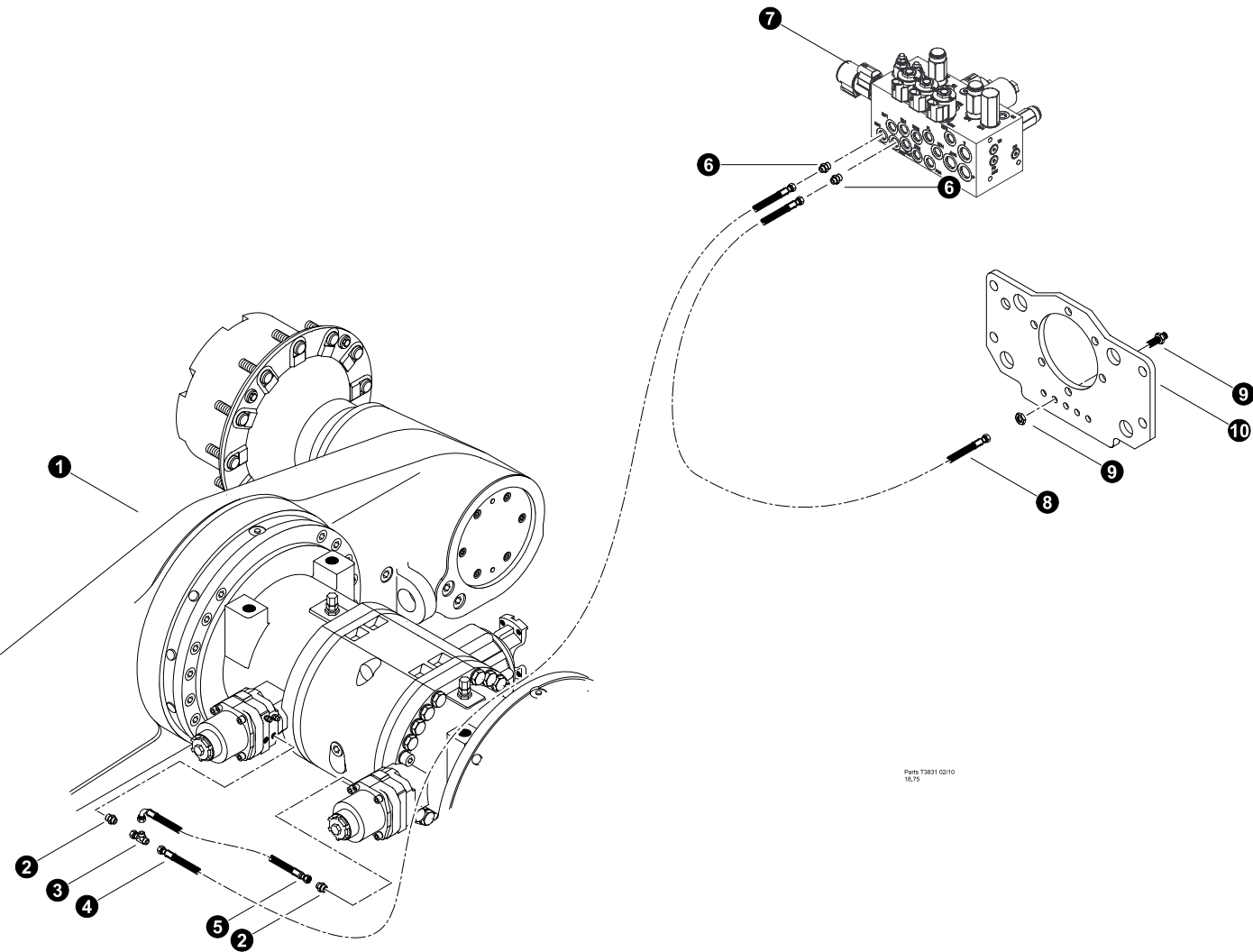
Part 13647 08/08  
18.75

**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<br>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   | 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<br>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.



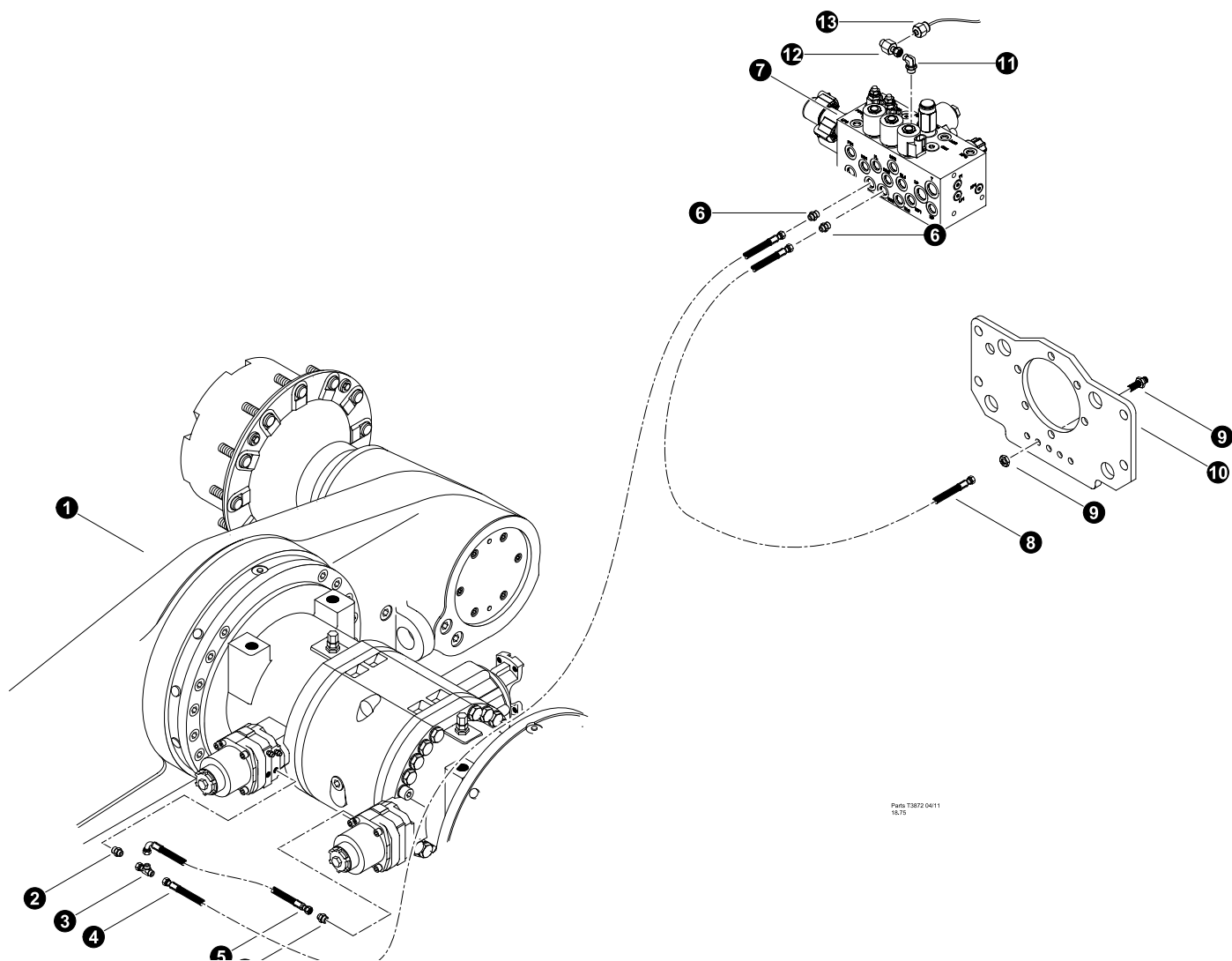


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Travel Brake Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>Manifold "TB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (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<br>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.

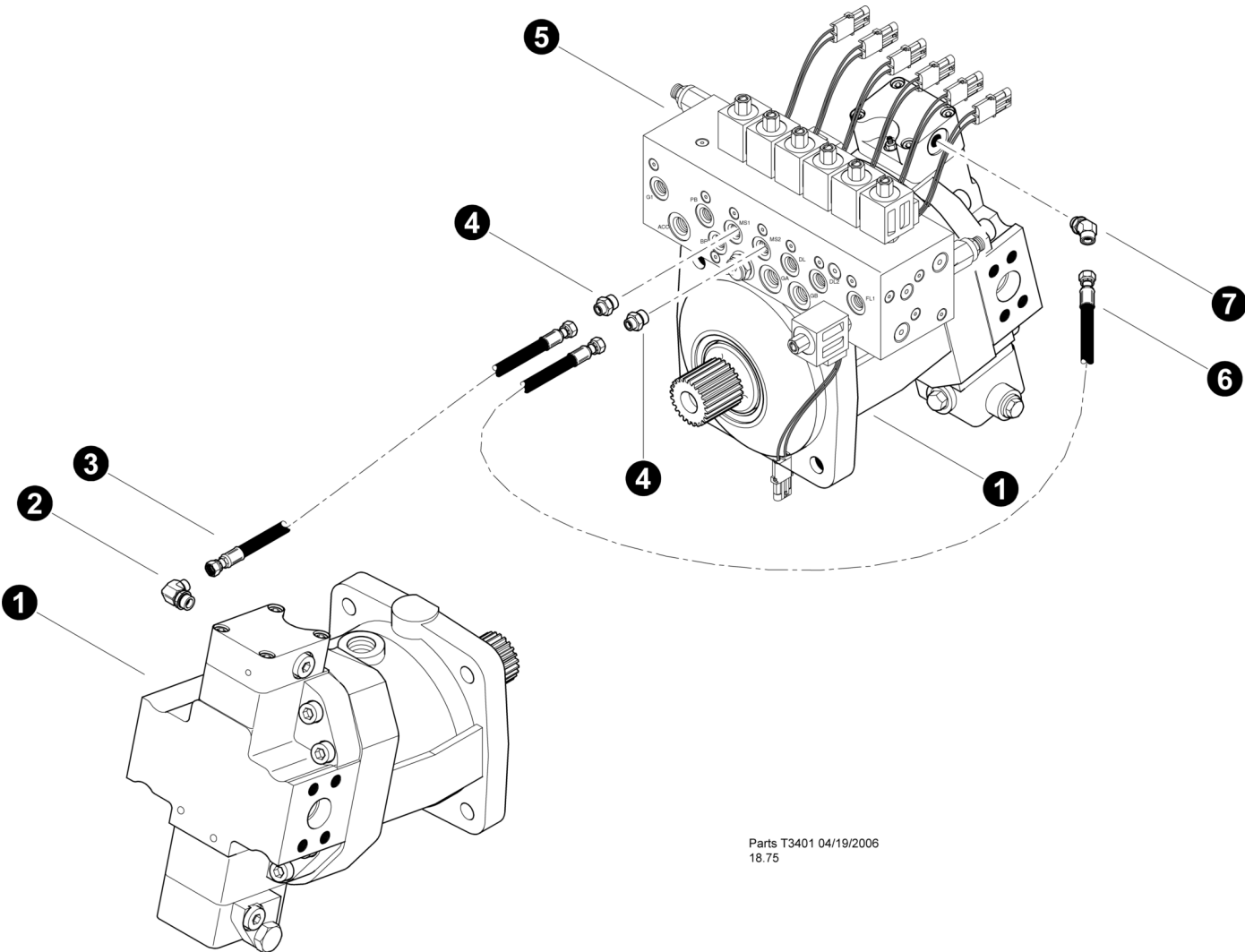


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Travel Brake Connections)  
Machine 0355-020111 and after**

| 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-040S (Front Axle Travel Brake to Lower<br>Manifold "TB" port tee) |             |
| 5   | 50607-FF | 1   |                                                                                   | HOSE ASSEMBLY - 2009.5-04-040S-0409 (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<br>Brake Bulkhead)       |             |
| 9   | 18582-FF | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                        |             |
| 10  | 52486-FF | 1   |                                                                                   | BRACKET, BRG MOUNT - DRIVELINE 830                                                             |             |
| 11  | 16540-FF | 1   |                                                                                   | ELBOW, 90 - FF1868T-0404S                                                                      |             |
| 12  | -FF      |     |                                                                                   | CONNECTOR, STR - 4-4 LOHL6G5TP-S Parker                                                        |             |
| 13  | 54282-FF | 1   |                                                                                   | SWITCH, PRESSURE - 30 PSI                                                                      |             |



See referenced page for component or assembly breakdown.



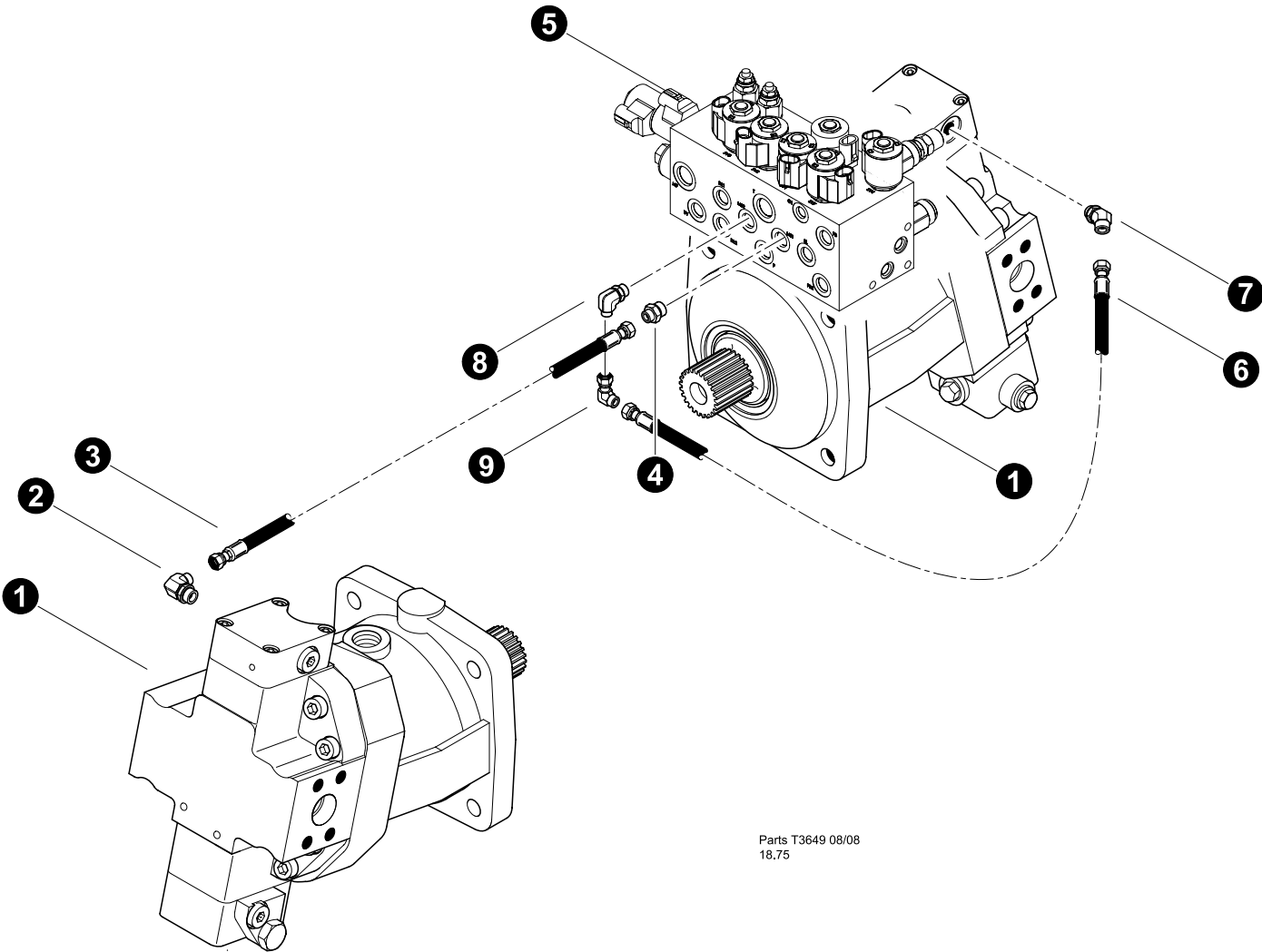
Parts T3401 04/19/2006  
18.75

**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<br>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<br>Manifold "MS2" port)    |             |
| 7   | 23322-FF | 2   |                                                                                   | ELBOW, 45 - 6-4 V5OLO-S                                                           |             |



See referenced page for component or assembly breakdown.



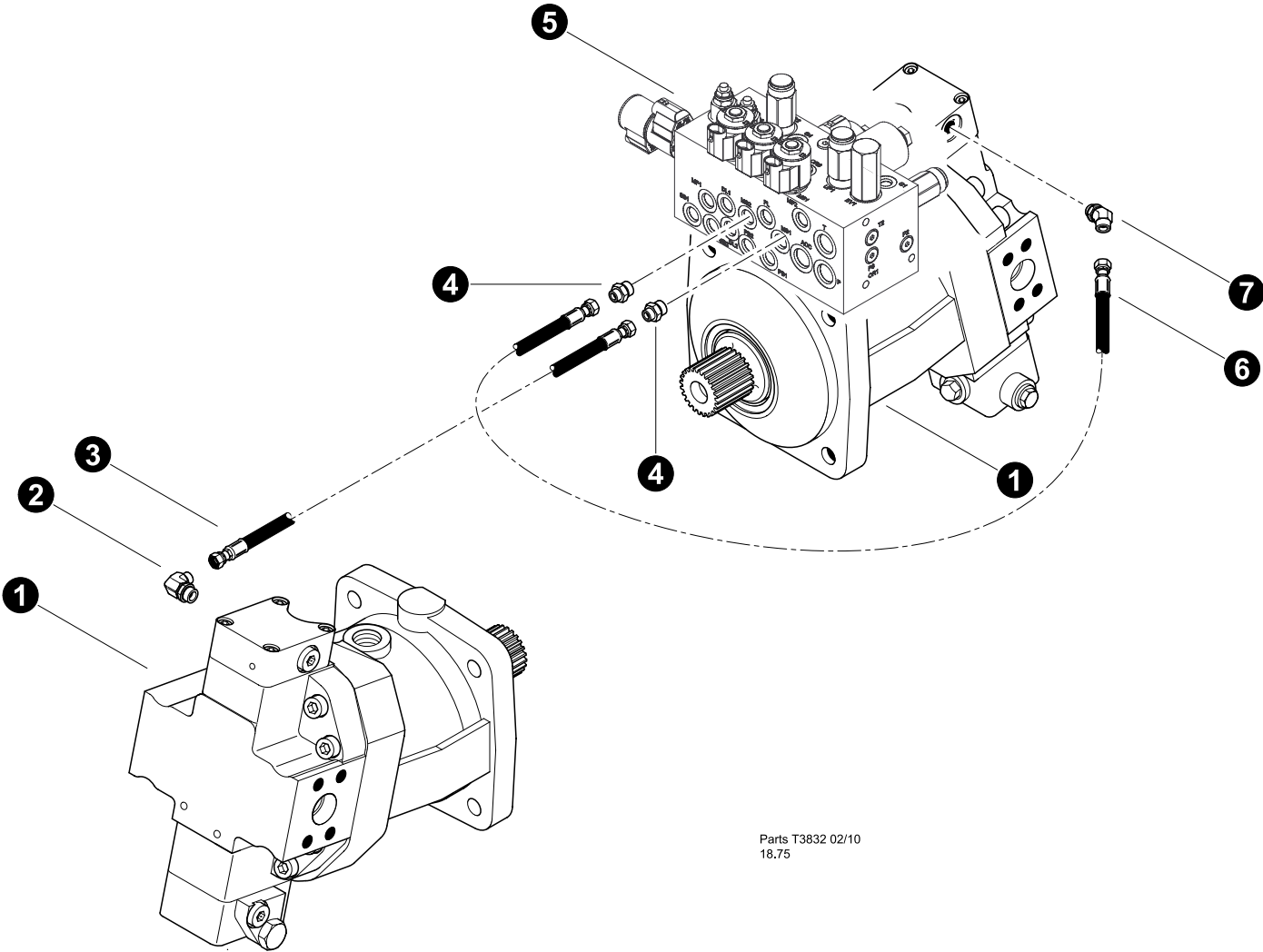
Parts T3649 08/08  
18,75

**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<br>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<br>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

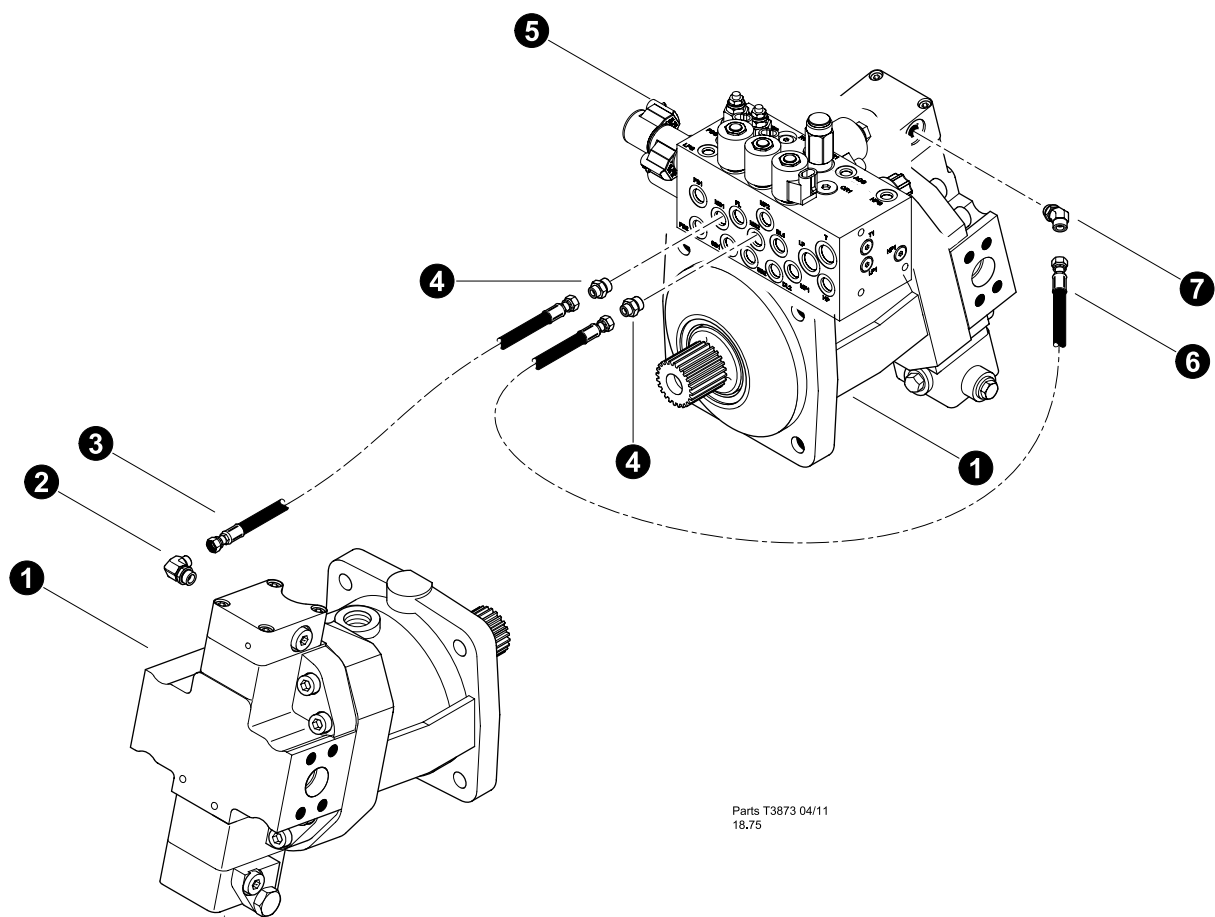


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Motor Shift Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>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<br>Manifold "MS2" port) |             |
| 7   | 23322-FF | 2   |                                                                                   | ELBOW, 45 - 6-4 V5OLO-S                                                          |             |



See referenced page for component or assembly breakdown.



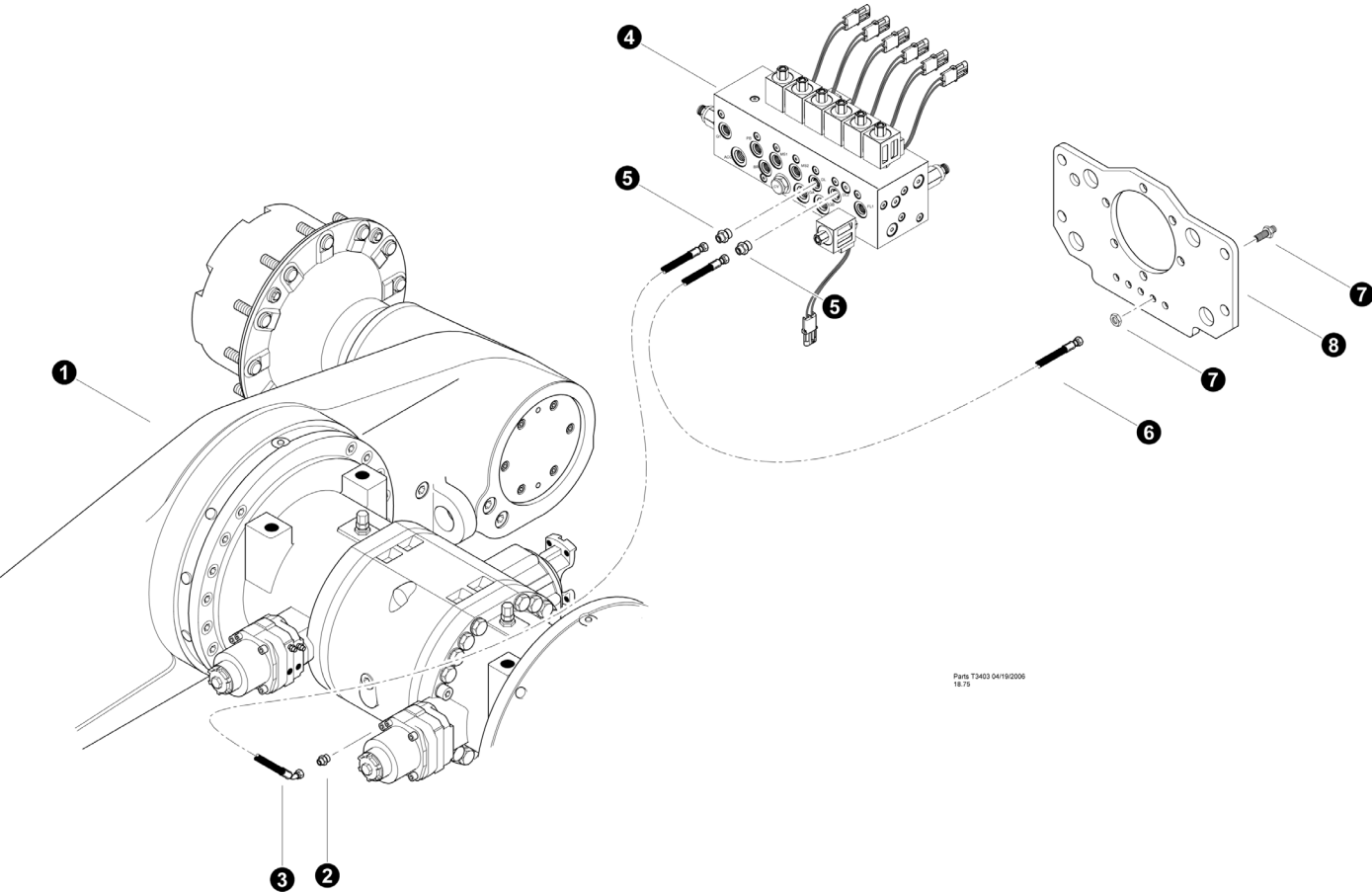
Parts T3873 04/11  
18.75

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Motor Shift Connections)  
Machine 0355-020111 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 - 2024-04-040S-040S (Front Motor to Lower<br>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<br>Manifold "MS2" port) |             |
| 7   | 23322-FF | 2   |                                                                                   | ELBOW, 45 - 6-4 V5OLO-S                                                          |             |



See referenced page for component or assembly breakdown.

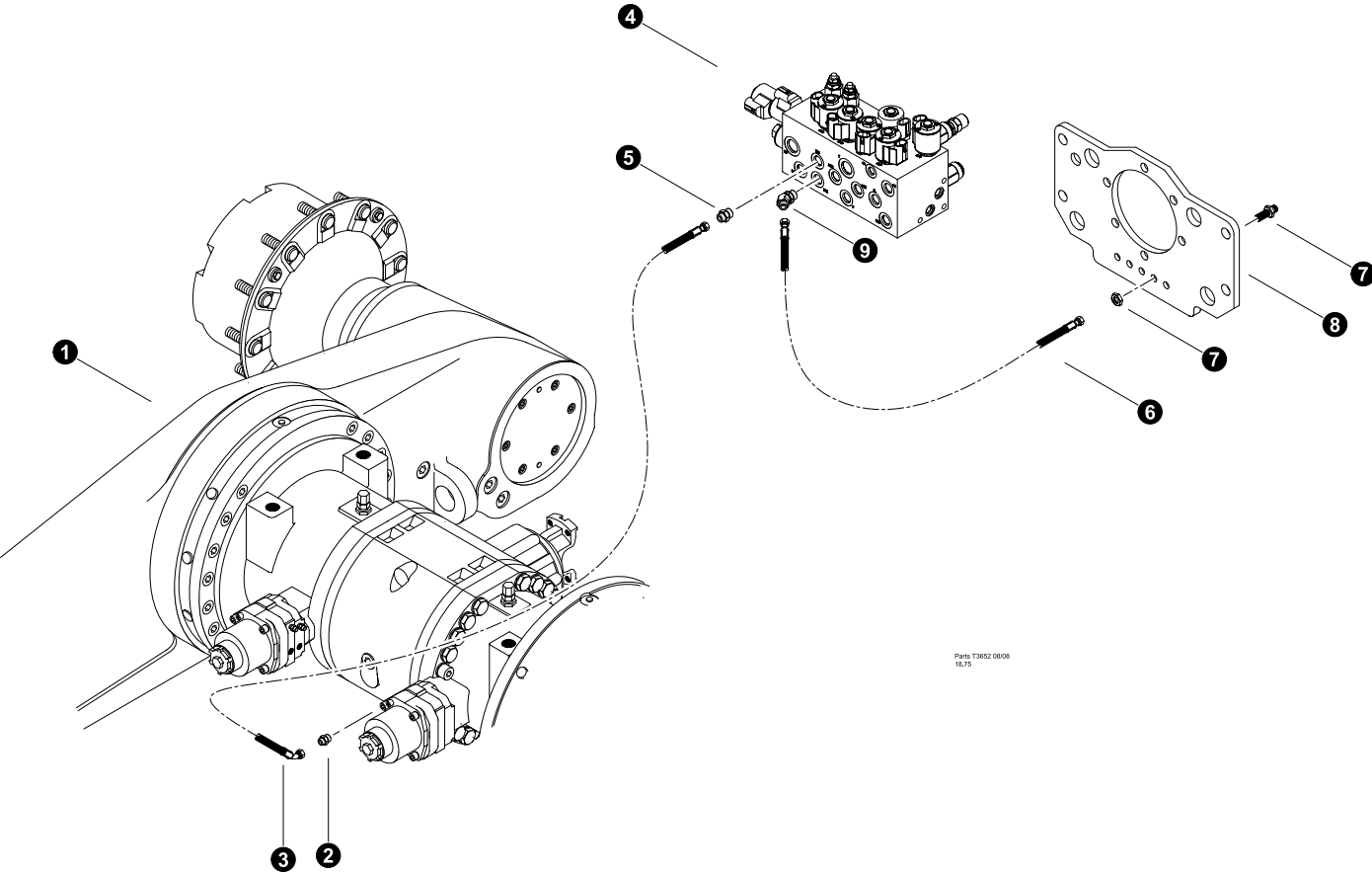


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Differential Lock Connections)  
SN - 0251 and before**

| 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<br>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<br>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.

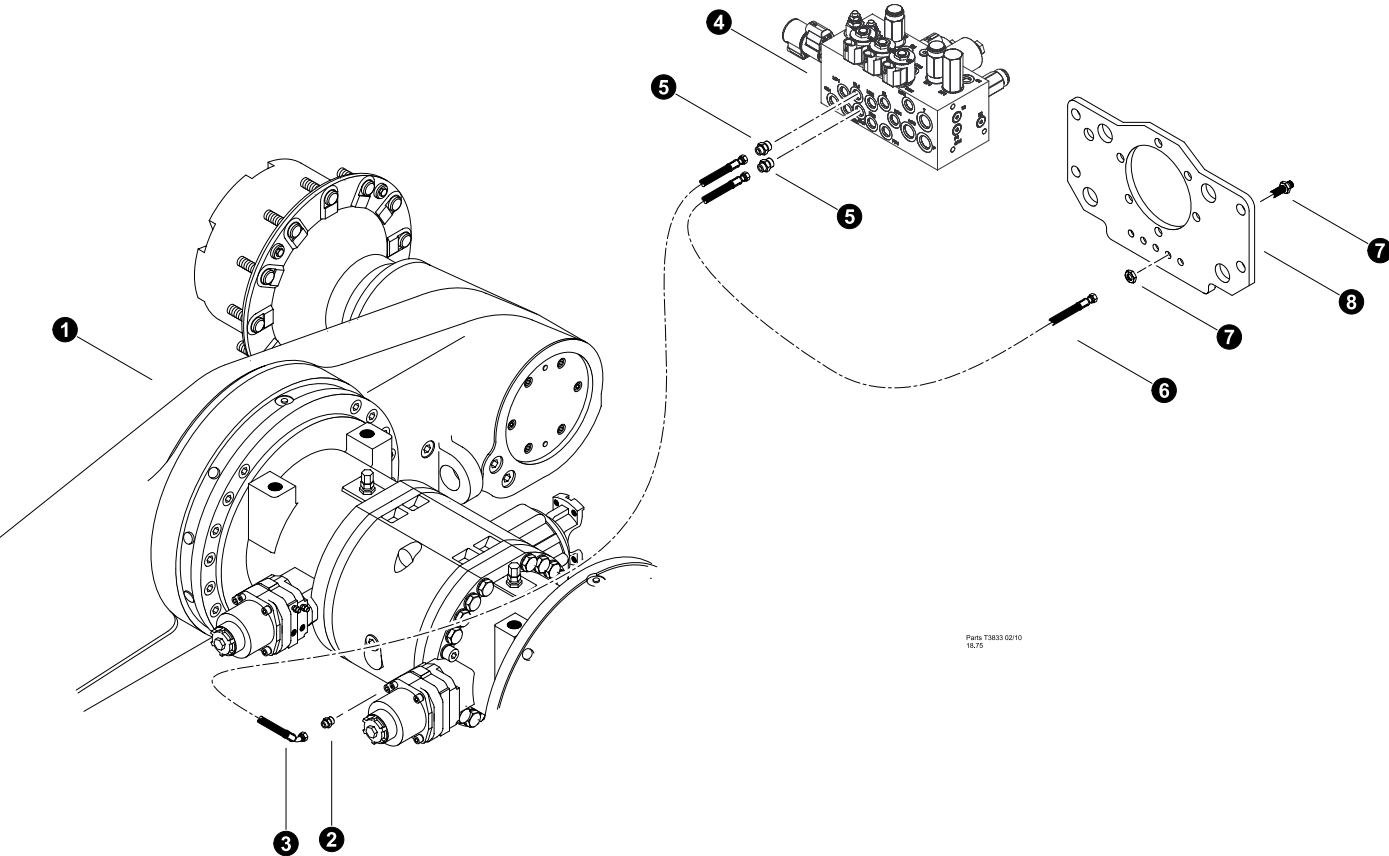


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Differential Lock Connections)  
SN - 0252-042208 to 0321-10219**

| 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<br>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<br>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.



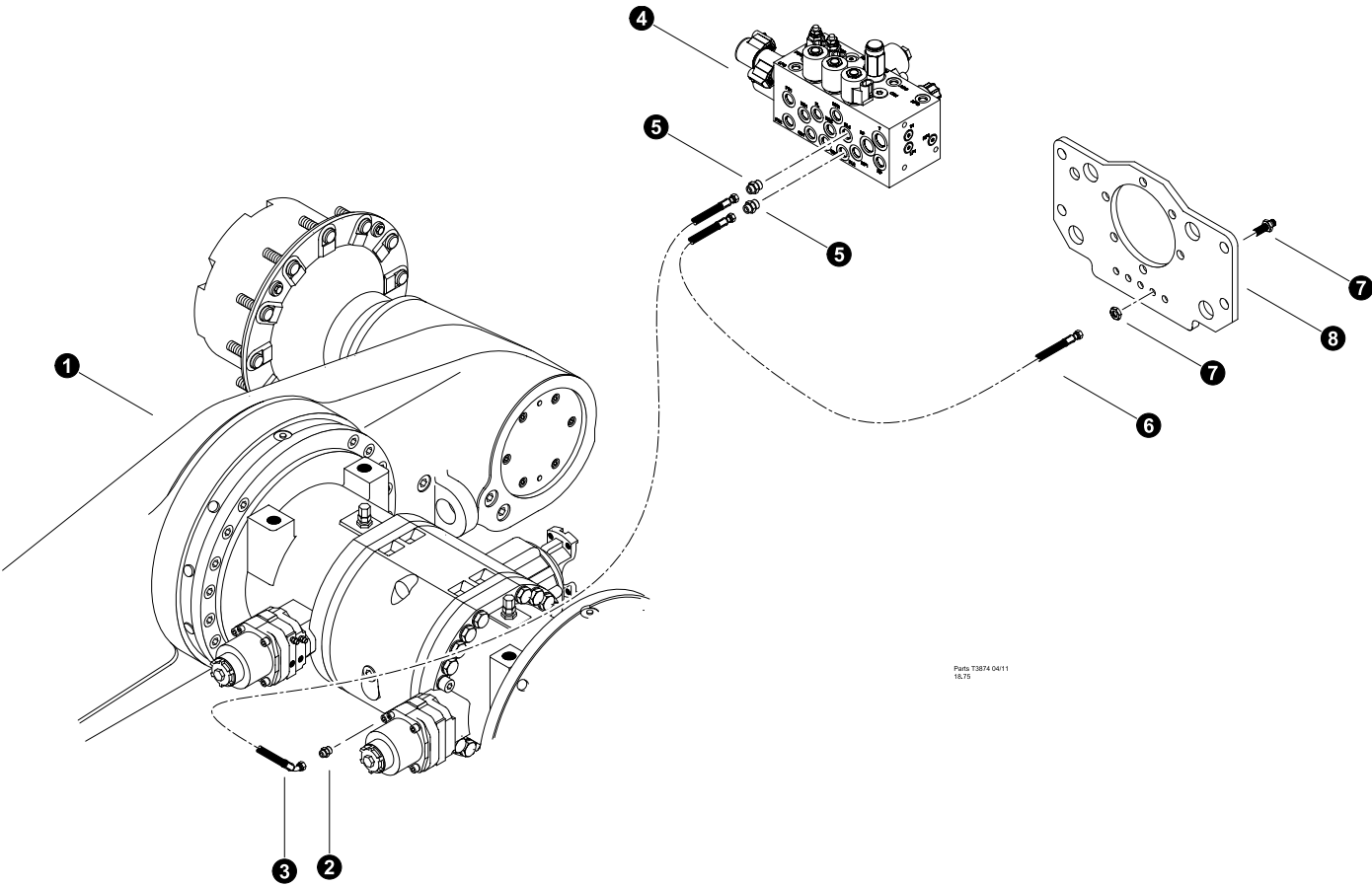


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Differential Lock Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>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<br>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.

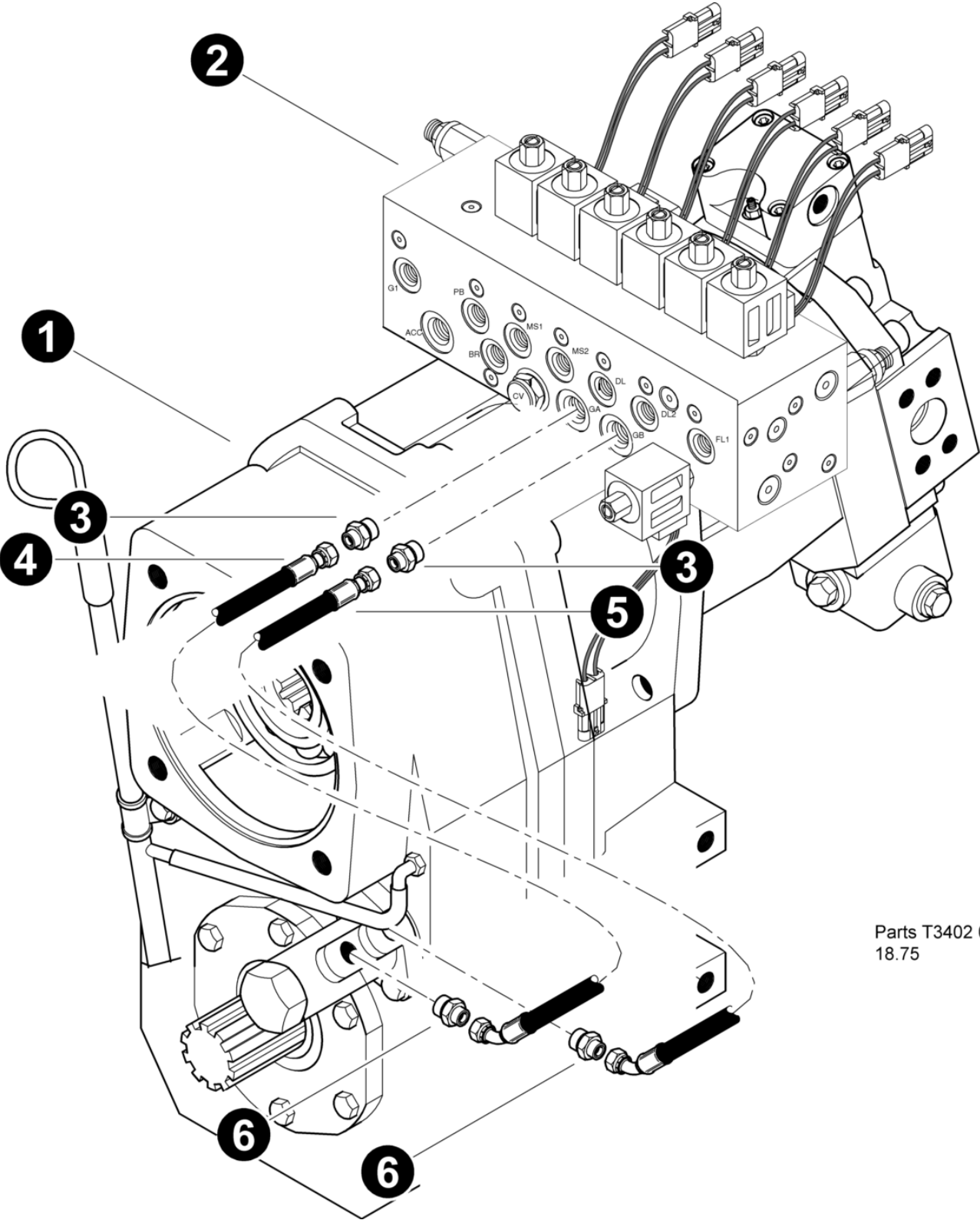


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Differential Lock Connections)  
Machine 0355-020111 and after**

| 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<br>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<br>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.



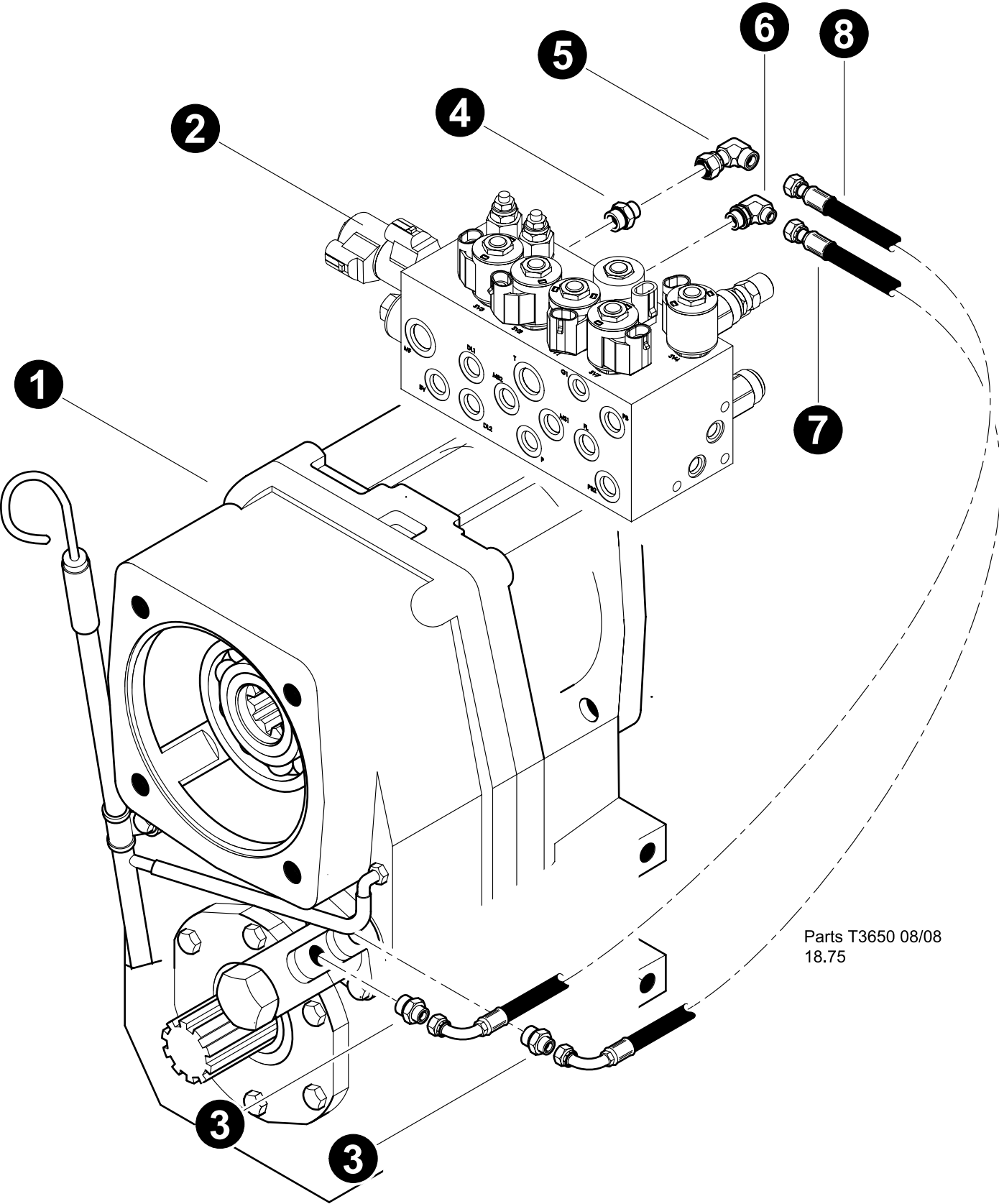
Parts T3402 04/19/2006  
18.75

**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<br>Manifold "GA" port) |             |
| 5   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2020-04-040S-0404 (GB Bulkhead to Lower<br>Manifold "GB" port) |             |
| 6   | 19470-FF | 2   |                                                                                   | CONNECTOR, STR METRIC - 4M14F8OMLOS                                            |             |



See referenced page for component or assembly breakdown.



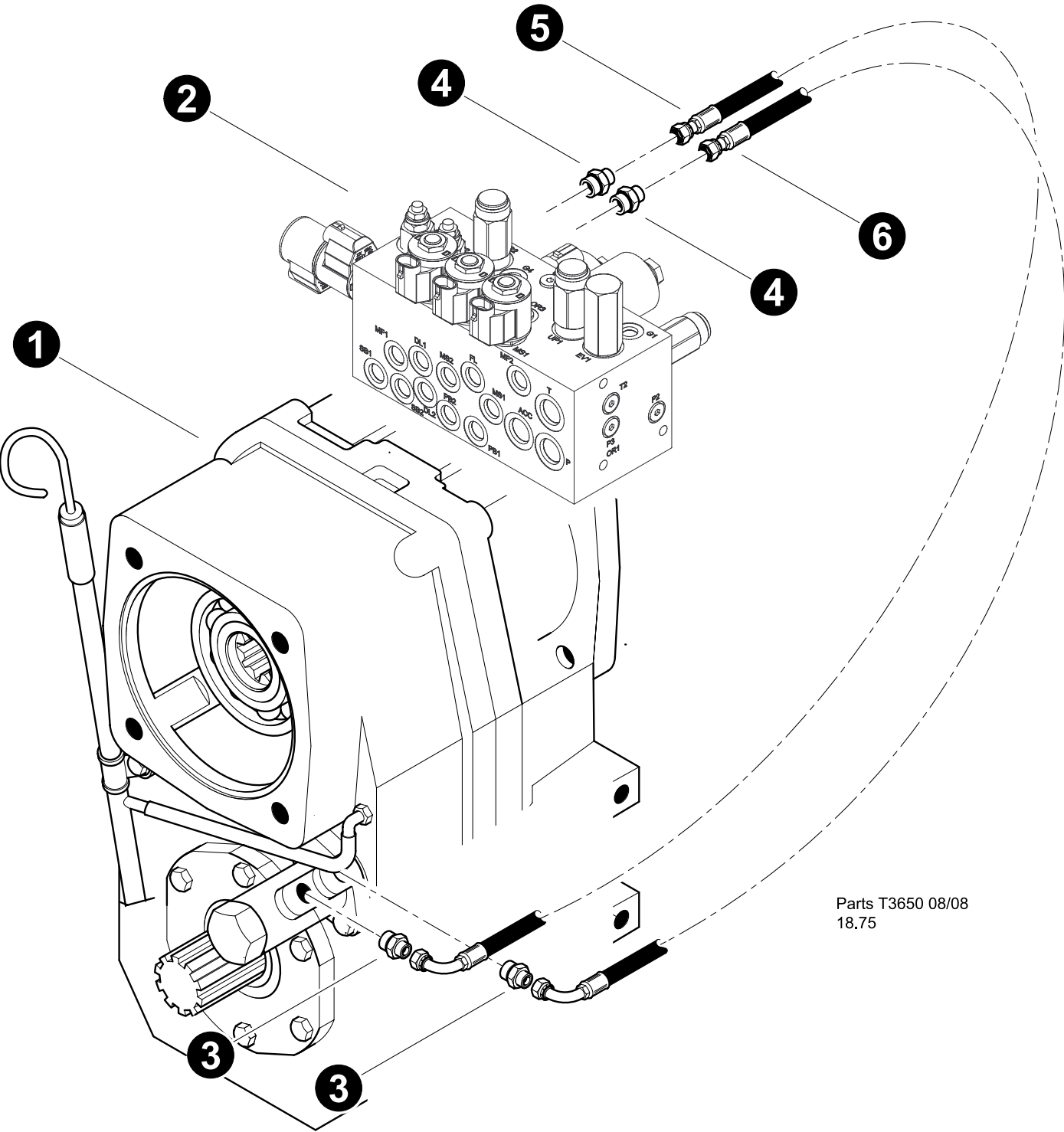
Parts T3650 08/08  
18.75

**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<br>Manifold "GB" port)    |             |
| 8   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2025.5-04-040S-0409 (Front Shift Port to Lower<br>Manifold "GA" port) |             |



See referenced page for component or assembly breakdown.



Parts T3650 08/08  
18.75

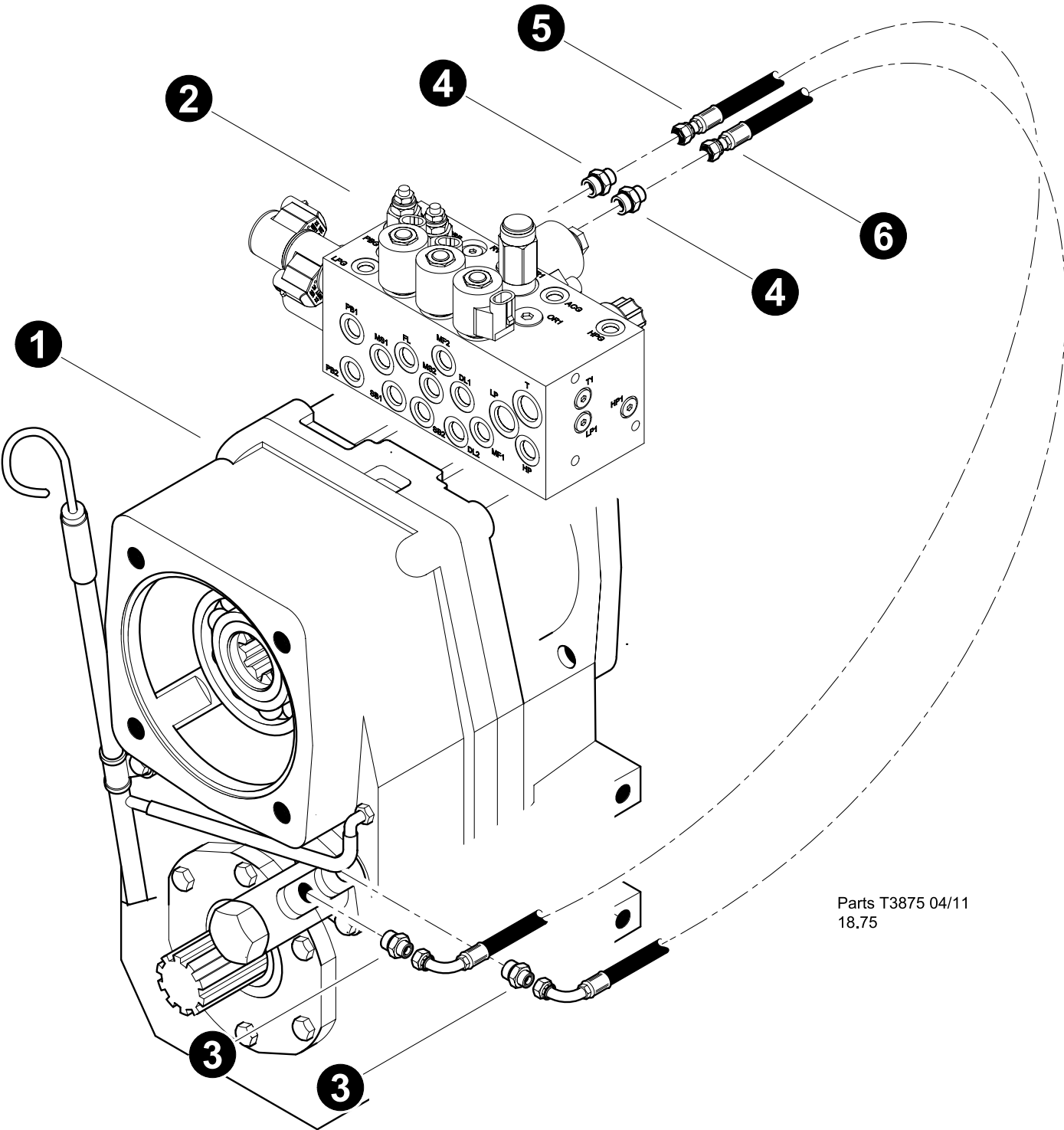


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Gear Box Shift Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>Manifold "GA" port) |             |
| 6   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2039.5-04-040S-0409 (Rear Shift Port to Lower<br>Manifold "GB" port)  |             |



See referenced page for component or assembly breakdown.



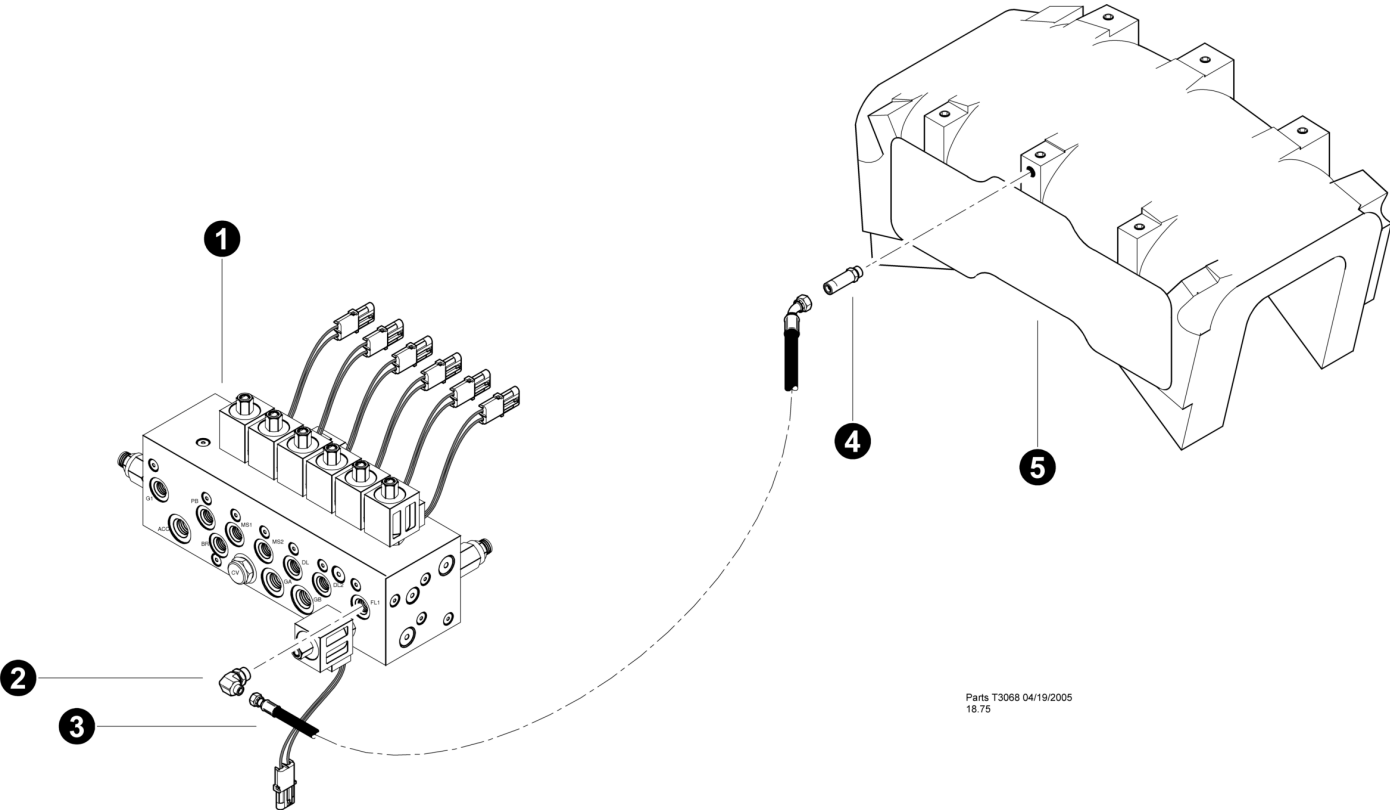
Parts T3875 04/11  
18.75

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Gear Box Shift Connections)  
Machine 0355-020111 and after**

| 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<br>Manifold "GA" port) |             |
| 6   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2039.5-04-040S-0409 (Rear Shift Port to Lower<br>Manifold "GB" port)  |             |



See referenced page for component or assembly breakdown.

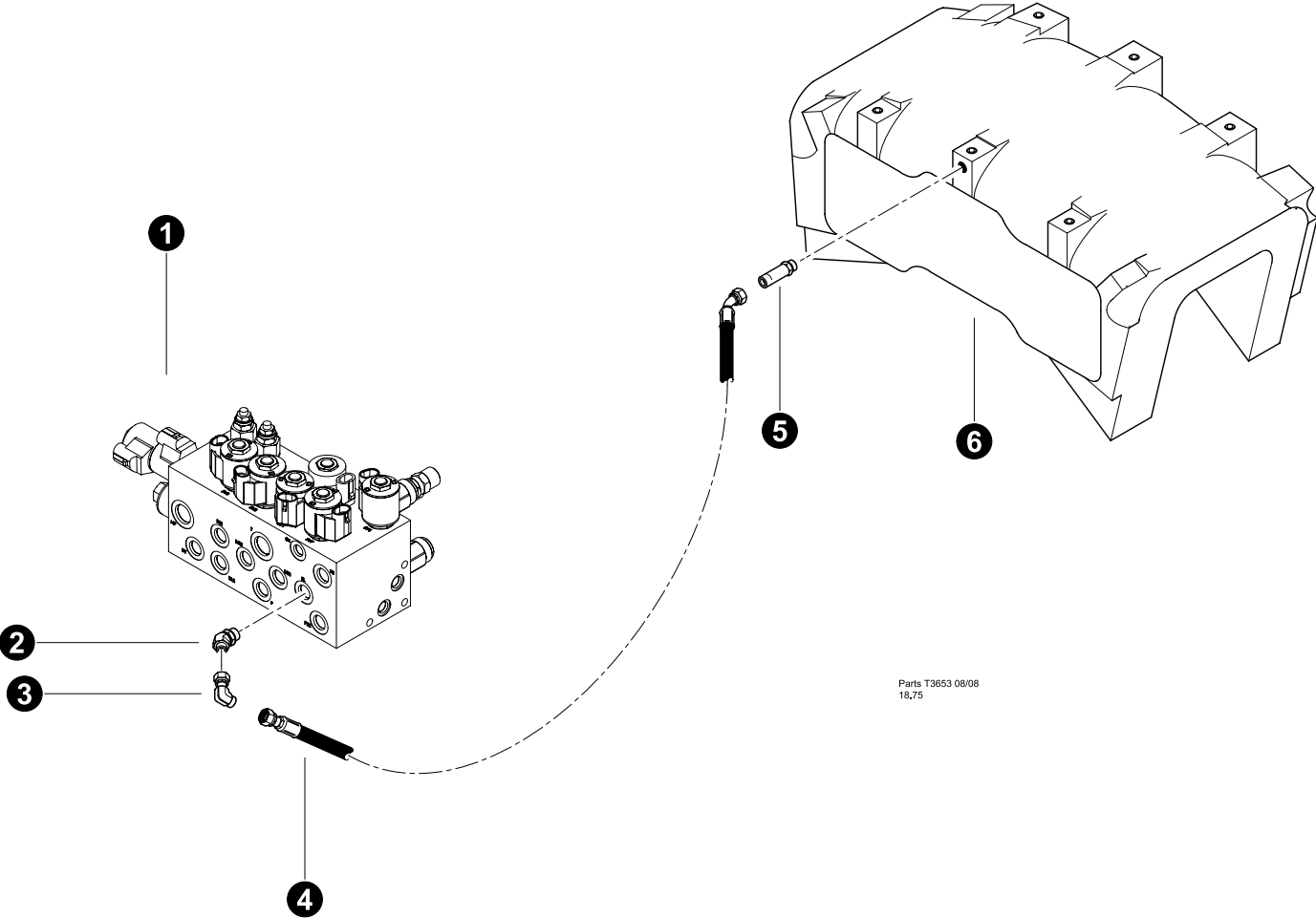


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Frame Lock Connections)  
SN - 0251 and before**

| 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<br>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.

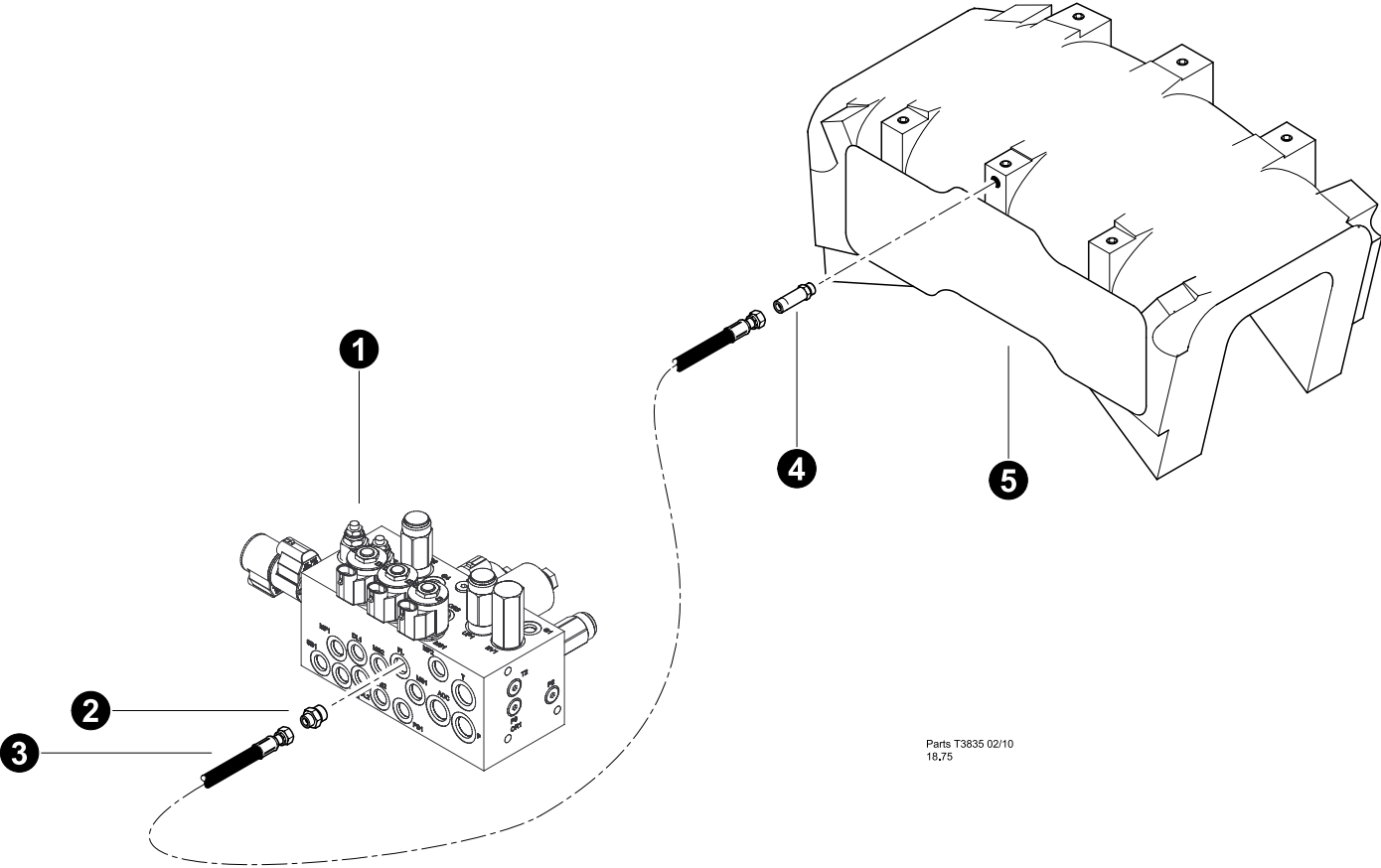


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Frame Lock Connections)  
SN - 0252-042208 to 0321-10219**

| 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<br>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.



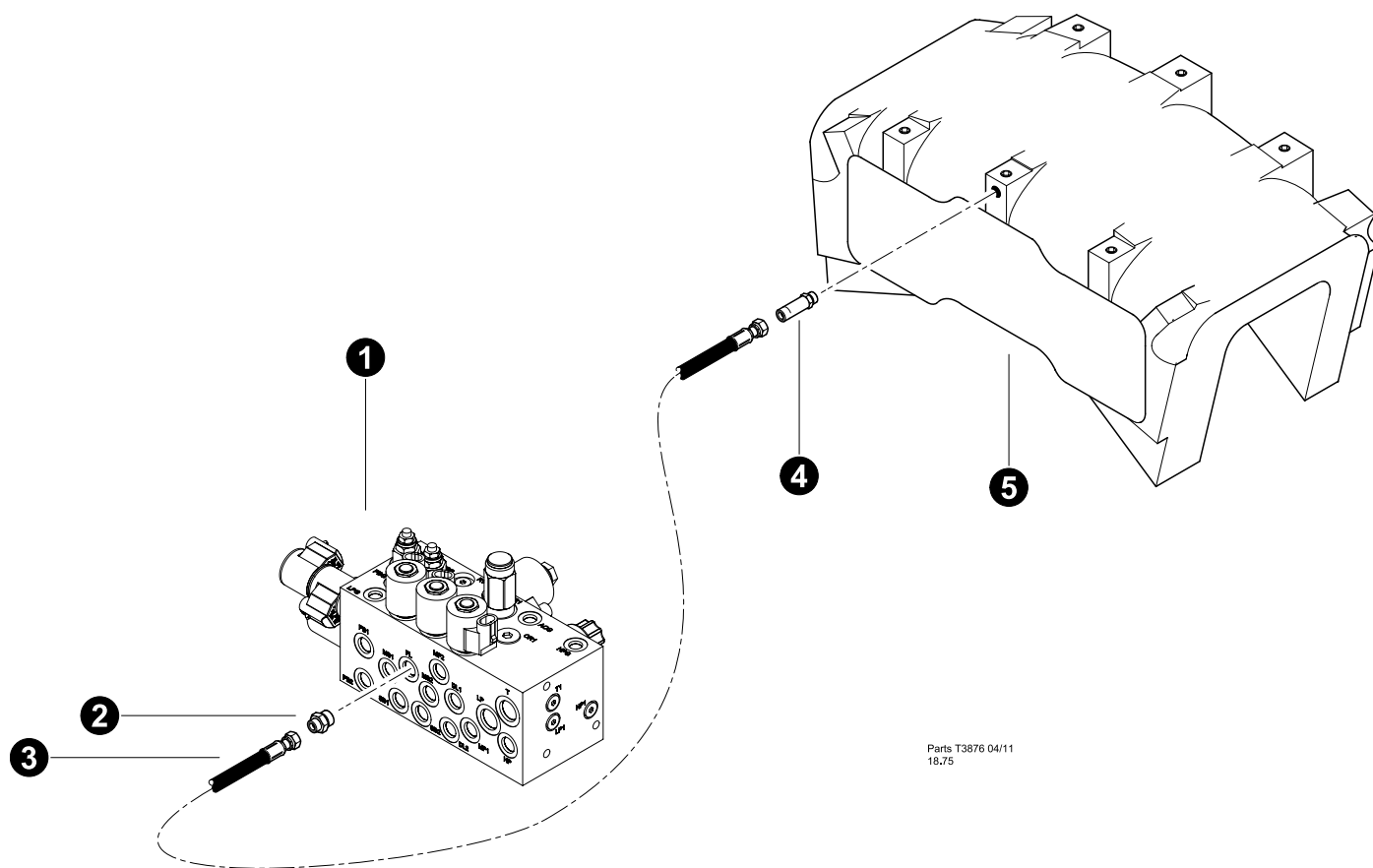


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Frame Lock Connections)  
SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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<br>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.



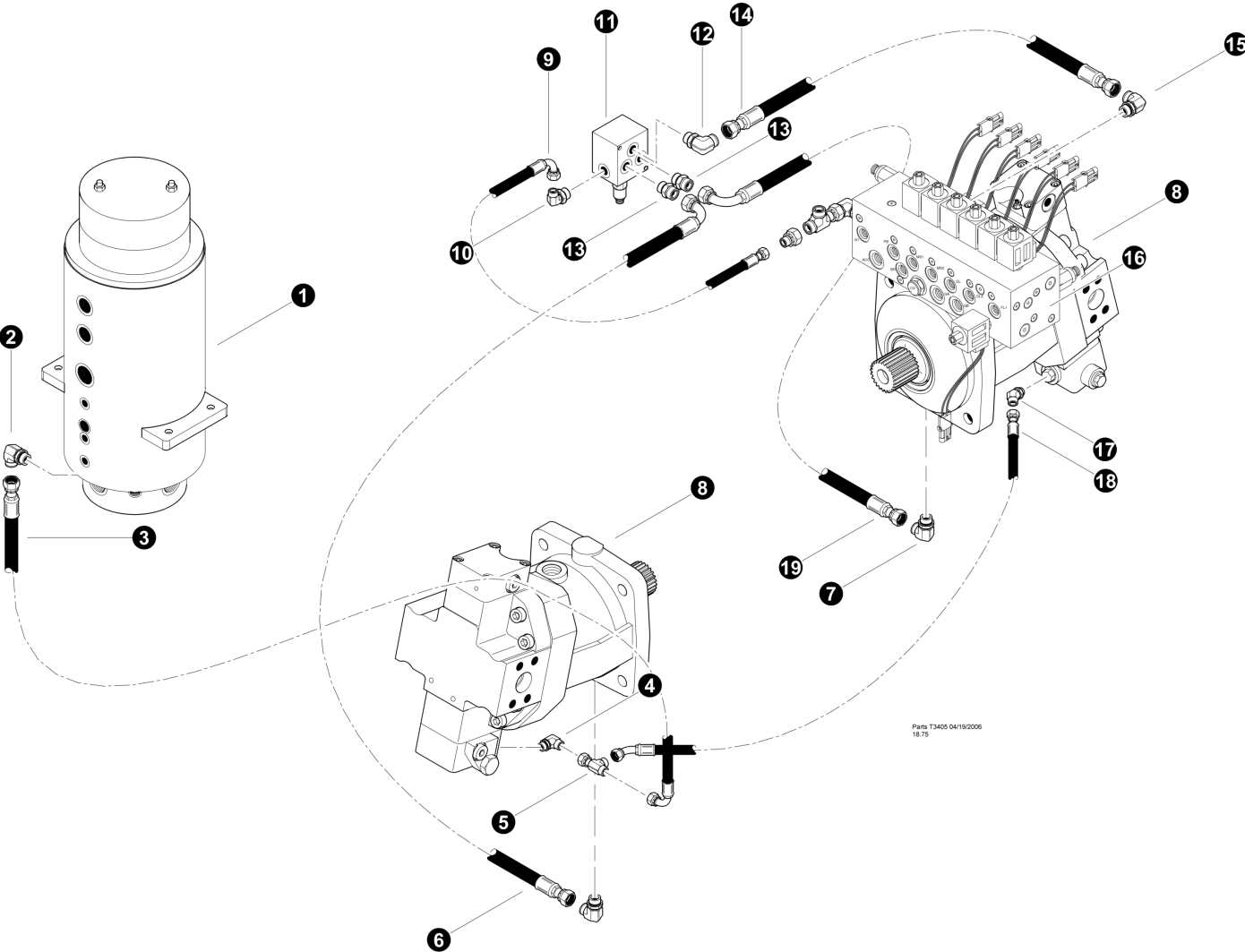
Parts T3876 04/11  
18.75

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Frame Lock Connections)  
Machine 0355-020111 and after**

| 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<br>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.

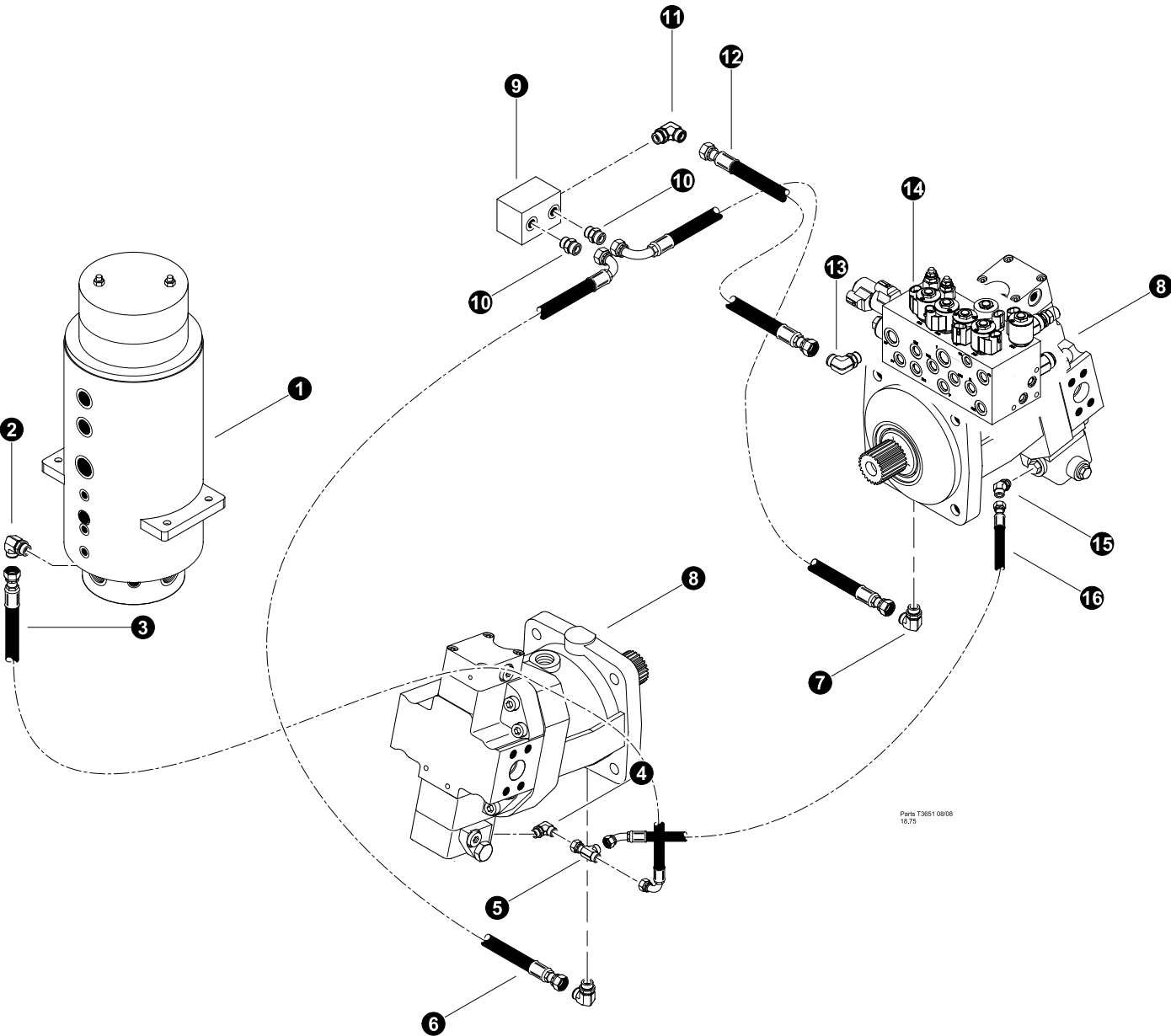


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Motor Flushing Supply and Return Connections)  
SN - 0251 and before**

| 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 (Rotary Manifold port "3" to<br>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<br>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<br>Motor)                 |             |



See referenced page for component or assembly breakdown.

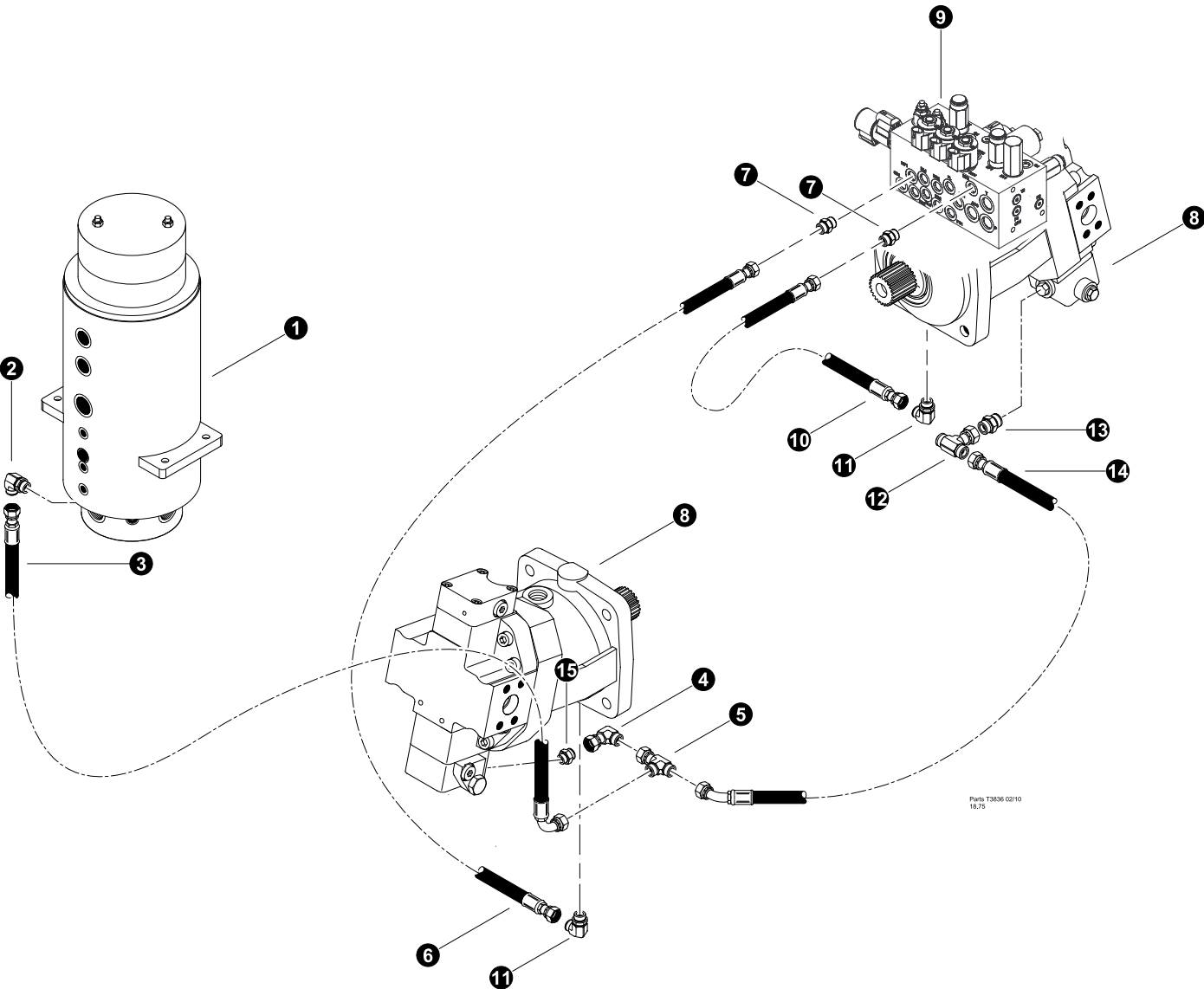


**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Motor Flushing Supply and Return Connections)  
SN - 0252-042208 to 0321-10219**

| 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 (Rotary Manifold port "3" to<br>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<br>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<br>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.



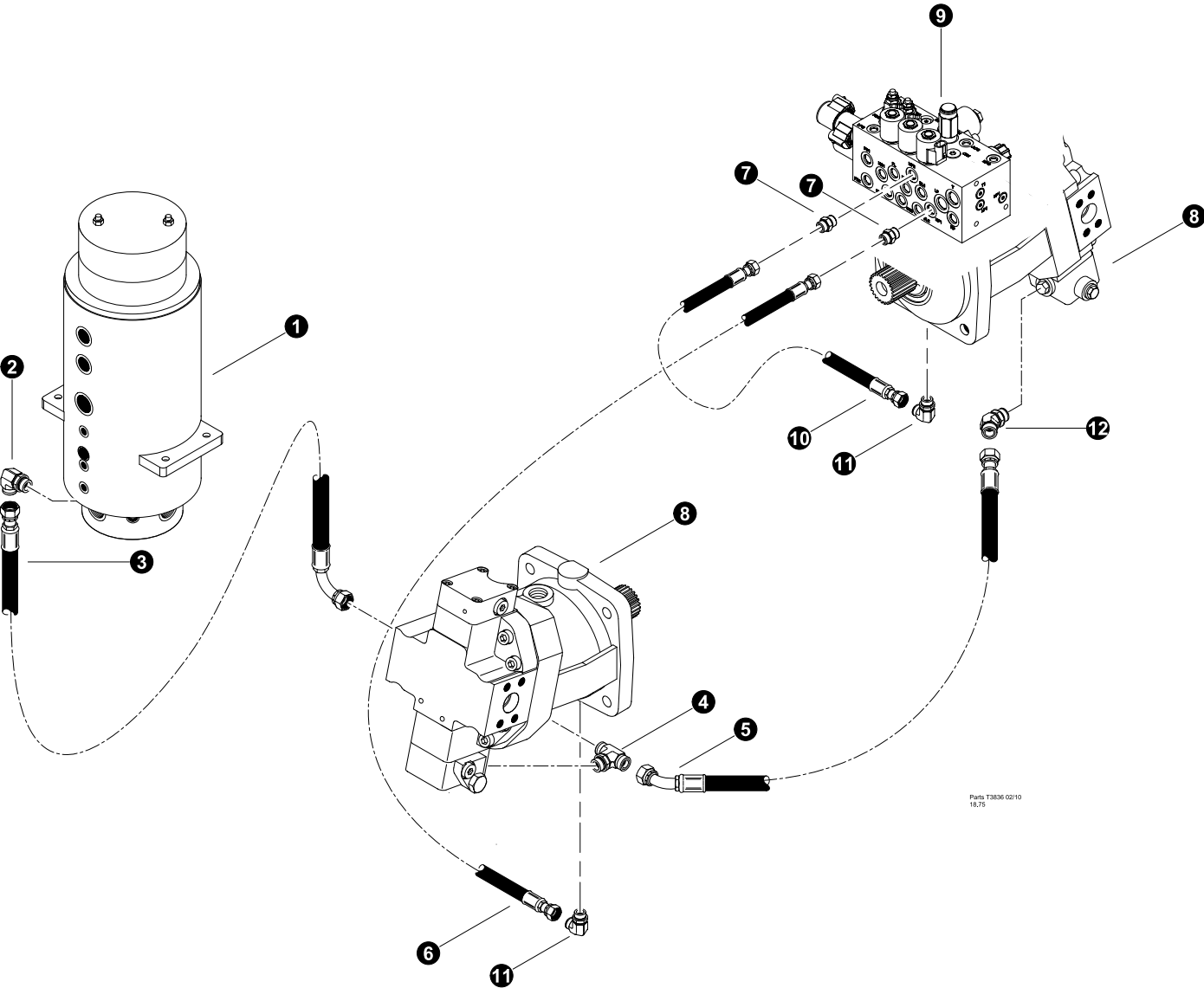


**Lower Solenoid Manifold Circuits  
and Components Breakdown**  
**(Front Frame - Motor Flushing Supply and Return Connections)**  
**SN - 0322-112409 to 0354-011211 (including machine 0319)**

| 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 - 2051-08-08OS-0809 (Rotary Manifold port "HO" to<br>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 . . . .                               |             |
| 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 R5OLO-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.



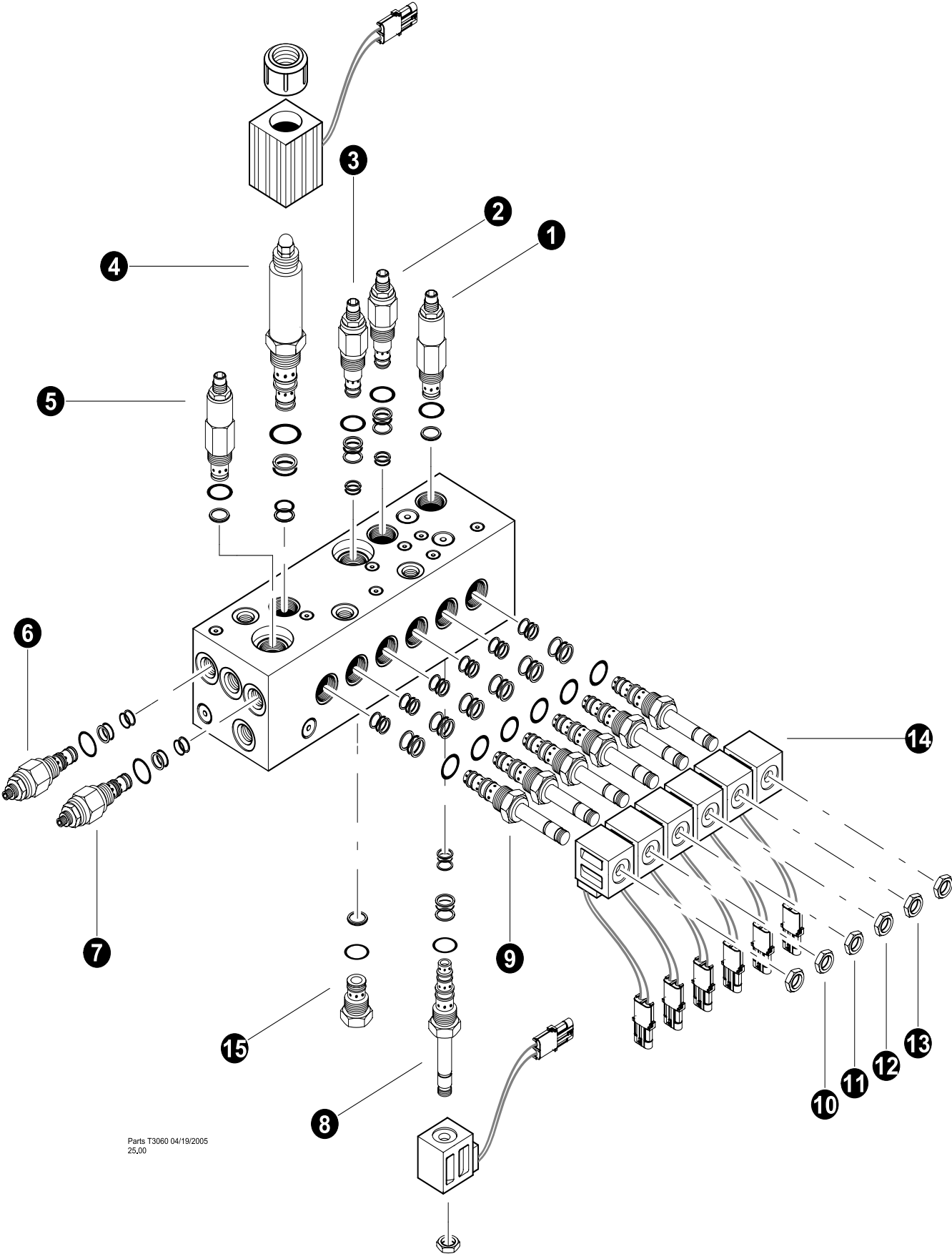
Parts 13636 0210  
18,75

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Front Frame - Motor Flushing Supply and Return Connections)  
Machine 0355-020111 and after**

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTARY MANIFOLD . . . . .                                                                                         | UP-1        |
| 2   | 16360-FF | 1   |                                                                                   | ELBOW, 90 - FF1868T-0808S                                                                                         |             |
| 3   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 2051-08-080S-0809 (Rotary Manifold port "LV1" to<br>flushing return tee) "No Clam Bunk Installed" |             |
| 4   | 20066-FF | 1   |                                                                                   | TEE - 8 S5OLO-S - BRANCH                                                                                          |             |
| 5   | -FF      |     |                                                                                   | HOSE ASSEMBLY - 2043-08-080S-0804 (Front to Rear Motor Flushing<br>Return Lines)                                  |             |
| 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 Rear Motor)                                                             |             |
| 11  | 20031-FF | 1   |                                                                                   | ELBOW, 90 - 6-8 C5OLO-S                                                                                           |             |
| 12  | 19126-FF | 1   |                                                                                   | ELBOW, 45 - FF2068T-0808S                                                                                         |             |



See referenced page for component or assembly breakdown.



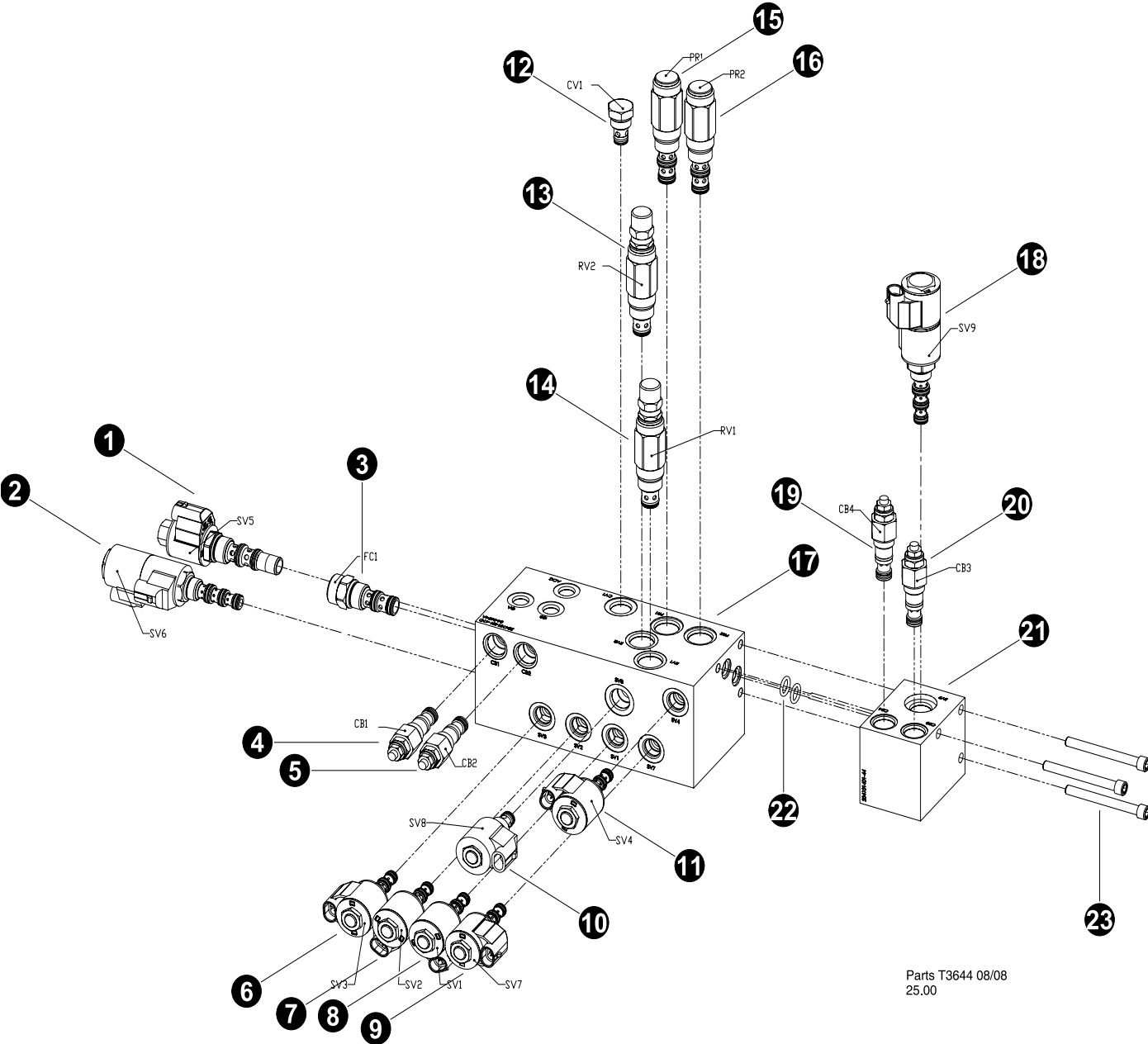
Parts T3060 04/19/2005  
25,00

**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.

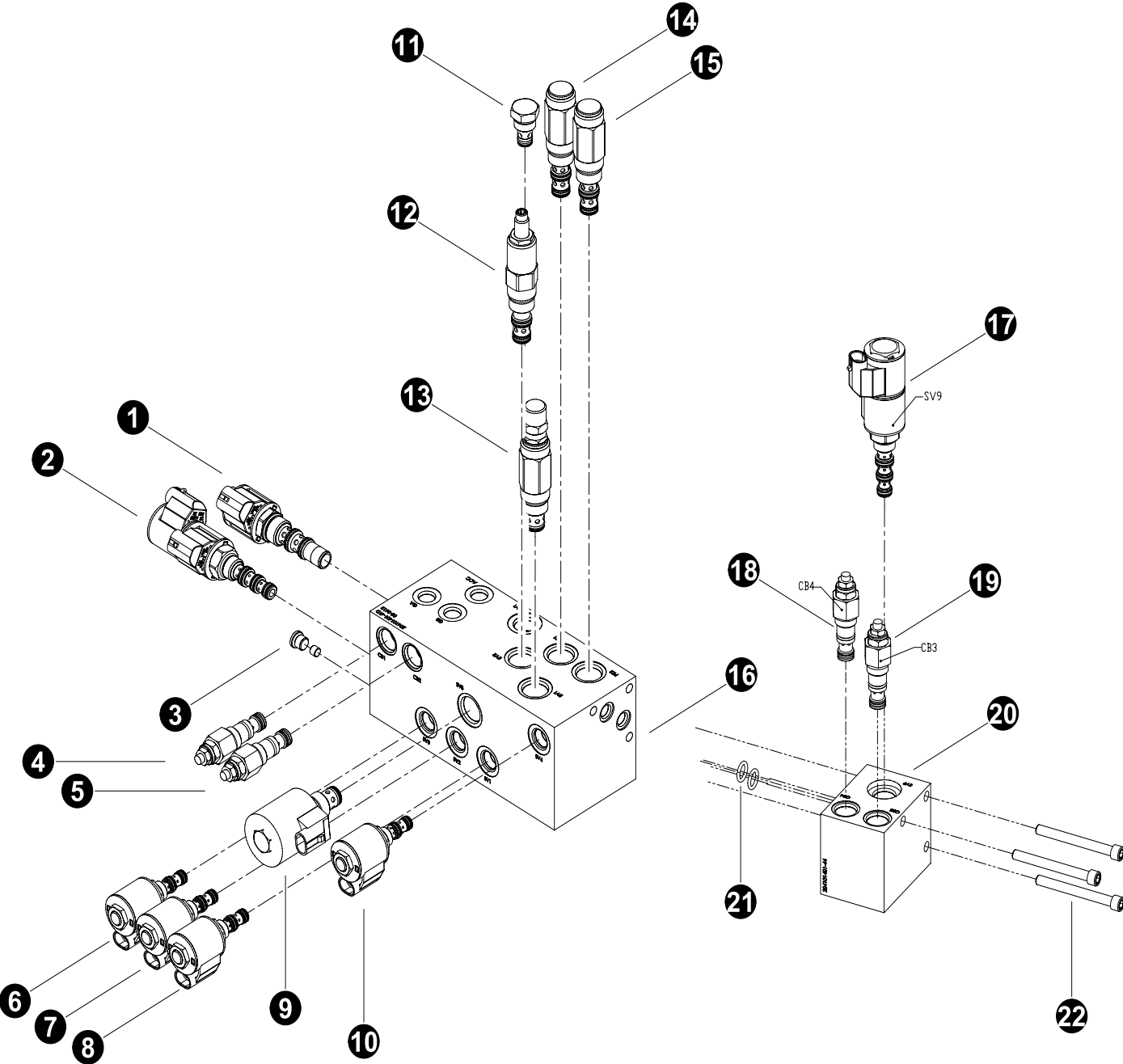
⌘ Included in



## 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)



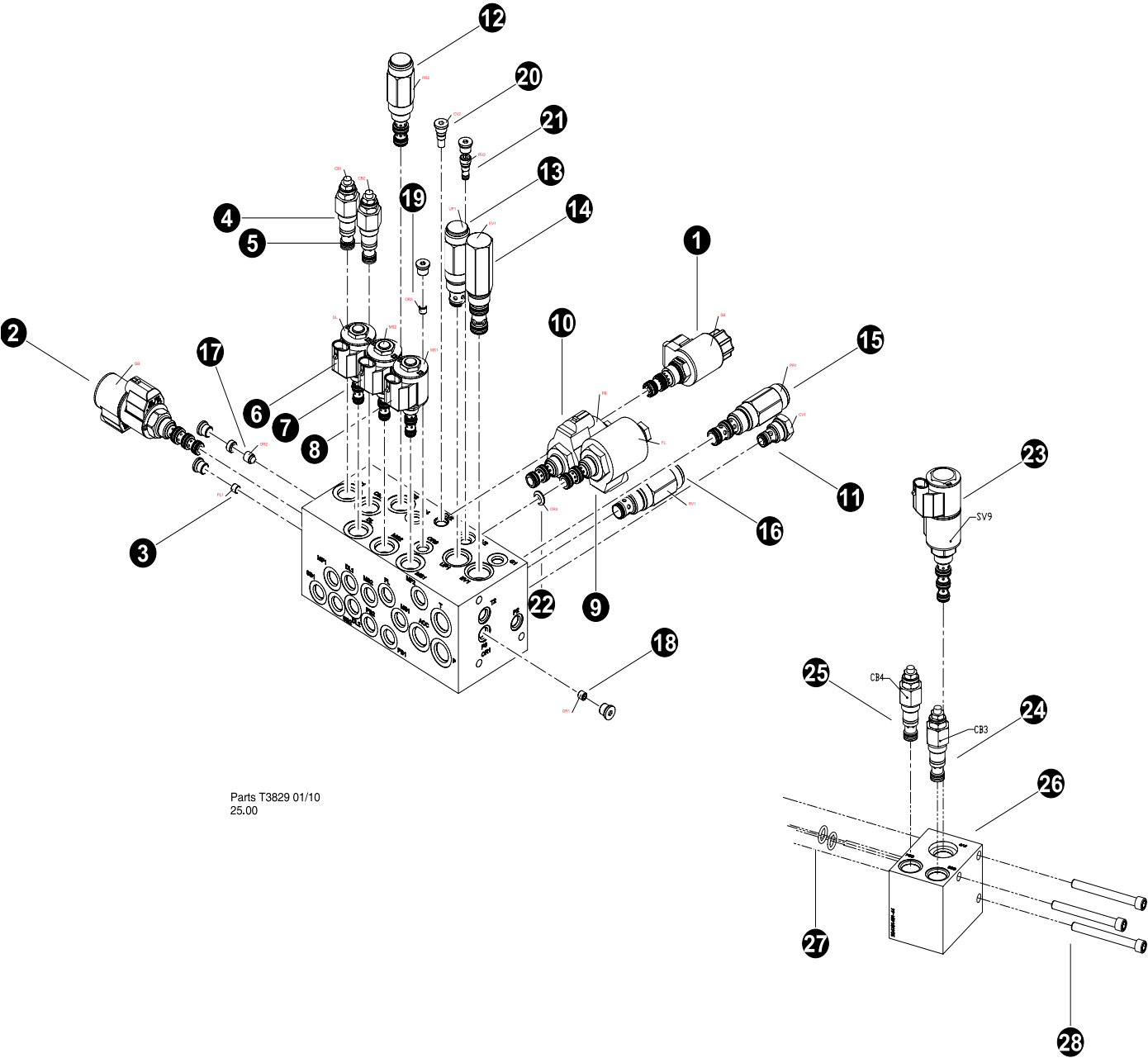
Parts T3807 08/09  
25.00



**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Lower Solenoid Manifold Breakdown)  
SN - 0298-022309 to 0321-102109  
(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)

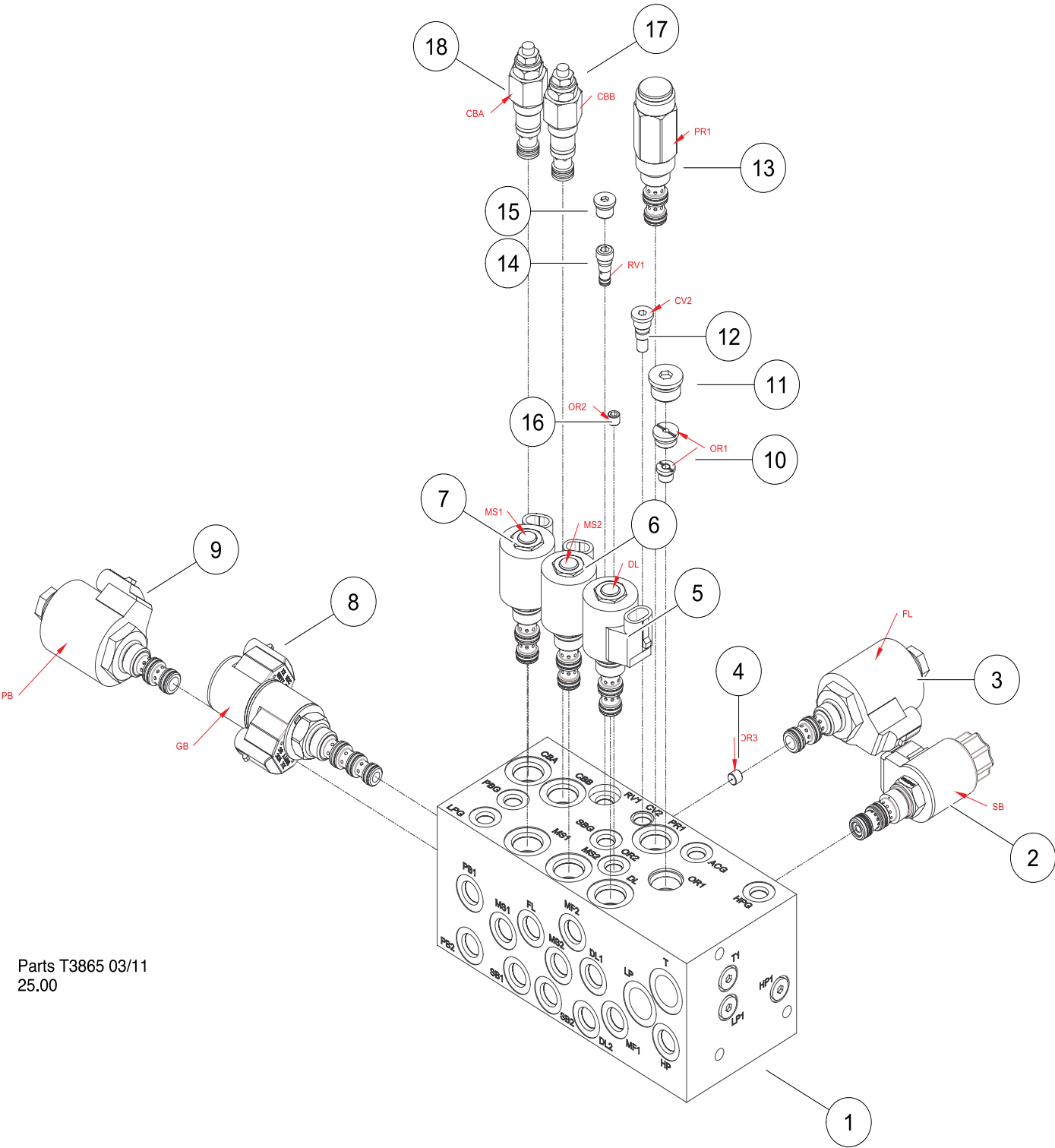


Parts T3829 01/10  
25.00

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Lower Solenoid Manifold Breakdown)  
SN - 0322-112409 to 0354-011211  
(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 (SV08-47D-0-N-24EY) 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)

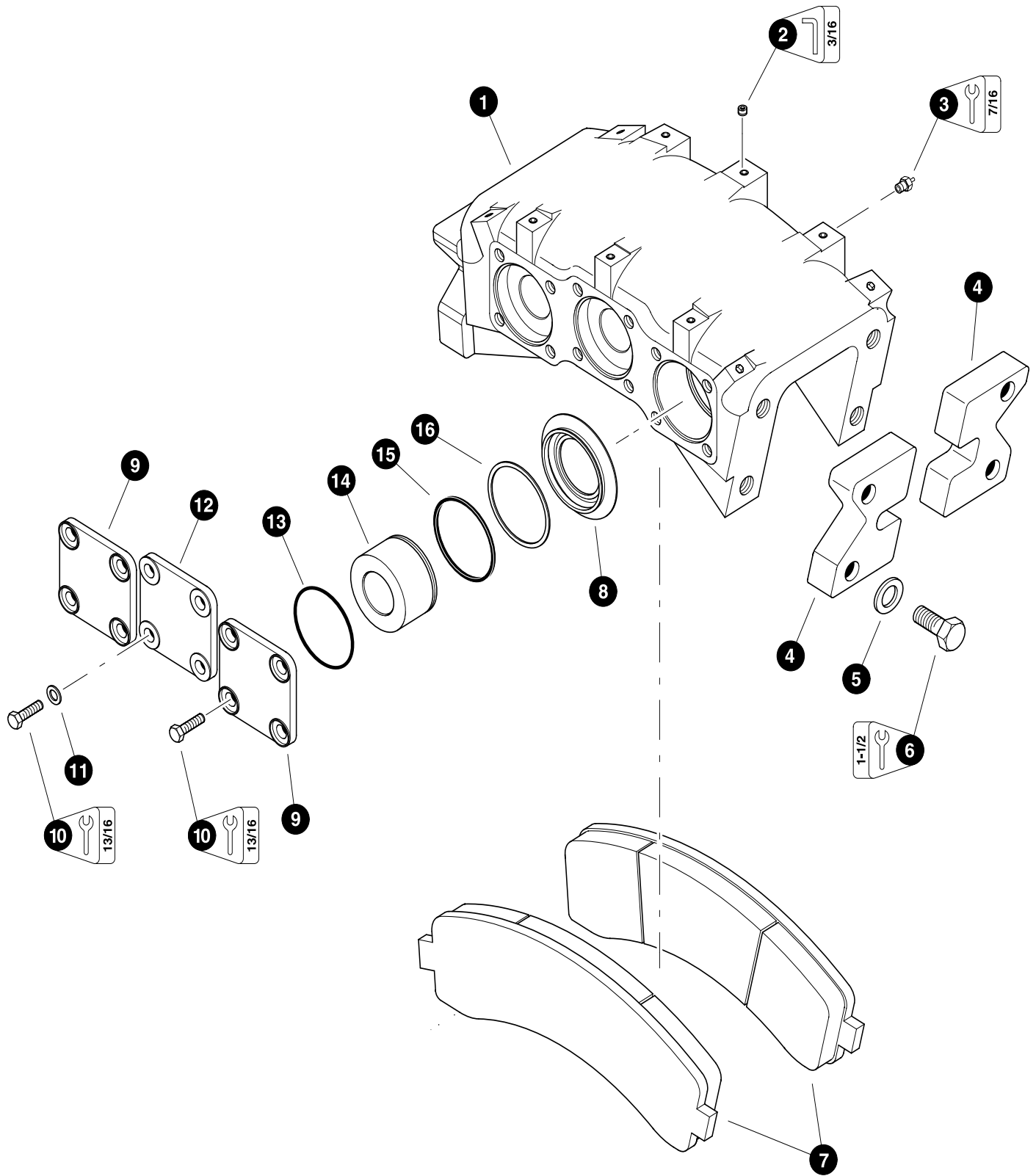


Parts T3865 03/11  
25.00

**Lower Solenoid Manifold Circuits  
and Components Breakdown  
(Lower Solenoid Manifold Breakdown)  
SN - Machine 0355-020111 and after**

| REF | PART #   | QTY |   | DESCRIPTION                                                    | SEE PAGE |
|-----|----------|-----|---|----------------------------------------------------------------|----------|
| 1   | 54263-FF | 1   | □ | VALVE, LOWER MANIFOLD - Fluid Systems                          |          |
| 2   | -FF      | 1   | ■ | Valve, Proportional (PDR08-01-C-N-110-24PN-8.8) Travel Brake   |          |
| 3   | -FF      | 1   | ⌘ | Valve, Directional Control (SV38-38-0-N-24EYZ) Frame Lock      |          |
| 4   | -FF      | 1   |   | ORIFACE, .039" 1/16"-27 NPTF                                   |          |
| 5   | -FF      | 1   | ⌘ | Valve, Directional Control (SV08-31-0-N-24EYZ) Diff Lock       |          |
| 6   | -FF      | 1   | ⌘ | Valve, Directional Control (SV08-31-0-N-24EYZ) Motor Shift 1   |          |
| 7   | -FF      | 1   | ⌘ | Valve, Directional Control (SV08-31-0-N-24EYZ) Motor Shift 2   |          |
| 8   | -FF      | 1   | ◆ | Valve, Directional Control (SV08-47D-0-N-24EY) Gear Box Shift  |          |
| 9   | -FF      | 1   | ⌘ | Valve, Directional Control (SV38-38-0-N-24EYZ) Parking Brake   |          |
| 10  | -FF      | 1   |   | ORIFACE, 210101804 - 90 & 91                                   |          |
| 11  | -FF      | 1   |   | PLUG, 08 ORB                                                   |          |
| 12  | -FF      | 1   | ⊗ | Valve, Check CV04-20-0-N-5                                     |          |
| 13  | -FF      | 1   | ● | Valve, Pressure Reducing (PR58-38H-0-N-20/9.0) 900 PSI         |          |
| 14  | -FF      | 1   | ⊠ | Valve, Thermal Relief (TR04-B20-0-N-40) 4000psi                |          |
| 15  | -FF      | 1   |   | PLUG,                                                          |          |
| 16  | -FF      | 1   |   | ORIFACE, .052" 1/16-27 NPTF                                    |          |
| 17  | -FF      | 1   | ❖ | Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve |          |
| 18  | -FF      | 1   | ❖ | Valve, Counterbalance (5008-3-500) Gear Shift Load Check Valve |          |
| -   | 53921-FF | 1   | □ | VALVE, GATE VALVE (optional)                                   |          |
| 23  | -FF      | 1   | ◆ | Valve, Directional Control (SV08-47D-0-N-24EY) Gate Control    |          |
| 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-BM)
- Seal Repair Kit (03054795) / Coil (24PN-8.8-40-1836)
- ◆ Seal Repair Kit (SK08-4N-MMM) / Coil (4303810) / Nut (7004400) / Spacer (4534720)
- ❖ Seal Repair Kit (12106)
- ⊗ 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<br>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.

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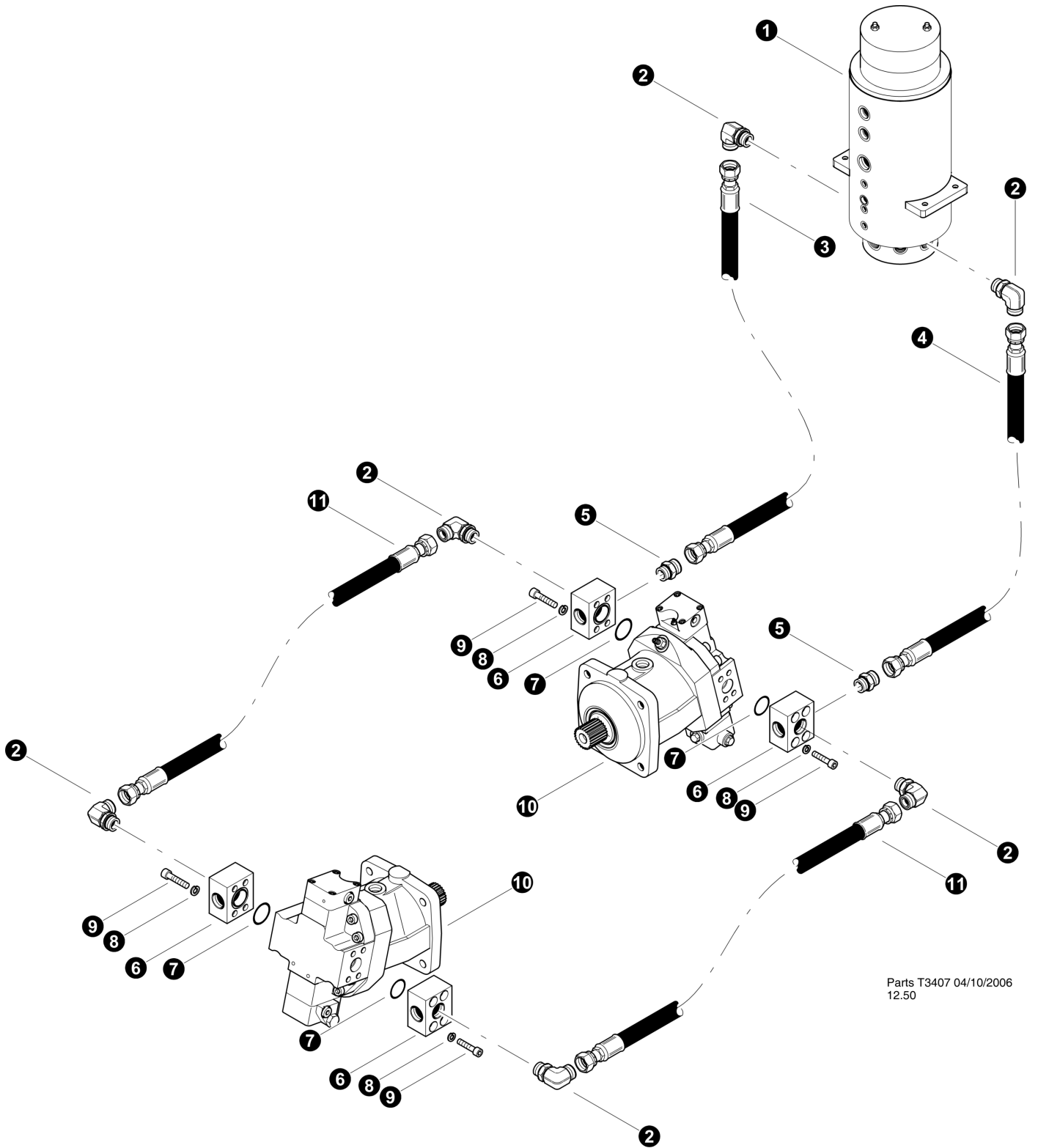
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## ***Section FF-5***

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### ***830, 840 Front Frame - Drive Motor Hydraulics***



Parts T3407 04/10/2006  
12.50

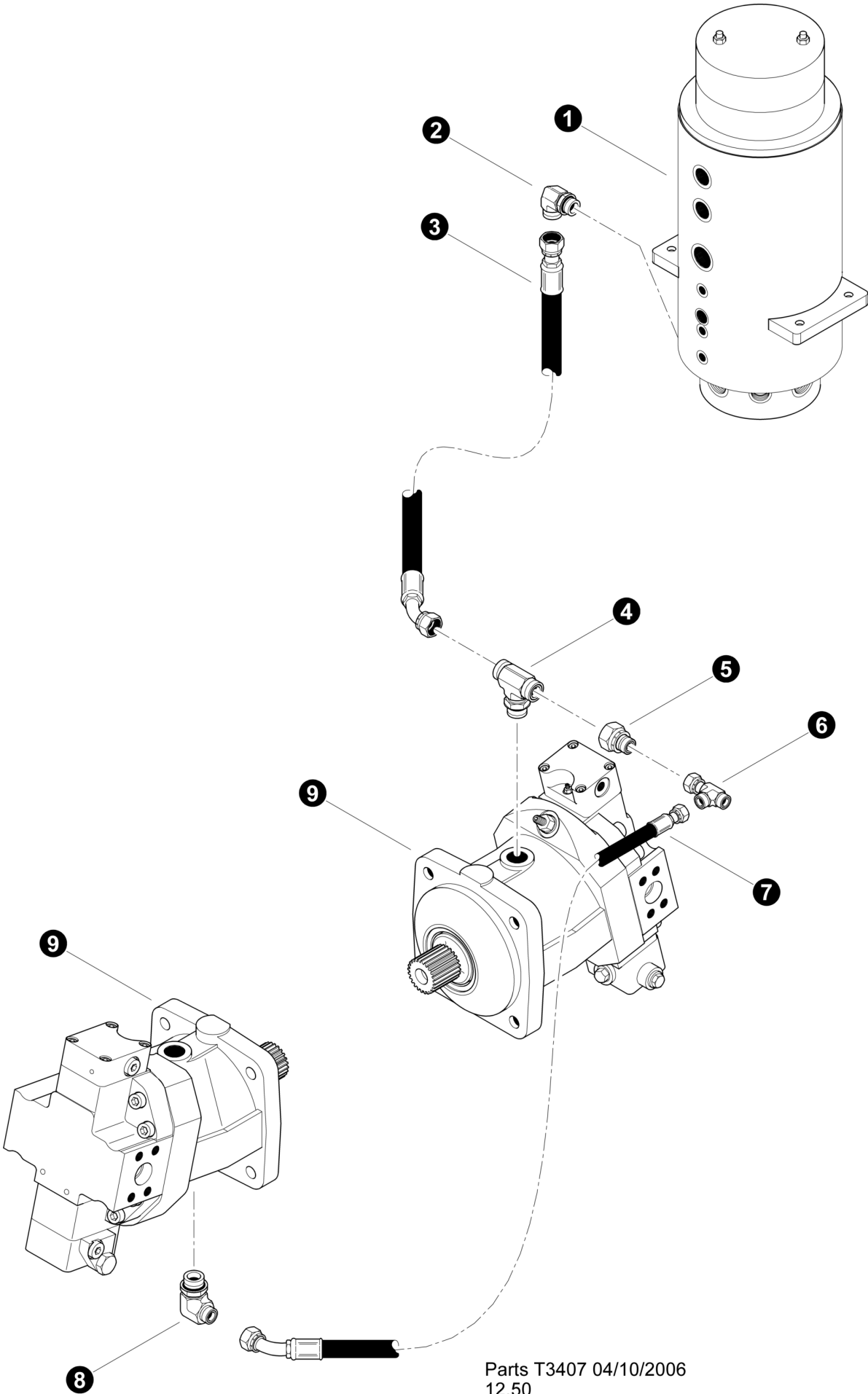
## DRIVE MOTOR HYDRAULICS

### 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<br>lower port "7" to Drive Motor) |             |
| 4   | -FF      | 1   |                                                                                   | HOSE ASSEMBLY - 6029-16-16OS-16OS (Rotary manifold<br>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<br>Rear Drive Motor)         |             |



See referenced page for component or assembly breakdown.



Parts T3407 04/10/2006  
12.50

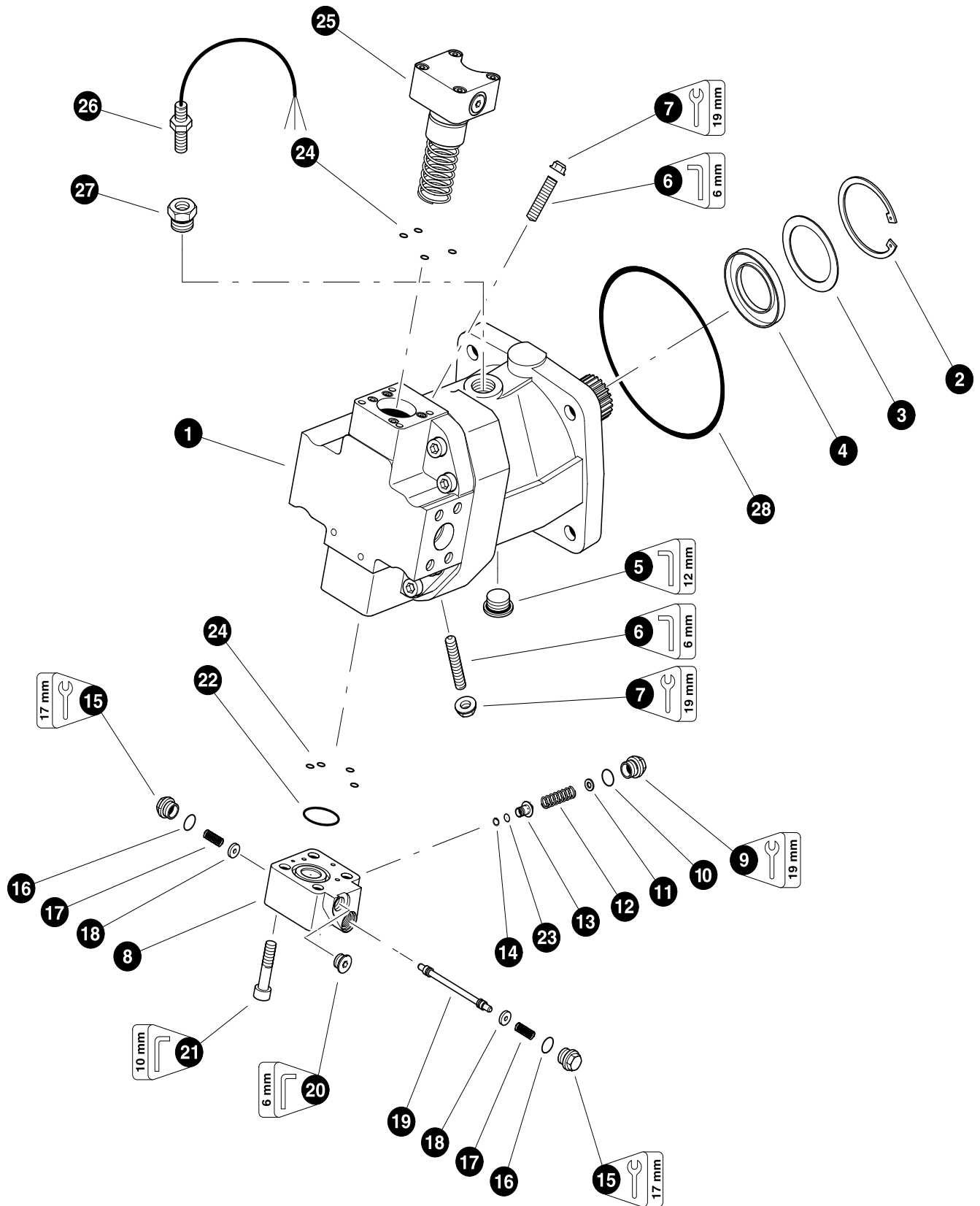
## DRIVE MOTOR HYDRAULICS

### ROTARY MANIFOLD TO REAR DRIVE MOTOR (Standard Front and All Rear Frames)

| 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)**

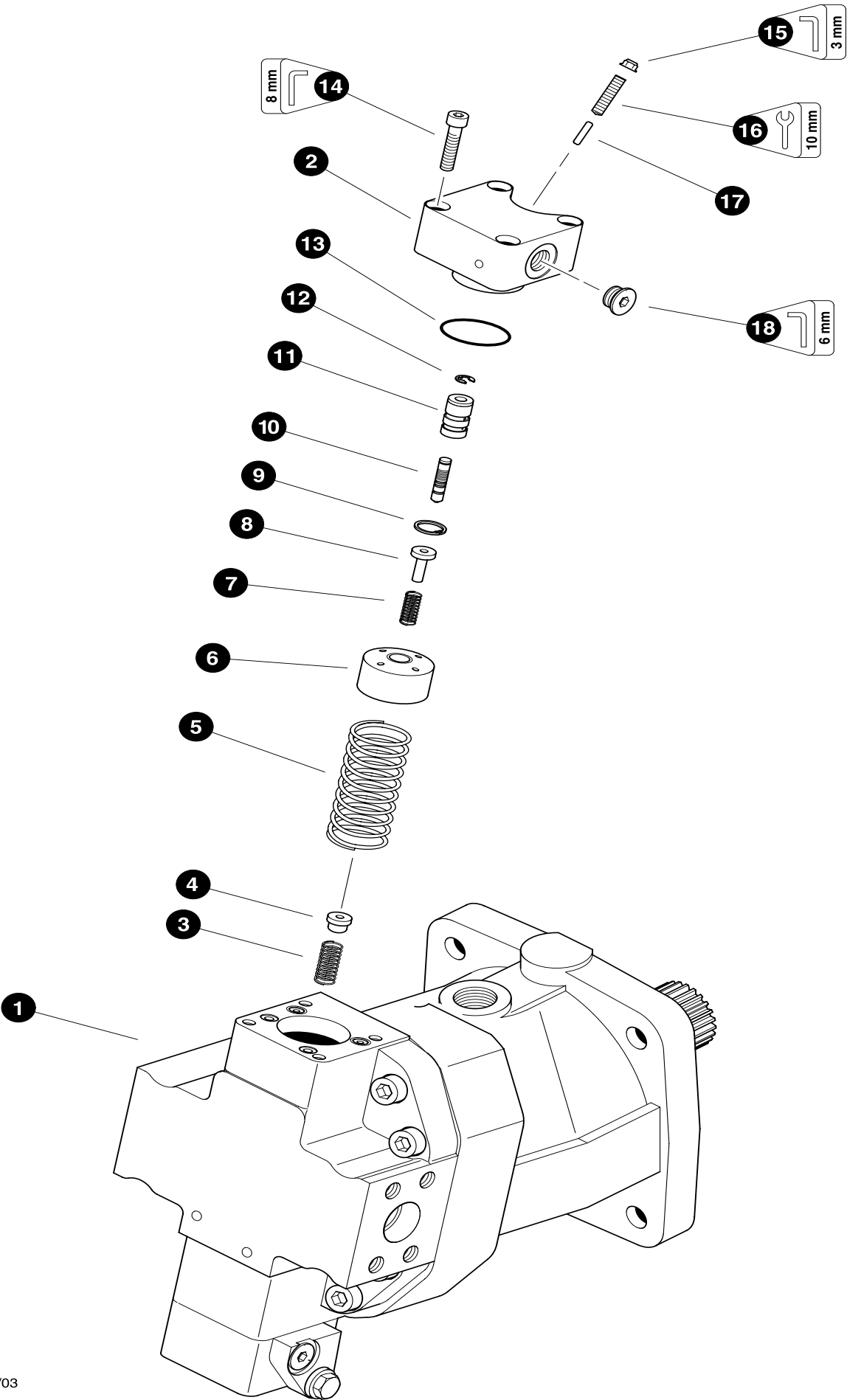
| REF | PART #      | QTY |   | DESCRIPTION                                                                                                  | SEE SECTION |
|-----|-------------|-----|---|--------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 51869-0-FF  | 1   | ☐ | MOTOR, wheel drive - Rexroth AA6VM160 (Front) (w/speed counter ring)<br>(Vg Min = 0 cubic meters) (flushing) |             |
|     | 51869-70-FF | 1   | ☐ | MOTOR, wheel drive - Rexroth AA6VM160 (Rear) (w/speed counter ring)<br>(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.





## REXROTH 160cc MOTOR HA2T Controler Brakedown

(Standard)

| REF | PART #                                                    | QTY |   | DESCRIPTION                                                                                                  | SEE SECTION |
|-----|-----------------------------------------------------------|-----|---|--------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 51869-0-FF                                                | 1   | ☐ | MOTOR, wheel drive - Rexroth AA6VM160 (Front) (w/speed counter ring)<br>(Vg Min = 0 cubic meters) (flushing) |             |
|     | 51869-70-FF                                               | 1   | ☐ | MOTOR, wheel drive - Rexroth AA6VM160 (Rear) (w/speed counter ring)<br>(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.

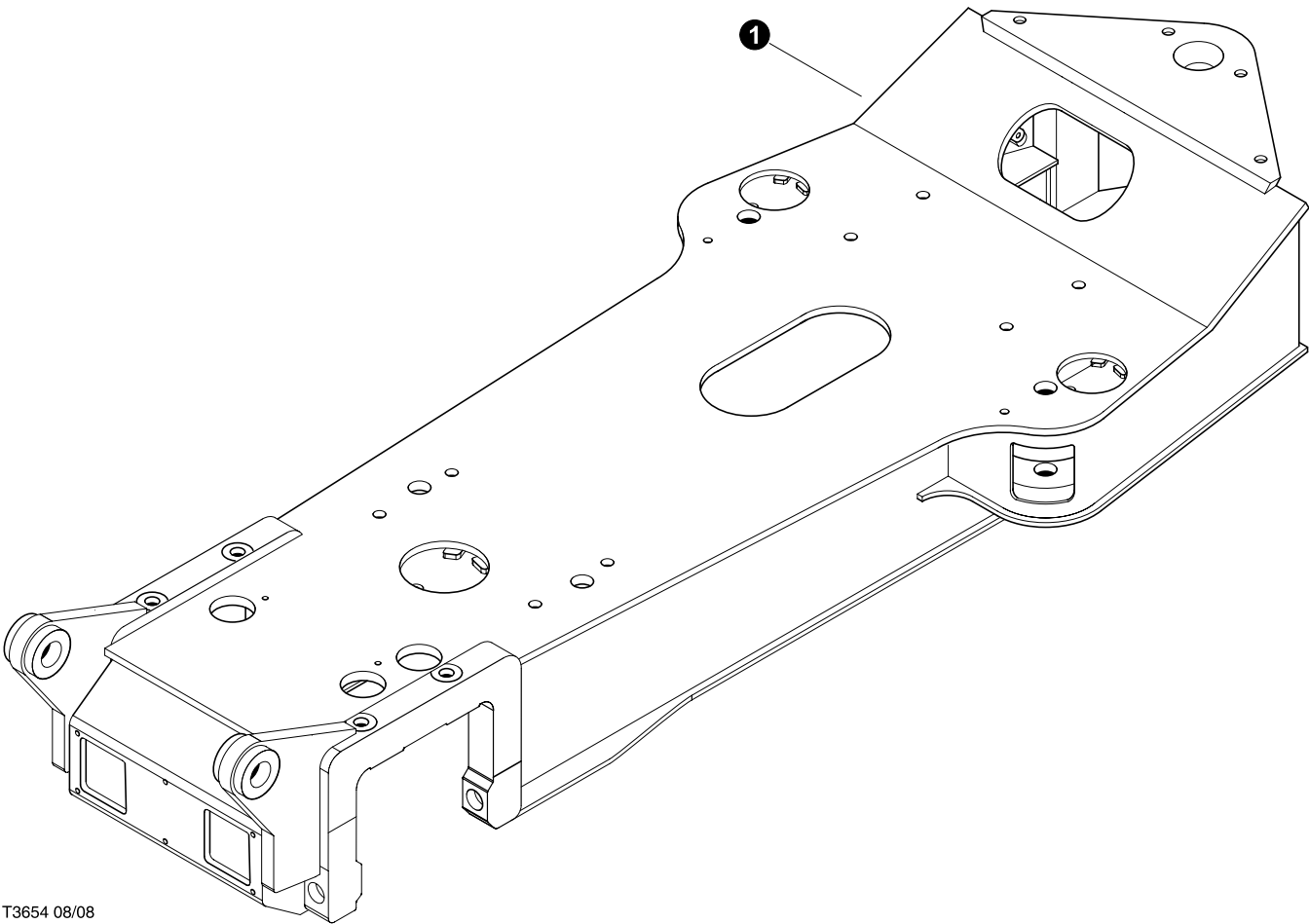
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# ***Section FR-1***

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## ***830 / 840 Rear Frame - Structural / Covers / Pins***

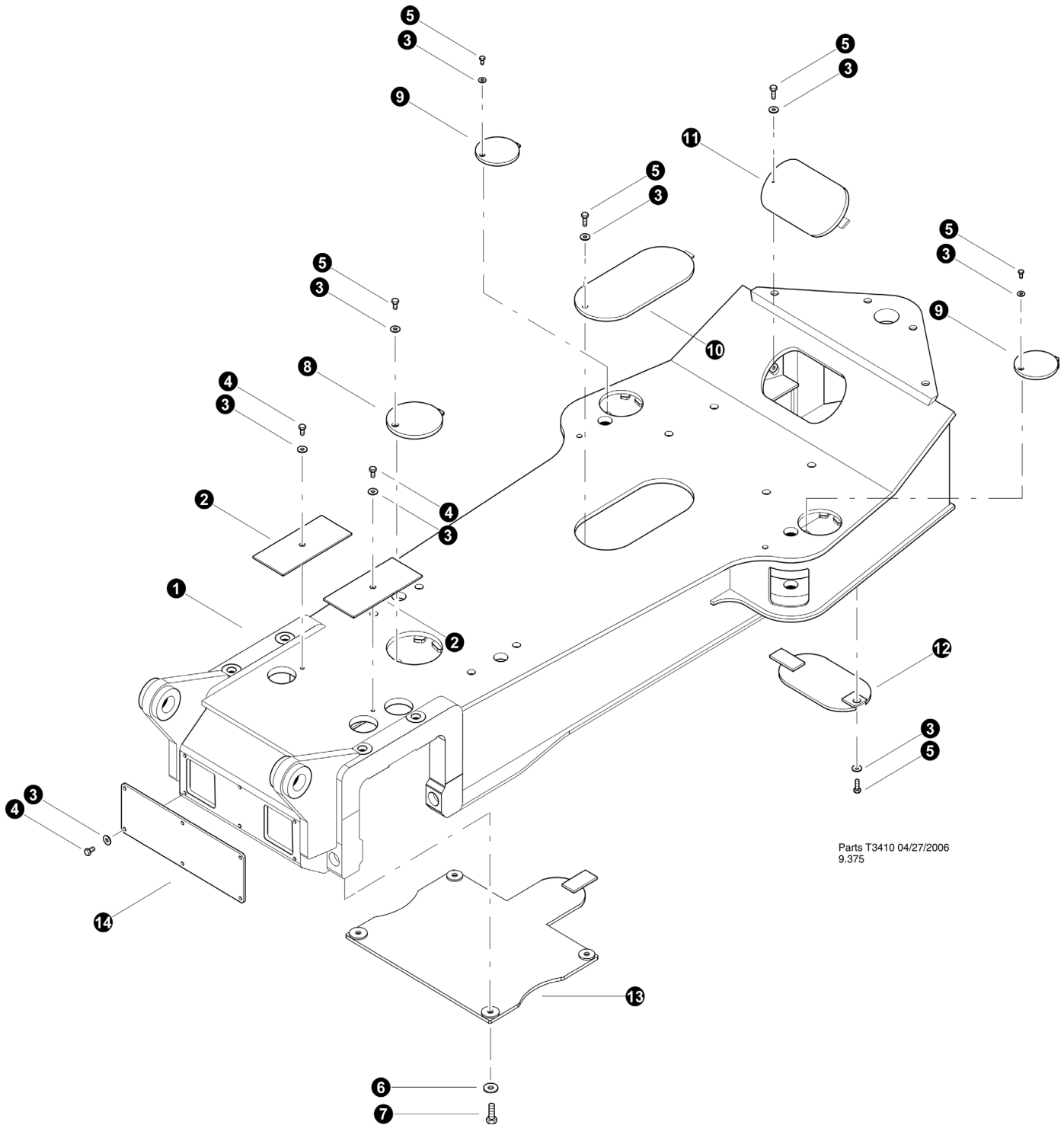


Parts T3654 08/08  
9.375

**REAR FRAME WELDMENT**

| REF | PART #   | QTY | DESCRIPTION                                                      | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------|-------------|
| 1   | 52914-FR | 1   | FRAME, REAR STD 830 NON-LEVEL TAPER PIN <i>(Standard length)</i> |             |
|     | 52915-FR | 1   | FRAME, REAR +24 830 NON-LEVEL TAPER PIN <i>(24" longer)</i>      |             |
|     | 52916-FR | 1   | FRAME, REAR +46 830 NON-LEVEL TAPER PIN <i>(46" longer)</i>      |             |

☐ Kit or Assembly - includes all items indented underneath.



Parts T3410 04/27/2006  
9.375

## REAR FRAME ACCESS COVERS

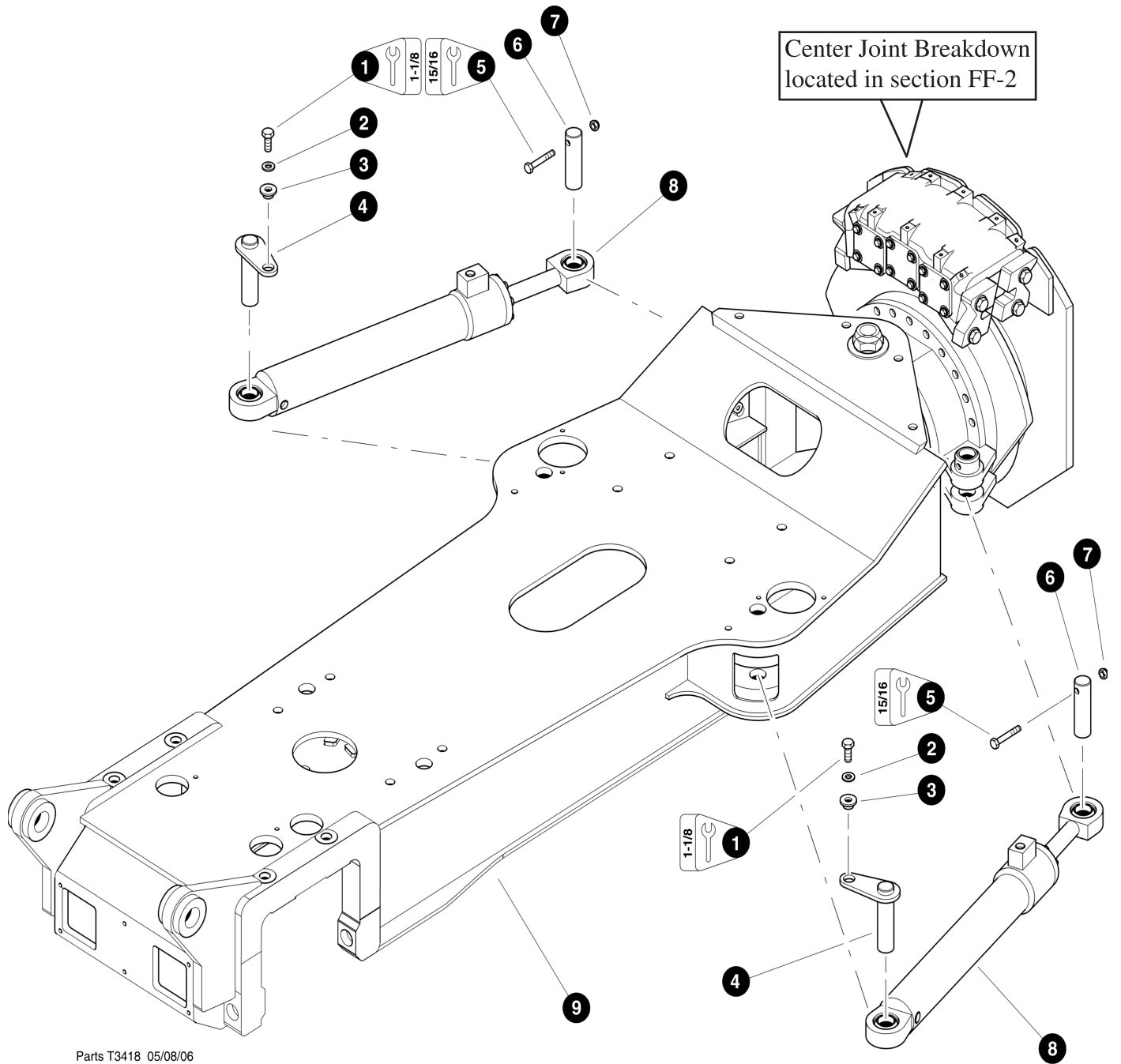
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF.     | 1   |  | REAR FRAME WELDMENT . . . . .        | FR-1        |
| 2   | 42162-FR | 2   |                                                                                   | COVER, access - rear frame axle top  |             |
| 3   | 15534-FR | 39  |                                                                                   | WASHER, SAE flat - 1/2"              |             |
| 4   | 10783-FR | 9   |                                                                                   | BOLT - 1/2" x 1"                     |             |
| 5   | 10739-FR | 30  |                                                                                   | BOLT - 1/2" x 1-1/2"                 |             |
| 6   | 10771-FR | 16  |                                                                                   | WASHER, SAE flat - 5/8               |             |
| 7   | 15681-FR | 8   |                                                                                   | BOLT, 5/8 X 2.25"                    |             |
| 8   | 52446-FR | 1   |                                                                                   | COVER, TOP REAR ROUND 8"             |             |
| 9   | 52475-FR | 2   |                                                                                   | COVER, TOP REAR ROUND 6"             |             |
| 10  | 52537-FR | 1   |                                                                                   | COVER, TOP REAR OBLONG 9 X 24        |             |
| 11  | 52477-FR | 1   |                                                                                   | COVER, TOP REAR OBLONG 8 X 14        |             |
| 12  | 52846-FR | 1   |                                                                                   | COVER, BOTTOM REAR (standar frame)   |             |
| 13  | 52215-FR | 1   |                                                                                   | COVER, AXLE BOTTOM AXLE-5" END - NEW |             |
| 14  | 52489-FR | 1   |                                                                                   | COVER, access - axle box end         |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## STEER CYLINDER INSTALLATION

| REF | PART #   | QTY | DESCRIPTION                                                                                            | SEE SECTION |
|-----|----------|-----|--------------------------------------------------------------------------------------------------------|-------------|
| 1   | 15549-FR | 2   | BOLT - 3/4" x 2"                                                                                       |             |
| 2   | 15550-FR | 2   | WASHER, SAE flat - 3/4"                                                                                |             |
| 3   | 18570-FR | 2   | WASHER, pin retaining                                                                                  |             |
| 4   | 80769-FR | 2   | PIN, steer cylinder mounting - base                                                                    |             |
| 5   | 10719-FR | 2   | BOLT - 5/8" x 4"                                                                                       |             |
| 6   | 19448-FR | 2   | PIN, steer cylinder mounting - rod                                                                     |             |
| 7   | 15563-FR | 2   | NUT, nylock - 5/8"                                                                                     |             |
| 8   | REF.     | 2   |  STEER CYLINDER ..... | FR-3        |
| 9   | REF.     | 1   | REAR FRAME WELDMENT .....                                                                              | FR-1        |



See referenced page for component or assembly breakdown.

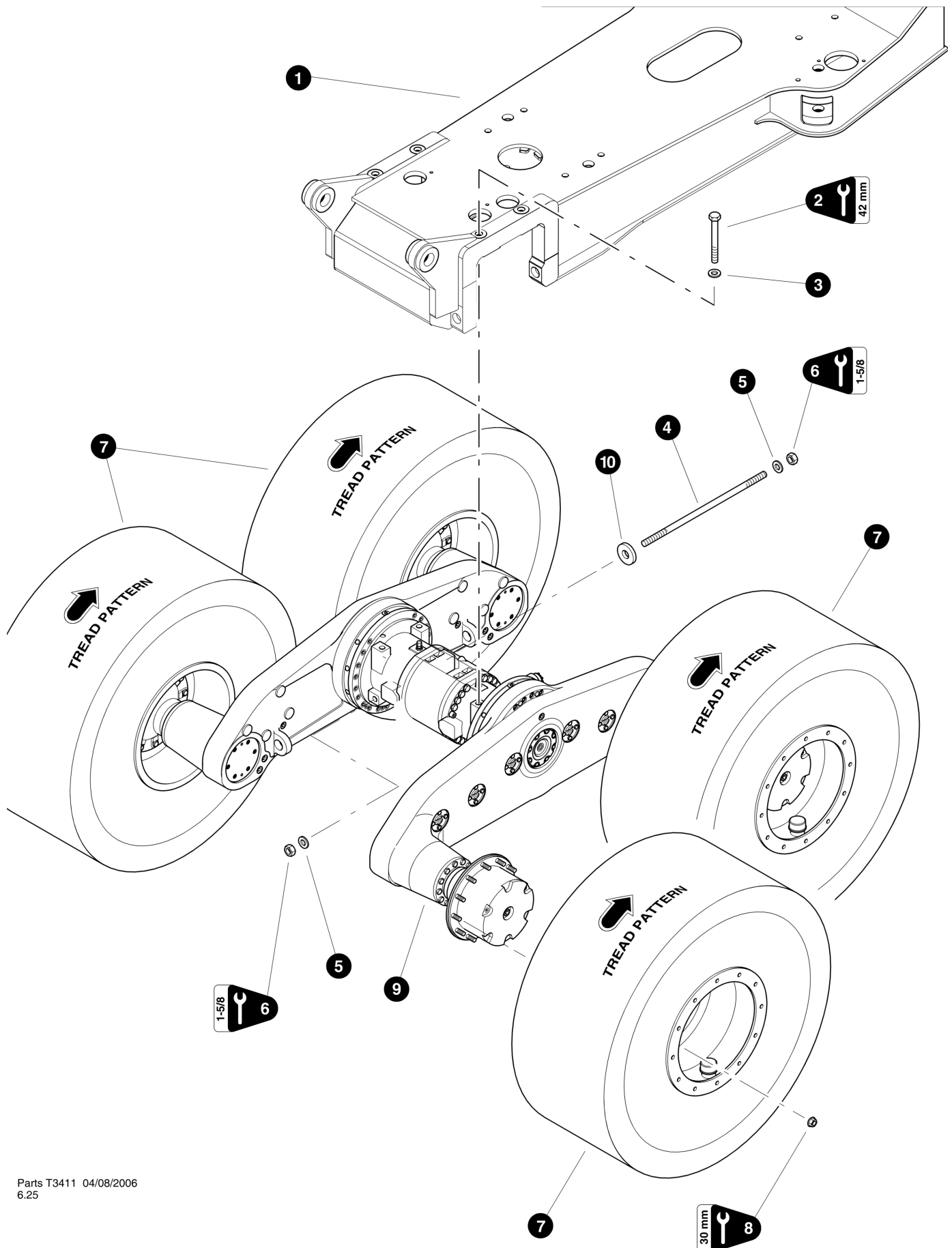
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## ***Section FR-2***

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### ***830, 840 Rear Frame - Frame & Drivetrain Installation***

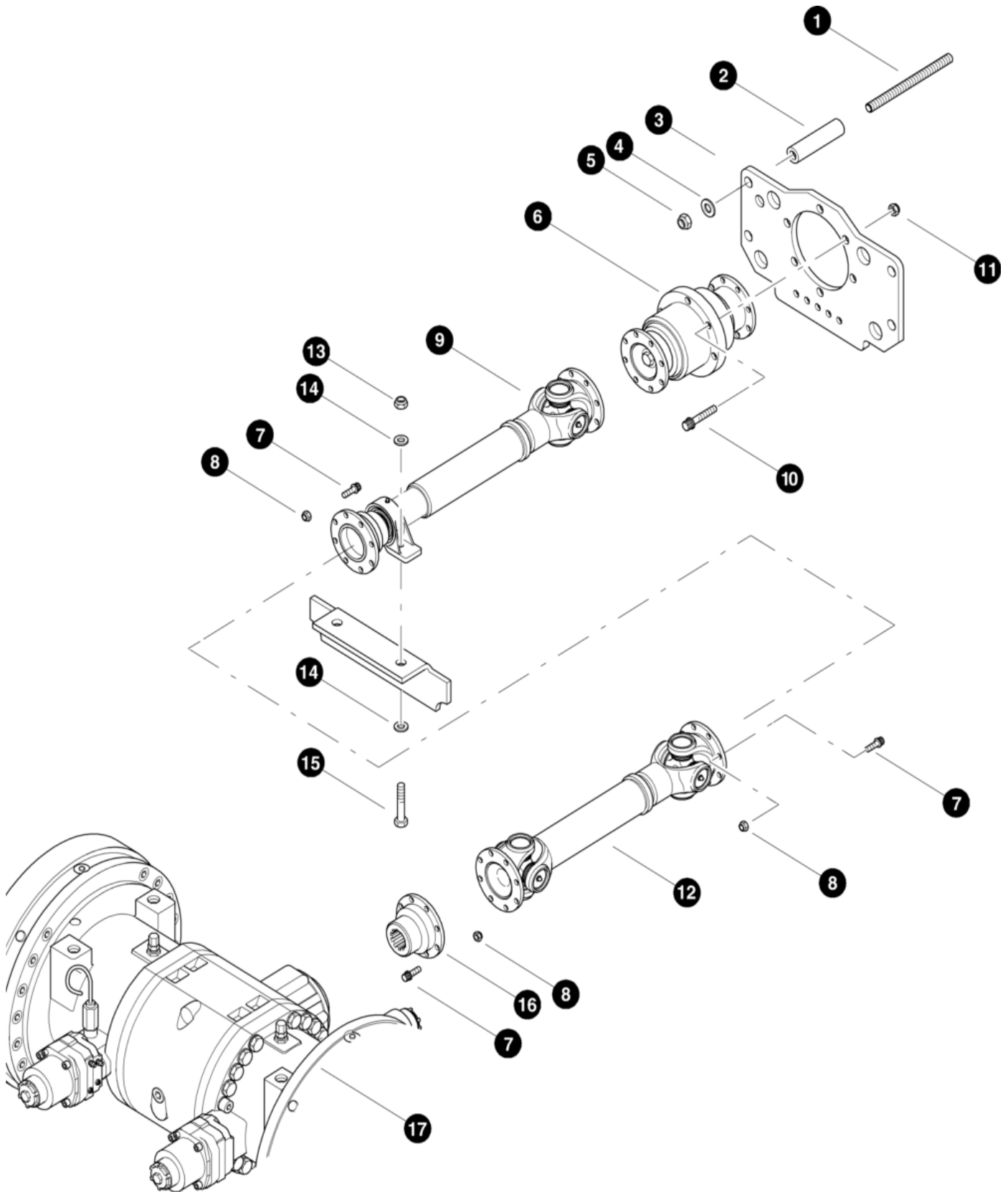


Parts T3411 04/08/2006  
6.25

## REAR AXLE INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | REAR FRAME WELDMENT . . . . .                                       | FR-1        |
| 2   | 23567-FR | 4   |                                                                                   | BOLT - 30mm-3.5P x 220mm <b>(Torque to 1100 ft.lbs. (1465 Nm))</b>  |             |
| 3   | 23990-FR | 4   |                                                                                   | WASHER, SAE FLAT - 1.25" (EXTRA THICK)                              |             |
| 4   | 52485-FF | 2   |                                                                                   | STUD - 1.25" - 7 X 27.50" <b>(Torque to 1200 ft.lbs. (1600 Nm))</b> |             |
| 5   | 22531-FR | 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-5        |
| 8   | 19361-FR | 48  |                                                                                   | NUT, lug <b>(Torque to 600 ft.lbs. (800 Nm))</b>                    |             |
| 9   | REF.     | 1   |  | REAR AXLE. . . . .                                                  | AX-1        |
| 10  | 24003-FR | 2   |                                                                                   | SPACER, axle spreader box                                           |             |

 See referenced page for component or assembly breakdown.



Parts T3412 04/28/06  
12.50

## DRIVE SHAFT INSTALLATION (NAF 2-SPEED SHAFTS) (STANDARD FRAME)

| REF | PART #   | QTY |   | DESCRIPTION                                                                    | SEE SECTION |
|-----|----------|-----|---|--------------------------------------------------------------------------------|-------------|
| 1   | 26037-FR | 4   |   | STUD, 3/4 X 8.5 (see note #2)                                                  |             |
| 2   | 80721-FR | 4   |   | SPACER                                                                         |             |
| 3   | 52486-FR | 1   |   | BRACKET, bearing mount                                                         |             |
| 4   | 15550-FR | 4   |   | WASHER, SAE flat 3/4                                                           |             |
| 5   | 10817-FR | 4   |   | NUT, lock - 3/4"                                                               |             |
| 6   | 25218-FR | 1   |   | IDLER, driveshaft (HD)                                                         |             |
| 7   | 50261-FR | 24  |   | BOLT, 12 point - 12mm-1.75P x 35mm (See Note #1 Below)                         |             |
| 8   | 50262-FR | 24  |   | NUT, lock - 12mm                                                               |             |
| 9   | 50791-FR | 1   | ☐ | DRIVE SHAFT (Gearbox to Center) (500793-61)                                    |             |
|     | 50466-FR | 2   |   | KIT, CROSS & BEARING                                                           |             |
|     | 50467-FR | 2   |   | YOKE, FLANGE (90mm)                                                            |             |
|     | 51594-FR | 1   |   | BEARING, PILLOW BLOCK                                                          |             |
| 10  | 50050-FR | 6   |   | BOLT, 12 point - 5/8" x 3" (See Note #1 Below)(Torque to 130 ft.lbs. (175 Nm)) |             |
| 11  | 10816-FR | 6   |   | NUT, lock - 5/8"                                                               |             |
| 12  | 50791-FR | 1   | ☐ | DRIVE SHAFT (Gearbox to Center) (498347-61)                                    |             |
|     | 50466-FR | 2   |   | KIT, CROSS & BEARING                                                           |             |
|     | 50467-FR | 2   |   | YOKE, FLANGE (90mm)                                                            |             |
| 13  | 10816-FR | 2   |   | NUT, LOCK - .625"                                                              |             |
| 14  | 23210-FR | 4   |   | WASHER, SAE FLAT - .625" (EXTRA THICK)                                         |             |
| 15  | 15517-FR | 2   |   | BOLT - .625" X 2.5"                                                            |             |
| 16  | 23997-FR | 1   |   | YOKE, companion flange - AXLE                                                  |             |
| 17  | REF.     | 1   | ☐ | AXEL ASSY.....                                                                 | AX          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

### Note #1:

Use Loctite 242 (blue) during installation.

### Note #2:

Use Loctite 262 (red) during installation.

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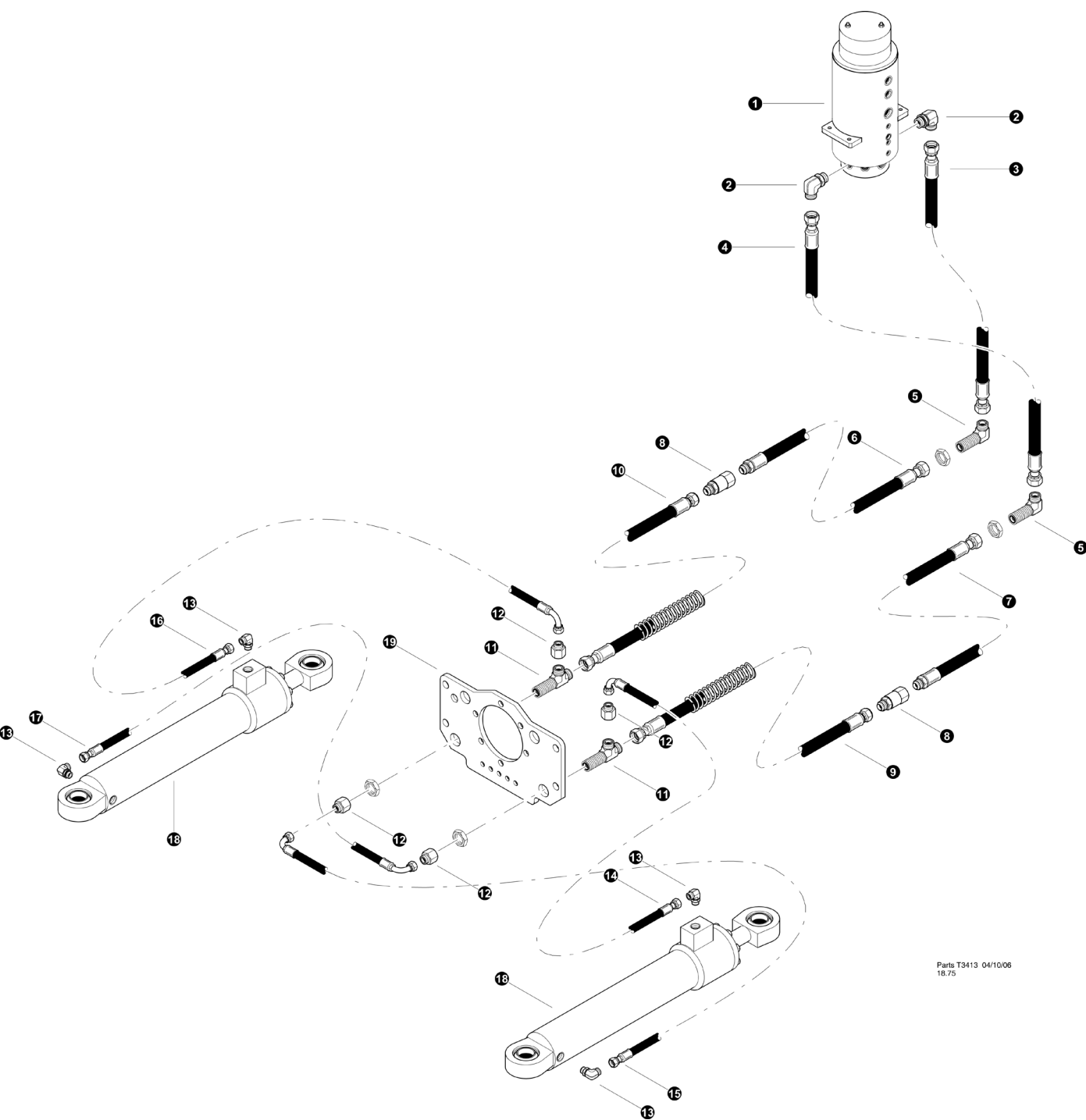
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# Section FR-3

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## **830 / 840 REAR FRAME - Hydraulic Circuits**



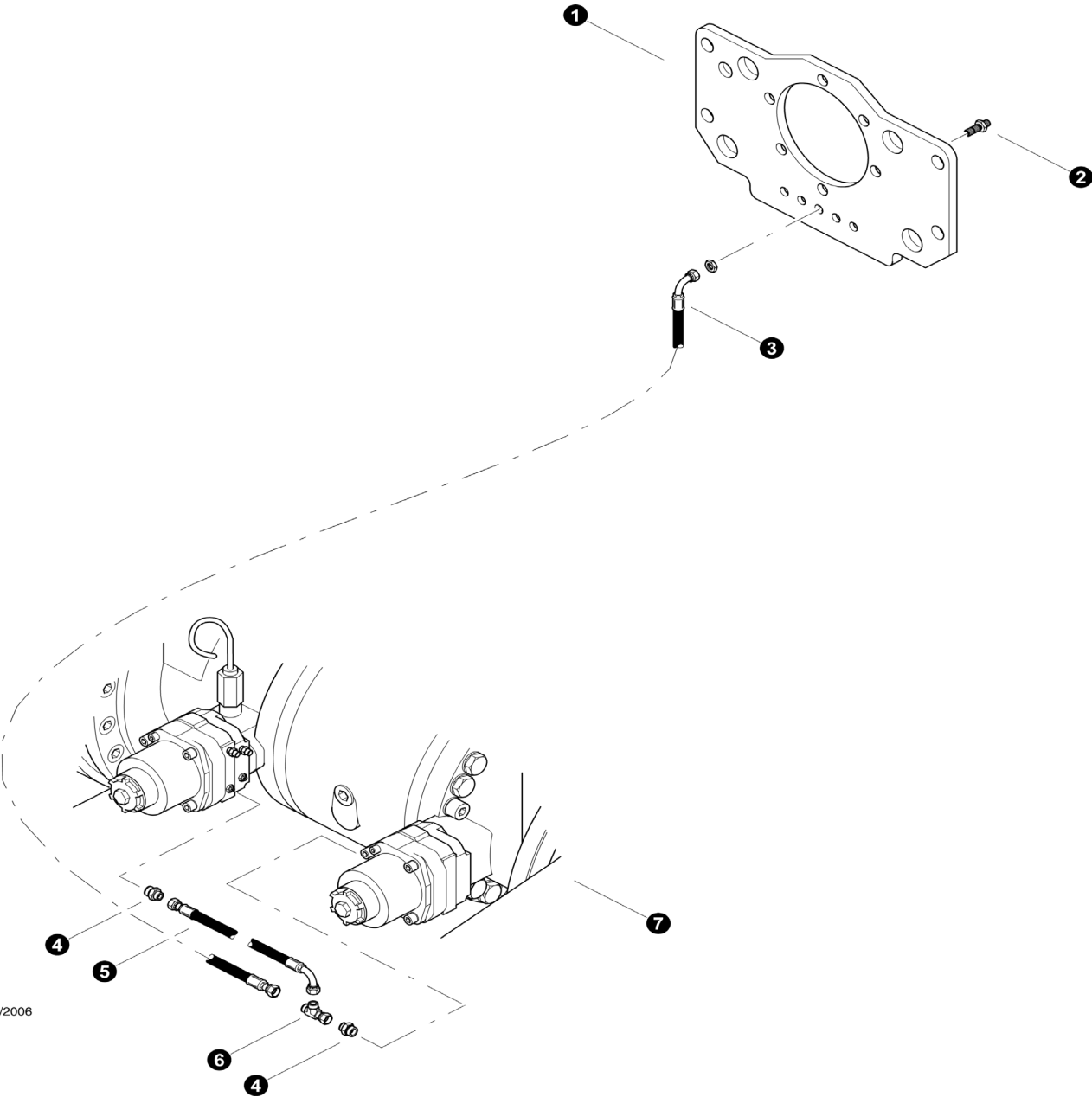
## REAR FRAME HYDRAULICS

### Steering Connections (Standard Front and Rear Frames)

| REF | PART #   | QTY |                                                                                     | DESCRIPTION                                                                                 | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |    | ROTARY MANIFOLD. . . . .                                                                    | UP-1        |
| 2   | 17688-FR | 2   |                                                                                     | ELBOW, 90 - FF1868T-1212S                                                                   |             |
| 3   | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4040-12-120S-1204 (Lower rotary manifold port #9 to Right bulkhead fitting) |             |
| 4   | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4034-12-120S-1204 (Lower rotary manifold port #10 to Left bulkhead fitting) |             |
| 5   | 24188-FR | 2   |                                                                                     | ELBOW, 90 BULKHEAD - 855BH-TT-12                                                            |             |
| 6   | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4050-12-120S-12MJ (with Spring Protector)                                   |             |
| 7   | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4050-12-120S-12MJ (with Spring Protector)                                   |             |
| 8   | 18782-FR | 2   |                                                                                     | SWIVEL, INLINE STR LS2406-1212                                                              |             |
| 9   | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4040-12-120S-12FJ (with Spring Protector)                                   |             |
| 10  | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4040-12-120S-12FJ (with Spring Protector)                                   |             |
| 11  | 20029-FR | 2   |                                                                                     | TEE, BULKHEAD RUN - 12 WJJLO-WLNL-S                                                         |             |
| 12  | 18581-FR | 1   |                                                                                     | CONNECTOR, REDUCER - ORS FF2281T-0812S                                                      |             |
| 13  | 16360-FR | 4   |                                                                                     | ELBOW, 90° - FF1868T-0808S                                                                  |             |
| 14  | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4046-08-080S-0809 (Right bulkhead tee to Right steer cylinder rod port)     |             |
| 15  | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4044-08-080S-0809 (Left bulkhead tee to Right steer cylinder base port)     |             |
| 16  | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4046-08-080S-0809 (Left bulkhead tee to left steer cylinder rod port)       |             |
| 17  | -FR      | 1   |                                                                                     | HOSE ASSEMBLY - 4044-08-080S-0809 (Right bulkhead tee to Left steer cylinder base port)     |             |
| 18  | REF.     | 2   |  | STEER CYLINDERS. . . . .                                                                    | FR-3        |
| 19  | 52486-FR | 1   |                                                                                     | BRACKET, BRG MOUNT - DRIVELINE 830                                                          |             |



See referenced page for component or assembly breakdown.



Parts T3414 04/12/2006  
18.75

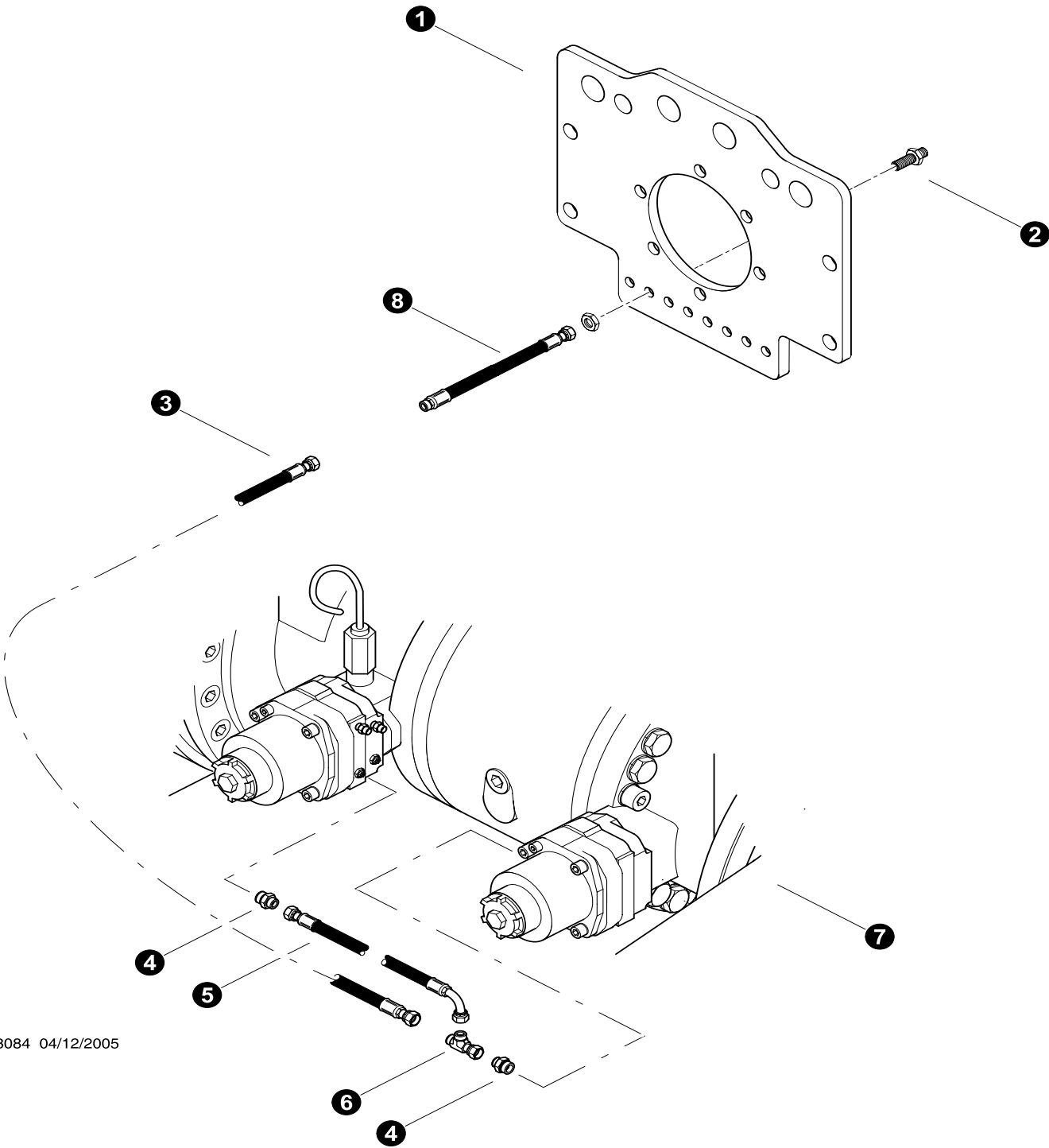
## REAR FRAME HYDRAULICS

### Lower Solenoid Manifold Connections - Parking Brake (Standard Front and Rear Frames)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 52486-FR | 1   | BRACKET, BRG MOUNT - DRIVELINE 830                                                                        |             |
| 2   | 18582-FR | 1   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                                   |             |
| 3   | -FR      | 1   | HOSE ASSEMBLY - 2124-04-04OS-04O9 (Rear frame PB bulkhead to<br>Rear Axle)                                |             |
| 4   | 19470-FR | 2   | CONNECTOR, STR 04-14m                                                                                     |             |
| 5   | 50607-FR | 1   | HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (PB jumper hose on rear axel)                                         |             |
| 6   | 15176-FR | 2   | TEE - 04                                                                                                  |             |
| 7   | REF.     | 1   |  REAR AXLE ASSEMBLY..... | AX          |



See referenced page for component or assembly breakdown.



Parts T3084 04/12/2005  
18.75

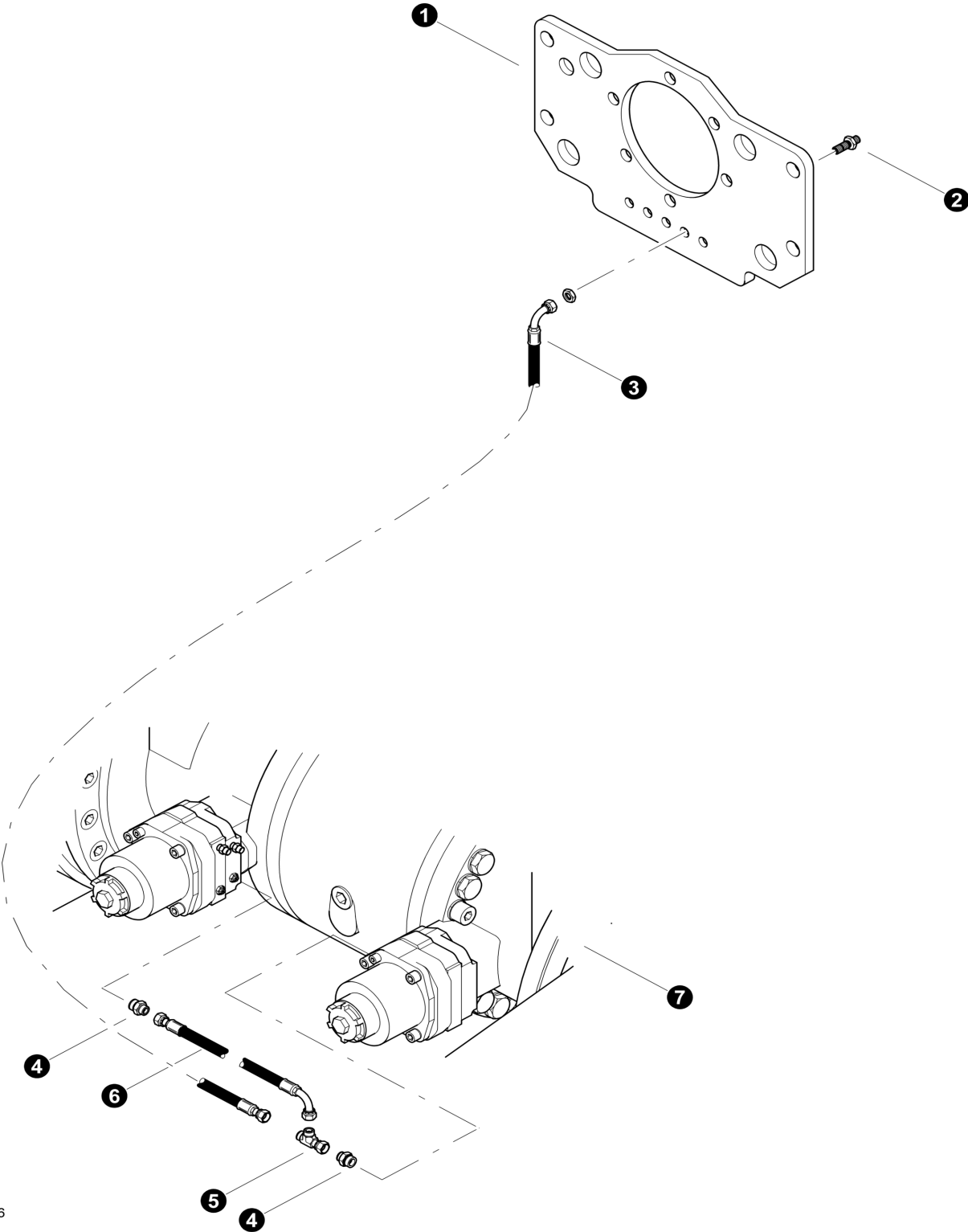
## REAR FRAME HYDRAULICS

### Lower Solenoid Manifold Connections - Parking Brake (Standard Front and 2 foot longer Rear Frame)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 42290-FR | 1   | BRACKET, bearing mount                                                                                    |             |
| 2   | 18582-FR | 1   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                                   |             |
| 3   | -FR      | 1   | HOSE ASSEMBLY - 2129-04-04OS-04OS (Rear frame PB bulkhead to Rear Axle)                                   |             |
| 4   | 19470-FR | 2   | CONNECTOR, STR 04-14m                                                                                     |             |
| 5   | 50607-FR | 1   | HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (PB jumper hose on rear axel)                                         |             |
| 6   | 15176-FR | 2   | TEE - 04                                                                                                  |             |
| 7   | REF.     | 1   |  REAR AXLE ASSEMBLY..... | AX          |
| 8   | 24886-FR | 1   | HOSE ASSEMBLY - 4024-04-04OS-04OM (PB 2' jumper hose)                                                     |             |



See referenced page for component or assembly breakdown.



Parts T3415 04/10/2006  
18.75



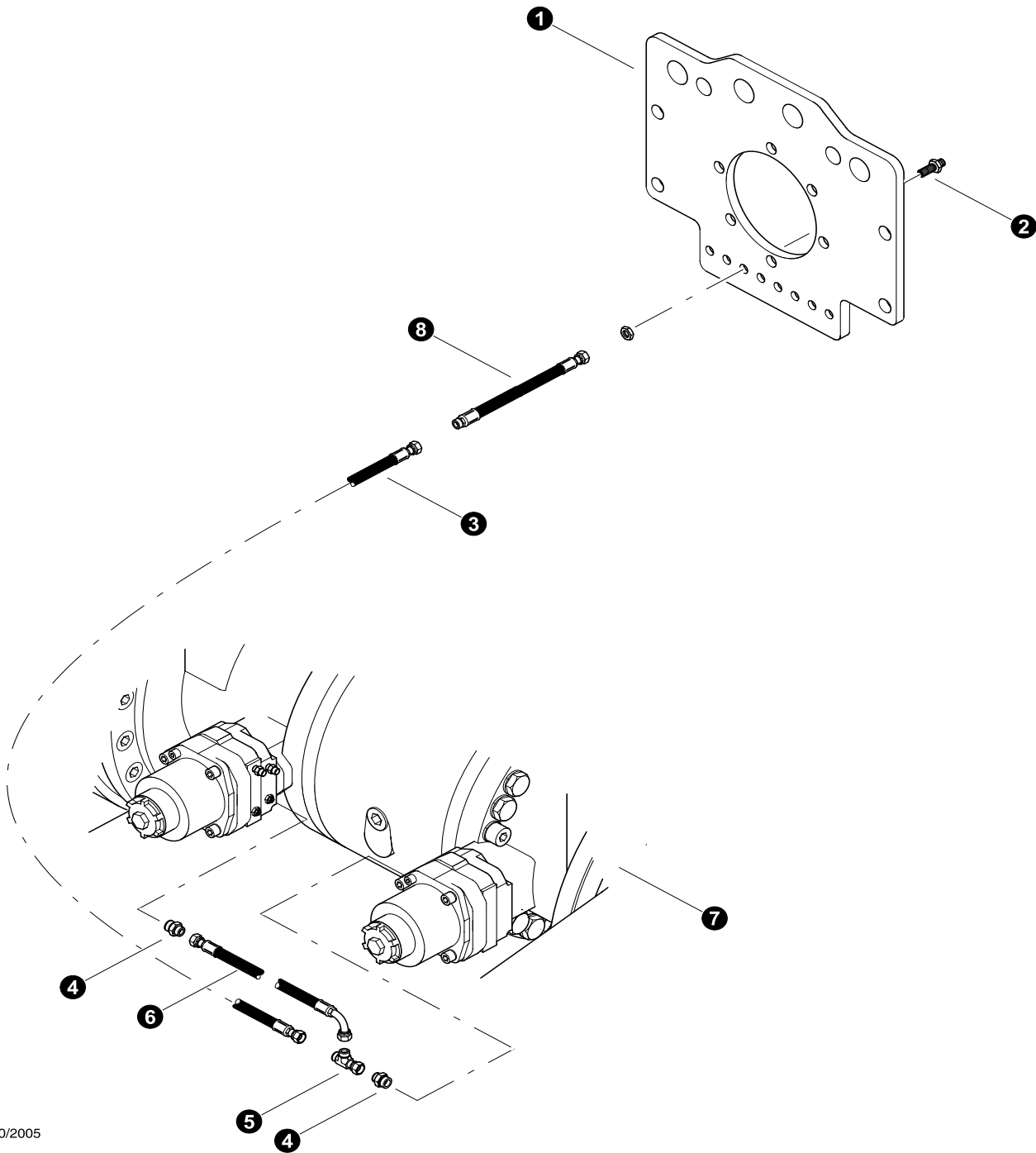
## REAR FRAME HYDRAULICS

### Lower Solenoid Manifold Connections - Travel Brake (Standard Front and Rear Frames)

| REF | PART #   | QTY | DESCRIPTION                                                                                                  | SEE SECTION |
|-----|----------|-----|--------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 52486-FR | 1   | BRACKET, BRG MOUNT - DRIVELINE 830                                                                           |             |
| 2   | 18582-FR | 1   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                                      |             |
| 3   | -FR      | 1   | HOSE ASSEMBLY - 2124-04-04OS-04O9 (Rear frame TB bulkhead to<br>Rear Axle)                                   |             |
| 4   | 19470-FR | 2   | CONNECTOR, STR 04-14m                                                                                        |             |
| 5   | 15176-FR | 2   | TEE - 04                                                                                                     |             |
| 6   | 50607-FR | 1   | HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (TB jumper hose on rear axel)                                            |             |
| 7   | REF.     | 1   |  REAR AXLE ASSEMBLY..... AX |             |



See referenced page for component or assembly breakdown.



Parts T3085 04/10/2005  
18.75

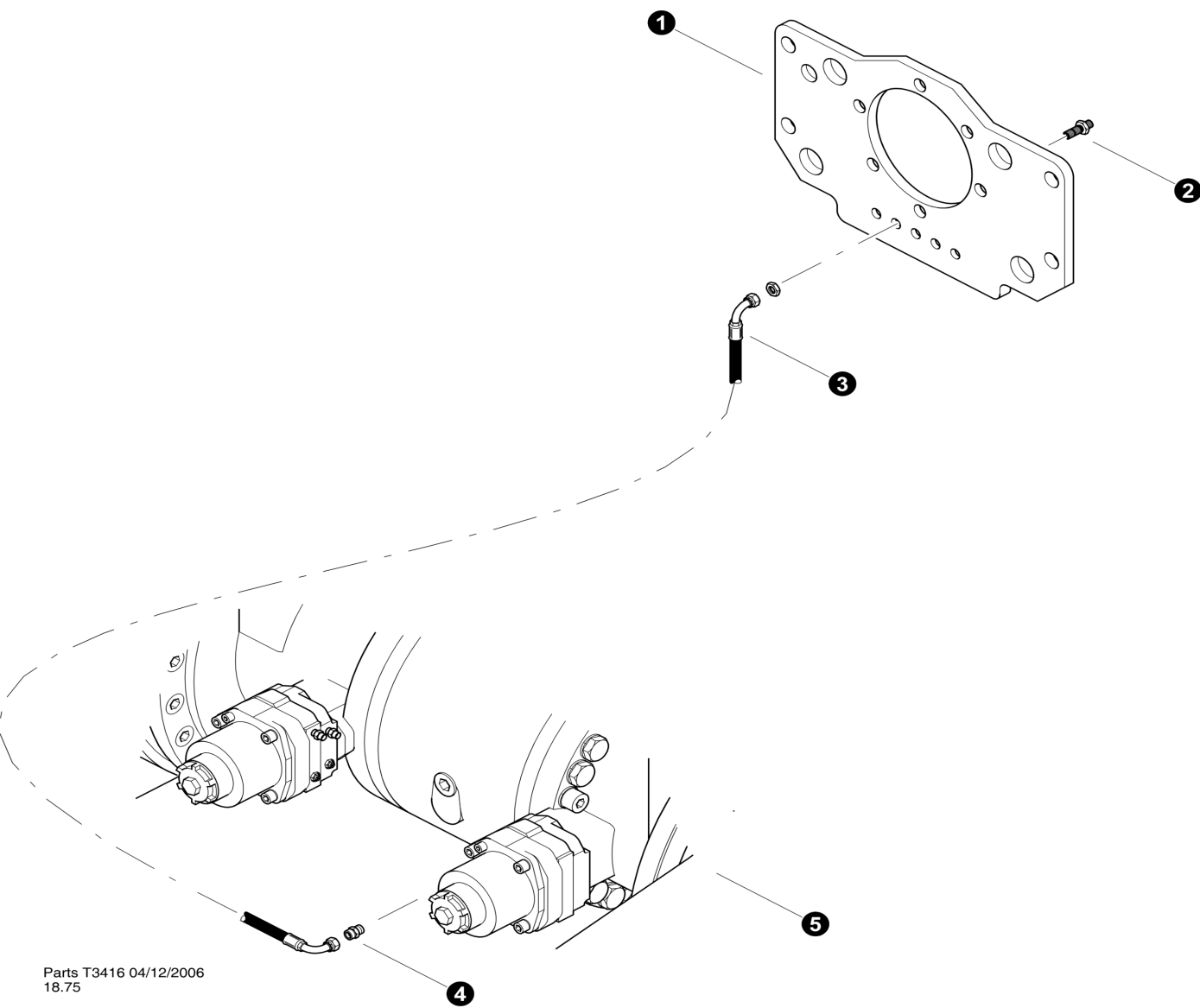
## REAR FRAME HYDRAULICS

### Lower Solenoid Manifold Connections - Travel Brake (Standard Front and 2 foot longer Rear Frame)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 42290-FR | 1   | BRACKET, bearing mount                                                                                    |             |
| 2   | 18582-FR | 1   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                                   |             |
| 3   | -FR      | 1   | HOSE ASSEMBLY - 2129-04-04OS-04OS (Rear frame TB bulkhead to<br>Rear Axle)                                |             |
| 4   | 19470-FR | 2   | CONNECTOR, STR 04-14m                                                                                     |             |
| 5   | 50607-FR | 1   | HOSE ASSEMBLY - 2009.5-04-04OS-04O9 (TB jumper hose on rear axel)                                         |             |
| 6   | 15176-FR | 2   | TEE - 04                                                                                                  |             |
| 7   | REF.     | 1   |  REAR AXLE ASSEMBLY..... | AX          |
| 8   | 24886-FR | 1   | HOSE ASSEMBLY - 4024-04-04OS-04OM (PB 2' jumper hose)                                                     |             |



See referenced page for component or assembly breakdown.



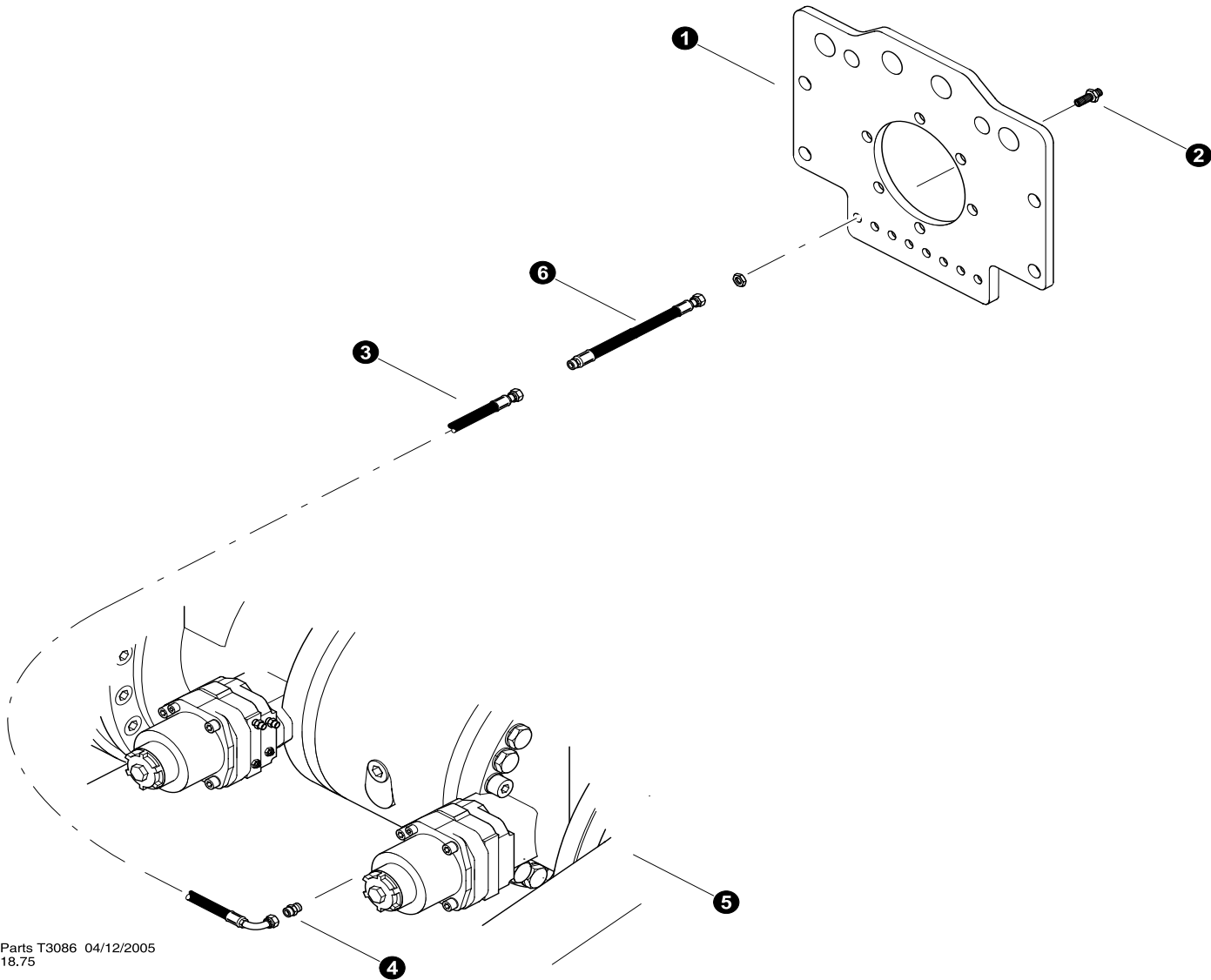
REAR FRAME HYDRAULICS

Lower Solenoid Manifold Connections - Differential Lock  
(Standard Front and Rear Frames)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------|
| 1   | 52486-FR | 1   |                                                                                   | BRACKET, BRG MOUNT - DRIVELINE 830                                         |             |
| 2   | 18582-FR | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                    |             |
| 3   | -FR      | 1   |                                                                                   | HOSE ASSEMBLY - 2128-04-04OS-04O9 (Rear frame TB bulkhead to<br>Rear Axle) |             |
| 4   | 19470-FR | 1   |                                                                                   | CONNECTOR, STR 04-14m                                                      |             |
| 5   | REF.     | 1   |  | REAR AXLE ASSEMBLY.....                                                    | AX          |



See referenced page for component or assembly breakdown.

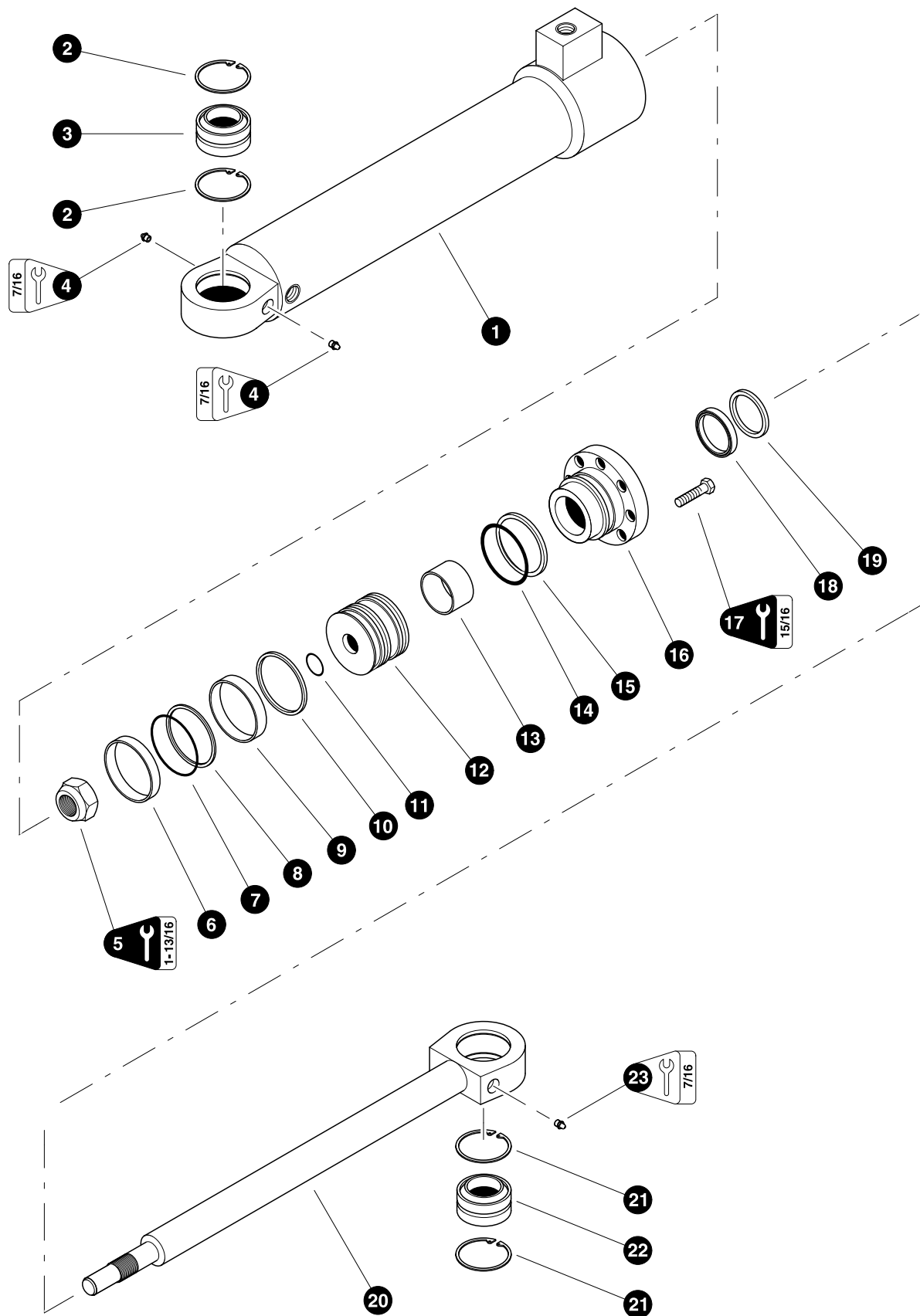


REAR FRAME HYDRAULICS

Lower Solenoid Manifold Connections - Differential Lock  
(Standard Front and 2 foot longer Rear Frame)

| REF | PART #   | QTY | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | 42290-FR | 1   | BRACKET, bearing mount                                                                                    |             |
| 2   | 18582-FR | 1   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                                                   |             |
| 3   | -FR      | 1   | HOSE ASSEMBLY - 2129-04-04OS-04OS (Rear frame TB bulkhead to<br>Rear Axle)                                |             |
| 4   | 19470-FR | 1   | CONNECTOR, STR 04-14m                                                                                     |             |
| 5   | REF.     | 1   |  REAR AXLE ASSEMBLY..... | AX          |
| 6   | 24886-FR | 1   | HOSE ASSEMBLY - 4024-04-04OS-04OM (PB 2' jumper hose) .                                                   |             |

 See referenced page for component or assembly breakdown.





## STEER CYLINDER (Jarp 2.25" Rod)

| REF | PART #   | QTY |   | DESCRIPTION                                                                             | SEE SECTION |
|-----|----------|-----|---|-----------------------------------------------------------------------------------------|-------------|
| -   | 51584-FR | 2   | ☐ | CYLINDER, STEER (2.25" ROD) - JARP                                                      |             |
| 1   | 51681-FR | 1   | ☐ | BARREL ASSEMBLY                                                                         |             |
| 2   | 19916-FR | 2   |   | RING, snap                                                                              |             |
| 3   | 19917-FR | 1   |   | BUSHING, spherical - 2"                                                                 |             |
| 4   | 10704-FR | 1   |   | FITTING, straight grease - 1/8" pipe thread                                             |             |
| 5   | -FR      | 1   |   | NUT, cylinder rod - 1-3/4" ( <b>Torque to 885 +/- 60 ft.lbs.<br/>(1175 +/- 80 Nm)</b> ) |             |
| 6   | NSS      | 1   | ⌘ | RING, piston wear                                                                       |             |
| 7   | NSS      | 1   | ⌘ | RING, piston loader                                                                     |             |
| 8   | NSS      | 1   | ⌘ | RING, piston chem-cast                                                                  |             |
| 9   | NSS      | 1   | ⌘ | RING, piston wear                                                                       |             |
| 10  | NSS      | 1   | ⌘ | RING, piston seal                                                                       |             |
| 11  | NSS      | 1   | ⌘ | O-RING, piston                                                                          |             |
| 12  | -FR      | 1   |   | PISTON                                                                                  |             |
| 13  | NSS      | 1   | ⌘ | RING, rod bearing wear                                                                  |             |
| 14  | NSS      | 1   | ⌘ | O-RING, rod bearing                                                                     |             |
| 15  | NSS      | 1   | ⌘ | RING, rod bearing back-up                                                               |             |
| 16  | 51685-FR | 1   |   | BEARING, rod                                                                            |             |
| 17  | 15681-FR | 8   |   | BOLT - 5/8" x 2-1/4" ( <b>Torque to 175 ft.lbs (233 Nm)</b> )                           |             |
| 18  | NSS      | 1   | ⌘ | U-CUP, rod bearing                                                                      |             |
| 19  | NSS      | 1   | ⌘ | WIPER, rod                                                                              |             |
| 20  | 51682-FR | 1   | ☐ | ROD ASSEMBLY                                                                            |             |
| 21  | 19916-FR | 2   |   | RING, snap                                                                              |             |
| 22  | 19917-FR | 1   |   | BUSHING, spherical - 2"                                                                 |             |
| 23  | 10704-FR | 1   |   | FITTING, straight grease - 1/8" pipe thread                                             |             |
| -   | 51683-FR | 1   |   | KIT, seal repair - steer cylinder                                                       |             |

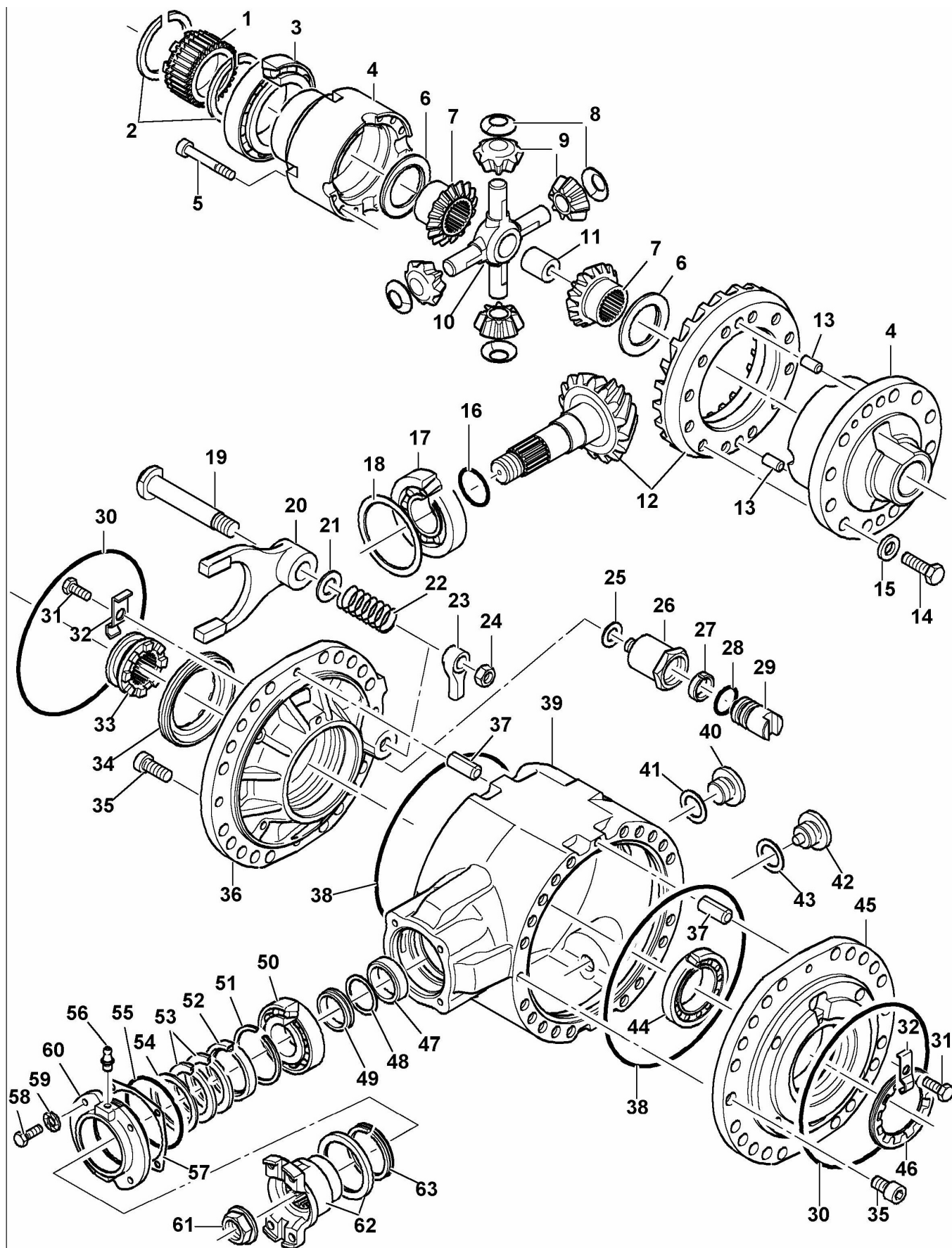
- ☐ Kit or Assembly - includes all items indented underneath.  
 ⌘ Included in seal repair kit Part # 19750-FR.

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# Section AX-1

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## **Axles, Gearboxes & Wheels - *Gearboxes (TIM 08)* *830 - Rear Axle***



## TIM 08 Axle Differential

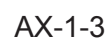
| REF | PART #   | QTY | DESCRIPTION                             | SEE PAGE |
|-----|----------|-----|-----------------------------------------|----------|
| -   | 2401.226 | 1   | Differential Complete Assymbly          |          |
| 1   | 9813.103 | 1   | Clutch-coupling sleeve                  |          |
| 2   | 1220.311 | 2   | Spring ring                             |          |
| 3   | 1110.175 | 1   | Tapered-roller bearing                  |          |
| 4   | 2102.146 | 1   | Differential cage                       |          |
| 5   | 1020.335 | 12  | Allen screw                             |          |
| 6   | 23861-AX | 2   | <input type="checkbox"/> Adjusting kit  |          |
| 6   | 7316.101 |     | Check disk                              |          |
| 6   | 7316.102 |     | Check disk                              |          |
| 6   | 7316.103 |     | Check disk                              |          |
| 6   | 7316.104 |     | Check disk                              |          |
| 7   | 23862-AX | 2   | Differential gear                       |          |
| 8   | 7518.028 | 4   | Thrust washer                           |          |
| 9   | 7514.032 | 4   | Planetary gear                          |          |
| 10  | 7515.031 | 1   | Cross bolt                              |          |
| 11  | 9565.051 | 1   | Adjusting bolt D32x42,0                 |          |
| 12  | 23856-AX | 1   | Crow n w heel / pinion Z=34/12          |          |
| 13  | 1200.228 | 4   | Straight pin 16m6x40, ST GEHAERTET 6325 |          |
| 14  | 1510.558 | 16  | Screw M16x1.5x40, 10.9 96115            |          |
| 15  | 7316.045 | 16  | Washer 16.1x30x4, C45 GEHAERTET 1542    |          |
| 16  | 1170.013 | 1   | O-ring                                  |          |
| 17  | 1110.114 | 1   | Tapered-roller bearing                  |          |
| 18  | 7317.026 | 1   | <input type="checkbox"/> Adjusting kit  |          |
| 18  | 7317.118 |     | Adjusting washer                        |          |
| 18  | 7317.119 |     | Adjusting washer                        |          |
| 18  | 7317.120 |     | Adjusting washer                        |          |
| 18  | 23859-AX |     | Adjusting washer                        |          |
| 19  | 23847-AX | 1   | Shifting rod                            |          |
| 20  | 23846-AX | 1   | Shift fork                              |          |
| 21  | 7317.023 | 1   | <input type="checkbox"/> Adjusting kit  |          |
| 21  | 7317.111 |     | Adjusting washer                        |          |
| 21  | 23845-AX |     | Adjusting washer                        |          |
| 21  | 7317.113 |     | Adjusting washer                        |          |
| 21  | 7317.114 |     | Adjusting washer                        |          |
| 22  | 23844-AX | 1   | Pressure spring                         |          |
| 23  | 23843-AX | 1   | Shifting lever                          |          |
| 24  | 23842-AX | 1   | Hex. nut                                |          |
| 25  | 23841-AX | 1   | O-ring                                  |          |
| 26  | 5263.061 | 1   | Cylinder                                |          |
| 27  | 1180.734 | 1   | Groove ring                             |          |
| 28  | 1180.811 | 1   | Shaft seal                              |          |
| 29  | 5252.100 | 1   | Piston                                  |          |
| 30  | 1170.716 | 2   | O-ring                                  |          |
| 31  | 1010.129 | 2   | Hexagon screw                           |          |
| 32  | 9566.010 | 2   | Locking plate                           |          |
| 33  | 23850-AX | 1   | Shifting sleeve                         |          |
| 34  | 23849-AX | 1   | Nut                                     |          |
| 35  | 1020.212 | 4   | Allen screw                             |          |
| 36  | 7527.140 | 1   | Flange                                  |          |
| 37  | 23830-AX | 2   | Adapter sleeve                          |          |
| 38  | 23831-AX | 2   | O-ring                                  |          |
| 39  | 23860-AX | 1   | Differential housing                    |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 08 Axle Differential Continued.....

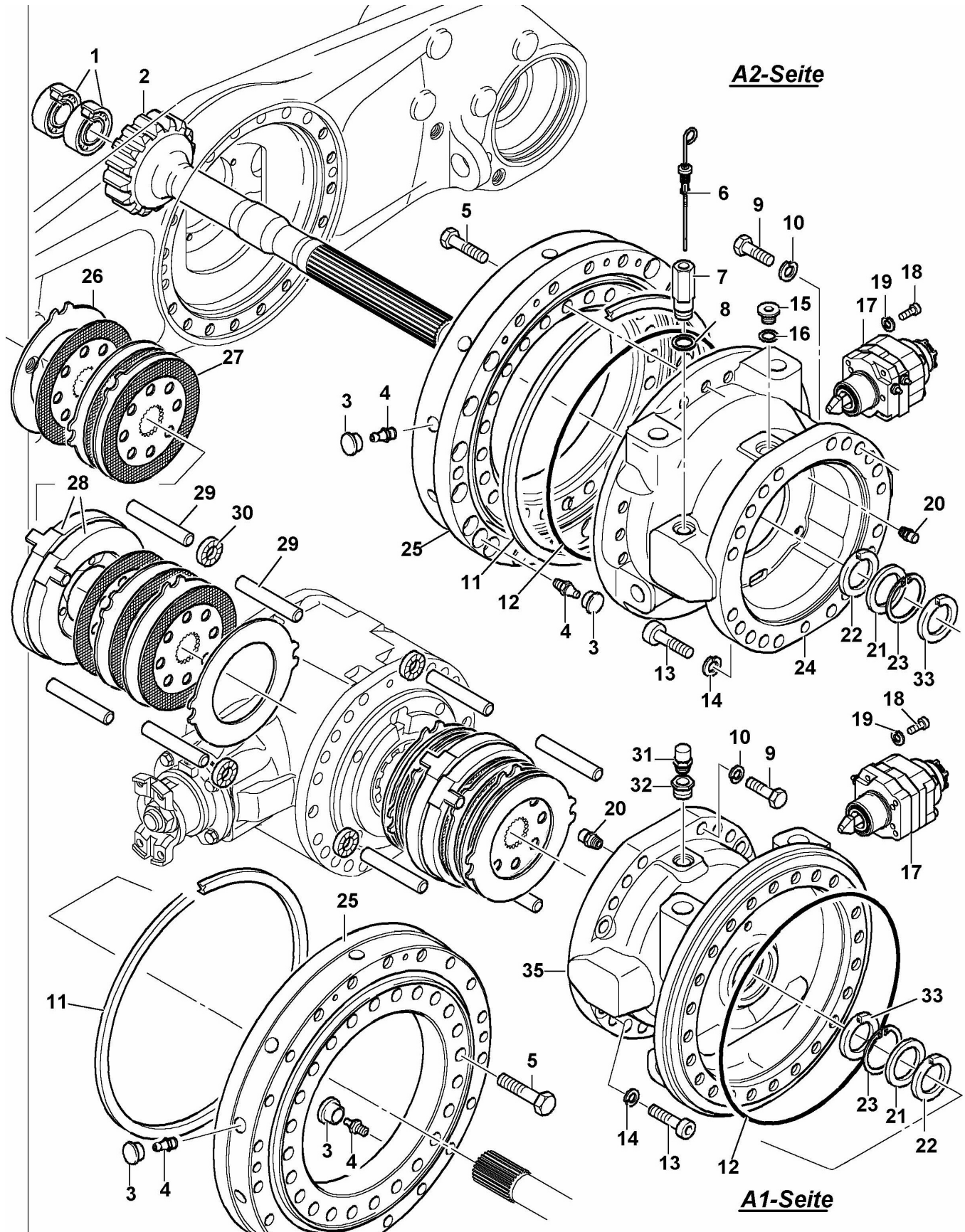
| REF | PART #   | QTY | DESCRIPTION                            | SEE PAGE |
|-----|----------|-----|----------------------------------------|----------|
| 40  | 1040.103 | 1   | Screw plug                             |          |
| 41  | 1180.507 | 1   | Seal ring                              |          |
| 42  | 9556.021 | 1   | Screw plug                             |          |
| 43  | 1180.502 | 1   | Seal ring                              |          |
| 44  | 23852-AX | 1   | Tapered-roller bearing                 |          |
| 45  | 23832-AX | 1   | Flange                                 |          |
| 46  | 23833-AX | 1   | Nut                                    |          |
| 47  | 23808-AX | 1   | Spacer bush                            |          |
| 48  | 23809-AX | 1   | <input type="checkbox"/> Adjusting kit |          |
| 48  | 7317.185 |     | Adjusting washer                       |          |
| 48  | 7317.184 |     | Adjusting washer                       |          |
| 48  | 7317.183 |     | Adjusting washer                       |          |
| 48  | 7317.182 |     | Adjusting washer                       |          |
| 48  | 7317.181 |     | Adjusting washer                       |          |
| 48  | 7317.180 |     | Adjusting washer                       |          |
| 48  | 7317.179 |     | Adjusting washer                       |          |
| 48  | 7317.178 |     | Adjusting washer                       |          |
| 48  | 7317.177 |     | Adjusting washer                       |          |
| 48  | 7317.176 |     | Adjusting washer                       |          |
| 48  | 7317.175 |     | Adjusting washer                       |          |
| 48  | 7317.174 |     | Adjusting washer                       |          |
| 48  | 7317.173 |     | Adjusting washer                       |          |
| 49  | 23810-AX | 1   | Spacer bush                            |          |
| 49  | 7311.062 | 1   | Spacer bush                            |          |
| 49  | 7311.063 | 1   | Spacer bush                            |          |
| 50  | 23811-AX | 1   | Tapered-roller bearing                 |          |
| 51  | 23812-AX | 1   | Spring ring                            |          |
| 52  | 23813-AX | 1   | Radial seal                            |          |
| 53  | 23814-AX | 2   | Seal ring                              |          |
| 54  | 23815-AX | 1   | Washer                                 |          |
| 55  | 23816-AX | 1   | O-ring                                 |          |
| 56  | 23819-AX | 1   | Taper grease nipple                    |          |
| 57  | 23817-AX | 1   | Gasket                                 |          |
| 58  | 23821-AX | 4   | Hexagon screw                          |          |
| 59  | 23820-AX | 4   | Locking clip                           |          |
| 60  | 23818-AX | 1   | Cover                                  |          |
| 61  | 23824-AX | 1   | Nut                                    |          |
| 62  | 7521.236 | 1   | Drive shaft flange                     |          |
| 63  | 23822-AX | 1   | V-ring                                 |          |
| -   | 7340.014 | 1   | Type plate                             |          |
| -   | 1200.108 | 4   | Pin                                    |          |
| -   | 1200.480 | 1   | Clamp Sleeve                           |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 08 Axle Axle Beam

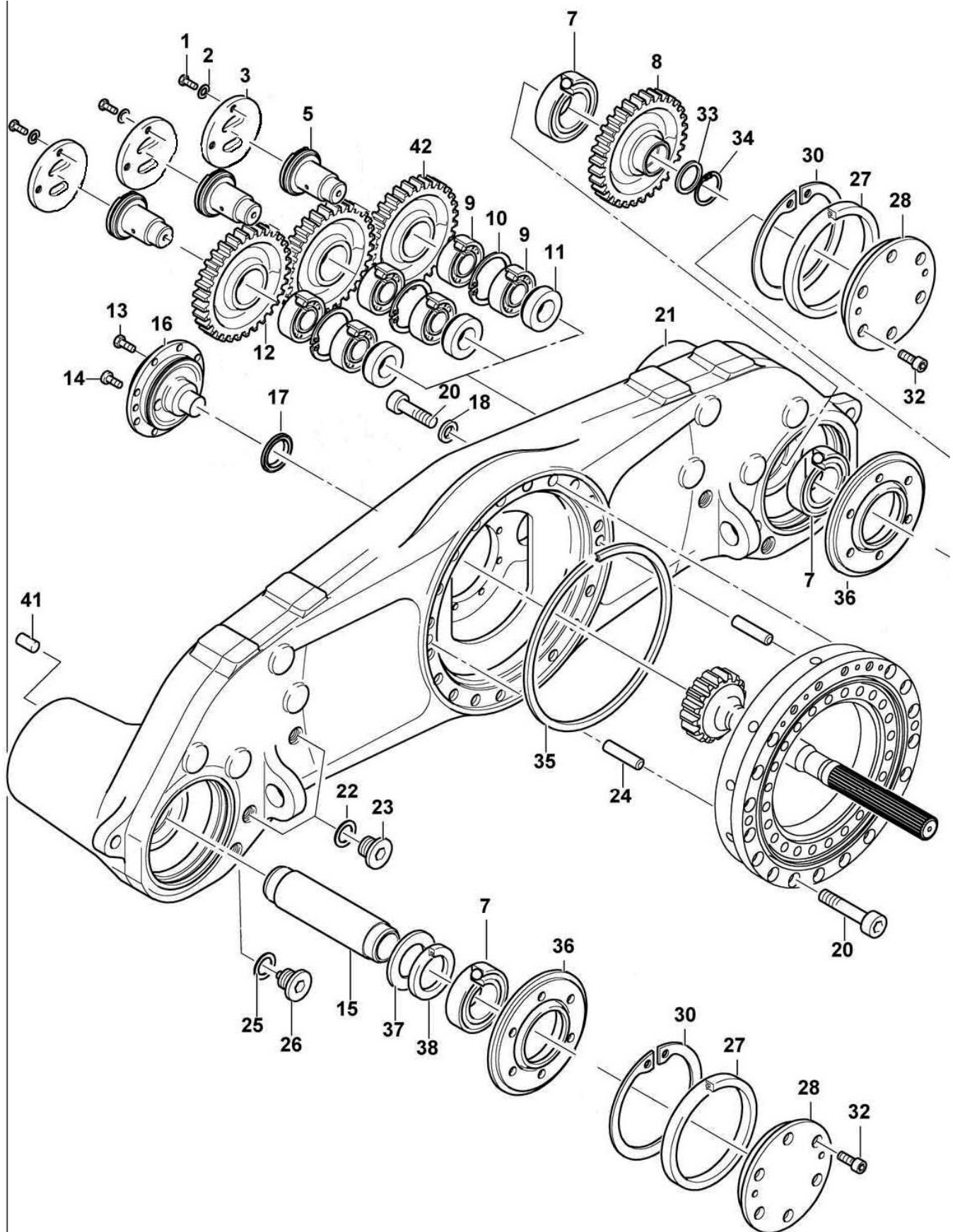
| REF | PART #   | QTY | DESCRIPTION               | SEE PAGE |
|-----|----------|-----|---------------------------|----------|
| 1   | 1130.067 | 2   | Cylinder roller bearing   |          |
| 2   | 7818.175 | 1   | Sun gear shaft            |          |
| 3   | 1750.710 | 4   | Plug                      |          |
| 4   | 1250.104 | 2   | Taper grease nipple       |          |
| 5   | 1010.669 | 24  | Hexagon screw             |          |
| 6   | 7325.026 | 1   | Dipstick (A2 ONLY)        |          |
| 7   | 7322.074 | 1   | Threaded stud (A2 ONLY)   |          |
| 8   | 1180.541 | 1   | Seal ring (A2 ONLY)       |          |
| 9   | 23807-AX | 16  | Hexagon screw             |          |
| 10  | 23806-AX | 16  | Locking clip              |          |
| 11  | 7308.050 | 1   | Scraper ring              |          |
| 12  | 1170.726 | 1   | O-ring                    |          |
| 13  | 1020.620 | 4   | Allen screw               |          |
| 14  | 1190.014 | 4   | Locking clip              |          |
| 15  | 1040.151 | 1   | Screw plug (A2 ONLY)      |          |
| 16  | 1180.541 | 1   | Seal ring (A2 ONLY)       |          |
| 17  | 52746-AX | 1   | Spring loaded cylinder    |          |
| 18  | 1020.260 | 3   | Allen screw               |          |
| 19  | 1190.031 | 3   | Locking clip              |          |
| 20  | 51270-AX | 1   | Breather                  |          |
| 21  | 7315.187 | 1   | Washer                    |          |
| 22  | 1160.236 | 1   | Oil seal                  |          |
| 23  | 1220.712 | 1   | Seeger-ring (A2 ONLY)     |          |
| 24  | 7276.115 | 1   | Axle housing (A2 ONLY)    |          |
| 25  | 7305.051 | 1   | Slewing ring              |          |
| 26  | 23825-AX | 6   | Intermediate disk         |          |
| 27  | 7345.036 | 6   | Coated disk               |          |
| 28  | 5504.002 | 1   | Operating disk            |          |
| 29  | 7321.151 | 4   | Straight pin              |          |
| 30  | 1190.211 | 2   | Toothed ring              |          |
| 31  | 1250.015 | 1   | Breather (A1 ONLY)        |          |
| 32  | 1750.705 | 1   | Reducing nipple (A1 ONLY) |          |
| 33  | 7308.063 | 1   | Seal ring                 |          |
| 34  | --       |     |                           |          |
| 35  | 7276.114 | 1   | Axle housing (A1 ONLY)    |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 08 Axle Bogie Housing

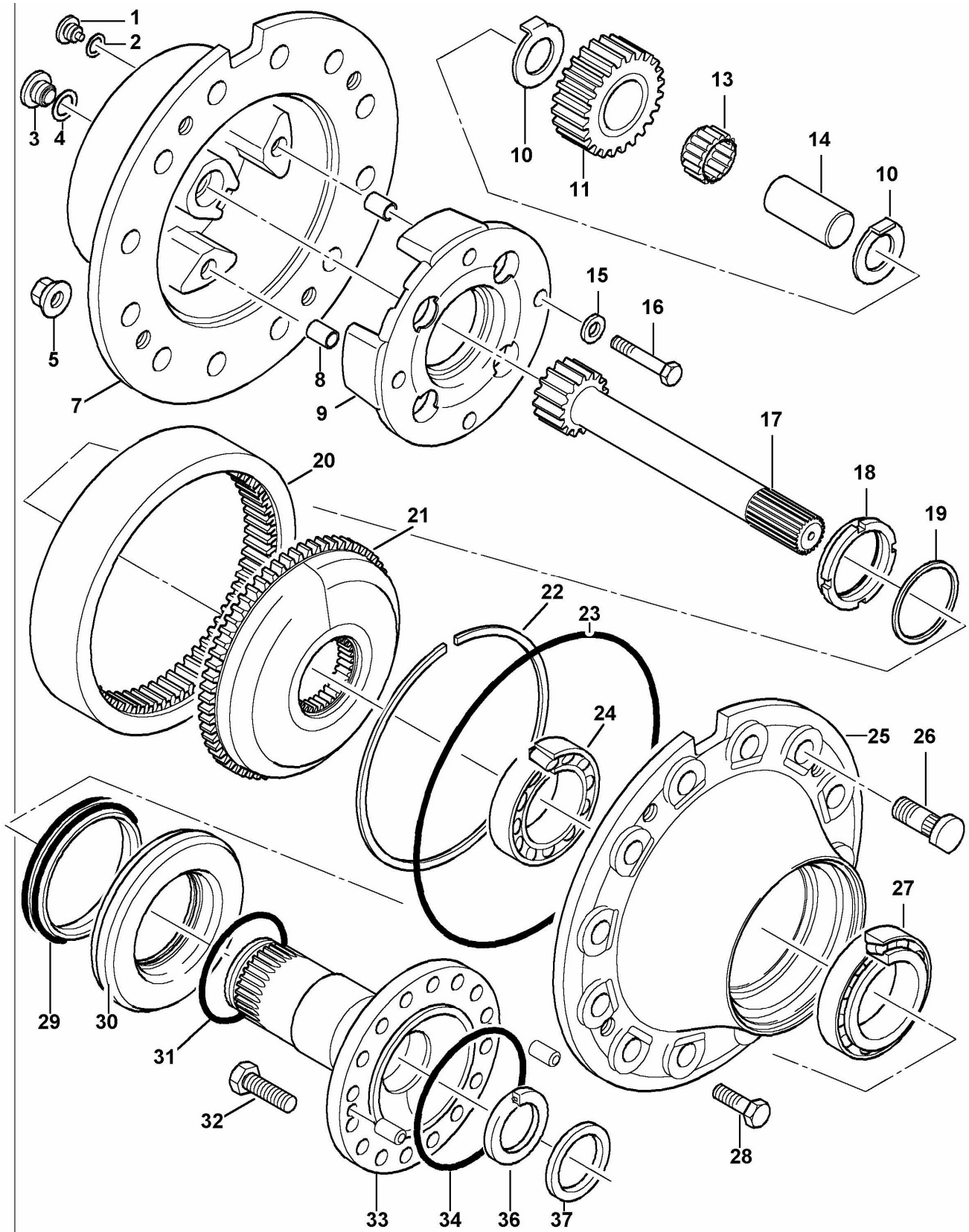
| REF | PART #   | QTY | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|-------------------------|----------|
| -   | 2405.037 | 2   | Bogie Housing Complete  |          |
| 1   | 1010.233 | 48  | Hexagon screw           |          |
| 2   | 7316.048 | 48  | Washer                  |          |
| 3   | 7302.011 | 12  | Cover                   |          |
| 4   | --       |     |                         |          |
| 5   | 7321.131 | 12  | Stud                    |          |
| 6   | --       |     |                         |          |
| 7   | 23730-AX | 8   | Grooved ball bearing    |          |
| 8   | 23731-AX | 4   | Gear                    |          |
| 9   | 1130.057 | 24  | Cylinder roller bearing |          |
| 10  | 1220.702 | 12  | Seeger-ring             |          |
| 11  | 23691-AX | 12  | Spacer bush             |          |
| 12  | 9804.356 | 8   | Gear                    |          |
| 13  | 23795-AX | 16  | Hexagon screw           |          |
| 14  | 23797-AX | 4   | Allen screw             |          |
| 15  | 23735-AX | 4   | Pipe                    |          |
| 16  | 23794-AX | 2   | Bearing stud            |          |
| 17  | 23799-AX | 2   | Axial shaft seal ring   |          |
| 18  | 23800-AX | 8   | Washer                  |          |
| 19  | --       |     |                         |          |
| 20  | 1020.618 | 48  | Allen screw             |          |
| 21  | 7277.112 | 2   | Bogie housing           |          |
| 22  | 1180.507 | 10  | Seal ring               |          |
| 23  | 1040.103 | 10  | Screw plug              |          |
| 24  | 1200.206 | 4   | Straight pin            |          |
| 25  | 1180.507 | 4   | Seal ring               |          |
| 26  | 7323.013 | 4   | Screw plug              |          |
| 27  | 23724-AX | 4   | Seal ring               |          |
| 28  | 23723-AX | 4   | Cover                   |          |
| 29  | 23726-AX | 4   | Gasket                  |          |
| 30  | 23725-AX | 4   | Seeger-ring             |          |
| 31  | --       |     |                         |          |
| 32  | 1020.220 | 24  | Allen screw             |          |
| 33  | 23729-AX | 4   | Supporting w asher      |          |
| 34  | 23728-AX | 4   | Seeger-ring             |          |
| 35  | 50176-AX | 2   | Seal ring               |          |
| 36  | 23727-AX | 4   | Cover                   |          |
| 37  | 23734-AX | 4   | Washer                  |          |
| 38  | 23733-AX | 4   | Oil seal                |          |
| 39  | --       |     |                         |          |
| 40  | --       |     |                         |          |
| 41  | 23732-AX | 8   | Straight pin            |          |
| 42  | 50173-AX | 4   | Gear                    |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 08 Axle Outer Component

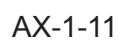
| REF | PART #   | QTY |   | DESCRIPTION              | SEE PAGE |
|-----|----------|-----|---|--------------------------|----------|
| 1   | 23741-AX | 2   |   | Screw plug               |          |
| 2   | 23742-AX | 2   |   | Seal ring                |          |
| 3   | 23743-AX | 1   |   | Screw plug               |          |
| 4   | 23744-AX | 1   | ☐ | Washer package           |          |
| 4   | 1210.113 |     |   | Support Washer           |          |
| 4   | 1210.295 |     |   | Seeger washer            |          |
| 4   | 1210.296 |     |   | Seeger washer            |          |
| 5   | 1060.408 | 12  |   | Nut with turnable washer |          |
| 6   | --       |     |   |                          |          |
| 7   | 7821.271 | 1   |   | Planetary cage           |          |
| 8   | 23752-AX | 4   |   | Shear bushing            |          |
| 9   | 7821.179 | 1   |   | Planetary cage           |          |
| 10  | 23746-AX | 8   |   | Check disk               |          |
| 11  | 23747-AX | 4   |   | Planetary gear           |          |
| 12  | --       |     |   |                          |          |
| 13  | 23748-AX | 4   |   | Needle roller cages      |          |
| 14  | 23751-AX | 4   |   | Planetary stud           |          |
| 15  | 7316.045 | 4   |   | Washer                   |          |
| 16  | 1010.536 | 4   |   | Hexagon screw            |          |
| 17  | 23756-AX | 1   |   | Sun gear shaft           |          |
| 18  | 23757-AX | 1   |   | Nut                      |          |
| 19  | 23758-AX | 1   | ☐ | Adjusting kit            |          |
| 19  | 7317.208 |     |   | Adjusting washer         |          |
| 19  | 7317.207 |     |   | Adjusting washer         |          |
| 19  | 7317.206 |     |   | Adjusting washer         |          |
| 19  | 7317.205 |     |   | Adjusting washer         |          |
| 19  | 7317.204 |     |   | Adjusting washer         |          |
| 19  | 7317.203 |     |   | Adjusting washer         |          |
| 19  | 7317.202 |     |   | Adjusting washer         |          |
| 19  | 7317.201 |     |   | Adjusting washer         |          |
| 19  | 7317.200 |     |   | Adjusting washer         |          |
| 19  | 7317.199 |     |   | Adjusting washer         |          |
| 20  | 23759-AX | 1   |   | Gear rim                 |          |
| 21  | 23760-AX | 1   |   | Ring gear carrier        |          |
| 22  | 23761-AX | 1   |   | Spring ring              |          |
| 23  | 23762-AX | 1   |   | O-ring                   |          |
| 24  | 23763-AX | 1   |   | Tapered-roller bearing   |          |
| 25  | 23764-AX | 1   |   | Wheel hub                |          |
| 26  | 22245-AX | 12  |   | Wheel bolt               |          |
| 27  | 23767-AX | 1   |   | Tapered-roller bearing   |          |
| 28  | 23765-AX | 4   |   | Hexagon screw            |          |
| 29  | 23768-AX | 1   |   | Slide ring sealing       |          |
| 30  | 23769-AX | 1   |   | Axle stub ring           |          |
| 31  | 23770-AX | 1   |   | O-ring                   |          |
| 32  | 7322.069 | 16  |   | Hexagon screw            |          |
| 33  | 23771-AX | 1   |   | Stub axle                |          |
| 34  | 23772-AX | 1   |   | O-ring                   |          |
| 35  | --       |     |   |                          |          |
| 36  | 23737-AX | 1   |   | Oil seal                 |          |
| 37  | 23736-AX | 1   |   | Washer                   |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 08 Axle Break Cylinder

| REF | PART #   | QTY |                          | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|--------------------------|-----------------------------|----------|
| --  | 52746-AX |     | <input type="checkbox"/> | Spring loaded cyl. compl. 1 |          |
| 1   | 7323.044 |     |                          | Screw Plug                  |          |
| 2   | --       |     |                          |                             |          |
| 3   | 1020.301 |     |                          | Hex bolt                    |          |
| 4   | 1170.107 |     |                          | O-ring                      |          |
| 5   | 5275.004 |     |                          | Housing                     |          |
| 6   | 1250.237 |     |                          | Plate spring                |          |
| 7   | 5252.185 |     |                          | Piston                      |          |
| 8   | 1020.153 |     |                          | Allen screw                 |          |
| 9   | 1190.105 |     |                          | Locking ring                |          |
| 10  | 23871-AX |     |                          | Allen screw                 |          |
| 11  | 1060.115 |     |                          | Hex nut                     |          |
| 12  | 50222-AX |     |                          | Guide ring                  |          |
| 13  | 5263.142 |     |                          | Cylinder (upper part)       |          |
| 14  | 7319.068 |     |                          | Gasket                      |          |
| 15  | 1180.927 |     |                          | Piston seal                 |          |
| 16  | 1250.598 |     |                          |                             |          |
| 17  | 23874-AX |     |                          | Guide ring                  |          |
| 18  | 1170.292 |     |                          | O-ring                      |          |
| 19  | 5263.146 |     |                          | Cylinder (lower part)       |          |
| 20  | 1180.925 |     |                          | Piston seal                 |          |
| 21  | 23878-AX |     |                          | Stud                        |          |
| 22  | --       |     |                          |                             |          |
| 23  | 5252.189 |     |                          | Pressure piston             |          |
| 24  | --       |     |                          |                             |          |
| 25  | 23879-AX |     |                          | Ring                        |          |
| 26  | 23876-AX |     |                          | Piston seal                 |          |
| 27  | 1180.926 |     |                          | Piston seal                 |          |
| 28  | 1020.257 |     |                          | Allen screw                 |          |
| 29  | 23802-AX |     |                          | Locking clip                |          |
| 30  | 23880-AX |     |                          | Wedge                       |          |
| --  | 7340.015 |     |                          | Indication plate            |          |
| --  | 1750.764 |     |                          | Blind rivet                 |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

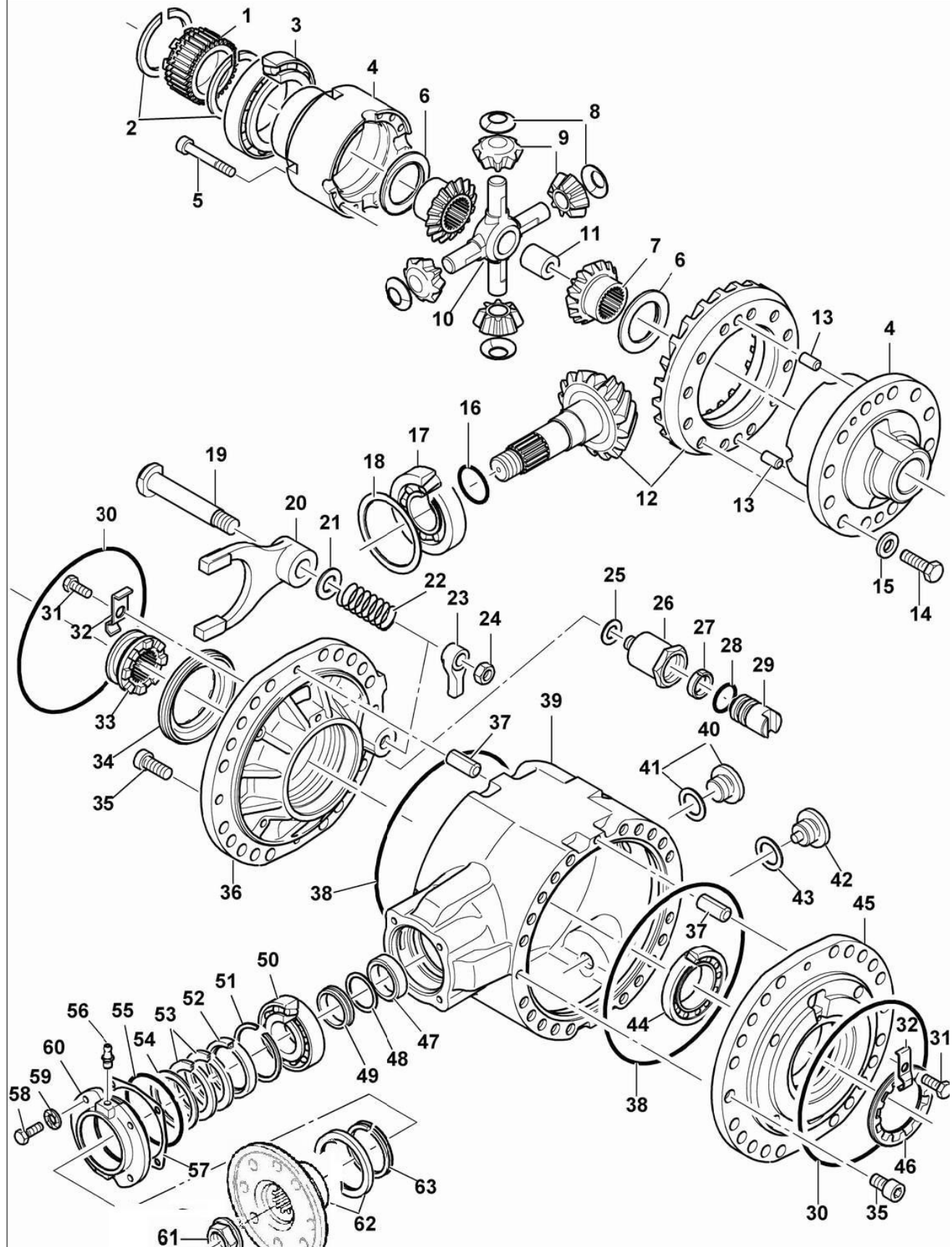
[illegible]



# Section AX-2

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## **Axles, Gearboxes & Wheels - Gearboxes (*TIM 17*) 630 & 830 - *Front Axle***



## TIM 17 Axle Differential

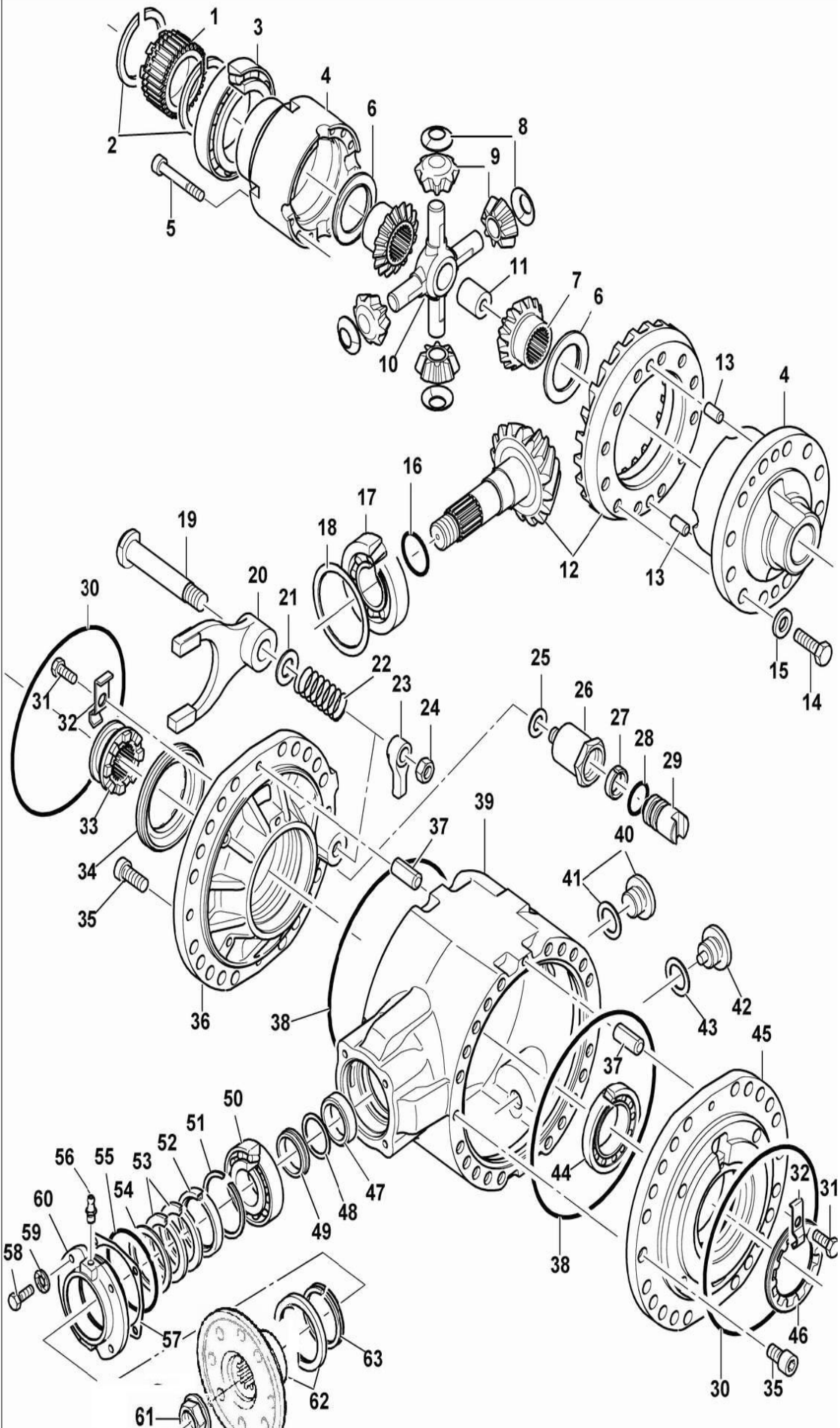
| REF | PART #     | QTY | DESCRIPTION                            | SEE PAGE |
|-----|------------|-----|----------------------------------------|----------|
| -   | 51139-EE   |     | TIM 17 AXLE COMPLETE                   |          |
| 1   | 23870      | 1   | Clutch-coupling sleeve                 |          |
| 2   | 23869      | 2   | Spring ring                            |          |
| 3   | 23868      | 1   | Tapered-roller bearing                 |          |
| 4   | 23854      | 1   | Differential cage                      |          |
| 5   | 23867      | 12  | Allen screw                            |          |
| 6   | 7316.067 * | 1   | <input type="checkbox"/> Adjusting kit |          |
| 6   | 7316.101 * |     | Check disk                             |          |
| 6   | 7316.102 * |     | Check disk                             |          |
| 6   | 7316.103 * |     | Check disk                             |          |
| 6   | 7316.104 * |     | Check disk                             |          |
| 7   | 7513.046 * | 2   | Differential gear                      |          |
| 8   | 7518.028 * | 4   | Thrust washer                          |          |
| 9   | 7514.032 * | 4   | Planetary gear                         |          |
| 10  | 7515.031 * | 1   | Cross bolt                             |          |
| 11  | 23863      | 1   | Adjusting bolt                         |          |
| 12  | 2101.336   | 1   | Crown wheel / pinion                   |          |
| 13  | 23855      | 4   | Straight pin                           |          |
| 14  | 23853      | 16  | Screw                                  |          |
| 15  | 7316.045   | 16  | Washer                                 |          |
| 16  | 23857      | 1   | O-ring                                 |          |
| 17  | 23858      | 1   | Tapered-roller bearing                 |          |
| 18  | 7317.026   | 1   | <input type="checkbox"/> Adjusting kit |          |
| 18  | 7317.118   |     | Adjusting washer                       |          |
| 18  | 7317.119   |     | Adjusting washer                       |          |
| 18  | 7317.120   |     | Adjusting washer                       |          |
| 18  | 7317.251   |     | Adjusting washer                       |          |
| 19  | 9816.132   | 1   | Shifting rod                           |          |
| 20  | 9809.066   | 1   | Shift fork                             |          |
| 21  | 7317.023   | 1   | <input type="checkbox"/> Adjusting kit |          |
| 21  | 7317.111   |     | Adjusting washer                       |          |
| 21  | 7317.112   |     | Adjusting washer                       |          |
| 21  | 7317.113   |     | Adjusting washer                       |          |
| 21  | 7317.114   |     | Adjusting washer                       |          |
| 22  | 7331.016   | 1   | Pressure spring                        |          |
| 23  | 9809.116   | 1   | Shifting lever                         |          |
| 24  | 1060.003   | 1   | Hex. nut                               |          |
| 25  | 1170.010   | 1   | O-ring                                 |          |
| 26  | 23837-AX   | 1   | Cylinder                               |          |
| 27  | 23838-AX   | 1   | Groove ring                            |          |
| 28  | 23839-AX   | 1   | Shaft seal                             |          |
| 29  | 5252.100   | 1   | Piston                                 |          |
| 30  | 1170.716   | 2   | O-ring                                 |          |
| 31  | 23835-AX   | 2   | Hexagon screw                          |          |
| 32  | 23834-AX   | 2   | Locking plate                          |          |
| 33  | 9813.104   | 1   | Shifting sleeve                        |          |
| 34  | 7329.012   | 1   | Nut                                    |          |
| 35  | 1020.212   | 4   | Allen screw                            |          |
| 36  | 7527.140   | 1   | Flange                                 |          |
| 37  | 1200.481   | 2   | Adapter sleeve                         |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 17 Axle Differential Continued.....

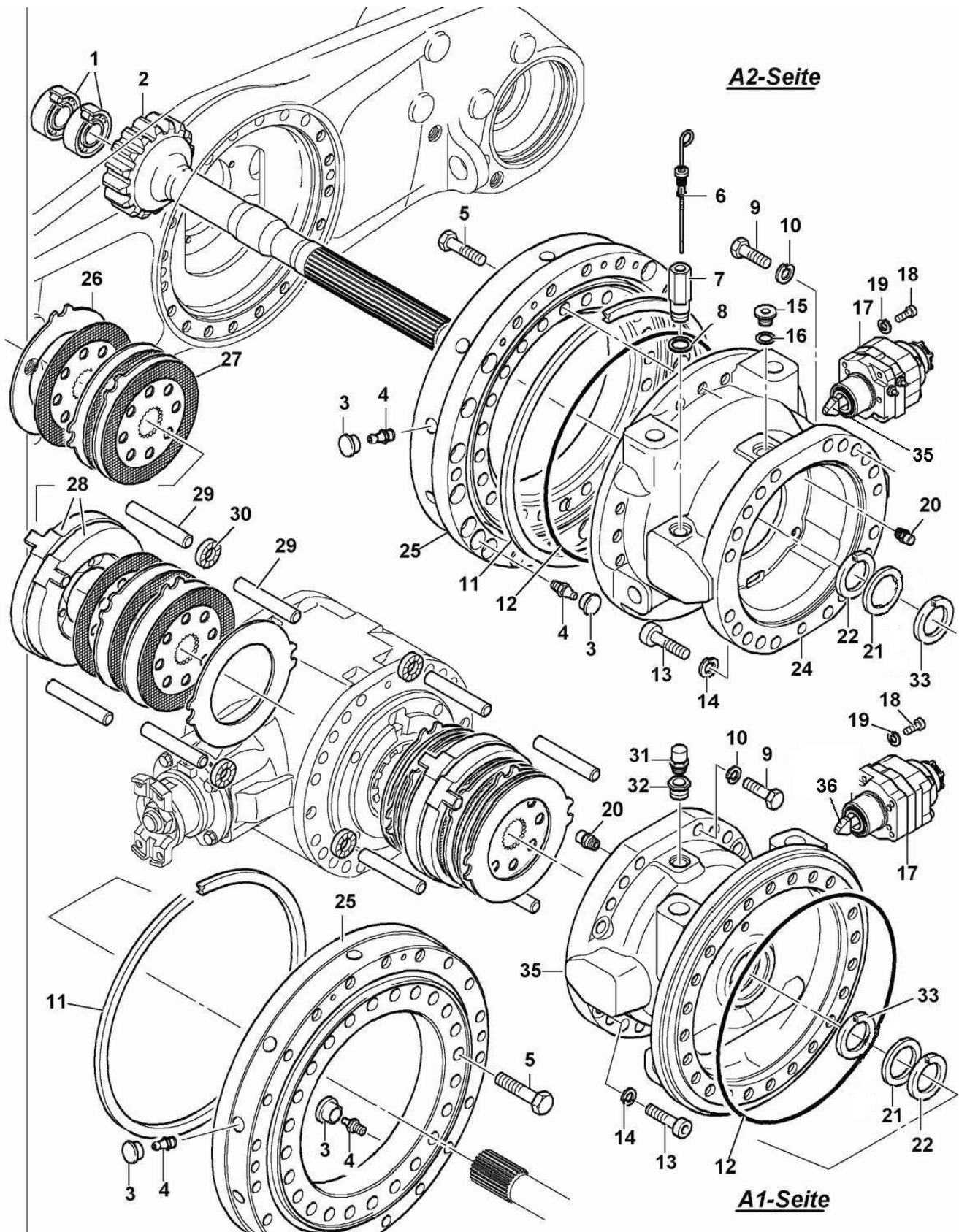
| REF | PART #    | QTY |   | DESCRIPTION             | SEE PAGE |
|-----|-----------|-----|---|-------------------------|----------|
| 38  | 1170.702  | 2   |   | O-ring                  |          |
| 39  | 7506.269  | 1   |   | Differential housing    |          |
| 40  | 23836-AX  | 1   |   | Screw plug              |          |
| 41  | 1180.507  | 1   |   | Seal ring               |          |
| 42  | 9556.021  | 1   |   | Screw plug              |          |
| 43  | 1180.502  | 1   |   | Seal ring               |          |
| 44  | 1110.007  | 1   |   | Tapered-roller bearing  |          |
| 45  | 7527.139  | 1   |   | Flange                  |          |
| 46  | 7329.082  | 1   |   | Nut                     |          |
| 47  | 7311.070  | 1   |   | Spacer bush             |          |
| 48  | 7317.037  | 1   | □ | Adjusting kit           |          |
| 48  | 7317.185  |     |   | Adjusting washer        |          |
| 48  | 7317.184  |     |   | Adjusting washer        |          |
| 48  | 7317.183  |     |   | Adjusting washer        |          |
| 48  | 7317.182  |     |   | Adjusting washer        |          |
| 48  | 7317.181  |     |   | Adjusting washer        |          |
| 48  | 7317.180  |     |   | Adjusting washer        |          |
| 48  | 7317.179  |     |   | Adjusting washer        |          |
| 48  | 7317.178  |     |   | Adjusting washer        |          |
| 48  | 7317.177  |     |   | Adjusting washer        |          |
| 48  | 7317.176  |     |   | Adjusting washer        |          |
| 48  | 7317.175  |     |   | Adjusting washer        |          |
| 48  | 7317.174  |     |   | Adjusting washer        |          |
| 48  | 7317.173  |     |   | Adjusting washer        |          |
| 49  | 7311.071  |     |   | Spacer bush             |          |
| 49  | 7311.062  |     |   | Spacer bush             |          |
| 49  | 7311.063  |     |   | Spacer bush             |          |
| 50  | 1110.186  | 1   |   | Tapered-roller bearing  |          |
| 51  | 1220.932  | 1   |   | Spring ring             |          |
| 52  | 7308.054  | 1   |   | Radial seal             |          |
| 53  | 7308.055  | 2   |   | Seal ring               |          |
| 54  | 7315.110  | 1   |   | Washer                  |          |
| 55  | 1170.534  | 1   |   | O-ring                  |          |
| 56  | 1250.103  | 1   |   | Taper grease nipple     |          |
| 57  | 7319.091  | 1   |   | Gasket                  |          |
| 58  | 1010.201  | 4   |   | Hexagon screw           |          |
| 59  | 1190.011  | 4   |   | Locking clip            |          |
| 60  | 7301.077  | 1   |   | Cover                   |          |
| 61  | 7329.057  | 1   |   | Nut                     |          |
| 62  | 7521.236  | 1   |   | Drive shaft flange      |          |
| 63  | 1180.125  | 1   |   | V-ring                  |          |
| -   | 7340.014  | 1   |   | Type plate              |          |
| -   | 1200.108  | 4   |   | Pin                     |          |
| -   | 2.190.013 | 1   |   | Differential cage copl. |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 17 Axle Axle Beam

| REF | PART #   | QTY | DESCRIPTION               | SEE PAGE |
|-----|----------|-----|---------------------------|----------|
| 1   | 1130.067 | 2   | Cylinder roller bearing   |          |
| 2   | 7818.175 | 1   | Sun gear shaft            |          |
| 3   | 23690-AX | 4   | Plug                      |          |
| 4   | 1250.104 | 2   | Taper grease nipple       |          |
| 5   | 1010.669 | 24  | Hexagon screw             |          |
| 6   | 7325.037 | 1   | Dipstick (A2 ONLY)        |          |
| 7   | 7322.074 | 1   | Threaded stud (A2 ONLY)   |          |
| 8   | 1180.541 | 1   | Seal ring (A2 ONLY)       |          |
| 9   | 1010.668 | 16  | Hexagon screw             |          |
| 10  | 1190.014 | 16  | Locking clip              |          |
| 11  | 7308.071 | 1   | Scraper ring              |          |
| 12  | 1170.726 | 1   | O-ring                    |          |
| 13  | 23803-AX | 4   | Allen screw               |          |
| 14  | 1190.014 | 4   | Locking clip              |          |
| 15  | 1040.151 | 1   | Screw plug                |          |
| 16  | 1180.541 | 1   | Seal ring                 |          |
| 17  | 5350.044 | 1   | Spring loaded cylinder    |          |
| 18  | 1020.260 | 3   | Allen screw               |          |
| 19  | 1190.031 | 3   | Locking clip              |          |
| 20  | 1250.002 | 1   | Breather                  |          |
| 21  | 7315.187 | 1   | Washer                    |          |
| 22  | 1160.236 | 1   | Oil seal                  |          |
| 23  | --       |     |                           |          |
| 24  | 7276.115 | 1   | Axle housing              |          |
| 25  | 7305.051 | 1   | Slewing ring              |          |
| 26  | 7344.036 | 6   | Intermediate disk         |          |
| 27  | 23826-AX | 6   | Coated disk               |          |
| 28  | 23827-AX | 1   | Operating disk            |          |
| 29  | 23829-AX | 4   | Straight pin              |          |
| 30  | 23828-AX | 2   | Toothed ring              |          |
| 31  | 22570-AX | 1   | Breather (A1 ONLY)        |          |
| 32  | 1750.705 | 1   | Reducing nipple (A1 ONLY) |          |
| 33  | 7308.063 | 1   | Seal ring                 |          |
| 34  | --       |     |                           |          |
| 35  | 7276.114 | 1   | Axle housing (A1 ONLY)    |          |
| 35  | 7835.001 | 1   | Wedge (A2 ONLY)           |          |
| 36  | 7835.001 | 1   | Wedge (A1 ONLY)           |          |

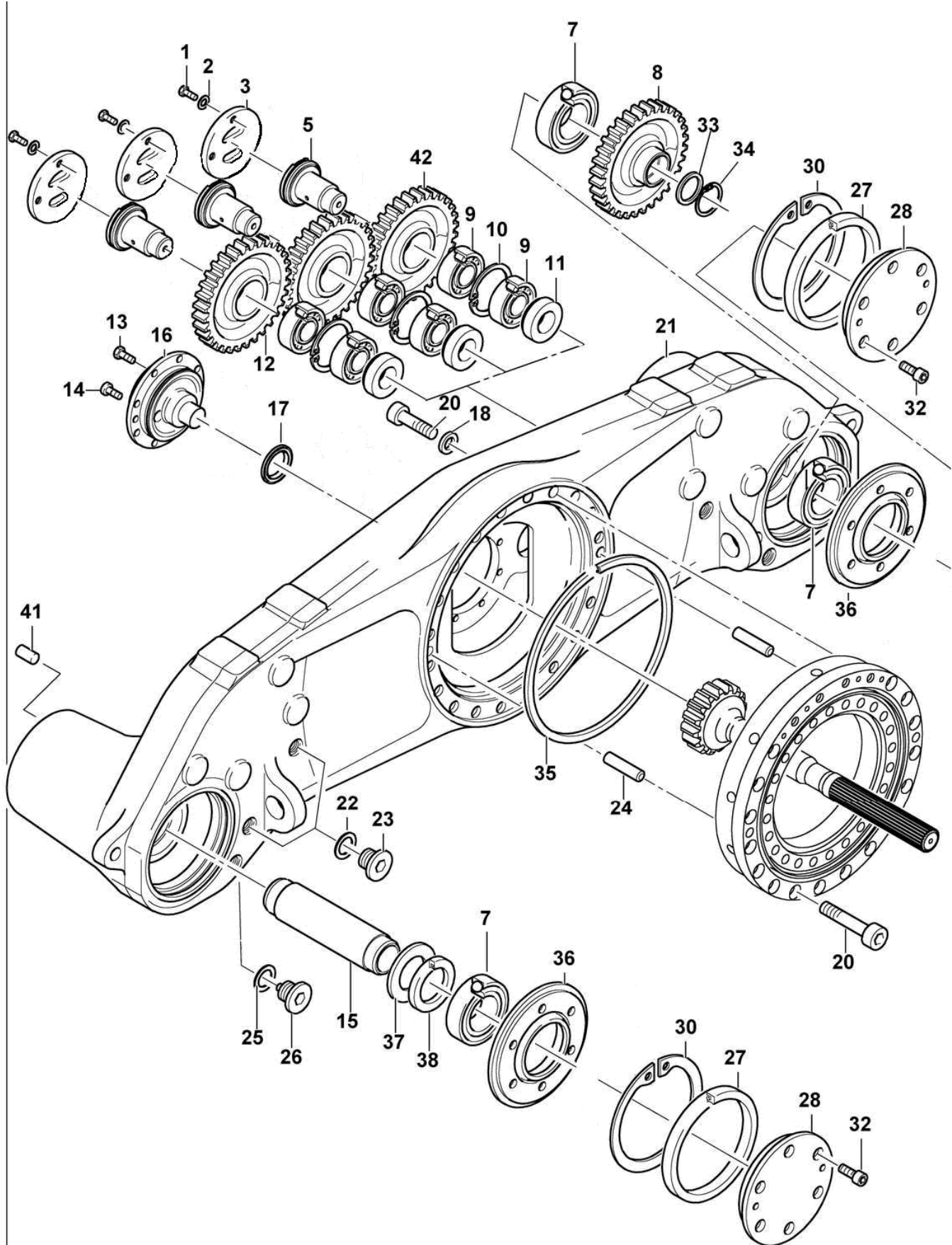


See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.







## TIM 17 Axle Bogie Housing

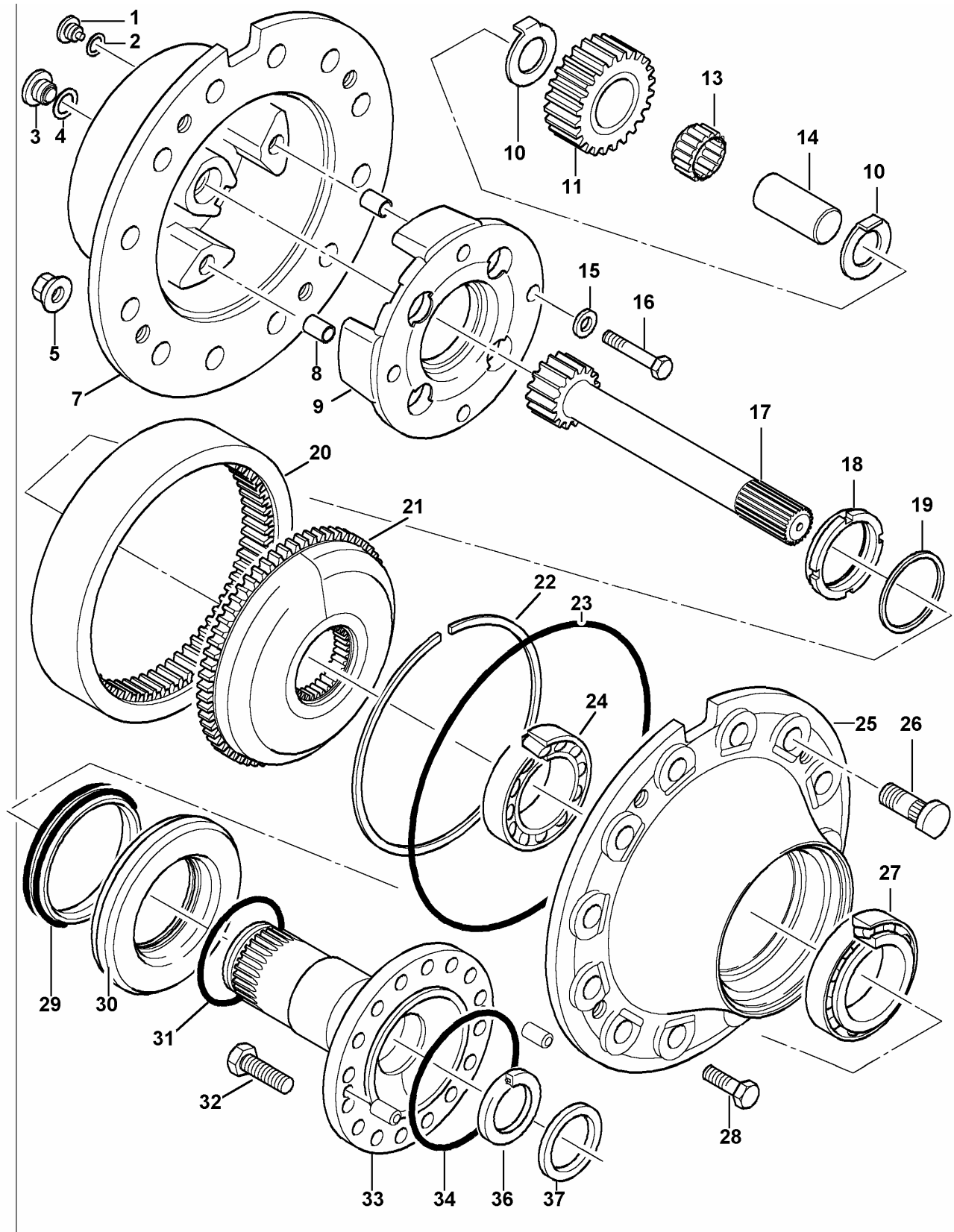
| REF | PART #   | QTY | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|-------------------------|----------|
| -   | 22834-AX | 2   | Bogie Housing Complete  |          |
| 1   | 1010.233 | 48  | Hexagon screw           |          |
| 2   | 7316.048 | 48  | Washer                  |          |
| 3   | 7302.011 | 12  | Cover                   |          |
| 4   | --       |     |                         |          |
| 5   | 7321.131 | 12  | Stud                    |          |
| 6   | --       |     |                         |          |
| 7   | 1120.107 | 8   | Grooved ball bearing    |          |
| 8   | 9804.352 | 4   | Gear                    |          |
| 9   | 23692-AX | 24  | Cylinder roller bearing |          |
| 10  | 23694-AX | 12  | Seeger-ring             |          |
| 11  | 7311.089 | 12  | Spacer bush             |          |
| 12  | 23693-AX | 8   | Gear                    |          |
| 13  | 1010.234 | 16  | Hexagon screw           |          |
| 14  | 1020.113 | 4   | Allen screw             |          |
| 15  | 7343.030 | 4   | Pipe                    |          |
| 16  | 7321.120 | 2   | Bearing stud            |          |
| 17  | 1180.841 | 2   | Axial shaft seal ring   |          |
| 18  | 7316.044 | 8   | Washer                  |          |
| 19  | --       |     |                         |          |
| 20  | 1020.618 | 48  | Allen screw             |          |
| 21  | 7277.112 | 2   | Bogie housing           |          |
| 22  | 1180.507 | 10  | Seal ring               |          |
| 23  | 1040.103 | 10  | Screw plug              |          |
| 24  | 23777-AX | 4   | Straight pin            |          |
| 25  | 1180.507 | 4   | Seal ring               |          |
| 26  | 7323.013 | 4   | Screw plug              |          |
| 27  | 7308.051 | 4   | Seal ring               |          |
| 28  | 7302.034 | 4   | Cover                   |          |
| 29  | 7319.087 | 4   | Gasket                  |          |
| 30  | 1220.837 | 4   | Seeger-ring             |          |
| 31  | --       |     |                         |          |
| 32  | 1020.220 | 24  | Allen screw             |          |
| 33  | 1210.110 | 4   | Supporting w asher      |          |
| 34  | 1220.714 | 4   | Seeger-ring             |          |
| 35  | 23778-AX | 2   | Seal ring               |          |
| 36  | 7301.070 | 4   | Cover                   |          |
| 37  | 7315.106 | 4   | Washer                  |          |
| 38  | 1160.275 | 4   | Oil seal                |          |
| 39  | --       |     |                         |          |
| 40  | --       |     |                         |          |
| 41  | 1200.286 | 8   | Straight pin            |          |
| 42  | 9804.313 | 4   | Gear                    |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 17 Axle Outer Component

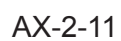
| REF | PART #   | QTY |   | DESCRIPTION              | SEE PAGE |
|-----|----------|-----|---|--------------------------|----------|
| 1   | 9556.021 | 2   |   | Screw plug               |          |
| 2   | 1180.502 | 2   |   | Seal ring                |          |
| 3   | 7323.016 | 1   |   | Screw plug               |          |
| 4   | 2108.017 | 1   | ☐ | Washer package           |          |
| 4   | 1210.113 |     |   | Support Washer           |          |
| 4   | 1210.295 |     |   | Seeger washer            |          |
| 4   | 1210.296 |     |   | Seeger washer            |          |
| 5   | 1060.408 | 12  |   | Nut with turnable washer |          |
| 6   | --       |     |   |                          |          |
| 7   | 7821.271 | 1   |   | Planetary cage           |          |
| 8   | 7313.018 | 4   |   | Shear bushing            |          |
| 9   | 7821.179 | 1   |   | Planetary cage           |          |
| 10  | 9633.010 | 8   |   | Check disk               |          |
| 11  | 7806.060 | 4   |   | Planetary gear           |          |
| 12  | --       |     |   |                          |          |
| 13  | 1130.280 | 4   |   | Needle roller cages      |          |
| 14  | 7807.056 | 4   |   | Planetary stud           |          |
| 15  | 7316.045 | 4   |   | Washer                   |          |
| 16  | 1010.536 | 4   |   | Hexagon screw            |          |
| 17  | 7818.086 | 1   |   | Sun gear shaft           |          |
| 18  | 7329.073 | 1   |   | Nut                      |          |
| 19  | 7317.047 | 1   | ☐ | Adjusting kit            |          |
| 19  | 7317.208 |     |   | Adjusting washer         |          |
| 19  | 7317.207 |     |   | Adjusting washer         |          |
| 19  | 7317.206 |     |   | Adjusting washer         |          |
| 19  | 7317.205 |     |   | Adjusting washer         |          |
| 19  | 7317.204 |     |   | Adjusting washer         |          |
| 19  | 7317.203 |     |   | Adjusting washer         |          |
| 19  | 7317.202 |     |   | Adjusting washer         |          |
| 19  | 7317.201 |     |   | Adjusting washer         |          |
| 19  | 7317.200 |     |   | Adjusting washer         |          |
| 19  | 7317.199 |     |   | Adjusting washer         |          |
| 20  | 7801.042 | 1   |   | Gear rim                 |          |
| 21  | 7804.044 | 1   |   | Ring gear carrier        |          |
| 22  | 1220.913 | 1   |   | Spring ring              |          |
| 23  | 1170.755 | 1   |   | O-ring                   |          |
| 24  | 1110.221 | 1   |   | Tapered-roller bearing   |          |
| 25  | 7828.143 | 1   |   | Wheel hub                |          |
| 26  | 7133.018 | 12  |   | Wheel bolt               |          |
| 27  | 1110.222 | 1   |   | Tapered-roller bearing   |          |
| 28  | 7322.088 | 4   |   | Hexagon screw            |          |
| 29  | 1180.325 | 1   |   | Slide ring sealing       |          |
| 30  | 7306.032 | 1   |   | Axle stub ring           |          |
| 31  | 1170.547 | 1   |   | O-ring                   |          |
| 32  | 7322.069 | 16  |   | Hexagon screw            |          |
| 33  | 7814.182 | 1   |   | Stub axle                |          |
| 34  | 1170.553 | 1   |   | O-ring                   |          |
| 35  | --       |     |   |                          |          |
| 36  | 1160.244 | 1   |   | Oil seal                 |          |
| 37  | 7315.107 | 1   |   | Washer                   |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 17 Axle Break Cylinder

| REF | PART #   | QTY |                          | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|--------------------------|-----------------------------|----------|
| --  | 52746-AX |     | <input type="checkbox"/> | Spring loaded cyl. compl. 1 |          |
| 1   | 7323.044 |     |                          | Screw Plug                  |          |
| 2   | --       |     |                          |                             |          |
| 3   | 1020.301 |     |                          | Hex bolt                    |          |
| 4   | 1170.107 |     |                          | O-ring                      |          |
| 5   | 5275.004 |     |                          | Housing                     |          |
| 6   | 1250.237 |     |                          | Plate spring                |          |
| 7   | 5252.185 |     |                          | Piston                      |          |
| 8   | 1020.153 |     |                          | Allen screw                 |          |
| 9   | 1190.105 |     |                          | Locking ring                |          |
| 10  | 23871-AX |     |                          | Allen screw                 |          |
| 11  | 1060.115 |     |                          | Hex nut                     |          |
| 12  | 50222-AX |     |                          | Guide ring                  |          |
| 13  | 5263.142 |     |                          | Cylinder (upper part)       |          |
| 14  | 7319.068 |     |                          | Gasket                      |          |
| 15  | 1180.927 |     |                          | Piston seal                 |          |
| 16  | 1250.598 |     |                          |                             |          |
| 17  | 23874-AX |     |                          | Guide ring                  |          |
| 18  | 1170.292 |     |                          | O-ring                      |          |
| 19  | 5263.146 |     |                          | Cylinder (lower part)       |          |
| 20  | 1180.925 |     |                          | Piston seal                 |          |
| 21  | 23878-AX |     |                          | Stud                        |          |
| 22  | --       |     |                          |                             |          |
| 23  | 5252.189 |     |                          | Pressure piston             |          |
| 24  | --       |     |                          |                             |          |
| 25  | 23879-AX |     |                          | Ring                        |          |
| 26  | 23876-AX |     |                          | Piston seal                 |          |
| 27  | 1180.926 |     |                          | Piston seal                 |          |
| 28  | 1020.257 |     |                          | Allen screw                 |          |
| 29  | 23802-AX |     |                          | Locking clip                |          |
| 30  | 23880-AX |     |                          | Wedge                       |          |
| --  | 7340.015 |     |                          | Indication plate            |          |
| --  | 1750.764 |     |                          | Blind rivet                 |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

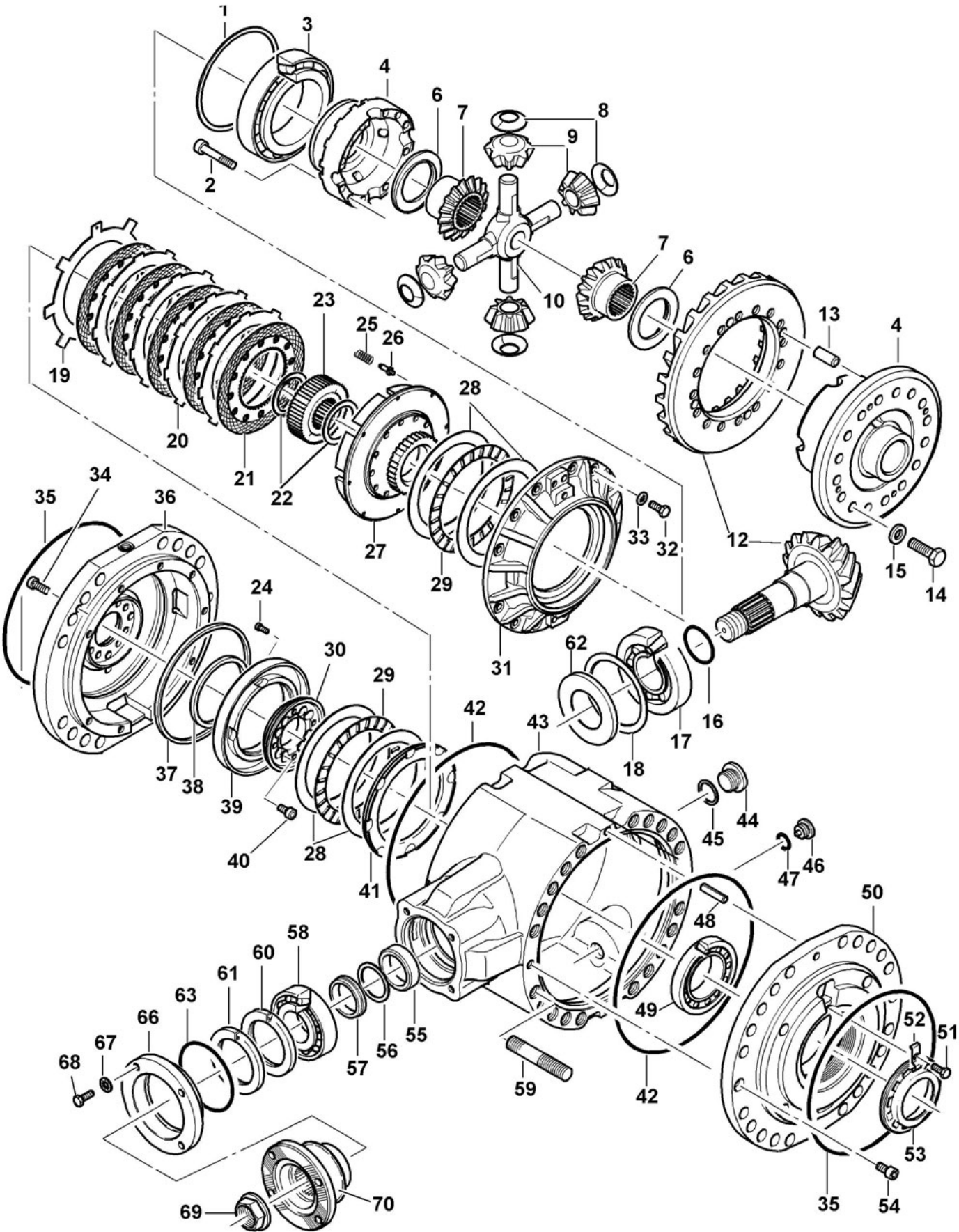
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# Section AX-3

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## **Axles, Gearboxes & Wheels - *Gearboxes (TIM 22)* *840 - Bogie Axles***







## Differential

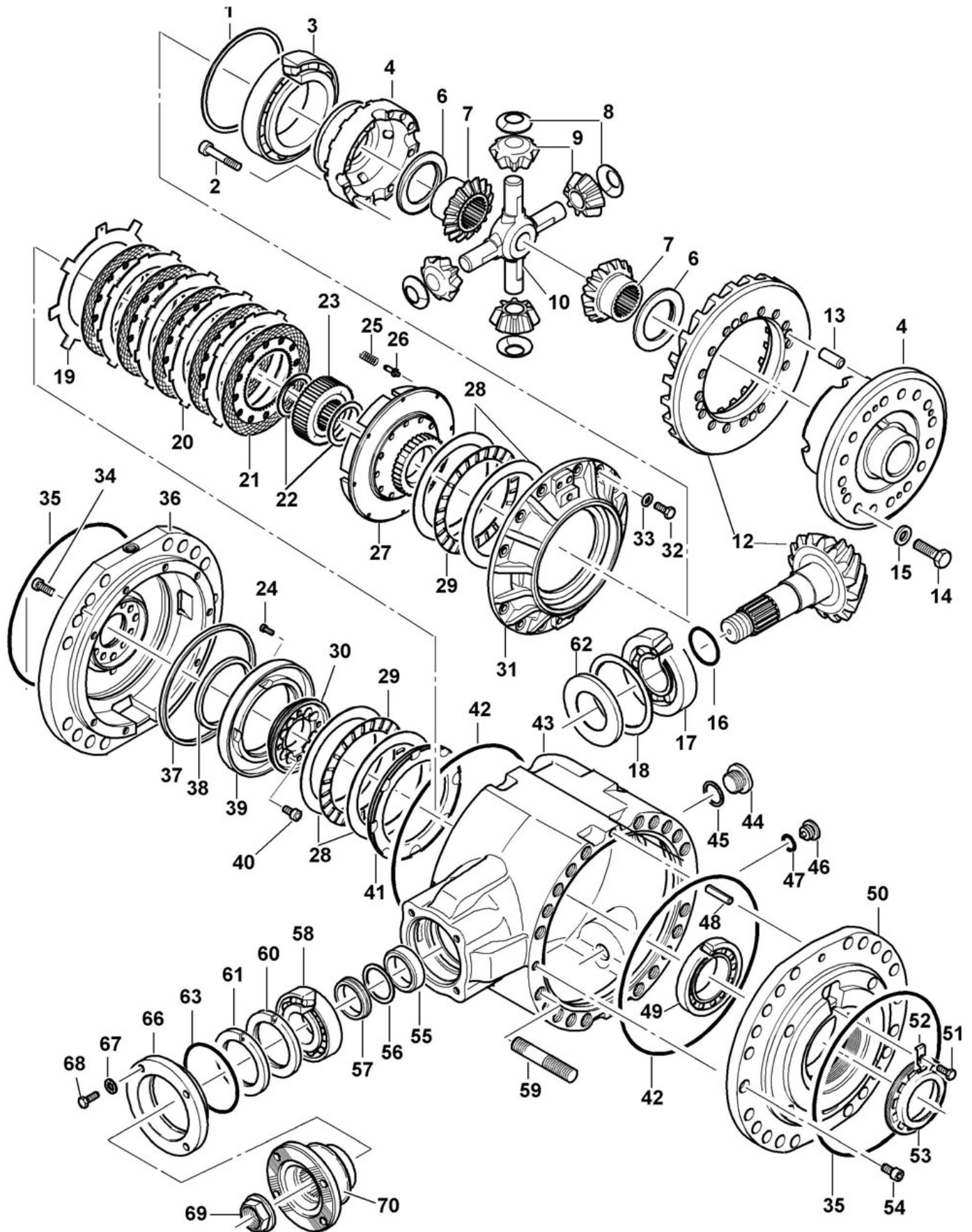
| REF | PART #   | QTY |   | DESCRIPTION                                   | SEE PAGE |
|-----|----------|-----|---|-----------------------------------------------|----------|
| --- | 2219.086 |     |   | Differential cage complete (includes items 2, |          |
| 1   | 2108.060 | 1   | □ | Adjusting kit s=1,0 bis 2,25                  |          |
| 1   | 7317.297 |     |   | Adjusting washer n.Bed. s=1,5                 |          |
| 1   | 7317.298 |     |   | Adjusting washer n.Bed. s=1,55                |          |
| 1   | 7317.299 |     |   | Adjusting washer n.Bed. s=1,6                 |          |
| 1   | 7317.300 |     |   | Adjusting washer n.Bed. s=1,65                |          |
| 1   | 7317.301 |     |   | Adjusting washer n.Bed. s=1,7                 |          |
| 1   | 7317.302 |     |   | Adjusting washer n.Bed. s=1,75                |          |
| 1   | 7317.303 |     |   | Adjusting washer n.Bed. s=1,8                 |          |
| 1   | 7317.304 |     |   | Adjusting washer n.Bed. s=1,85                |          |
| 1   | 7317.305 |     |   | Adjusting washer n.Bed. s=1,9                 |          |
| 1   | 7317.306 |     |   | Adjusting washer n.Bed. s=1,95                |          |
| 1   | 7317.307 |     |   | Adjusting washer n.Bed. s=2,0                 |          |
| 1   | 7317.308 |     |   | Adjusting washer n.Bed. s=2,05                |          |
| 1   | 7317.309 |     |   | Adjusting washer n.Bed. s=2,1                 |          |
| 1   | 7317.310 |     |   | Adjusting washer n.Bed. s=2,15                |          |
| 1   | 7317.311 |     |   | Adjusting washer n.Bed. s=2,2                 |          |
| 1   | 7317.312 |     |   | Adjusting washer n.Bed. s=2,25                |          |
| 1   | 7317.323 |     |   | Adjusting washer n.Bed. s=1,0                 |          |
| 1   | 7317.324 |     |   | Adjusting washer n.Bed. s=1,2                 |          |
| 2   | 1020.374 | 12  |   | Allen screw M12x80, 10.9 VP n.TI-58 912       |          |
| 3   | 1110.233 | 1   |   | Tapered-roller bearing JP13049AJP13010        |          |
| 4   | 2102.188 | 1   |   | Differential cage                             |          |
| 6   | 7517.014 | 1   | □ | Adjusting kit s=1,5 bis 4,0                   |          |
| 6   | 7510.028 |     |   | Check disk s=2,8                              |          |
| 6   | 7510.029 |     |   | Check disk s=3,0                              |          |
| 6   | 7510.030 |     |   | Check disk s=3,2                              |          |
| 6   | 7510.031 |     |   | Check disk s=2,0                              |          |
| 6   | 7510.032 |     |   | Check disk s=2,2                              |          |
| 6   | 7510.033 |     |   | Check disk s=2,6                              |          |
| 6   | 7510.034 |     |   | Check disk s=4,0                              |          |
| 6   | 7510.035 |     |   | Check disk s=3,4                              |          |
| 6   | 7510.036 |     |   | Check disk s=3,6                              |          |
| 7   | 7510.055 | 2   |   | Differential gear s=3,8                       |          |
| 8   | 7518.030 | 4   |   | Thrust washer                                 |          |
| 9   | 7514.033 | 4   |   | Planetary gear                                |          |
| 10  | 7515.032 | 1   |   | Cross bolt                                    |          |
| 11  | 7321.123 | 1   |   | Stud                                          |          |
| 12  | 2101.355 | 1   |   | Crown wheel / pinion z=34/12                  |          |
| 13  | 1200.228 | 4   |   | Straight pin 16m6x40, ST GEHAERTET 6325       |          |
| 14  | 1510.559 | 16  |   | Screw M16x1.5x50, 10.9 961                    |          |
| 15  | 7316.045 | 16  |   | Washer 16.1x30x4, C45 GEHAERTET               |          |
| 16  | 1170.013 | 1   |   | O-ring OR 42x4.5, 72NBR872                    |          |
| 17  | 1110.223 | 1   |   | Tapered-roller bearing 9278/9220              |          |
| 18  | 2108.047 | 1   | □ | Adjusting kit s=3,0 bis 2,5 je 0,25           |          |
| 18  | 7317.247 |     |   | Adjusting washer n.Bed. s=3,0                 |          |
| 18  | 7317.248 |     |   | Adjusting washer n.Bed. s=2,75                |          |
| 18  | 7317.249 |     |   | Adjusting washer n.Bed. s=2,5                 |          |
| 19  | 7344.050 | 1   |   | Driven disk                                   |          |
| 20  | 7344.049 | 5   |   | Driven disk                                   |          |
| 21  | 7345.056 | 6   |   | Coated disk                                   |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## Differential Continued.....

| REF | PART #   | QTY | DESCRIPTION                             | SEE PAGE |
|-----|----------|-----|-----------------------------------------|----------|
| 22  | 7316.125 | 2   | Check disk                              |          |
| 23  | 9867.093 | 1   | Disk support                            |          |
| 24  | 1020.029 | 1   | Allen screw, M16x10 8.8 VERZINKT        |          |
| 25  | 7331.048 | 8   | Pressure spring                         |          |
| 26  | 7322.113 | 8   | Screw                                   |          |
| 27  | 9867.092 | 1   | Disk support                            |          |
| 28  | 1130.596 | 3   | Rotor disk                              |          |
| 29  | 1130.283 | 2   | Axial needle bearing 150x190x5          |          |
| 30  | 5252.176 | 1   | Piston                                  |          |
| 31  | 7527.175 | 1   | Flange                                  |          |
| 32  | 1010.266 | 12  | Hexagon screw M10x35, 10.9 VP n.TI-58   |          |
| 33  | 7316.048 | 12  | Washer, 10.1x21x2                       |          |
| 34  | 1020.212 | 2   | Allen screw, M10x20, 8.8                |          |
| 35  | 1170.735 | 2   | O-ring                                  |          |
| 36  | 7527.239 | 1   | Flange                                  |          |
| 37  | 7308.074 | 1   | Shaft seal                              |          |
| 38  | 1180.905 | 1   | Shaft seal                              |          |
| 39  | 5252.143 | 1   | Piston                                  |          |
| 40  | 1020.220 | 8   | Allen screw, M10x20, 8.8 VP n.Ti-58     |          |
| 41  | 7316.176 | 1   | Check disk                              |          |
| 42  | 1170.726 | 2   | O-ring, OR 415x5, 72NBR872              |          |
| 43  | 7506.319 | 1   | Differential housing                    |          |
| 44  | 1040.103 | 1   | Screw plug, M30x1.5, 5.8 Innensechskant |          |
| 45  | 1180.507 | 1   | Seal ring, A30x36x2, CU                 |          |
| 46  | 9556.021 | 1   | Screw plug, M20x1.5, 5.8 M. MAGNET      |          |
| 47  | 1180.502 | 1   | Seal ring, A20x24x1.5, CU               |          |
| 48  | 1200.235 | 2   | Straight pin, 16m6x55                   |          |
| 49  | 1110.171 | 1   | Tapered-roller bearing                  |          |
| 50  | 7527.283 | 1   | Flange                                  |          |
| 51  | 1010.129 | 1   | Hexagon screw, M8x16, 10.9              |          |
| 52  | 9566.019 | 1   | Locking plate                           |          |
| 53  | 7329.073 | 1   | Nut, M85x2                              |          |
| 54  | 1020.216 | 2   | Allen screw, M10x30, 8.8                |          |
| 55  | --       | -   |                                         |          |
| 56  | 2108.046 | 1   | <input type="checkbox"/> Adjusting kit  |          |
| 56  | 7317.234 | -   | Adjusting washer s=0,96                 |          |
| 56  | 7317.235 | -   | Adjusting washer s=1,0                  |          |
| 56  | 7317.236 | -   | Adjusting washer s=1,04                 |          |
| 56  | 7317.237 | -   | Adjusting washer s=1,08                 |          |
| 56  | 7317.238 | -   | Adjusting washer s=1,12                 |          |
| 56  | 7317.239 | -   | Adjusting washer s=1,16                 |          |
| 56  | 7317.240 | -   | Adjusting washer s=1,20                 |          |
| 56  | 7317.241 | -   | Adjusting washer s=1,24                 |          |
| 56  | 7317.242 | -   | Adjusting washer s=1,28                 |          |
| 56  | 7317.243 | -   | Adjusting washer s=1,32                 |          |
| 56  | 7317.244 | -   | Adjusting washer s=1,36                 |          |
| 56  | 7317.245 | -   | Adjusting washer s=1,40                 |          |
| 56  | 7317.246 | -   | Adjusting washer s=1,44                 |          |
| 57  | 2108.045 | -   | Spacer bush, D58xD76x"s"                |          |
| 57  | 7311.117 | -   | Spacer bush s=11,51                     |          |
| 57  | 7311.118 | -   | Spacer bush s=11,99                     |          |
| 57  | 7311.119 | -   | Spacer bush s=12,47                     |          |

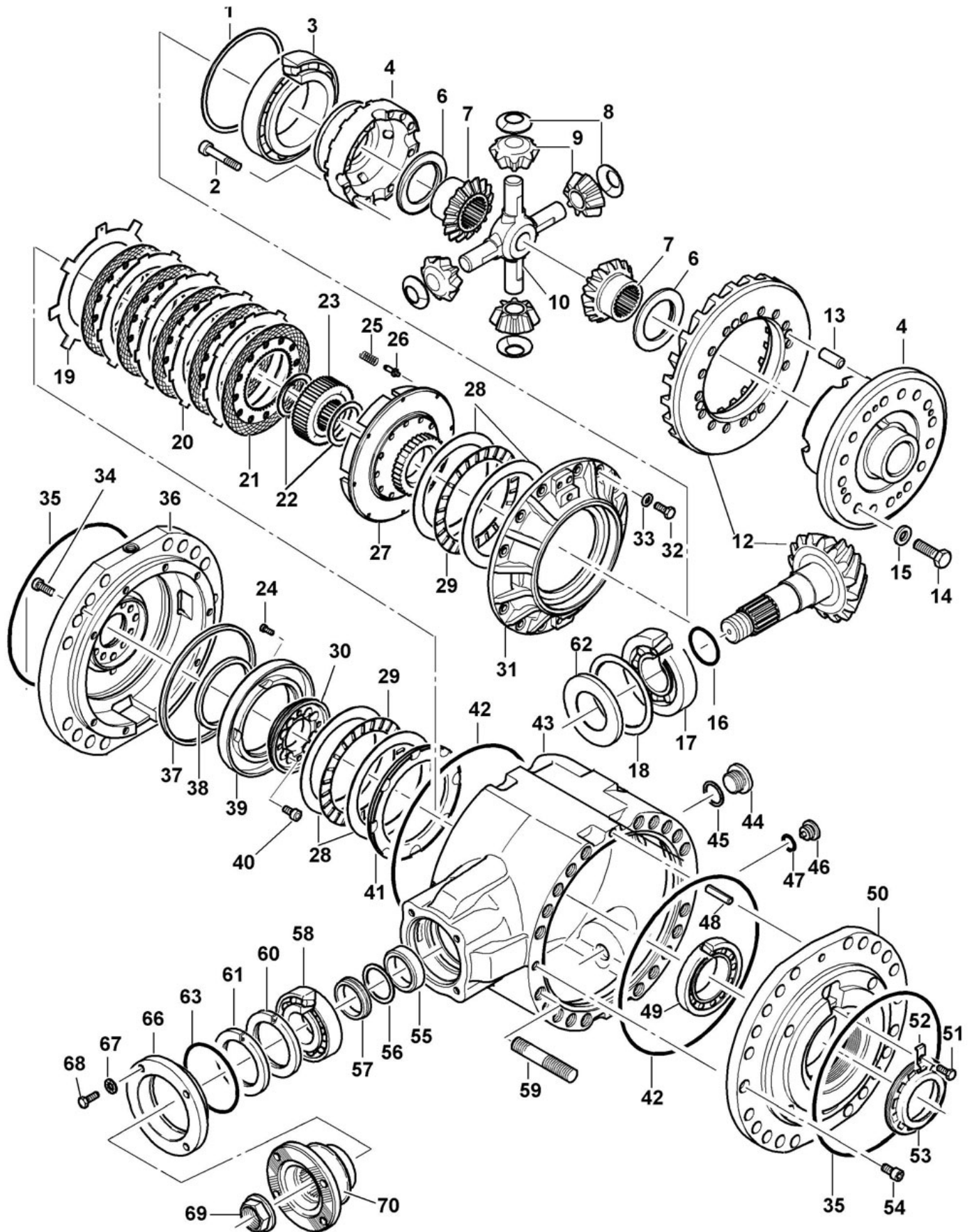


See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## Differential Continued.....

| REF | PART #   | QTY | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|-----------------------------|----------|
| 58  | 1110.229 | 1   | Tapered-roller bearing      |          |
| 59  | 1030.614 | 1   | Spring ring                 |          |
| 60  | 7308.054 | 1   | Radial seal                 |          |
| 61  | 7308.055 | 1   | Seal ring                   |          |
| 62  | 7301.064 | 1   | Washer                      |          |
| 63  | 1180.125 | 1   | V-ring                      |          |
| 64  | --       |     |                             |          |
| 65  | --       |     |                             |          |
| 66  | 7301.124 | 1   | Cover                       |          |
| 67  | 1190.011 | 1   | Locking clip                |          |
| 68  | 1010.201 | 1   | Hexagon screw, M10x25, 10.9 |          |
| 69  | 7329.057 | 1   | Nut 1 M40x1.5               |          |
| 70  | 7521.236 | 1   | Drive shaft flange          |          |
| --  | 1200.110 | 2   | Pin                         |          |

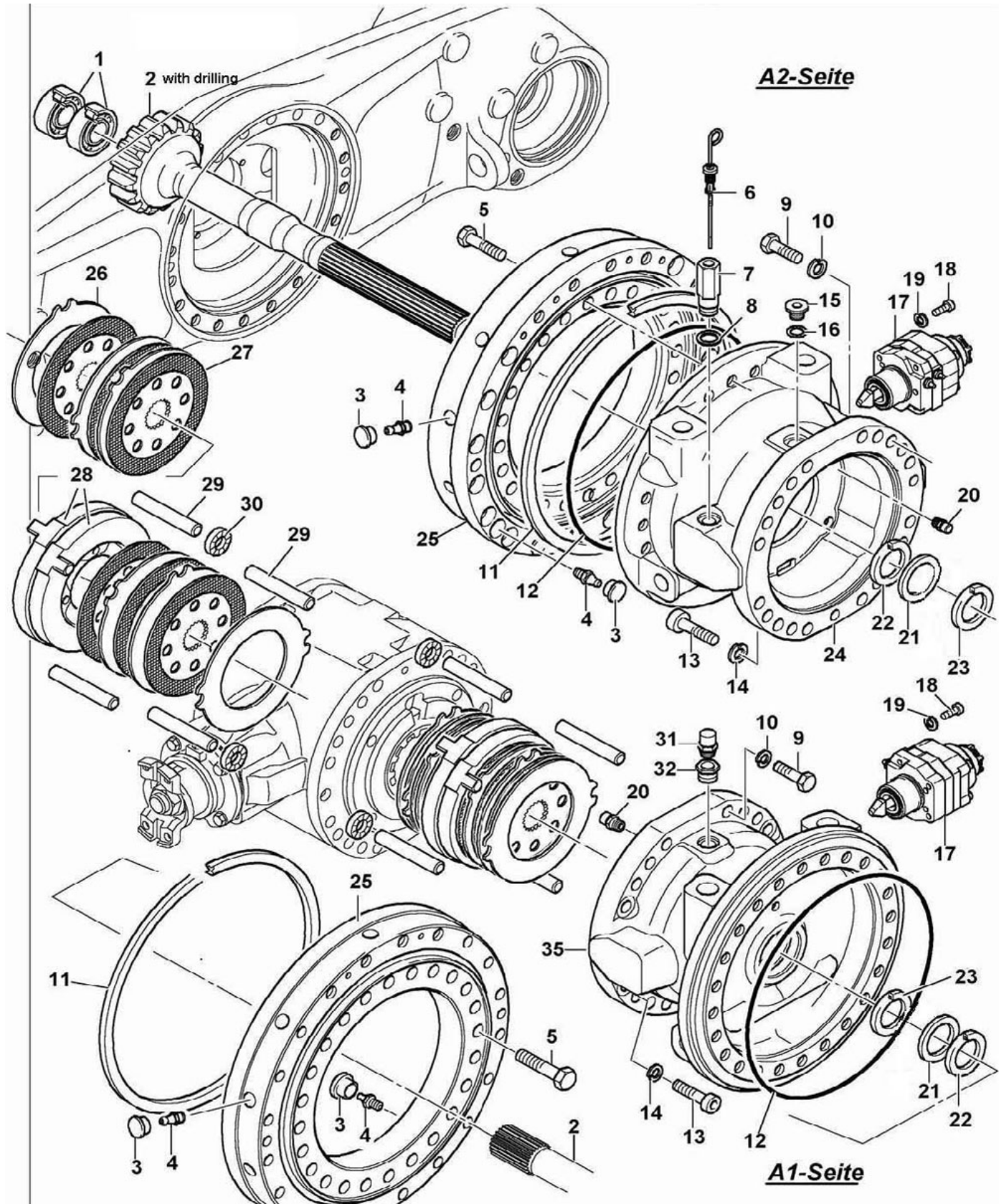


See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## Axle Beams

| REF | PART #   | QTY | DESCRIPTION                   | SEE PAGE |
|-----|----------|-----|-------------------------------|----------|
| 1   | 1130.067 | 4   | Cylinder roller bearing       |          |
| 2   | 7818.183 | 2   | Sun gear shaft, with drilling |          |
| 2   | 7818.145 | 2   | Sun gear shaft                |          |
| 3   | 1750.710 | 20  | Plug                          |          |
| 4   | 1250.104 | 20  | Taper grease nipple           |          |
| 5   | 1010.669 | 48  | Hexagon screw                 |          |
| 6   | 7325.037 | 1   | Dipstick (A2 only)            |          |
| 7   | 7322.074 | 1   | Threaded stud (A2 only)       |          |
| 8   | 1180.541 | 1   | Seal ring (A2 only)           |          |
| 9   | 1010.664 | 36  | Hexagon screw                 |          |
| 10  | 7316.044 | 36  | Washer                        |          |
| 11  | 7308.071 | 2   | Scraper ring                  |          |
| 12  | 1170.726 | 2   | O-RING                        |          |
| 13  | 1020.620 |     | Allen screw (A2 only)         |          |
| 14  | --       |     |                               |          |
| 15  | 1040.151 | 1   | Screw plug (A2 only)          |          |
| 16  | 1180.541 | 1   | Seal ring (A2 only)           |          |
| 17  | 5350.064 | 2   | Spring loaded cylinder        |          |
| 18  | 1020.260 | 6   | Allen screw                   |          |
| 19  | 1190.031 | 6   | Locking clip                  |          |
| 20  | 1250.002 | 1   | Breather                      |          |
| 21  | 7315.187 | 1   | Washer                        |          |
| 22  | 1160.236 | 2   | Oil seal                      |          |
| 23  | 7308.063 | 2   | Oil seal                      |          |
| 24  | 7276.137 | 1   | Axle housing (A2 only)        |          |
| 25  | 7305.033 | 2   | Slewing ring                  |          |
| 26  | 7344.036 | 12  | Intermediate disk             |          |
| 27  | 7345.057 | 12  | Coated disk                   |          |
| 28  | 5504.002 | 2   | Operating disk                |          |
| 29  | 1200.297 | 4   | Straight pin                  |          |
| 30  | 1190.211 | 4   | Toothed ring                  |          |
| 31  | 1250.015 | 2   | Breather bar                  |          |
| 32  | 1750.705 | 2   | Reducing nipple               |          |
| 33  | --       |     |                               |          |
| 34  | --       |     |                               |          |
| 35  | 7276.136 | 1   | Axle housing (A1 only)        |          |

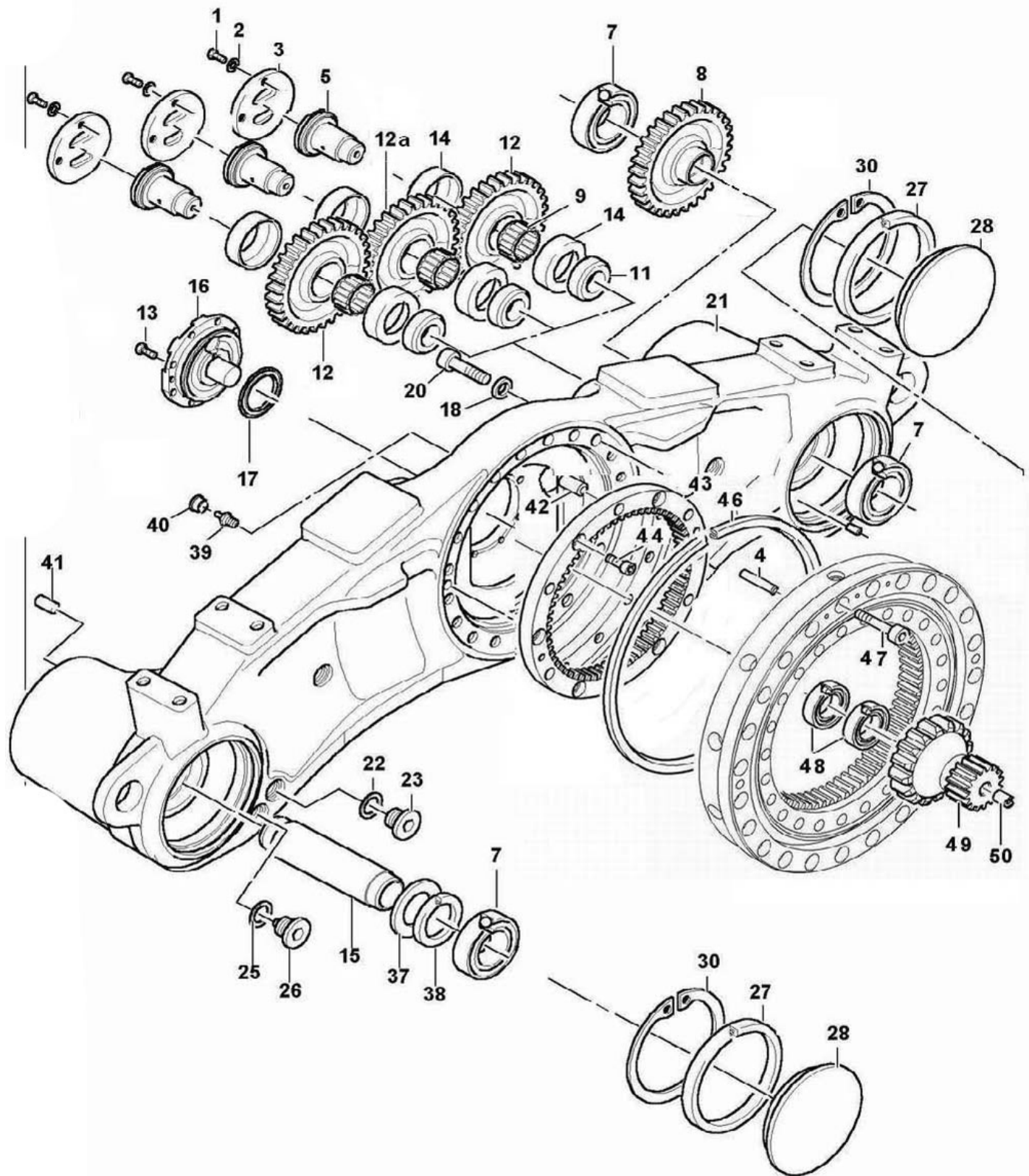


See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.







## Bogie Housing

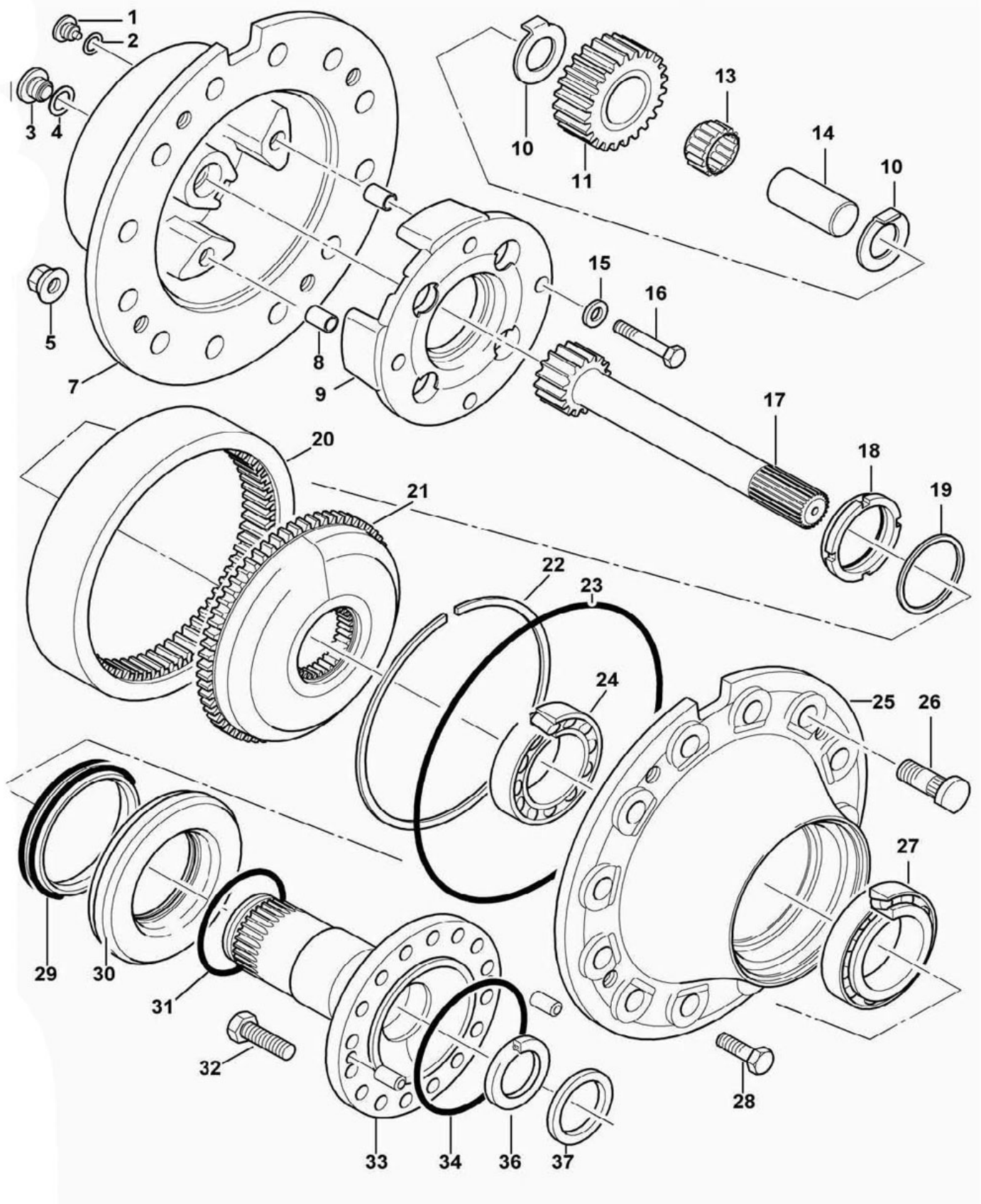
| REF | PART #   | QTY | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|-------------------------|----------|
| -   |          |     | Bogie housing complete  |          |
| 1   | 1010.233 | 48  | Hexagon screw, M10x20   |          |
| 2   | 7316.048 | 48  | Washer                  |          |
| 3   | 7302.011 | 12  | Cover                   |          |
| 4   | --       |     |                         |          |
| 5   | 7321.131 | 12  | Stud                    |          |
| 6   | --       |     |                         |          |
| 7   | 1120.107 | 8   | Grooved ball bearing    |          |
| 8   | 9804.533 | 4   | Gear 4 Z=27             |          |
| 9   | 1130.057 | 24  | Cylinder roller bearing |          |
| 10  | 1220.702 | 12  | Seeger-ring             |          |
| 11  | 7311.089 | 12  | Spacer bush             |          |
| 12  | 9804.532 | 8   | Gear 8 Z=32             |          |
| 12a | 9804.589 | 4   | Gear 4 Z=21             |          |
| 13  | 1010.234 | 16  | Hexagon screw, M10x25   |          |
| 14  | 1020.113 | 4   | Allen screw             |          |
| 15  | 7343.030 | 4   | Pipe                    |          |
| 16  | 7321.169 | 2   | Bearing stud            |          |
| 17  | 1180.841 | 2   | Axial shaft seal ring   |          |
| 18  | 7316.044 | 8   | Washer                  |          |
| 19  | --       |     |                         |          |
| 20  | 1020.619 | 48  | Allen screw             |          |
| 21  | 7277.148 | 2   | Bogie housing           |          |
| 22  | 1180.507 | 10  | Seal ring               |          |
| 23  | 1040.103 | 10  | Screw plug              |          |
| 24  | 1200.206 | 4   | Straight pin            |          |
| 25  | 1180.507 | 4   | Seal ring               |          |
| 26  | 7323.013 | 4   | Screw plug              |          |
| 27  | 7308.051 | 4   | Seal ring               |          |
| 28  | 7302.082 | 4   | Cover                   |          |
| 29  | 7319.087 | 4   | Gasket                  |          |
| 30  | 1220.837 | 4   | Seeger-ring             |          |
| 32  | 1020.029 | 2   | Allen screw             |          |
| 32  | 1020.220 | 24  | Allen screw             |          |
| 33  | 1210.110 | 4   | Supporting washer       |          |
| 34  | 1220.714 | 4   | Seeger-ring             |          |
| 35  | 7308.040 | 2   | Seal ring               |          |
| 36  | 7301.070 | 4   | Cover                   |          |
| 37  | 7315.106 | 4   | Washer                  |          |
| 38  | 1160.275 | 4   | Oil seal                |          |
| 39  | 1250.104 | 4   | Taper grease nipple     |          |
| 40  | 1750.710 | 4   | Plug                    |          |
| 41  | 1200.286 | 8   | Straight pin            |          |
| 42  | 1200.252 | 16  | Straight pin            |          |
| 43  | 7801.060 | 2   | Gear rim                |          |
| 44  | 1020.328 | 12  | Allen screw             |          |
| 45  | 1200.206 | 4   | Straight pin            |          |
| 46  | 7308.040 | 2   | Seal ring               |          |
| 47  | 1020.618 | 48  | Allen screw             |          |
| 48  | 1130.067 | 4   | Cylinder roller bearing |          |
| 49  | 9804.435 | 2   | Gear, Z=16              |          |
| 50  | 7321.026 | 2   | Compression stud        |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## Outer Component

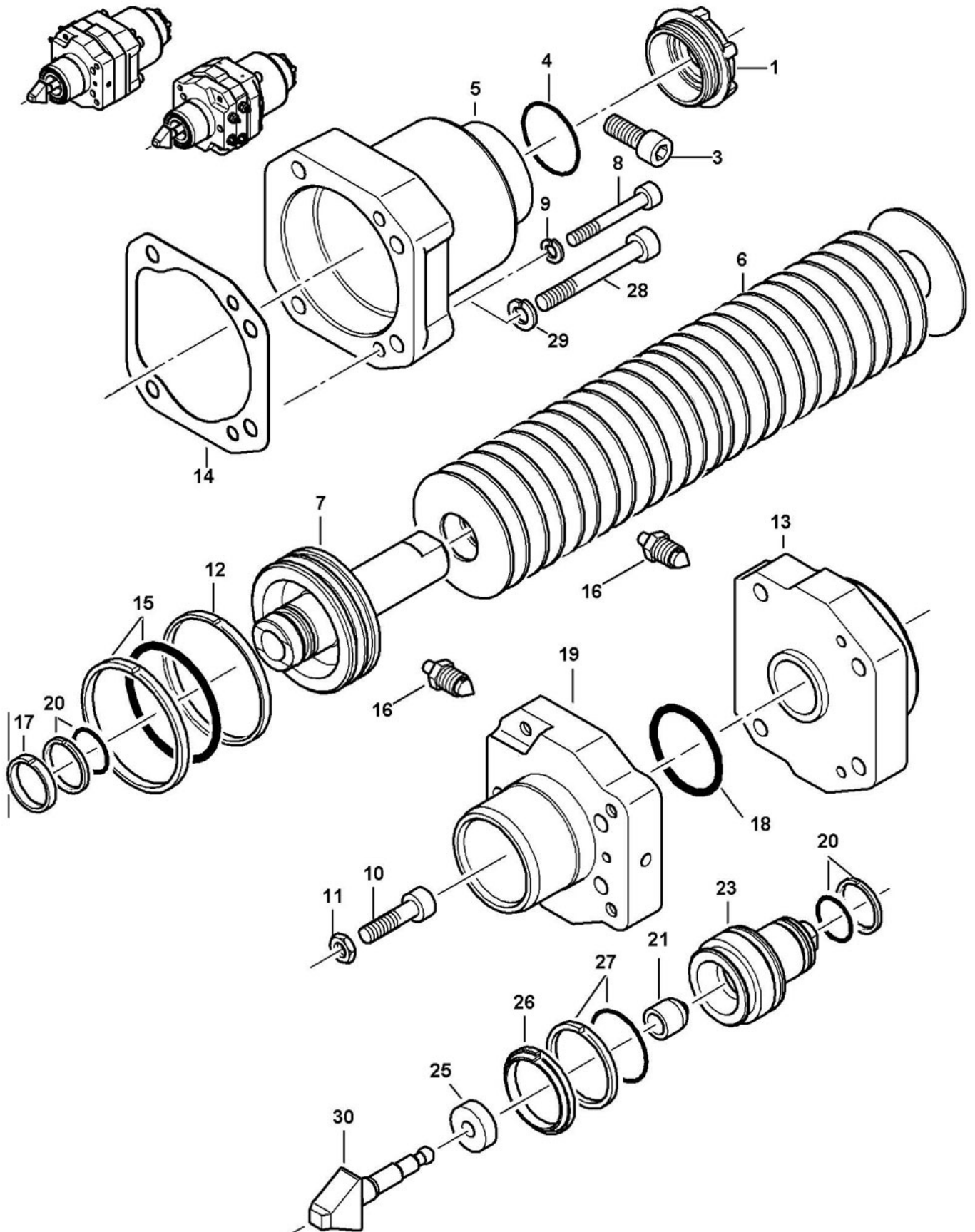
| REF | PART #   | QTY |                          | DESCRIPTION                                        | SEE PAGE |
|-----|----------|-----|--------------------------|----------------------------------------------------|----------|
| -   |          |     | <input type="checkbox"/> | OUTER COMPONENT (complete)                         |          |
| 1   | 9556.021 | 2   |                          | Screw plug M20x1.5, MIT MAGNET 908                 |          |
| 2   | 1180.502 | 2   |                          | Seal ring A20x24x1.5, CU 7603                      |          |
| 3   | 7323.026 | 1   |                          | Screw plug M45X1.5, 5.8                            |          |
| 4   | 2108.017 | 1   | <input type="checkbox"/> | Washer package s=2,5 / 1,0 / 0,5                   |          |
| 4   | 1210.113 |     |                          | Supporting washer n.B. s=2,5                       |          |
| 4   | 1210.295 |     |                          | Seeger washer n.B. s=1,0                           |          |
| 4   | 1210.296 |     |                          | Seeger washer n.B. s=0,5                           |          |
| 5   | 1060.408 | 48  |                          | Nut with turnable washer M22x1.5, KI.10 -A3C 74361 |          |
| 7   | 7821.278 | 1   |                          | Planetary cage                                     |          |
| 8   | 7313.018 | 4   |                          | Shear bushing                                      |          |
| 9   | 7821.179 | 1   |                          | Planetary cage                                     |          |
| 10  | 9633.010 | 8   |                          | Check disk                                         |          |
| 11  | 7806.078 | 4   |                          | Planetary gear Z=25                                |          |
| 12  | 1210.101 | 8   |                          | Supporting washer between 1130.281                 |          |
| 13  | 1130.281 | 8   |                          | Needle roller cages K45X57X25FH                    |          |
| 14  | 7807.067 | 4   |                          | Planetary stud                                     |          |
| 15  | 7316.045 | 4   |                          | Washer 16.1x30x4                                   |          |
| 16  | 1010.536 | 4   |                          | Hexagon screw M16x90, 10.9 VP n.TI-58 931          |          |
| 17  | 7818.153 | 1   |                          | Sun gear shaft Z=14                                |          |
| 18  | 7329.073 | 1   |                          | Nut M85x2                                          |          |
| 19  | 7317.047 | 1   | <input type="checkbox"/> | Adjusting kit s=1,375 bis 2,5 je 0,125             |          |
| 19  | 7317.208 |     |                          | Adjusting washer n.B. s=1,375                      |          |
| 19  | 7317.207 |     |                          | Adjusting washer n.B. s=1,5                        |          |
| 19  | 7317.206 |     |                          | Adjusting washer n.B. s=1,625                      |          |
| 19  | 7317.205 |     |                          | Adjusting washer n.B. s=1,75                       |          |
| 19  | 7317.204 |     |                          | Adjusting washer n.B. s=1,875                      |          |
| 19  | 7317.203 |     |                          | Adjusting washer n.B. s=2.0                        |          |
| 19  | 7317.202 |     |                          | Adjusting washer n.B. s=2,125                      |          |
| 19  | 7317.201 |     |                          | Adjusting washer n.B. s=2,25                       |          |
| 19  | 7317.200 |     |                          | Adjusting washer n.B. s=2,375                      |          |
| 19  | 7317.199 |     |                          | Adjusting washer n.B. s=2,5                        |          |
| 20  | 7801.065 | 1   |                          | Gear rim Z=66                                      |          |
| 21  | 7804.058 | 1   |                          | Ring gear carrier Z=66                             |          |
| 22  | 1220.913 | 1   |                          | Spring ring SB 310                                 |          |
| 23  | 1170.755 | 1   |                          | O-ring OR 345x5, 72NBR872                          |          |
| 24  | 1110.221 | 1   |                          | Tapered-roller bearing 331 22                      |          |
| 25  | 7828.164 | 1   |                          | Wheel hub                                          |          |
| 26  | 7133.032 | 48  |                          | Wheel bolt                                         |          |
| 27  | 1110.222 | 1   |                          | Tapered-roller bearing 320 24X TIMKEN              |          |
| 28  | 1020345  | 12  |                          | Allen screw M12x30, 10.9 VP n.Ti-58 933            |          |
| 29  | 1180.325 | 1   |                          | Slide ring sealing 7690 H-56                       |          |
| 30  | 7306.032 | 1   |                          | Axle stub ring                                     |          |
| 31  | 1170.547 | 1   |                          | O-ring OR 120x4                                    |          |
| 32  | 1030.614 | 16  |                          | Stud M1620x45, 10.9 939                            |          |
| 32a | 1060.010 | 16  |                          | Hexagon nut M20 10 934                             |          |
| 33  | 7814.233 | 1   |                          | Stub axle                                          |          |
| 34  | 1170.553 | 1   |                          | O-ring OR 150x5, 72NBR872                          |          |
| 36  | 1160.244 | 1   |                          | Oil seal 65x75x8 BASL                              |          |
| 37  | 7315.107 | 1   |                          | Washer                                             |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## Break Cylinder

| REF | PART #   | QTY |                          | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|--------------------------|-----------------------------|----------|
| --  | 52746-AX |     | <input type="checkbox"/> | Spring loaded cyl. compl. 1 |          |
| 1   | 7323.044 | 1   |                          | Screw Plug                  |          |
| 2   | --       |     |                          |                             |          |
| 3   | 1020.301 | 1   |                          | Hex bolt                    |          |
| 4   | 1170.107 | 1   |                          | O-ring                      |          |
| 5   | 5275.004 | 1   |                          | Housing                     |          |
| 6   | 1250.237 | 26  |                          | Plate spring                |          |
| 7   | 5252.185 | 1   |                          | Piston                      |          |
| 8   | 1020.153 | 2   |                          | Allen screw                 |          |
| 9   | 1190.105 | 2   |                          | Locking ring                |          |
| 10  | 23871-AX | 1   |                          | Allen screw                 |          |
| 11  | 1060.115 | 1   |                          | Hex nut                     |          |
| 12  | 50222-AX | 1   |                          | Guide ring                  |          |
| 13  | 5263.142 | 1   |                          | Cylinder (upper part)       |          |
| 14  | 7319.068 | 1   |                          | Gasket                      |          |
| 15  | 1180.927 | 1   |                          | Piston seal                 |          |
| 16  | 1250.598 | 2   |                          | Breather with hood          |          |
| 17  | 23874-AX | 1   |                          | Guide ring                  |          |
| 18  | 1170.292 | 1   |                          | O-ring                      |          |
| 19  | 5263.146 | 1   |                          | Cylinder (lower part)       |          |
| 20  | 1180.925 | 2   |                          | Piston seal                 |          |
| 21  | 23878-AX | 1   |                          | Stud                        |          |
| 22  | --       |     |                          |                             |          |
| 23  | 5252.189 | 1   |                          | Pressure piston             |          |
| 24  | --       |     |                          |                             |          |
| 25  | 23879-AX | 1   |                          | Ring                        |          |
| 26  | 23876-AX | 1   |                          | Piston seal                 |          |
| 27  | 1180.926 | 1   |                          | Piston seal                 |          |
| 28  | 1020.257 | 4   |                          | Allen screw                 |          |
| 29  | 23802-AX | 4   |                          | Locking clip                |          |
| 30  | 23880-AX | 1   |                          | Wedge                       |          |
| --  | 7340.015 | 1   |                          | Indication plate            |          |
| --  | 1750.764 | 2   |                          | Blind rivet                 |          |



See referenced page for component or assembly breakdown.



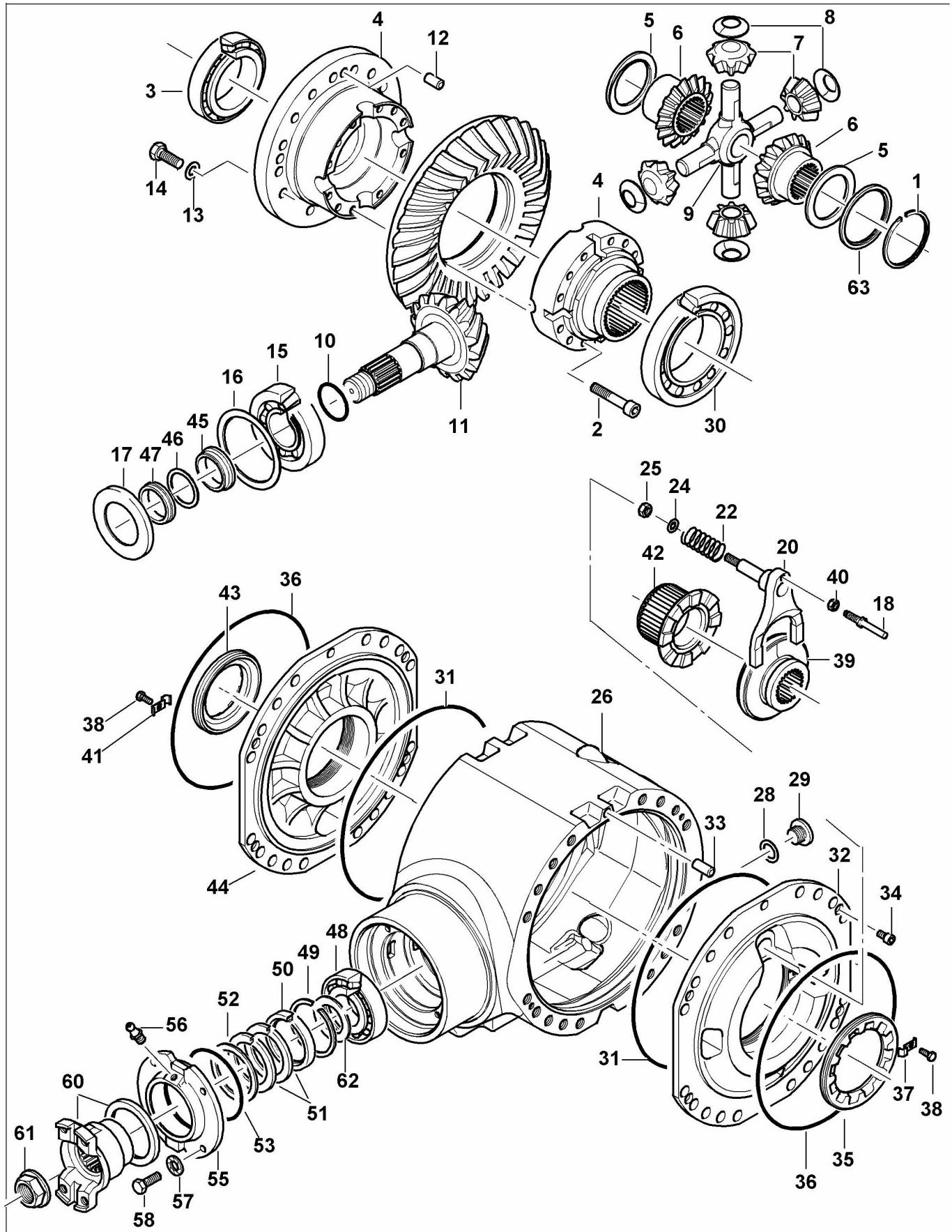
Kit or Assembly - includes all items indented underneath.

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## Section AX-4

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### **Axles, Gearboxes & Wheels -** ***TIM 14 Axle - TB630 Rear***





## TIM 14 AXLE

### Differential Breakdown

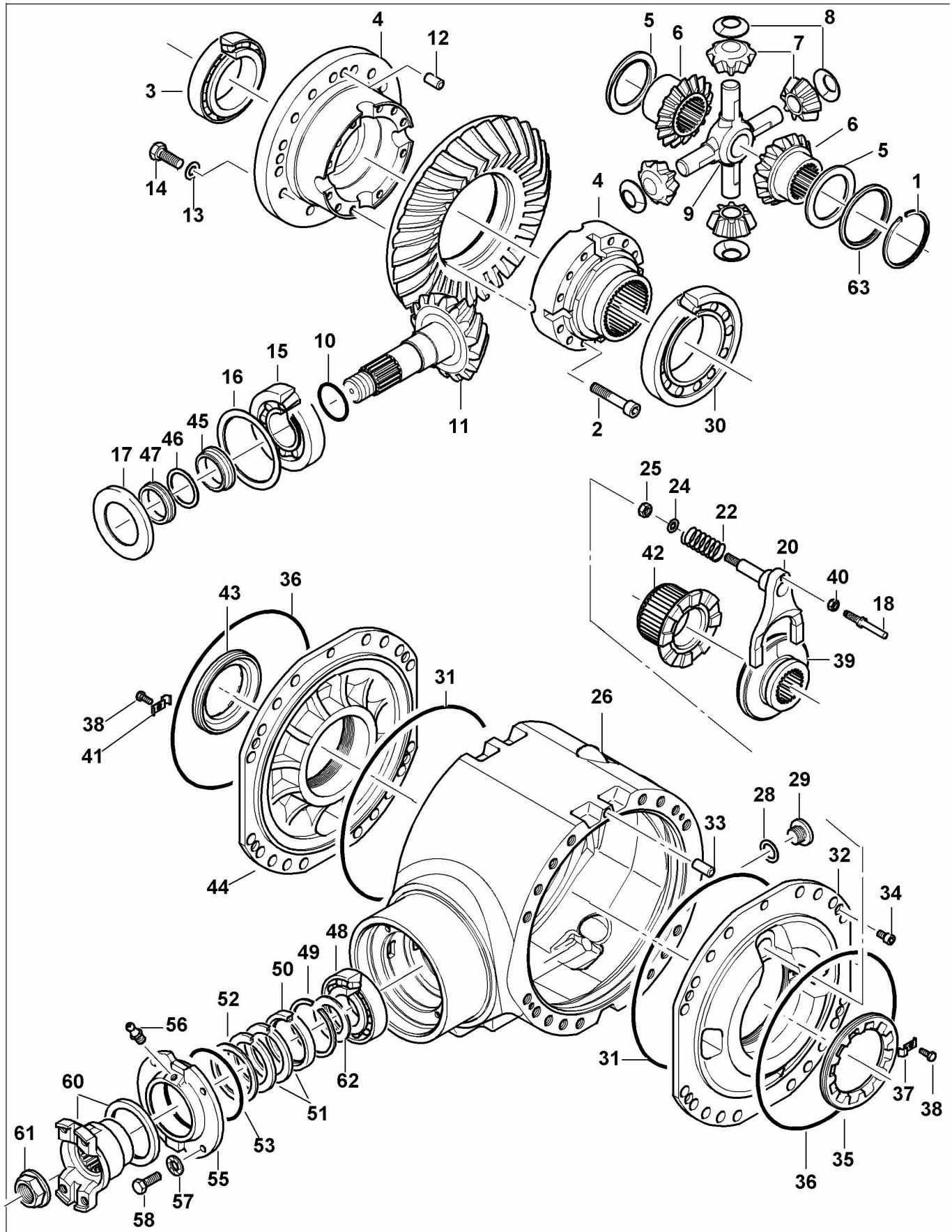
| REF | PART #   | QTY | DESCRIPTION                            | SEE PAGE |
|-----|----------|-----|----------------------------------------|----------|
| -   | 25015-AX |     | TIM 14 AXLE - COMPLETE                 |          |
| 1   | 1220.936 | 1   | Spring ring                            |          |
| 2   | 1020.374 | 12  | Allen screw                            |          |
| 3   | 1110.111 | 1   | Tapered-roller bearing                 |          |
| 4   | 2102.157 | 1   | Differential cage                      |          |
| 5   | 7517.014 | 2   | <input type="checkbox"/> Adjusting kit |          |
| 5   | 7517.028 |     | Check disk s=2,8                       |          |
| 5   | 7517.029 |     | Check disk s=3,0                       |          |
| 5   | 7517.030 |     | Check disk s=3,2                       |          |
| 5   | 7517.031 |     | Check disk s=2,0                       |          |
| 6   | 7517.032 |     | Check disk s=2,2                       |          |
| 6   | 7513.053 | 2   | Differential gear                      |          |
| 7   | 7514.031 | 4   | Planetary gear                         |          |
| 8   | 7518.024 | 4   | Thrust washer                          |          |
| 9   | 7515.029 | 1   | Cross bolt                             |          |
| 10  | 1170.013 | 1   | O-ring                                 |          |
| 11  | 2101.335 | 1   | Crown wheel / pinion                   |          |
| 12  | 1200.228 | 4   | Straight pin                           |          |
| 13  | 7322.077 | 16  | Screw                                  |          |
| 14  | 7316.045 | 16  | Washer                                 |          |
| 15  | 1110.223 | 1   | Tapered-roller bearing                 |          |
| 16  | 2108.047 | 1   | <input type="checkbox"/> Adjusting kit |          |
| 16  | 7317.247 |     | Adjusting washer s=3,0                 |          |
| 16  | 7317.248 |     | Adjusting washer s=2,75                |          |
| 16  | 7317.249 |     | Adjusting washer s=2,5                 |          |
| 17  | 7301.064 | 1   | Cover                                  |          |
| 18  | 9816.129 | 1   | Shifting rod                           |          |
| 19  |          |     |                                        |          |
| 20  | 9809.115 | 1   | Shift fork                             |          |
| 21  |          |     |                                        |          |
| 22  | 7331.016 | 1   | Pressure spring                        |          |
| 23  |          |     |                                        |          |
| 24  | 7316.047 | 1   | Washer                                 |          |
| 25  | 1060.009 | 1   | Hex. nut                               |          |
| 26  | 7506.250 | 1   | Differential housing                   |          |
| 27  |          |     |                                        |          |
| 28  | 1180.541 | 1   | O-ring                                 |          |
| 29  | 1040.151 | 1   | Screw plug                             |          |
| 30  | 1110.220 | 1   | Tapered-roller bearing                 |          |
| 31  | 1170.735 | 4   | O-ring                                 |          |
| 32  | 7527.185 | 1   | Flange                                 |          |
| 33  | 1200.228 | 2   | Straight pin                           |          |
| 34  | 1020.203 | 4   | Allen screw                            |          |
| 35  | 7329.092 | 1   | Nut                                    |          |
| 36  |          |     |                                        |          |
| 37  | 9566.010 | 2   | Locking plate                          |          |
| 38  | 1010.129 | 2   | Hexagon screw                          |          |
| 39  | 9813.144 | 1   | Shifting sleeve                        |          |
| 40  | 1060.007 | 1   | Hex. nut                               |          |
| 41  | 9566.019 | 1   | Locking plate                          |          |
| 42  | 9813.142 | 1   | Clutch-coupling sleeve                 |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 14 AXLE

### Differential Breakdown Cont....

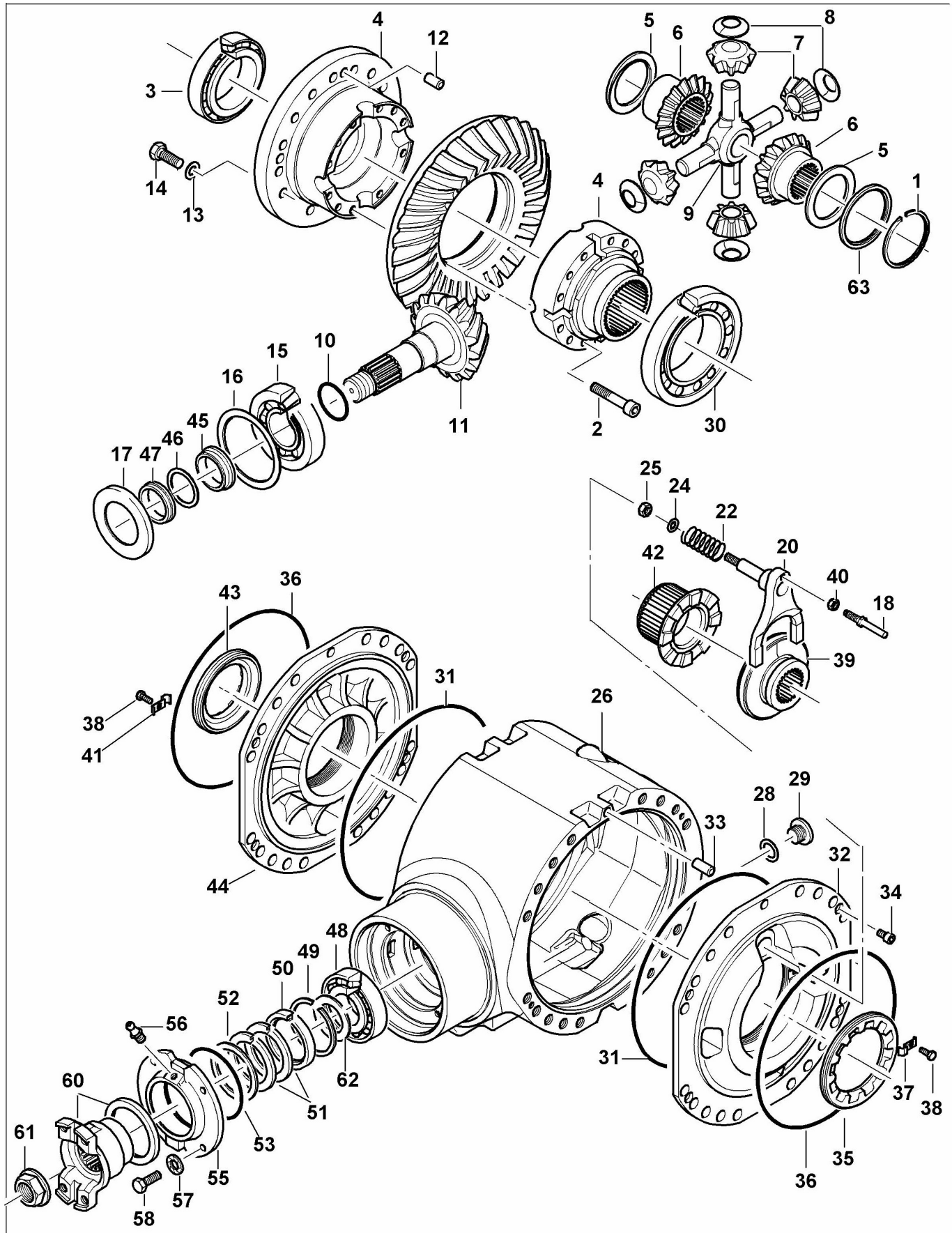
| REF | PART #   | QTY |   | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|---|-------------------------|----------|
| 43  | 9310.072 | 1   |   | Nut                     |          |
| 44  | 7527.184 | 1   |   | Flange                  |          |
| 45  | 7311.116 | 1   |   | Spacer bush             |          |
| 46  | 2108.046 | 1   | □ | Adjusting kit           |          |
| 46  | 7317.234 |     |   | Adjusting washer s=0,96 |          |
| 46  | 7317.235 |     |   | Adjusting washer s=1,0  |          |
| 46  | 7317.236 |     |   | Adjusting washer s=1,04 |          |
| 46  | 7317.237 |     |   | Adjusting washer s=1,08 |          |
| 46  | 7317.238 |     |   | Adjusting washer s=1,12 |          |
| 46  | 7317.239 |     |   | Adjusting washer s=1,16 |          |
| 46  | 7317.240 |     |   | Adjusting washer s=1,20 |          |
| 46  | 7317.241 |     |   | Adjusting washer s=1,24 |          |
| 46  | 7317.242 |     |   | Adjusting washer s=1,28 |          |
| 46  | 7317.243 |     |   | Adjusting washer s=1,32 |          |
| 46  | 7317.244 |     |   | Adjusting washer s=1,36 |          |
| 46  | 7317.245 |     |   | Adjusting washer s=1,40 |          |
| 46  | 7317.246 |     |   | Adjusting washer s=1,44 |          |
| 47  | 2108.045 | 1   | □ | Adjusting kit           |          |
| 47  | 7311.117 |     |   | Spacer bush s=11,51     |          |
| 47  | 7311.118 |     |   | Spacer bush s=11,99     |          |
| 47  | 7311.119 |     |   | Spacer bush s=12,47     |          |
| 48  | 1110.229 | 1   |   | Tapered-roller bearing  |          |
| 49  | 1220.932 | 1   |   | Spring ring             |          |
| 50  | 7308.054 | 1   |   | Radial seal             |          |
| 51  | 7308.055 | 2   |   | Seal ring               |          |
| 52  | 7315.110 | 1   |   | Washer                  |          |
| 52a | 1180.125 | 1   |   | V - ring                |          |
| 53  | 1170.534 | 1   |   | O-ring                  |          |
| 54  |          |     |   |                         |          |
| 55  | 7301.124 | 1   |   | Cover                   |          |
| 56  | 1250.103 | 1   |   | Taper grease nipple     |          |
| 57  | 1190.011 | 4   |   | Locking clip            |          |
| 58  | 1010.201 | 4   |   | Hexagon screw           |          |
| 59  |          |     |   |                         |          |
| 60  | 23997-AX | 1   |   | YOKE, companion flange  |          |
| 61  | 7329.057 | 1   |   | Nut                     |          |
| 62  | 7315.181 | 1   |   | Washer                  |          |
| 63  | 7311.159 | 1   |   | Spacer bush             |          |
| 70  | 7316.153 | 1   |   | Washer                  |          |
| 71  | 7307.135 | 1   |   | Ring                    |          |
| 72  | 7308.036 | 2   |   | Oil seal                |          |
| 73  | 7533.011 | 1   |   | Axle balancer           |          |
| 74  | 1040.115 | 2   |   | Screw plug              |          |
| 75  | 1180.505 | 2   |   | Seal ring               |          |
| 76  | 7312.101 | 1   |   | Boxtrees                |          |
| 77  | 7316.154 | 1   |   | Washer                  |          |
| 78  |          |     |   |                         |          |
| 79  | 7315.219 | 1   |   | Washer                  |          |
| 80  | 1010.201 | 8   |   | Hexagon screw           |          |
| 81  | 7322.088 | 16  |   | Screw                   |          |
| 82  | 7302.051 | 1   |   | Cover                   |          |
| 83  | 7316.114 | 2   |   | Check disk              |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 14 AXLE

### Differential Breakdown Cont....

| REF | PART #   | QTY | DESCRIPTION   | SEE PAGE |
|-----|----------|-----|---------------|----------|
| 84  | 7302.050 | 1   | Cover         |          |
| 85  | 1020.372 | 12  | Allen screw   |          |
| 86  | 7312.102 | 1   | Boxtrees      |          |
| 87  | 7533.012 | 1   | Axle balancer |          |
| 88  | 1180.881 | 1   | Oil seal      |          |
| 89  | 1180.126 | 1   | V-ring        |          |
| 90  | 7321.102 | 1   | Bearing stud  |          |
| 91  | 1020.506 | 16  | Allen screw   |          |

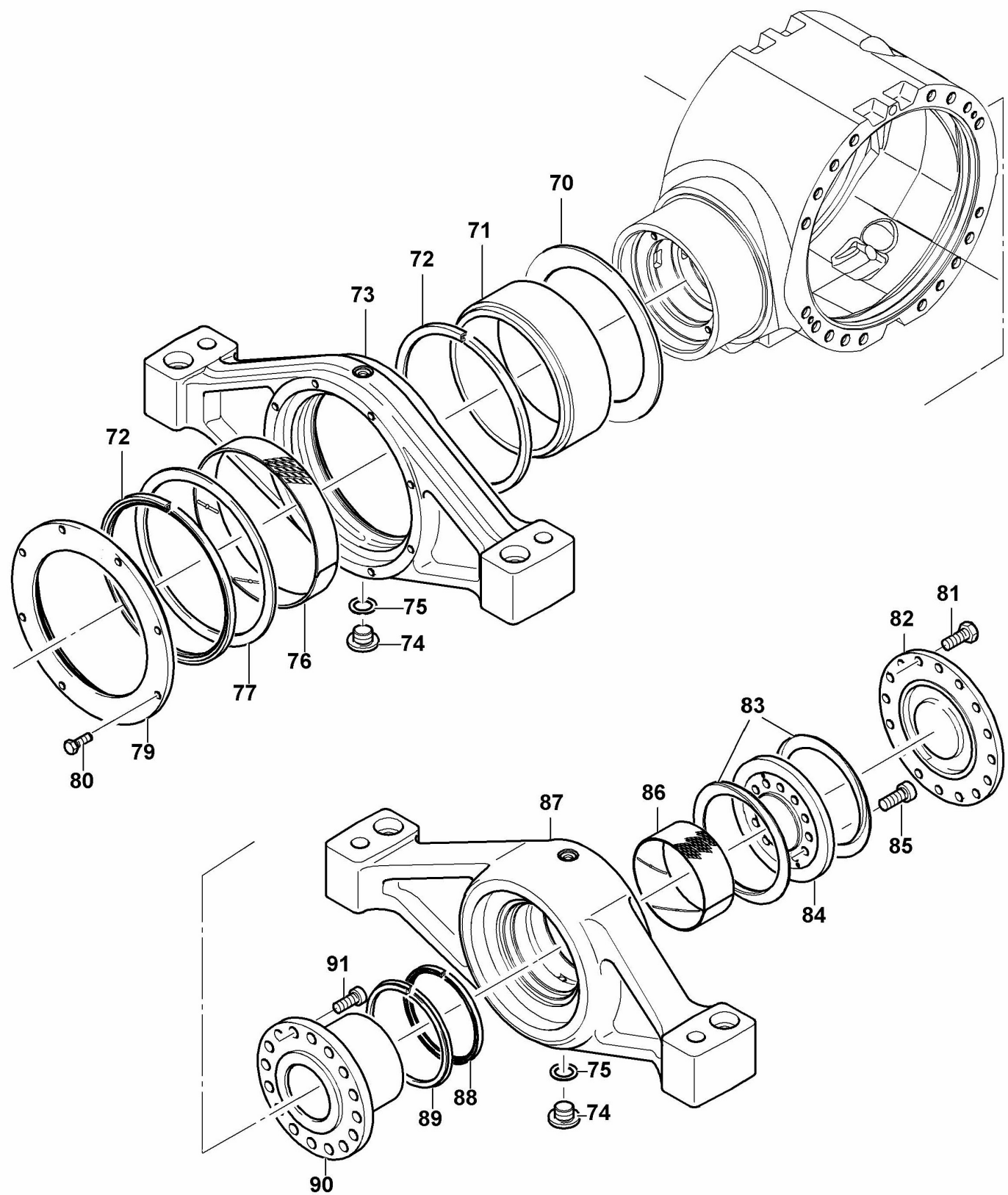


See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 14 AXLE

### Axle Breakdown

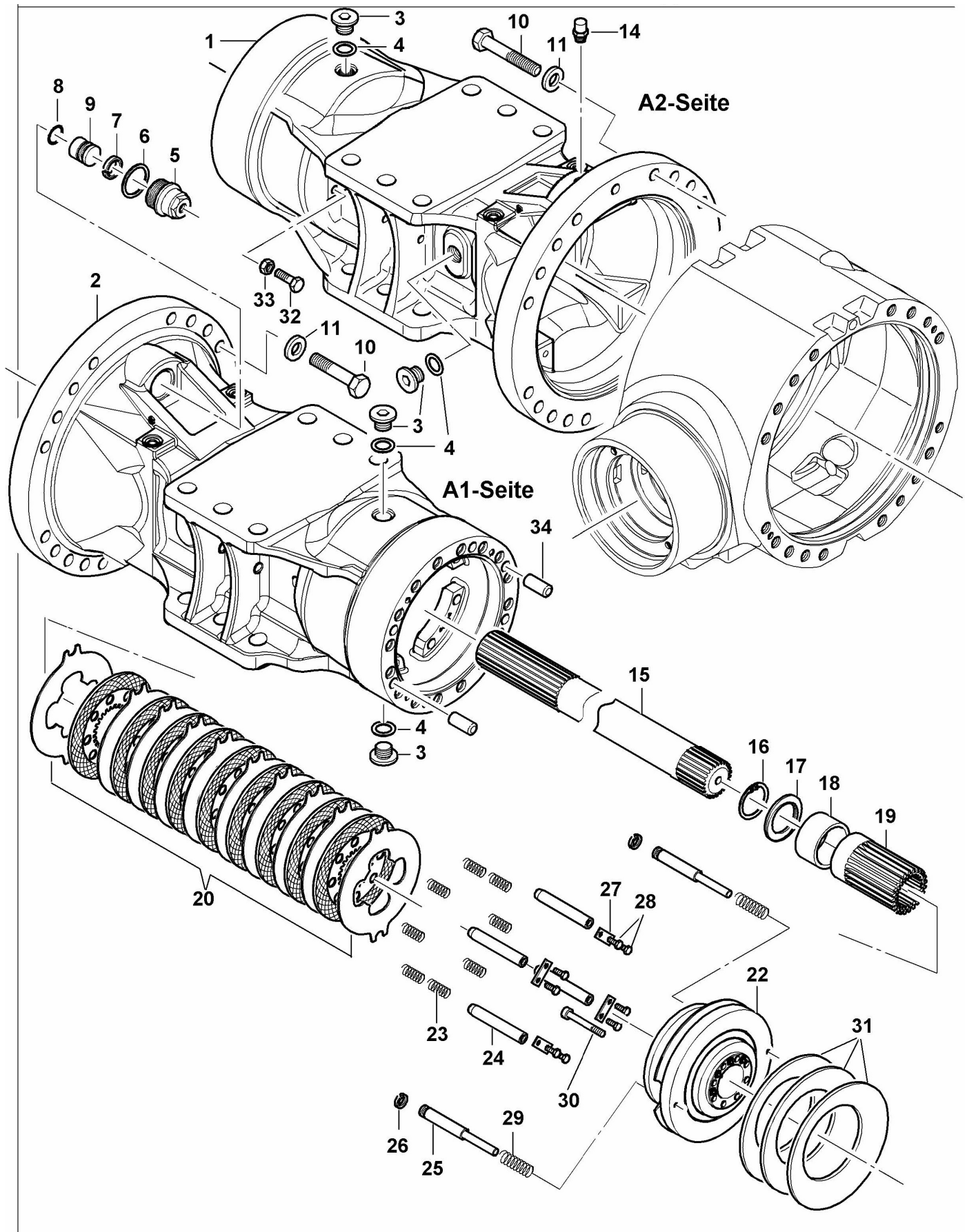
| REF | PART #   | QTY | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|-----------------------------|----------|
| 1   |          |     |                             |          |
| 2   | 7271.196 | 1   | Axle housing                |          |
| 3   | 1040.151 | 3   | Screw plug                  |          |
| 4   | 1180.541 | 3   | Seal ring                   |          |
| 5   | 5263.033 | 1   | Cylinder                    |          |
| 6   | 1180.555 | 1   | Seal ring                   |          |
| 7   | 1180.734 | 1   | Groove ring                 |          |
| 8   | 1180.811 | 1   | Shaft seal                  |          |
| 9   | 5252.117 | 1   | Piston                      |          |
| 10  | 7322.122 | 8   | Hexagon screw               |          |
| 11  | 7316.044 | 18  | Washer                      |          |
| 12  |          |     |                             |          |
| 13  |          |     |                             |          |
| 14  |          |     |                             |          |
| 15  | 7220.131 | 1   | Drive shaft                 |          |
| 16  | 1220.626 | 1   | Seeger-ring                 |          |
| 17  | 7316.111 | 1   | Check disk                  |          |
| 17a | 7321.205 | 2   | Pin                         |          |
| 18  | 7312.038 | 1   | Bush                        |          |
| 19  | 9867.099 | 1   | Disk support                |          |
| 20  | 2109.008 | 1   | Multi-plate package         |          |
| 20  | 7344.037 | 10  | Driven disk                 |          |
| 20  | 7345.038 |     | Drive disk of S = 5,0       |          |
| 20  | 7345.059 |     | Drive disk of S = 5,3       |          |
| 21  |          |     |                             |          |
| 22  | 5360.037 | 1   | Ring piston bracke cylinder |          |
| 23  | 7331.036 | 8   | Pressure spring             |          |
| 24  | 7320.034 | 4   | Stud                        |          |
| 25  | 7320.033 | 2   | Stud                        |          |
| 26  | 1180.827 | 2   | Shaft seal                  |          |
| 27  | 7315.116 | 4   | Washer                      |          |
| 28  | 1010.010 | 8   | Hexagon screw               |          |
| 29  | 7331.055 | 2   | Pressure spring             |          |
| 30  | 1020.154 | 8   | Allen screw                 |          |
| 31  | 7331.030 | 3   | Disk spring                 |          |
| 32  | 1010.304 | 2   | Hexagon screw               |          |
| 33  | 1060.132 | 2   | Hex nut                     |          |
| 34  | 1200.228 | 2   | Straight pin                |          |
|     | 7340.018 | 1   | Type plate                  |          |
|     | 1200.110 | 2   | Pin                         |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 14 AXLE

### Axle Breakdown Cont....

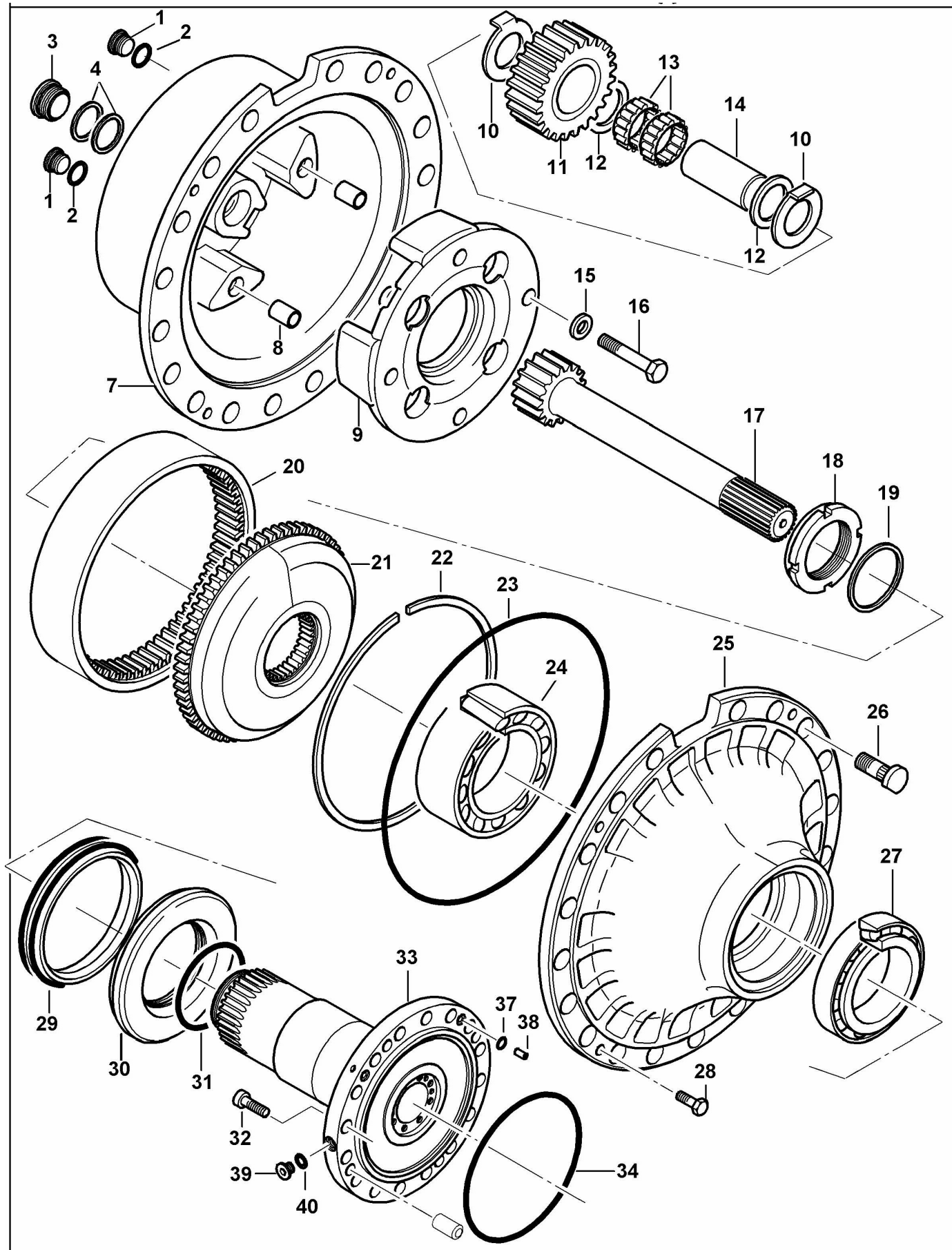
| REF | PART #   | QTY | DESCRIPTION                 | SEE PAGE |
|-----|----------|-----|-----------------------------|----------|
| 1   | 7271.197 | 1   | Axle housing                |          |
| 2   |          |     |                             |          |
| 3   | 1040.151 | 3   | Screw plug                  |          |
| 4   | 1180.541 | 3   | Seal ring                   |          |
| 5   |          |     |                             |          |
| 6   |          |     |                             |          |
| 7   |          |     |                             |          |
| 8   |          |     |                             |          |
| 9   |          |     |                             |          |
| 10  | 7322.122 | 8   | Hexagon screw               |          |
| 11  | 7316.044 | 18  | Washer                      |          |
| 12  |          |     |                             |          |
| 13  |          |     |                             |          |
| 14  | 9566.030 | 1   | Breather                    |          |
| 15  | 7220.131 | 1   | Drive shaft                 |          |
| 16  | 1220.626 | 1   | Seeger-ring                 |          |
| 17  | 7316.111 | 1   | Check disk                  |          |
| 17a | 7321.205 | 2   | Pin                         |          |
| 18  | 7312.038 | 1   | Bush                        |          |
| 19  | 9867.099 | 1   | Disk support                |          |
| 20  | 2109.008 | 1   | Multi-plate package         |          |
| 20  | 7344.037 | 10  | Driven disk                 |          |
| 20  | 7345.038 | 9   | Drive disk th. = 5,0        |          |
| 20  | 7345.059 | 9   | Drive disk th. = 5,3        |          |
| 21  |          |     |                             |          |
| 22  | 5360.037 | 1   | Ring piston bracke cylinder |          |
| 23  | 7331.036 | 8   | Pressure spring             |          |
| 24  | 7320.034 | 4   | Stud                        |          |
| 25  | 7320.033 | 2   | Stud                        |          |
| 26  | 1180.827 | 2   | Shaft seal                  |          |
| 27  | 7315.116 | 4   | Washer                      |          |
| 28  | 1010.010 | 8   | Hexagon screw               |          |
| 29  | 7331.055 | 2   | Pressure spring             |          |
| 30  | 1020.154 | 8   | Allen screw                 |          |
| 31  | 7331.030 | 3   | Disk spring                 |          |
| 32  | 1010.304 | 2   | Hexagon screw               |          |
| 33  | 1060.132 | 2   | Hex nut                     |          |
| 34  | 1200.228 | 2   | Straight pin                |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 14 AXLE Planetary Breakdown

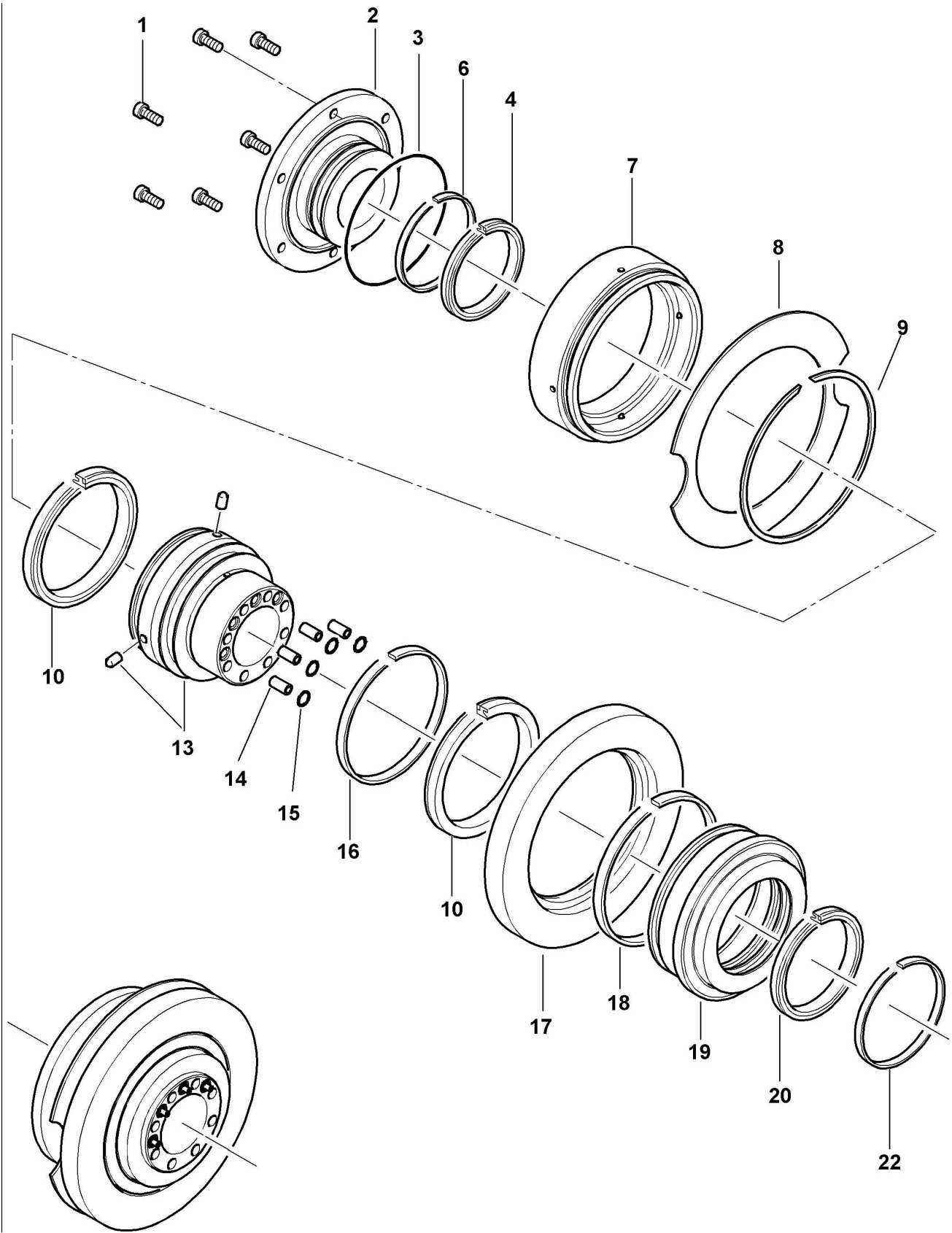
| REF | PART #   | QTY | DESCRIPTION                            | SEE PAGE |
|-----|----------|-----|----------------------------------------|----------|
| 1   | 9556.011 | 3   | Screw plug                             |          |
| 2   | 1180.502 | 3   | Seal ring                              |          |
| 3   | 7323.016 | 2   | Screw plug                             |          |
| 4   | 2108.017 | 2   | Adjusting kit                          |          |
| 4   | 1210.110 |     | Supporting washer                      |          |
| 4   | 1210.218 |     | Seeger washer                          |          |
| 5   |          |     |                                        |          |
| 6   |          |     |                                        |          |
| 7   | 7821.257 | 2   | Planetary cage                         |          |
| 8   | 7313.018 | 8   | Shear bushing                          |          |
| 9   | 7821.179 | 2   | Planetary cage                         |          |
| 10  | 9633.010 | 16  | Check disk                             |          |
| 11  | 7806.060 | 8   | Planetary gear                         |          |
| 12  | 1210.101 | 16  | Supporting washer                      |          |
| 13  | 1130.280 | 16  | Needle roller cages                    |          |
| 14  | 7807.056 | 8   | Planetary stud                         |          |
| 15  | 7316.045 | 8   | Washer                                 |          |
| 16  | 1010.536 | 2   | Hexagon screw                          |          |
| 17  | 7818.083 | 2   | Sun gear shaft                         |          |
| 18  | 7329.073 | 2   | Nut                                    |          |
| 19  | 7317.047 |     | <input type="checkbox"/> Adjusting kit |          |
| 19  | 7317.208 |     | Adjusting washer s=1,375               |          |
| 19  | 7317.207 |     | Adjusting washer s=1,5                 |          |
| 19  | 7317.206 |     | Adjusting washer s=1,625               |          |
| 19  | 7317.205 |     | Adjusting washer s=1,75                |          |
| 19  | 7317.204 |     | Adjusting washer s=1,875               |          |
| 19  | 7317.203 |     | Adjusting washer s=2.0                 |          |
| 19  | 7317.202 |     | Adjusting washer s=2,125               |          |
| 19  | 7317.201 |     | Adjusting washer s=2,25                |          |
| 19  | 7317.200 |     | Adjusting washer s=2,375               |          |
| 19  | 7317.199 |     | Adjusting washer s=2,5                 |          |
| 20  | 7801.042 | 2   | Gear rim                               |          |
| 21  | 7804.058 | 2   | Ring gear carrier                      |          |
| 22  | 1220.913 | 2   | Spring ring                            |          |
| 23  | 1170755  | 2   | O-ring                                 |          |
| 24  | 1110.221 | 2   | Tapered-roller bearing                 |          |
| 25  | 7828.142 | 2   | Wheel hub                              |          |
| 26  | 7133.032 | 38  | Wheel bolt                             |          |
| 27  | 1110.222 | 2   | Tapered-roller bearing                 |          |
| 28  | 7322.088 | 8   | Hexagon screw                          |          |
| 29  | 1180.325 | 2   | Slide ring sealing                     |          |
| 30  | 7306.032 | 2   | Axle stub ring                         |          |
| 31  | 1170.547 | 2   | O-ring                                 |          |
| 32  | 1020.625 | 32  | Allen screw                            |          |
| 33  | 7814.239 | 2   | Stub axle                              |          |
| 34  | 1170.725 | 2   | O-ring                                 |          |
| 35  |          |     |                                        |          |
| 36  |          |     |                                        |          |
| 37  | 1170.104 | 4   | O-ring                                 |          |
| 38  | 7312.082 | 4   | Bush                                   |          |
| 39  | 1040.105 | 4   | Screw plug                             |          |
| 40  | 1180.503 | 4   | Seal ring                              |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 14 AXLE Brake Cylinder Breakdown

| REF | PART #   | QTY |                          | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|--------------------------|-------------------------|----------|
| -   | 5360.037 | 1   | <input type="checkbox"/> | Complete Brake Cylinder |          |
| 1   | 1020.155 | 6   |                          | Allen screw             |          |
| 2   | 5252.135 | 1   |                          | Piston                  |          |
| 3   | 1170.607 | 1   |                          | O-ring                  |          |
| 4   | 7308.088 | 1   |                          | Shaft seal              |          |
| 5   |          |     |                          |                         |          |
| 6   | 7308.058 | 1   |                          | Piston guide ring       |          |
| 7   | 7307.124 | 1   |                          | Intermediate ring       |          |
| 8   | 7315.197 | 1   |                          | Washer                  |          |
| 9   | 1220.901 | 1   |                          | Spring ring             |          |
| 10  | 7308.087 | 2   |                          | Shaft seal              |          |
| 11  |          |     |                          |                         |          |
| 12  |          |     |                          |                         |          |
| 13  | 2429.015 | 1   |                          | Cylinder compl.         |          |
| 14  | 7312.083 | 4   |                          | Bush                    |          |
| 15  | 1170.103 | 4   |                          | O-ring                  |          |
| 16  | 7308.059 | 1   |                          | Piston guide ring       |          |
| 17  | 7315.114 | 1   |                          | Washer                  |          |
| 18  | 7308.057 | 1   |                          | Piston guide ring       |          |
| 19  | 5252.154 | 1   |                          | Piston                  |          |
| 20  | 7308.089 | 1   |                          | Shaft seal              |          |
| 21  |          |     |                          |                         |          |
| 22  | 1180.822 | 1   |                          | Driving band            |          |



See referenced page for component or assembly breakdown.



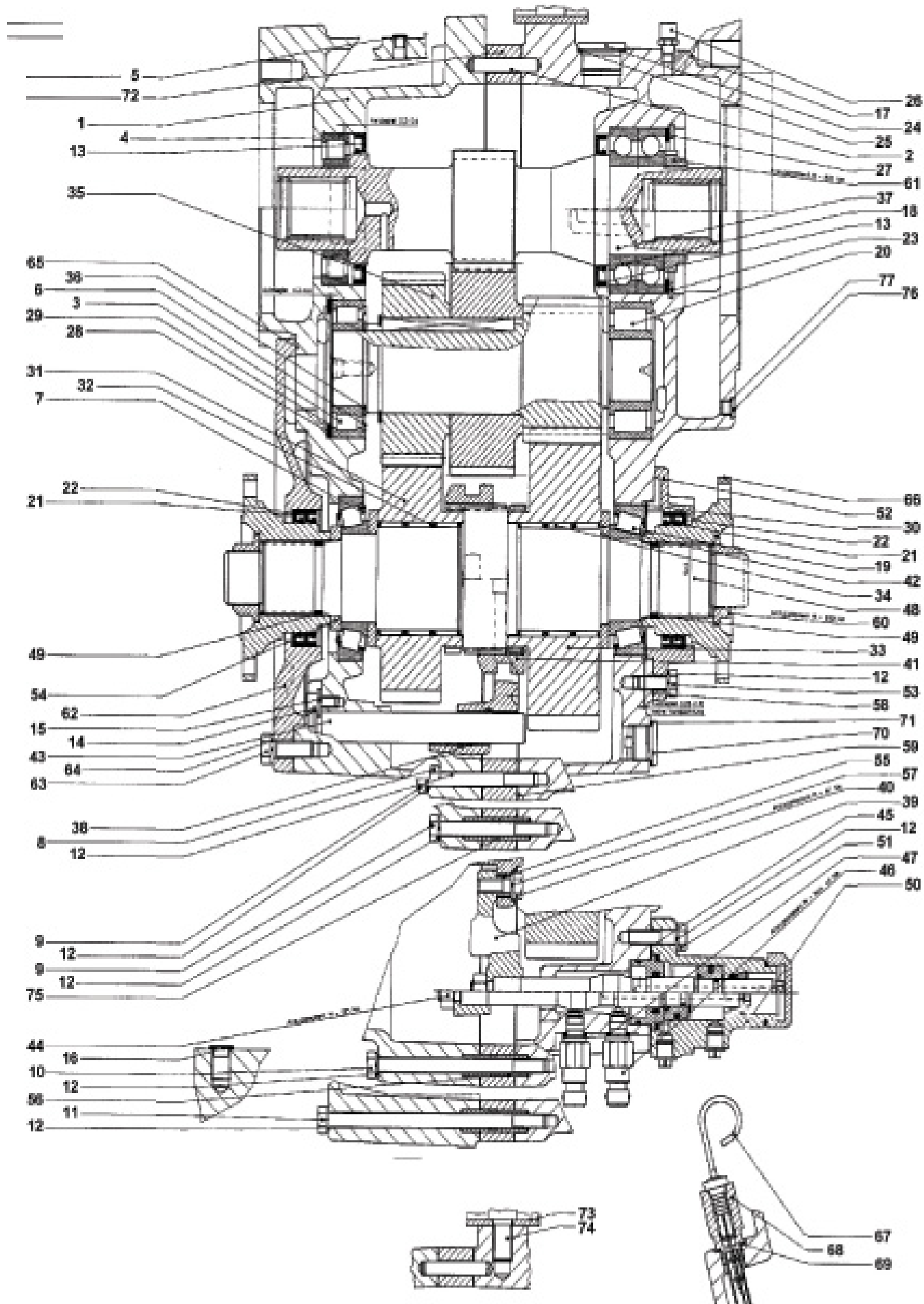
Kit or Assembly - includes all items indented underneath.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# Section AX-5

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## **Axles, Gearboxes & Wheels - *TIM 15 Gearbox* (*Dual Motor - 830/840*)**





## TIM 15 - DUAL MOTOR GEARBOX

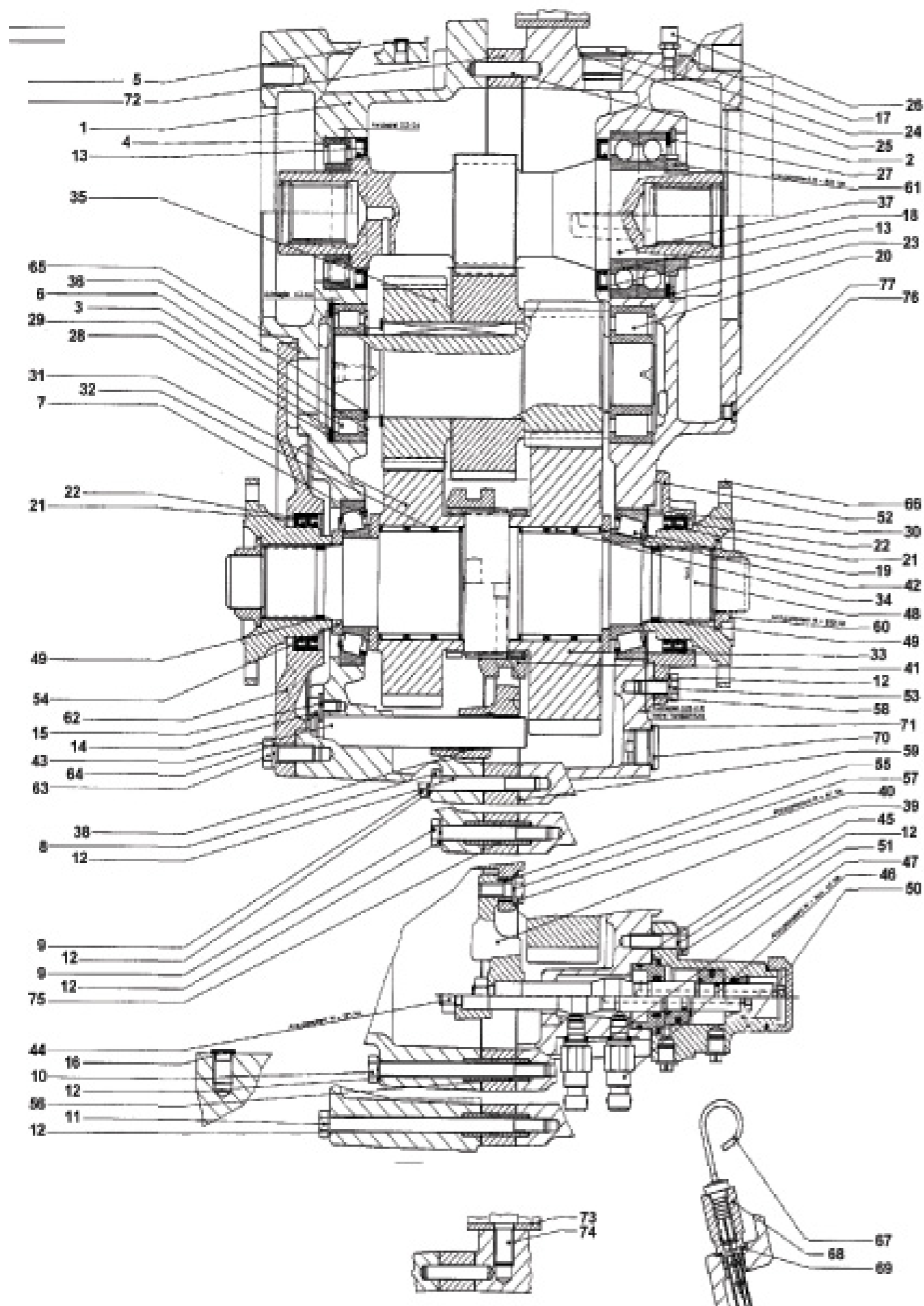
| REF | PART #   | QTY | DESCRIPTION                   | SEE PAGE |
|-----|----------|-----|-------------------------------|----------|
| -   | 50371-AX |     | GEARBOX, DUAL MOTOR-2SP - NAF |          |
| 1   | 9801.517 | 1   | Housing                       |          |
| 2   | 1200.602 | 2   | Straight pin                  |          |
| 3   | 1130.049 | 1   | Cylinder roller bearing       |          |
| 4   | 1130.076 | 1   | Cylinder roller bearing       |          |
| 5   | 1250.620 | 1   | Plug                          |          |
| 6   | 1180.760 | 1   | Nilos-ring                    |          |
| 7   | 1110.119 | 1   | Tapered roller bearing        |          |
| 8   | 1510.212 | 6   | Hexagon screw                 |          |
| 9   | 1510.213 | 4   | Hexagon screw                 |          |
| 10  | 1010.225 | 1   | Hexagon screw                 |          |
| 11  | 1510.215 | 2   | Hexagon screw                 |          |
| 12  | 23722-AX | 13  | Locking clip                  |          |
| 13  | 1160.220 | 2   | Oil seal                      |          |
| 14  | 1020.113 | 1   | Allen screw                   |          |
| 15  | 7316.057 | 2   | Washer                        |          |
| 16  | 1250.626 | 8   | Plug                          |          |
| 17  | 9801.434 | 1   | Housing                       |          |
| 18  | 1130.579 | 2   | Tapered-roller bearing        |          |
| 19  | 1110.014 | 1   | Tapered-roller bearing        |          |
| 20  | 1130.058 | 1   | Cylinder roller bearing       |          |
| 21  | 1160.121 | 2   | Oil seal                      |          |
| 22  | 1160.217 | 2   | Oil seal                      |          |
| 23  | 1220.802 | 1   | Seeger-ring                   |          |
| 24  | 1040.180 | 1   | Screw plug                    |          |
| 25  | 1180.518 | 1   | Seal ring                     |          |
| 26  | 1250.001 | 1   | Breather                      |          |
| 27  | 1210.125 | 1   | Supporting washer             |          |
| 28  | 1210.119 | 1   | Supporting washer             |          |
| 29  | 2108.013 | 1   | Adjusting kit                 |          |
| 30  | 2108.021 | 1   | Adjusting kit                 |          |
| 31  | 9804.520 | 1   | Gear                          |          |
| 32  | 1130.272 | 2   | Needle roller cages           |          |
| 33  | 9804.522 | 1   | Gear                          |          |
| 34  | 1130.272 | 3   | Needle roller cages           |          |
| 35  | 2205.156 | 1   | Gear block                    |          |
| 36  | 1210.121 | 1   | Supporting washer             |          |
| 37  | 9805.310 | 1   | Drive pinion                  |          |
| 38  | 9809.110 | 1   | Shifting lever complete       |          |
| 39  | 9809.118 | 1   | Shifting lever complete       |          |
| 40  | 1010.219 | 1   | Hexagon screw                 |          |
| 41  | 9813.149 | 1   | Washer                        |          |
| 42  | 7315.060 | 2   | Shifting sleeve               |          |
| 43  | 9816.119 | 1   | Washer                        |          |
| 44  | 1060.003 | 1   | Shifting rod                  |          |
| 45  | 2108.049 | 1   | Hex. nut                      |          |
| 46  | 54093-AX | 2   | SWITCH, NAF GEARBOX           |          |
| 47  | 2108.003 | 2   | Adjusting kit                 |          |
| 48  | 7222.080 | 1   | Shaft                         |          |
| 49  | 1170.065 | 2   | O-ring                        |          |
| 50  | 9880.098 | 1   | Shift cylinder complete       |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 15 - DUAL MOTOR GEARBOX

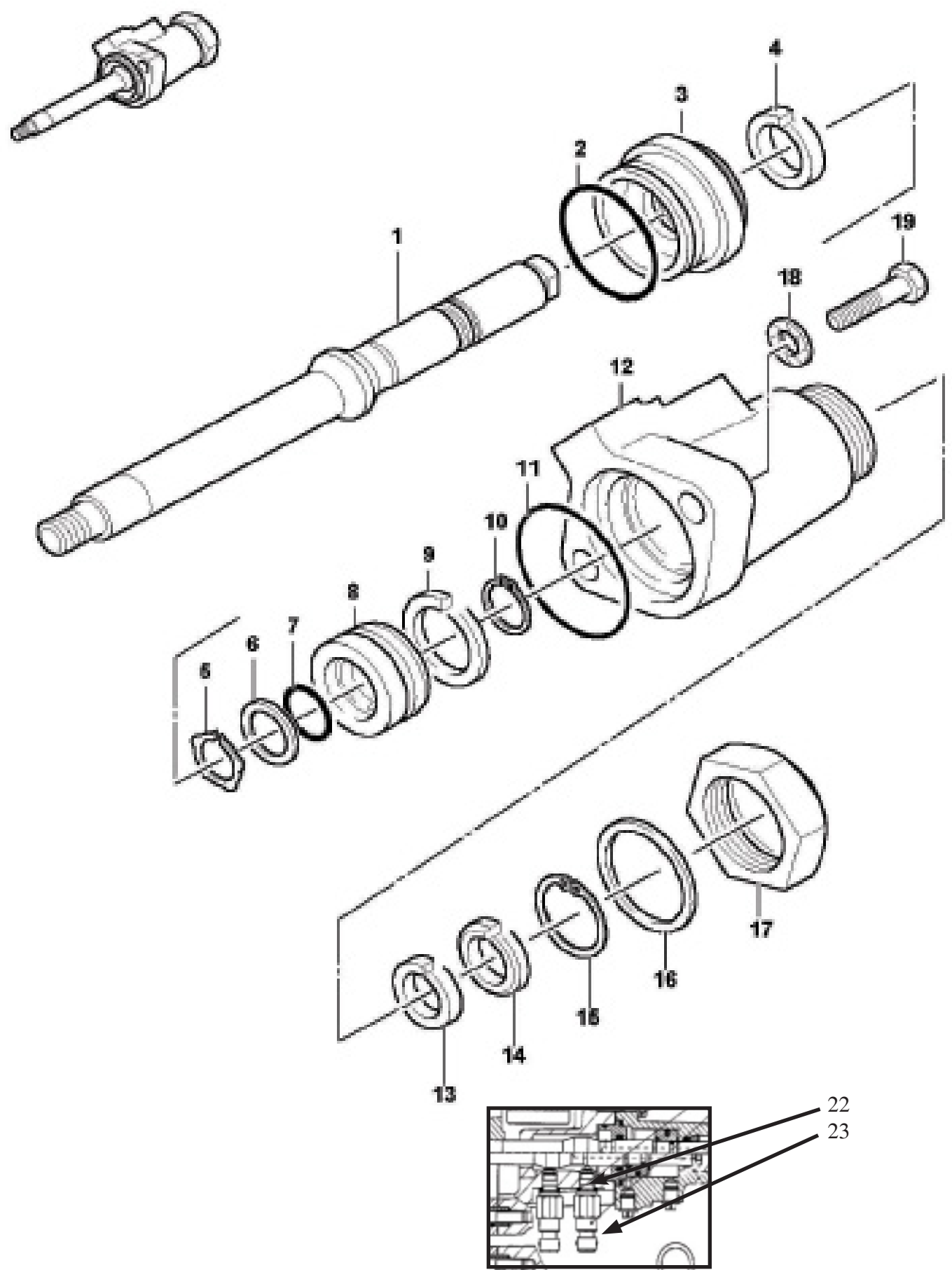
| REF | PART #   | QTY | DESCRIPTION    | SEE PAGE |
|-----|----------|-----|----------------|----------|
| 51  | 1010.242 | 2   | Hexagon screw  |          |
| 52  | 7301.029 | 1   | Cover          |          |
| 53  | 1010.201 | 6   | Hexagon screw  |          |
| 54  | 7311.163 | 1   |                |          |
| 55  | 7311.111 | 1   | Spacer bushing |          |
| 56  | 7313.012 | 12  | Shear bushing  |          |
| 57  | 7316.048 | 1   | Washer         |          |
| 58  | 7319.033 | 1   | Gasket         |          |
| 59  | 7319.129 | 2   | Gasket         |          |
| 60  | 7329.057 | 2   | Nut            |          |
| 61  | 7329.093 | 1   | Nut            |          |
| 62  | 7301.141 | 1   | Cover          |          |
| 63  | 1010.346 | 9   | Hexagon screw  |          |
| 64  | 1190.017 | 9   | Locking clip   |          |
| 65  | 7319.030 | 1   | Gasket         |          |
| 66  | 52906-AX | 2   | Cardan flange  |          |
| 67  | 7325.046 | 1   | Dipstick       |          |
| 68  | 7343.027 | 1   | Tube           |          |
| 69  | 1180.508 | 1   | Seal ring      |          |
| 70  | 7323.025 | 1   | Screw plug     |          |
| 71  | 1180.541 | 1   | Seal ring      |          |
| 72  | 9801.389 | 1   |                |          |
| 73  | 7412.016 | 1   |                |          |
| 74  | 1020.522 | 1   |                |          |
| 75  | 7312.084 | 6   |                |          |
| 76  | 1040.115 | 1   |                |          |
| 77  | 1180.505 | 1   |                |          |
| --  | 7340.018 | 1   | Type plate     |          |
| --  | 1200.110 | 2   | Pin            |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 15 - DUAL MOTOR GEARBOX

| REF | PART #   | QTY |   | DESCRIPTION             | SEE PAGE |
|-----|----------|-----|---|-------------------------|----------|
| -   | 52907-AX | 1   | ☐ | Complete Shift Cylinder |          |
| 1   | 9816137  | 1   |   | Shifting rod            |          |
| 2   | 1170.005 | 1   |   | O-ring                  |          |
| 3   | 7307.097 | 1   |   | Eccentric ring          |          |
| 4   | 50519-AX | 1   |   | Shaft seal              |          |
| 5   | 50127-AX | 1   |   | Seeger-k-ring           |          |
| 6   | 7315.090 | 1   |   | Washer                  |          |
| 7   | 1170.092 | 1   |   | O-ring                  |          |
| 8   | 5252.097 | 1   |   | Piston                  |          |
| 9   | 1180.767 | 1   |   | Shaft seal              |          |
| 10  | 1220.053 | 1   |   | Seeger-ring             |          |
| 11  | 1170.013 | 1   |   | O-ring                  |          |
| 12  | 5263.086 | 1   |   | Cylinder                |          |
| 13  | 1180.643 | 1   |   | Shaft seal              |          |
| 14  | 7307.080 | 1   |   | Eccentric ring          |          |
| 15  | 50129-AX | 1   |   | Seeger-ring             |          |
| 16  | 50521-AX | 1   |   | Seal Ring               |          |
| 17  | 7302.003 | 1   |   | Cover                   |          |
| 18  | 1190.015 | 2   |   | Locking Clip            |          |
| 19  | 1010.242 | 2   |   | Bolt                    |          |
| 20  | 1020.260 | 1   |   | Allen Screw             |          |
| 21  | 2108.080 | 1   |   | Shim kit                |          |
| 21  | 7311.168 | 1   |   | Washer                  |          |
| 21  | 7311.169 | 1   |   | Washer                  |          |
| 21  | 7311.170 | 1   |   | Washer                  |          |
| 22  | 2108.003 | 2   |   | Adjusting kit           |          |
| 23  | 54093-AX | 2   |   | SWITCH, NAF GEARBOX     |          |



See referenced page for component or assembly breakdown.



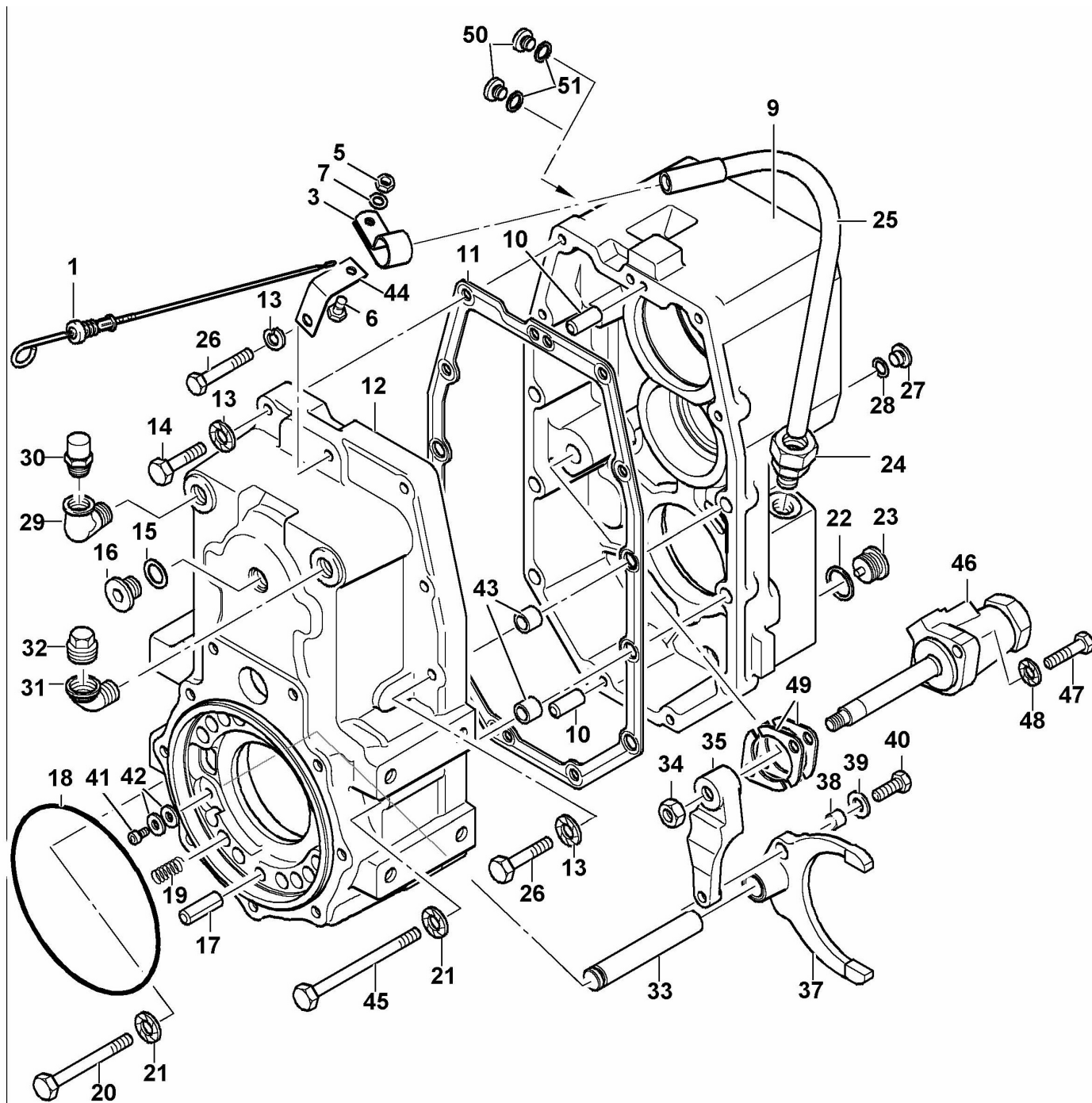
Kit or Assembly - includes all items indented underneath.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# Section AX-6

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## **Axles, Gearboxes & Wheels - *TIM 16 Gearbox* (*Single Motor - 630*)**





## TIM 16 - SINGLE MOTOR GEARBOX

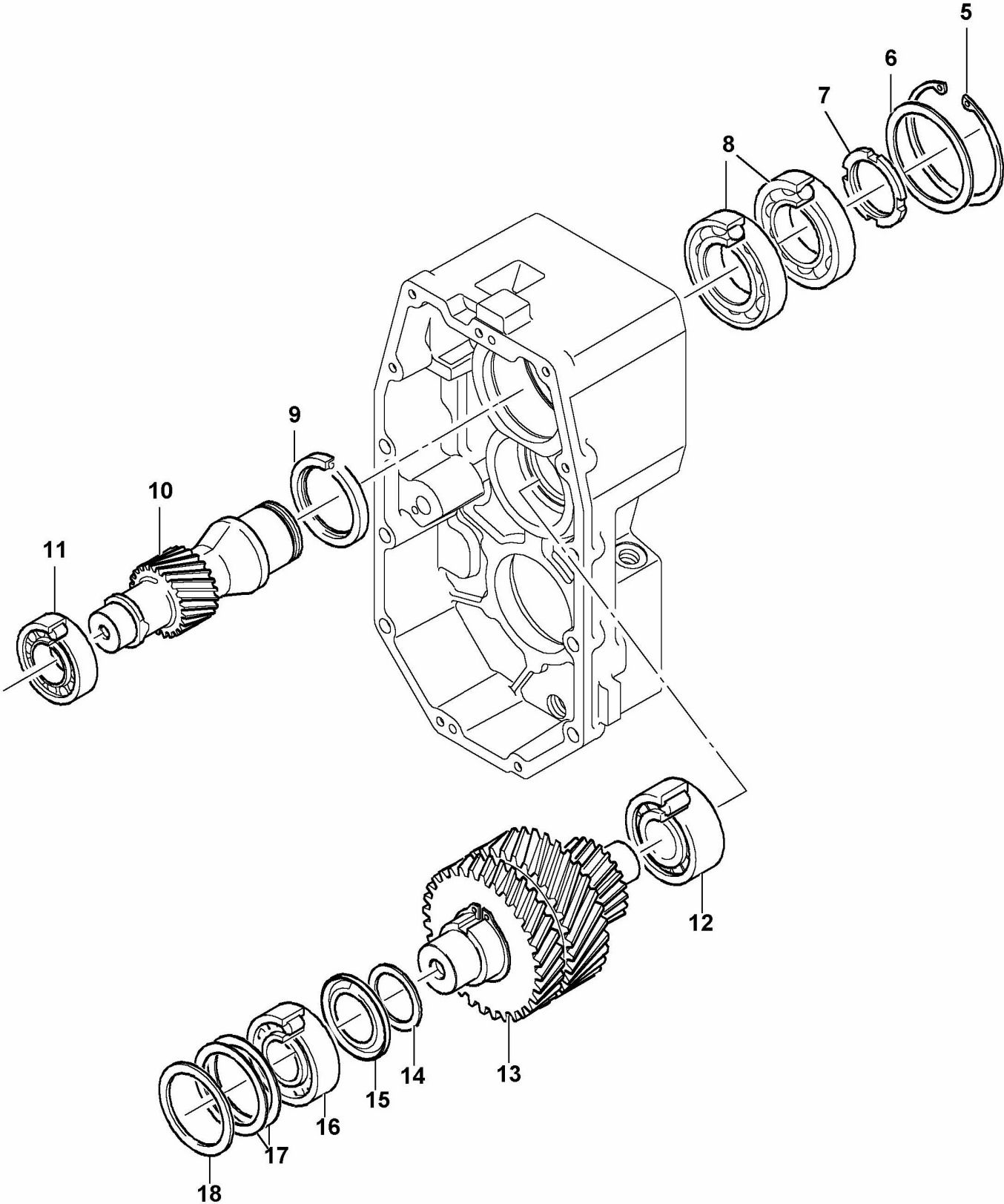
| REF | PART #   | QTY | DESCRIPTION                           | SEE PAGE |
|-----|----------|-----|---------------------------------------|----------|
| --- | 50502-AX |     | TIM 16 GEARBOX COMPLETE               |          |
| 1   | 7325.045 | 1   | Dipstick L=620                        |          |
| 3   | 1750.793 | 1   | Pipe saddle D22X20                    |          |
| 5   | 1060.014 | 1   | Hex. nut M8, 10 934                   |          |
| 6   | 1010.101 | 1   | Hexagon screw M8x20, 10.9 933         |          |
| 7   | 1190.024 | 1   | Locking clip VSK 8,                   |          |
| 9   | 9801.536 | 1   | Housing                               |          |
| 10  | 1200.258 | 2   | Straight pin 10m6x28,                 |          |
| 11  | 7319.129 | 1   | Gasket 0.75                           |          |
| 12  | 9801.345 | 1   | Housing                               |          |
| 13  | 1190.015 | 11  | Locking clip VSK 10,                  |          |
| 14  | 1010.205 | 6   | Hexagon screw M10x50, 10.9 931        |          |
| 15  | 1180.525 | 1   | Seal ring A21x26x1.5, CU 7603         |          |
| 16  | 1040.125 | 1   | Screw plug R 1/2 " 908                |          |
| 17  | 1200.478 | 2   | Adapter sleeve 14x45,                 |          |
| 18  | 1170.725 | 1   | O-ring OR 210x4, 72NBR872             |          |
| 19  | 7331.036 | 14  | Pressure spring                       |          |
| 20  | 1010.252 | 3   | Hexagon screw M10x110, 10.9 931       |          |
| 21  | 1190.015 | 2   | Locking clip VSK 10,                  |          |
| 22  | 1180.541 | 1   | Seal ring A27x32x2, CU 7603           |          |
| 23  | 7323.025 | 1   | Screw plug R 3/4", 5.8 MIT MAGNET     |          |
| 25  | 7341.112 | 1   | Pipe compl                            |          |
| 26  | 1010.210 | 4   | Hexagon screw M10x60, 10.9 931        |          |
| 27  | 1040.115 | 1   | Screw plug M10x1, 5.8 908             |          |
| 28  | 1180.505 | 1   | Seal ring A10x13.5x1, CU 7603         |          |
| 29  | 1250.621 | 1   | 90 deg. Elbow IA 1/2"                 |          |
| 30  | 1250.015 | 1   | Breather R 1/2 "                      |          |
| 31  | 1750.659 | 1   | 90 deg. Elbow IA 3/4"x1/2"            |          |
| 32  | 1040.174 | 1   | Screw plug 3/4" 5.8 909               |          |
| 33  | 9816.065 | 1   | Shifting rod                          |          |
| 34  | 1060.003 | 1   | Hex. nut M14x1.5, 10 934              |          |
| 35  | 9809.078 | 1   | Shifting lever                        |          |
| 37  | 9809.107 | 1   | Shifting lever compl                  |          |
| 38  | 7311.111 | 1   | Spacer bush                           |          |
| 39  | 7316.048 | 1   | Washer                                |          |
| 40  | 1010.219 | 1   | Hexagon screw M8x30, 10.9 933         |          |
| 41  | 1020.113 | 1   | Allen screw M8x16, 8.8 VP n.TI-58 912 |          |
| 42  | 7316.057 | 1   | SCHEIBE                               |          |
| 43  | 7313.012 | 6   | Holding plate Hexagon screw           |          |
| 44  | 7148.044 | 1   | Shift cylinder compl                  |          |
| 45  | 1010.226 | 2   | Locking clip M10x150, 10.9 931        |          |
| 46  | 9880.108 | 1   | Adjusting kit Hub 27                  |          |
| 47  | 1010.242 | 2   | Washer M10x40, 10.9 931               |          |
| 48  | 1190.015 | 2   | Screw plug VSK 10,                    |          |
| 49  | 2108.049 | 1   | Seal ring s=1,0                       |          |
| 49  | 7315.169 |     | SCHEIBE n.Bed.                        |          |
| 50  | 1040.105 | 1   | Type plate                            |          |
| 51  | 1180.503 | 2   | Pin                                   |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 16 - SINGLE MOTOR GEARBOX

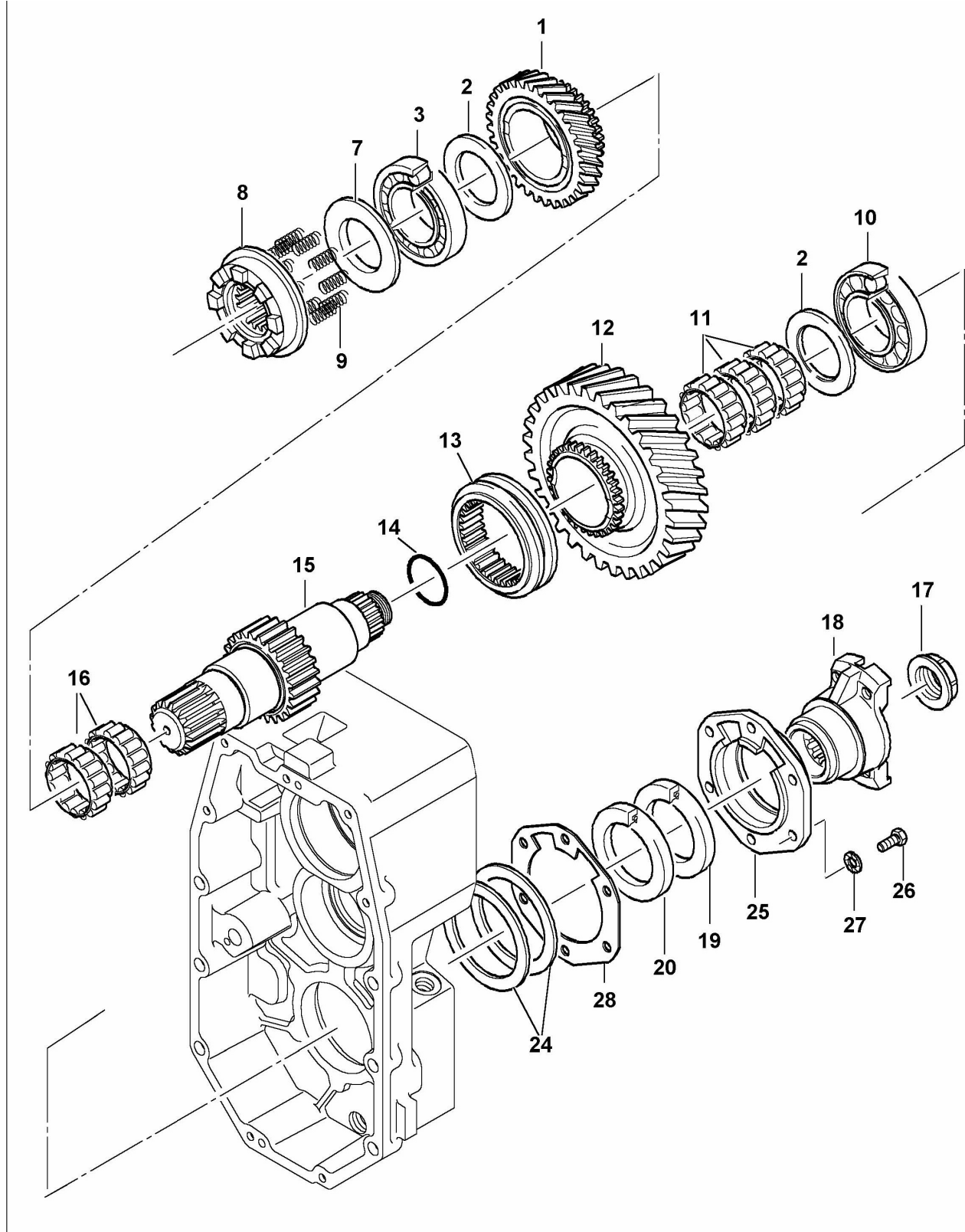
| REF | PART #   | QTY |   | DESCRIPTION                             | SEE PAGE |
|-----|----------|-----|---|-----------------------------------------|----------|
| 1   | ---      |     |   |                                         |          |
| 2   | ---      |     |   |                                         |          |
| 3   | ---      |     |   |                                         |          |
| 4   | ---      |     |   |                                         |          |
| 5   | 1220.802 | 1   |   | Seeger-ring 120x4 472                   |          |
| 6   | 1210.125 | 1   |   | Supporting washer SS 100x120x3.5        |          |
| 7   | 7329.093 | 1   |   | Groove nut M65x1.5                      |          |
| 8   | 1130.579 | 2   |   | Taper-rolling bearing 7213 BECB         |          |
| 9   | 1160.220 | 1   |   | Oil seal 80x110x10 BA                   |          |
| 10  | 9805.312 | 1   |   | Drive pinion Z=18                       |          |
| 11  | 1130.045 | 1   |   | Cylinder roller bearing NJ2209 EC/C3/J  |          |
| 12  | 1130.058 | 1   |   | Cylinder roller bearing NJK 2309 C3 NTN |          |
| 13  | 2205.132 | 1   |   | Gear block Z=15/37/37                   |          |
| 14  | 1210.121 | 1   |   | Supporting washer SS 55x68x3            |          |
| 15  | 1180.760 | 1   |   | Nilos-ring NUP2211AV                    |          |
| 16  | 1130.049 | 1   |   | Cylinder roller bearing NJ 2211 EC3     |          |
| 17  | 2108.013 | 1   | □ | Adjusting kit 1 s=1,0 / 0,5 / 0,3 / 3,5 |          |
| 17  | 1210.229 |     |   | Seeger washer PS 80x100x1.0             |          |
| 17  | 1210.228 |     |   | Seeger washer PS 80x100x0.5             |          |
| 17  | 1210.267 |     |   | Seeger washer PS 80x100x0.3             |          |
| 18  | 1210.119 | 1   |   | Supporting washer SS 80x100x3.5         |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



## TIM 16 - SINGLE MOTOR GEARBOX

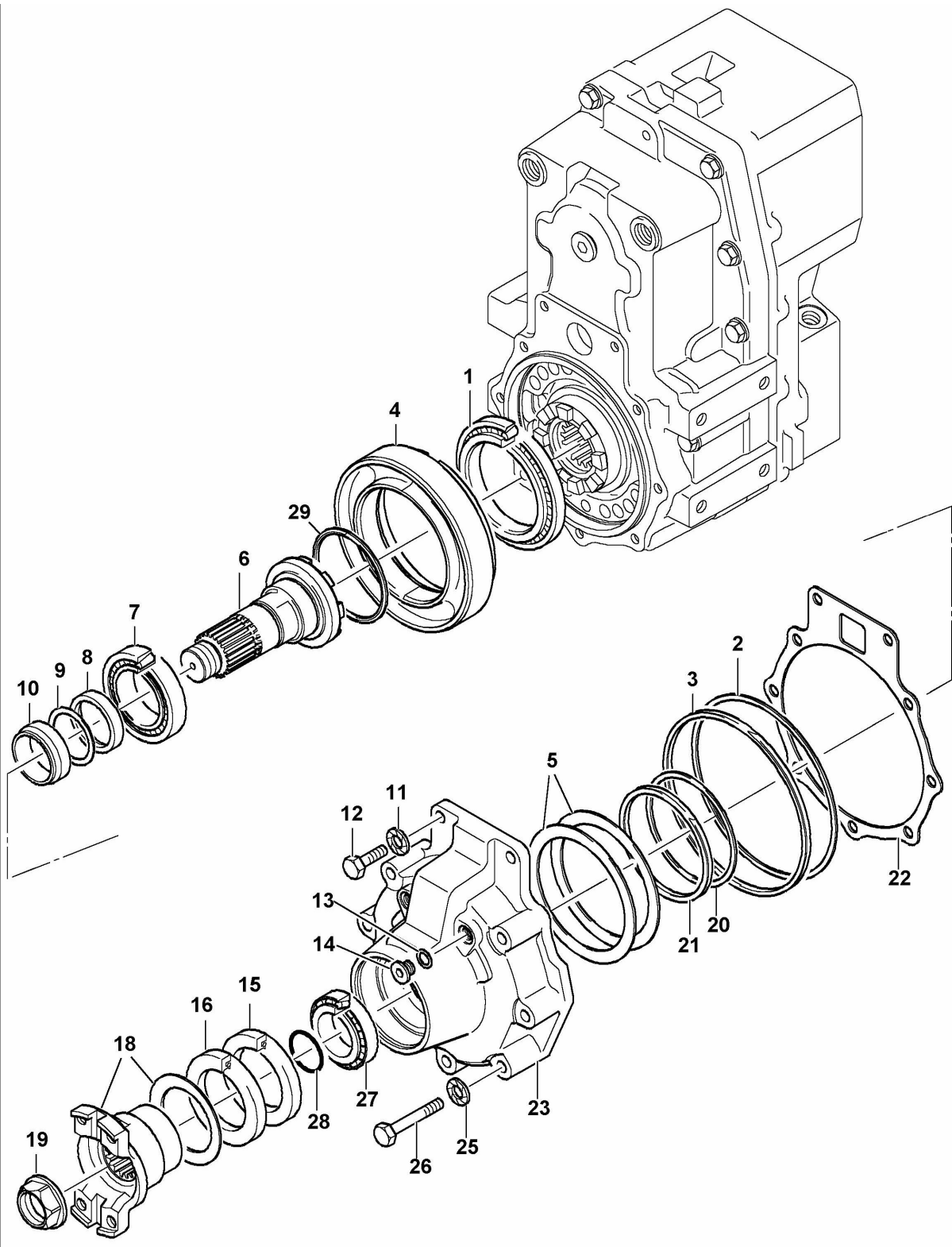
| REF | PART #   | QTY | DESCRIPTION                                         | SEE PAGE |
|-----|----------|-----|-----------------------------------------------------|----------|
| 1   | 9804.292 | 1   | Gear Z=34                                           |          |
| 2   | 7315.060 | 2   | Washer                                              |          |
| 3   | 1110.119 | 1   | Tapered-roller bearing 30 213                       |          |
| 4   | ---      |     |                                                     |          |
| 5   | ---      |     |                                                     |          |
| 6   | ---      |     |                                                     |          |
| 7   | 7315.168 | 1   | Washer                                              |          |
| 8   | 9813.072 | 1   | Shifting sleeve                                     |          |
| 9   | 7331.036 | 10  | Pressure spring                                     |          |
| 10  | 1110.014 | 1   | Tapered-roller bearing D60XD110X29.75               |          |
| 11  | 1130.272 | 3   | Needle roller cages K75X83X23 2S                    |          |
| 12  | 9804.440 | 1   | Gear Z=43                                           |          |
| 13  | 9813.135 | 1   | Shifting sleeve                                     |          |
| 14  | 1170.090 | 1   | O-ring OR 45x4.5, 72NBR872                          |          |
| 15  | 7222.034 | 1   | Shaft                                               |          |
| 16  | 1130.272 | 2   | Needle roller cages K75X83X23 2S                    |          |
| 17  | 7329.057 | 1   | Nut M40x1.5                                         |          |
| 18  | 7521.150 | 1   | Cardan flange                                       |          |
| 19  | 1160.217 | 1   | Oil seal 80x100x10 BASL                             |          |
| 20  | 1160.121 | 1   | Oil seal 80x100x10 BA                               |          |
| 21  | ---      |     |                                                     |          |
| 22  | ---      |     |                                                     |          |
| 23  | ---      |     |                                                     |          |
| 24  | 2108.021 | 1   | □ Adjusting kit s=1,0 / 0,5 / 0,9 / 0,8 / 0,7 / 0,6 |          |
| 24  | 1210.432 |     | Seeger washer n.Bed. 95x115x1,0                     |          |
| 24  | 1210.433 |     | Seeger washer n.Bed. 95x115x0,5                     |          |
| 24  | 7317.049 |     | Adjusting washer n.Bed. 95x115x0,9                  |          |
| 24  | 7317.096 |     | Adjusting washer n.Bed. 95x115x0,8                  |          |
| 24  | 7317.097 |     | Adjusting washer n.Bed. 95x115x0,7                  |          |
| 24  | 7317.098 |     | Adjusting washer n.Bed. 95x115x0,6                  |          |
| 25  | 7301.029 | 1   | Cover                                               |          |
| 26  | 1010.201 | 6   | Hexagon screw M10x25, 10.9 933                      |          |
| 27  | 1190.015 | 6   | Locking clip VSK 10, FEDERSTAHL DACROM              |          |
| 28  | 7319.033 | 1   | Gasket 0.5 stark, AFM31                             |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 16 - SINGLE MOTOR GEARBOX

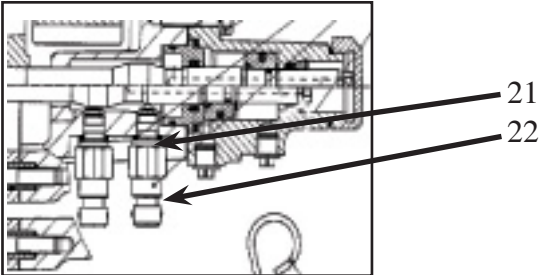
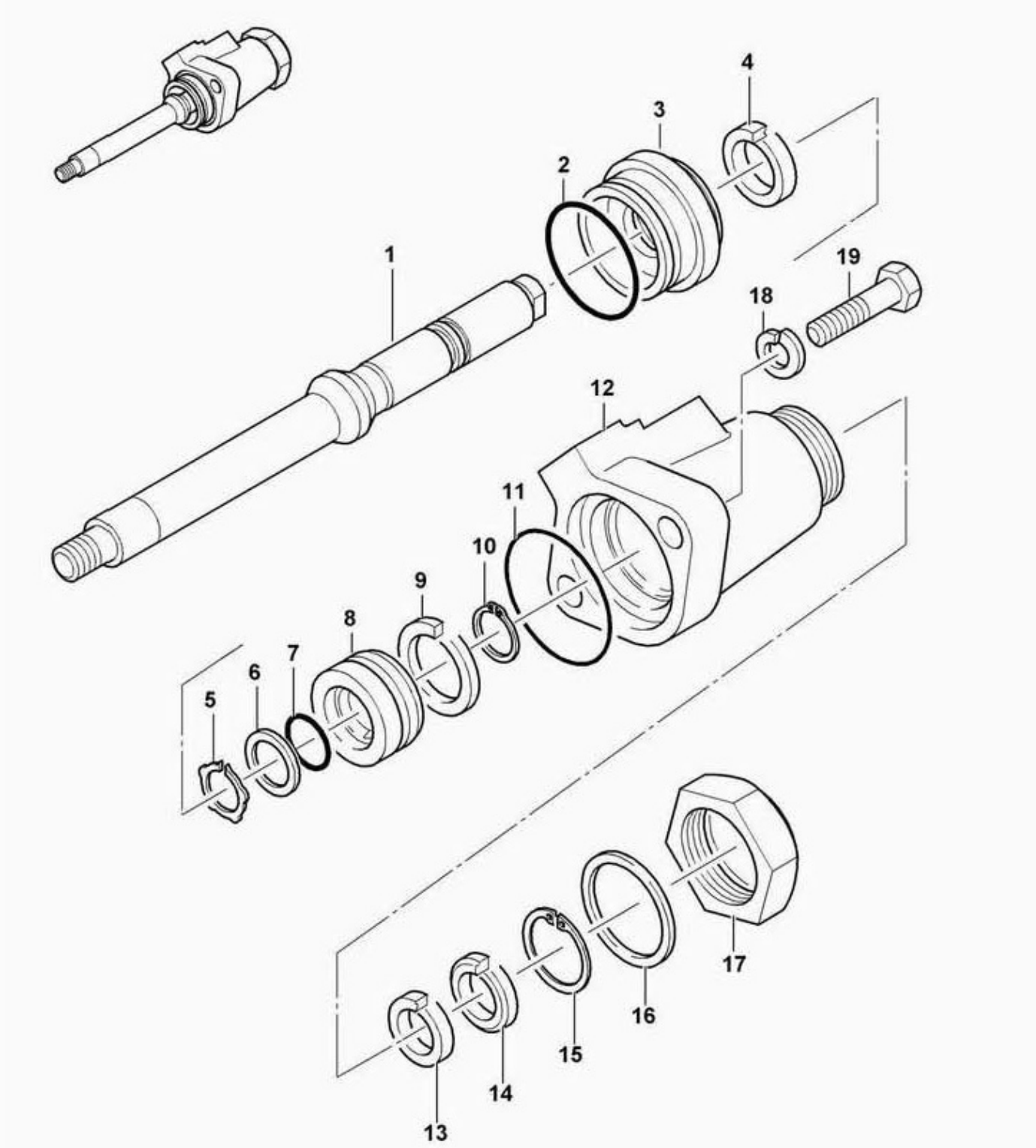
| REF | PART #   | QTY |   | DESCRIPTION                                                 | SEE PAGE |
|-----|----------|-----|---|-------------------------------------------------------------|----------|
| 1   | 1110.175 | 1   |   | Tapered-roller bearing 37431A/37625, TIMKEN                 |          |
| 2   | 1180.765 | 1   |   | Support washer SU 227x215x2.5P,                             |          |
| 3   | 1180.756 | 1   |   | Quad-ring 4446-366Y                                         |          |
| 4   | 5252.071 | 1   |   | Piston                                                      |          |
| 5   | 2108.011 | 1   | □ | Adjusting kit s=1,0 / 0,5                                   |          |
| 5   | 1210.426 |     |   | Seeger washer n.B. 140x170x1,0                              |          |
| 5   | 1210.427 |     |   | Seeger washer n.B. 140x170x0,5                              |          |
| 6   | 7222.020 | 1   |   | Driven shaft                                                |          |
| 7   | 1110.004 | 1   |   | Tapered-roller bearing 32014X                               |          |
| 8   | 7315.050 | 1   |   | Washer                                                      |          |
| 9   | 7317.050 | 2   | □ | Adjusting kit s=0,5/0,6/0,7/0,8/0,9/1,0/1,3/1,4/1,5/1,6/1,7 |          |
| 9   | 7317.209 |     |   | Adjusting washer n.Bed. s=0,5                               |          |
| 9   | 7317.210 |     |   | Adjusting washer n.Bed. s=0,6                               |          |
| 9   | 7317.211 |     |   | Adjusting washer n.Bed. s=0,7                               |          |
| 9   | 7317.212 |     |   | Adjusting washer n.Bed. s=0,8                               |          |
| 9   | 7317.213 |     |   | Adjusting washer n.Bed. s=0,9                               |          |
| 9   | 7317.214 |     |   | Adjusting washer n.Bed. s=1,0                               |          |
| 9   | 7317.215 |     |   | Adjusting washer n.Bed. s=1,3                               |          |
| 9   | 7317.216 |     |   | Adjusting washer n.Bed. s=1,4                               |          |
| 9   | 7317.217 |     |   | Adjusting washer n.Bed. s=1,5                               |          |
| 9   | 7317.218 |     |   | Adjusting washer n.Bed. s=1,6                               |          |
| 9   | 7317.219 |     |   | Adjusting washer n.Bed. s=1,7                               |          |
| 10  | 7311.079 | 1   |   | Spacer bush                                                 |          |
| 11  | 1190.017 | 2   |   | Locking clip VSK 12,                                        |          |
| 12  | 1510.320 | 2   |   | Hexagon screw M12x40, 10.9 933                              |          |
| 13  | 1180.503 | 1   |   | Seal ring 14x18x1.5, CU 7603                                |          |
| 14  | 1040.105 | 1   |   | Screw plug M14x1.5, 8.8 908                                 |          |
| 15  | 1160.214 | 1   |   | Oil seal 85x110x12 BA                                       |          |
| 16  | 1160.215 | 1   |   | Oil seal 85x110x12 BASL                                     |          |
| 17  | ---      |     |   |                                                             |          |
| 18  | 2107.127 | 1   |   | Drive shaft flange                                          |          |
| 19  | 7329.057 | 1   |   | Nut M40x1.5                                                 |          |
| 20  | 1180.766 | 1   |   | Support washer SG 128x140x2.5P,                             |          |
| 21  | 1180.754 | 1   |   | Quad-ring 4428-366Y, NBR                                    |          |
| 22  | 7319.030 | 1   |   | Gasket 0.5 stark, AFM31                                     |          |
| 23  | 7504.045 | 1   |   | Housing                                                     |          |
| 24  | ---      |     |   |                                                             |          |
| 25  | 1190.017 | 7   |   | Locking clip VSK 12,                                        |          |
| 26  | 1510.338 | 7   |   | Hexagon screw M12x80, 10.9 931                              |          |
| 27  | 1110.071 | 1   |   | Tapered-roller bearing 32011X                               |          |
| 28  | 1170.090 | 1   |   | O-ring OR 45x4.5, 72NBR872                                  |          |
| 29  | 1180.763 | 1   |   | Scraper ring D105xD115x7x10, NBR                            |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.





## TIM 16 - SINGLE MOTOR GEARBOX

### Shift Cylinder

| REF | PART #   | QTY | DESCRIPTION                                      | SEE PAGE |
|-----|----------|-----|--------------------------------------------------|----------|
| --- | 9880.088 |     | <input type="checkbox"/> Shift cylinder Complete |          |
| 1   | 9816.117 | 1   | Shifting rod                                     |          |
| 2   | 1170.005 | 1   | O-ring OR 42x3, 72NBR872                         |          |
| 3   | 7307.097 | 1   | Eccentric ring                                   |          |
| 4   | 1180.724 | 1   | Shaft seal 22x30x6,Q3 2019 Z5048                 |          |
| 5   | 1220.050 | 1   | Seeger-k-ring AK 20x1.2 983                      |          |
| 6   | 7315.090 | 1   | Washer                                           |          |
| 7   | 1170.092 | 1   | O-ring OR 15x3, 72NBR872                         |          |
| 8   | 5252.097 | 1   | Piston                                           |          |
| 9   | 1180.767 | 1   | Shaft seal 40x29x4.2, KR 0040 00701              |          |
| 10  | 1220.053 | 1   | Seeger-ring AS 20x1.75 471                       |          |
| 11  | 1170.013 | 1   | O-ring OR 42x4.5, 72NBR872                       |          |
| 12  | 5263.086 | 1   | Cylinder                                         |          |
| 13  | 1180.643 | 1   | Shaft seal 20x28x6,Q3                            |          |
| 14  | 7307.080 | 1   | Eccentric ring                                   |          |
| 15  | 1220.611 | 1   | Seeger-ring 30x1.2 472                           |          |
| 16  | 1180.526 | 1   | Seal ring A40x47x2, CU 7603                      |          |
| 17  | 7302.003 | 1   | Cover                                            |          |
| 18  | 1190.015 | 2   | Locking clip VSK 10,                             |          |
| 19  | 1010.242 | 2   | Hexagon screw M10x40, 10.9                       |          |
| 21  | 2108.003 | 2   | Adjusting kit                                    |          |
| 22  | 54093-AX | 2   | SWITCH, NAF GEARBOX                              |          |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

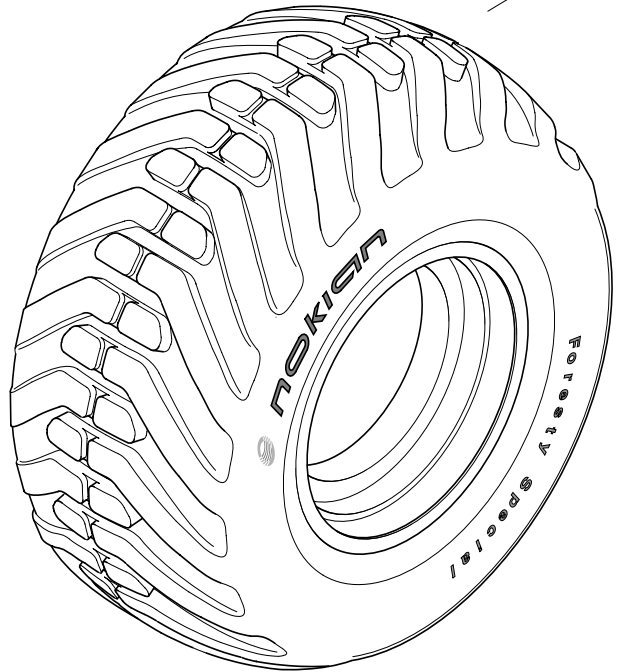
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# ***Section AX-7***

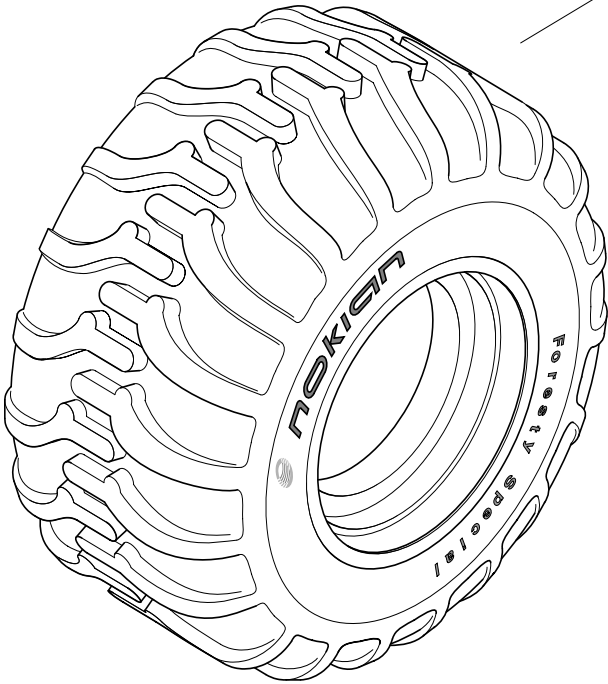
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## ***Axles, Gearboxes & Wheels - Tires and Wheels***

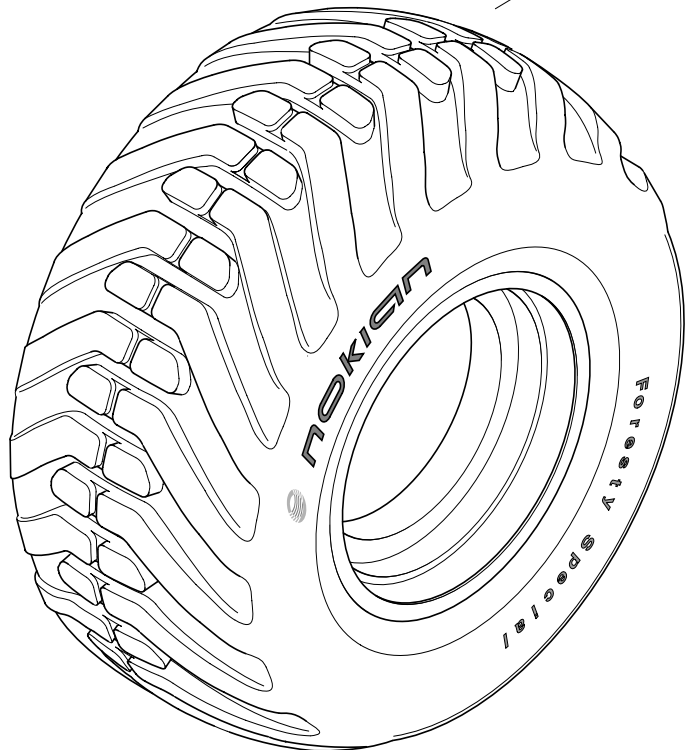
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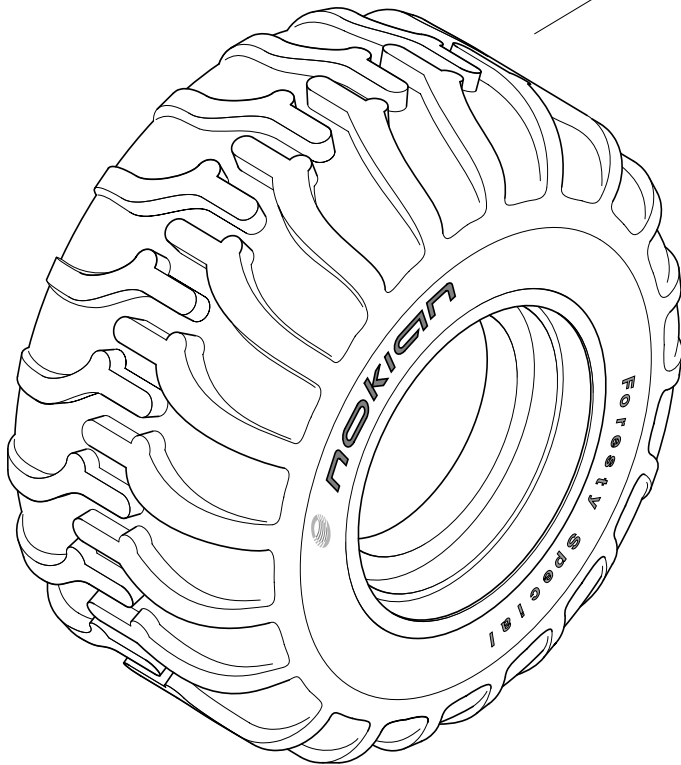
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4



3



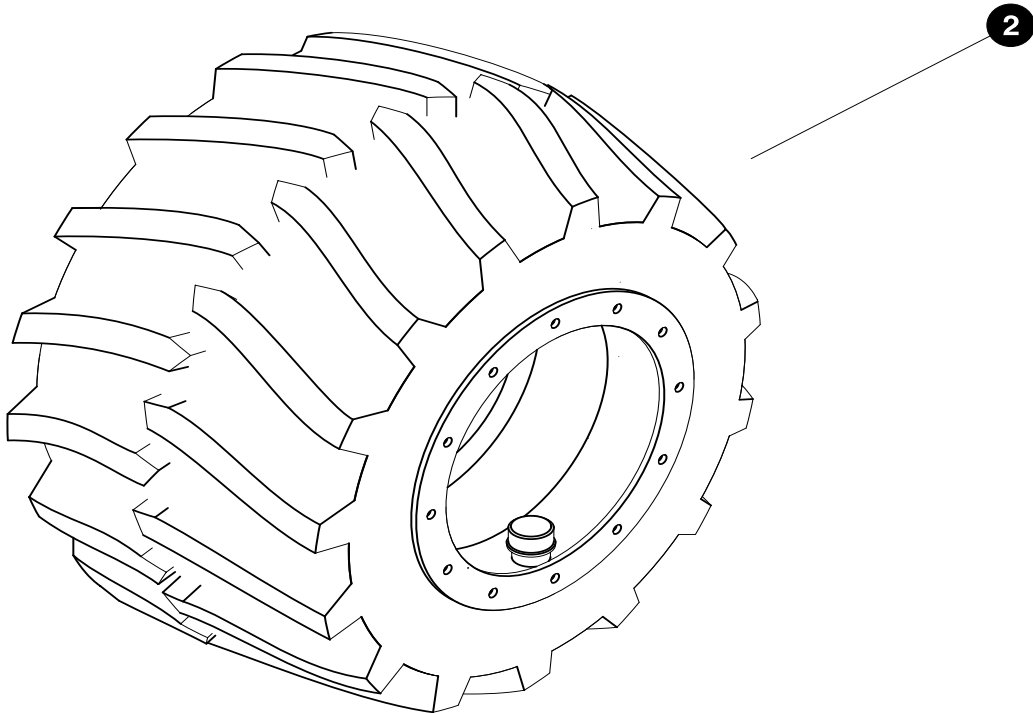
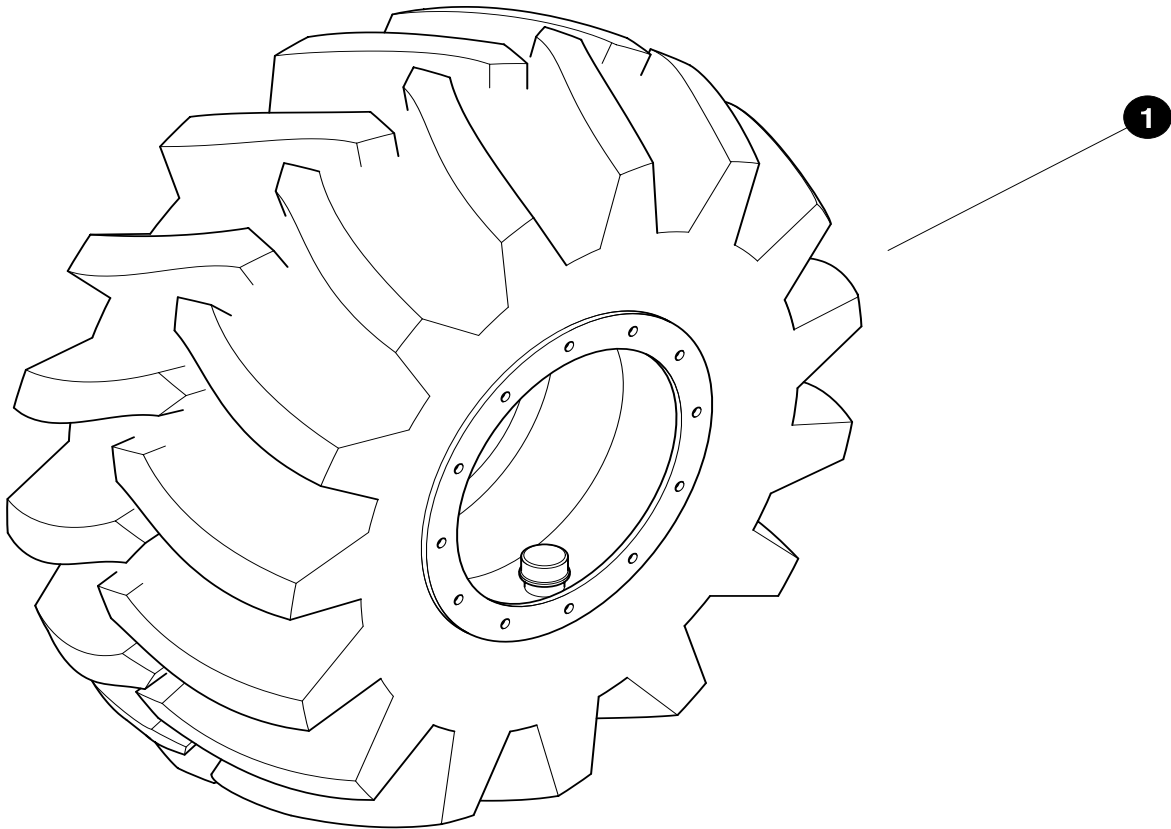
## WHEEL ASSEMBLIES (NOKIAN)

| REF | PART #     | QTY | DESCRIPTION                                                                                | SEE PAGE |
|-----|------------|-----|--------------------------------------------------------------------------------------------|----------|
| 1   | 20006-AX   |     | <input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - LH ( <i>Aggressive tread</i> )     |          |
| 1   | 20007-AX   |     | <input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - RH ( <i>Aggressive tread</i> )     |          |
| -   | ---        | 1   | TIRE - 700/55-26.5"/20 ply ( <i>Nokian</i> ) (T486091)                                     |          |
| -   | 21137-AX   | 1   | RIM, wheel - 750/55-26.5"                                                                  |          |
| -   | ---        | 1   | PLUG, black pipe - valve stem cover (T499985)                                              |          |
| -   | ---        | 1   | TUBE, tire - 700/55-26.5" (3550167)                                                        |          |
| 2   | 19053-AX   |     | <input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - LH ( <i>Non-aggressive tread</i> ) |          |
| 2   | 20005-AX   |     | <input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - RH ( <i>Non-aggressive tread</i> ) |          |
| -   | ---        | 1   | TIRE - 700/55-26.5"/20 ply ( <i>Nokian</i> ) (T486095)                                     |          |
| -   | 21137-AX   | 1   | RIM, wheel - 750/55-26.5"                                                                  |          |
| -   | ---        | 1   | PLUG, black pipe - valve stem cover (T499985)                                              |          |
| -   | ---        | 1   | TUBE, tire - 700/55-26.5" (3550167)                                                        |          |
| 3   | 23673-L-AX |     | <input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - LH ( <i>Aggressive tread</i> )     |          |
| 3   | 23673-R-AX |     | <input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - RH ( <i>Aggressive tread</i> )     |          |
| -   | 23674-AX   | 1   | TIRE - 750/55-26.5"/20 ply ( <i>Nokian</i> )( <i>Aggressive tread</i> )                    |          |
| -   | 21137-AX   | 1   | RIM, wheel - 750/55-26.5"                                                                  |          |
| -   | ---        | 1   | PLUG, black pipe - valve stem cover (T499985)                                              |          |
| -   | 20313-AX   | 1   | TUBE, tire - 750/55-26.5"                                                                  |          |
| 4   | 20310-L-AX |     | <input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - LH ( <i>Non-aggressive tread</i> ) |          |
| 4   | 20310-R-AX |     | <input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - RH ( <i>Non-aggressive tread</i> ) |          |
| -   | 20312-AX   | 1   | TIRE - 750/55-26.5"/20 ply ( <i>Nokian</i> )( <i>Non-aggressive tread</i> )                |          |
| -   | 21137-AX   | 1   | RIM, wheel - 750/55-26.5"                                                                  |          |
| -   | ---        | 1   | PLUG, black pipe - valve stem cover (T499985)                                              |          |
| -   | 20313-AX   | 1   | TUBE, tire - 750/55-26.5"                                                                  |          |

☐ Kit or Assembly - includes all items indented underneath.

### **Note:**

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.



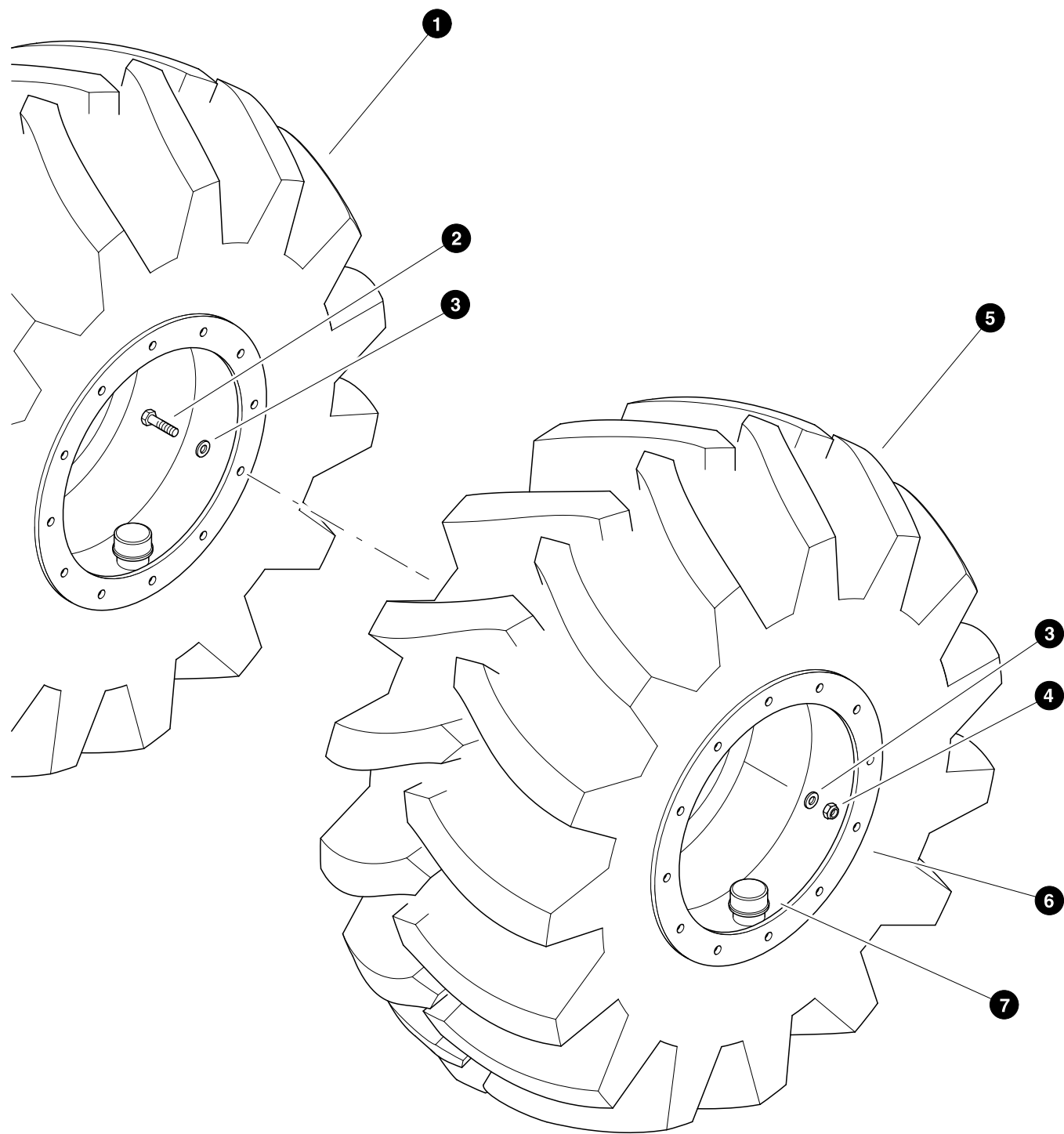
## WHEEL ASSEMBLIES (FIRESTONE)

| REF | PART #     | QTY |                          | DESCRIPTION                                                     | SEE PAGE |
|-----|------------|-----|--------------------------|-----------------------------------------------------------------|----------|
| 1   | 20915-L-AX |     | <input type="checkbox"/> | WHEEL ASSEMBLY, 28L-26 - LH <i>(With spacer for dual tires)</i> |          |
| 1   | 20915-R-AX |     | <input type="checkbox"/> | WHEEL ASSEMBLY, 28L-26 - RH <i>(With spacer for dual tires)</i> |          |
| -   | 19795-AX   | 1   |                          | TIRE/TUBE - 28L-26/14 ply <i>(Firestone)</i>                    |          |
| -   | 22409-AX   | 1   |                          | RIM, wheel - 28L-26 <i>(With spacer for dual tires)</i>         |          |
| -   | NSS        | 1   |                          | CAP, black pipe - vavle stem cover                              |          |
| -   | 19798-AX   | 1   |                          | TUBE, tire - 28L-26                                             |          |
| 2   | 19909-L-AX |     | <input type="checkbox"/> | WHEEL ASSEMBLY, 54 x 37" - LH (high floation)                   |          |
| 2   | 19909-R-AX |     | <input type="checkbox"/> | WHEEL ASSEMBLY, 54 x 37" - RH (high floation)                   |          |
| -   | 19791-AX   | 1   |                          | TIRE - 54 x 37"/12 ply <i>(Firestone)</i>                       |          |
| -   | 19803-AX   | 1   |                          | RIM, wheel - 54 x 37"                                           |          |
| -   | NSS        | 1   |                          | CAP, black pipe - vavle stem cover                              |          |

☐ Kit or Assembly - includes all items indented underneath.

**Note:**

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.





## WHEEL ASSEMBLIES

### (Dual Configuration - 28L-26 & 23.1-26 - 16 Wheels Total)

(Firestone dual tires)

| REF | PART #     | QTY |                                                                                   | DESCRIPTION                            | SEE PAGE |
|-----|------------|-----|-----------------------------------------------------------------------------------|----------------------------------------|----------|
| 1   | REF.       |     |  | WHEEL ASSEMBLY, 28L-26 - LH . . . . .  | AX-3-2   |
|     | REF.       |     |  | WHEEL ASSEMBLY, 28L-26 - RH . . . . .  | AX-3-2   |
| 2   | 10840-AX   | 96  |                                                                                   | BOLT - 3/4" x 3"                       |          |
| 3   | 15550-AX   | 192 |                                                                                   | WASHER, SAE flat - 3/4"                |          |
| 4   | 10817-AX   | 96  |                                                                                   | NUT, lock - 3/4"                       |          |
| --  | 19911-L-AX | 4   | <input type="checkbox"/>                                                          | WHEEL ASSEMBLY, 23.1-26 - LH           |          |
| --  | 19911-R-AX | 4   | <input type="checkbox"/>                                                          | WHEEL ASSEMBLY, 23.1-26 - RH           |          |
| 5   | 19800-AX   | 1   |                                                                                   | TIRE/TUBE - 23.1-26/14 ply (Firestone) |          |
| 6   | 19920-AX   | 1   |                                                                                   | RIM, wheel - 23.1-26                   |          |
| 7   | NSS        | 1   |                                                                                   | CAP, black pipe                        |          |



See referenced page for component or assembly breakdown.

☐ Kit or Assembly - includes all items indented underneath.

#### **Note:**

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.

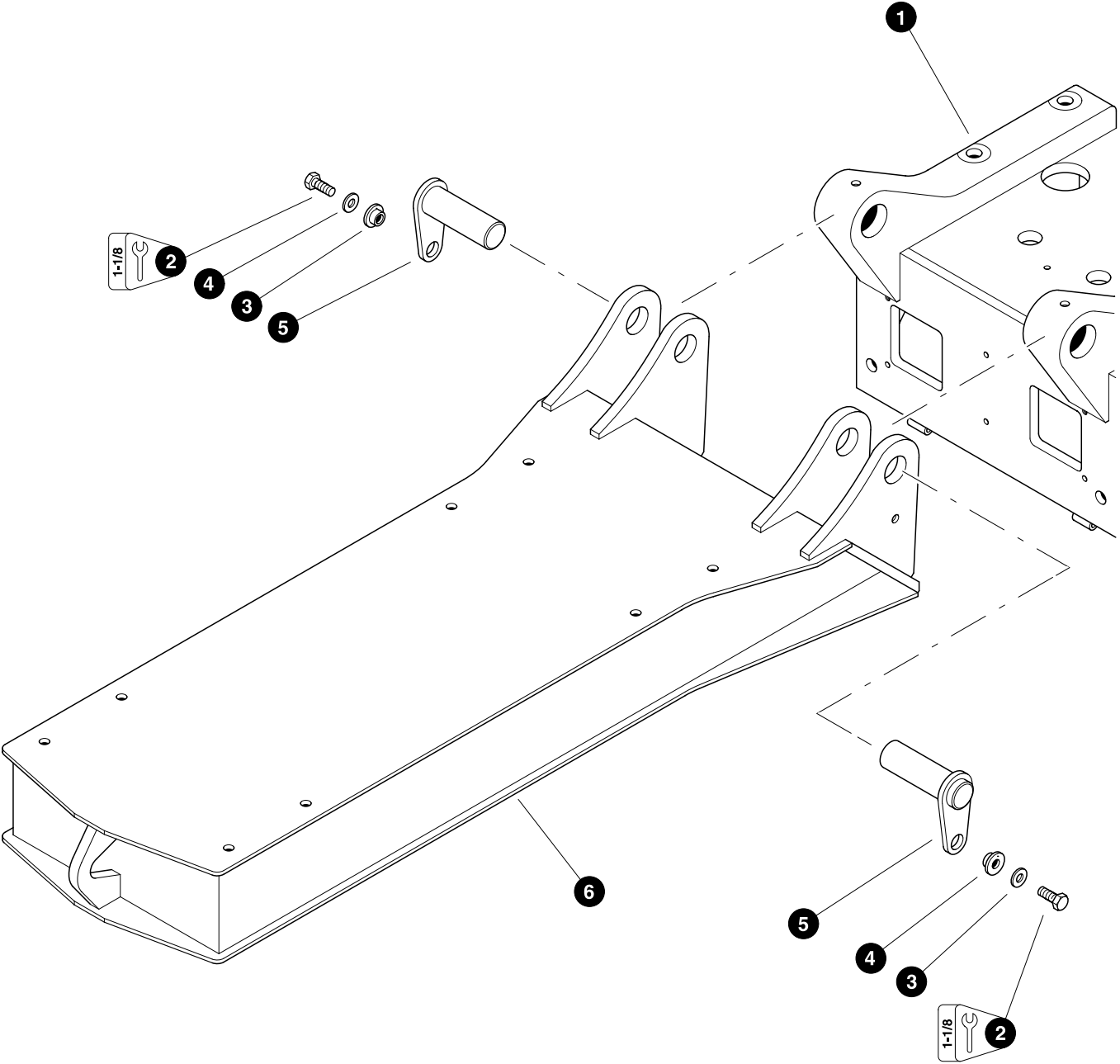
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# ***Section FB-1***

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## ***Bunks, Log Stakes & Headache Rack - Installation***

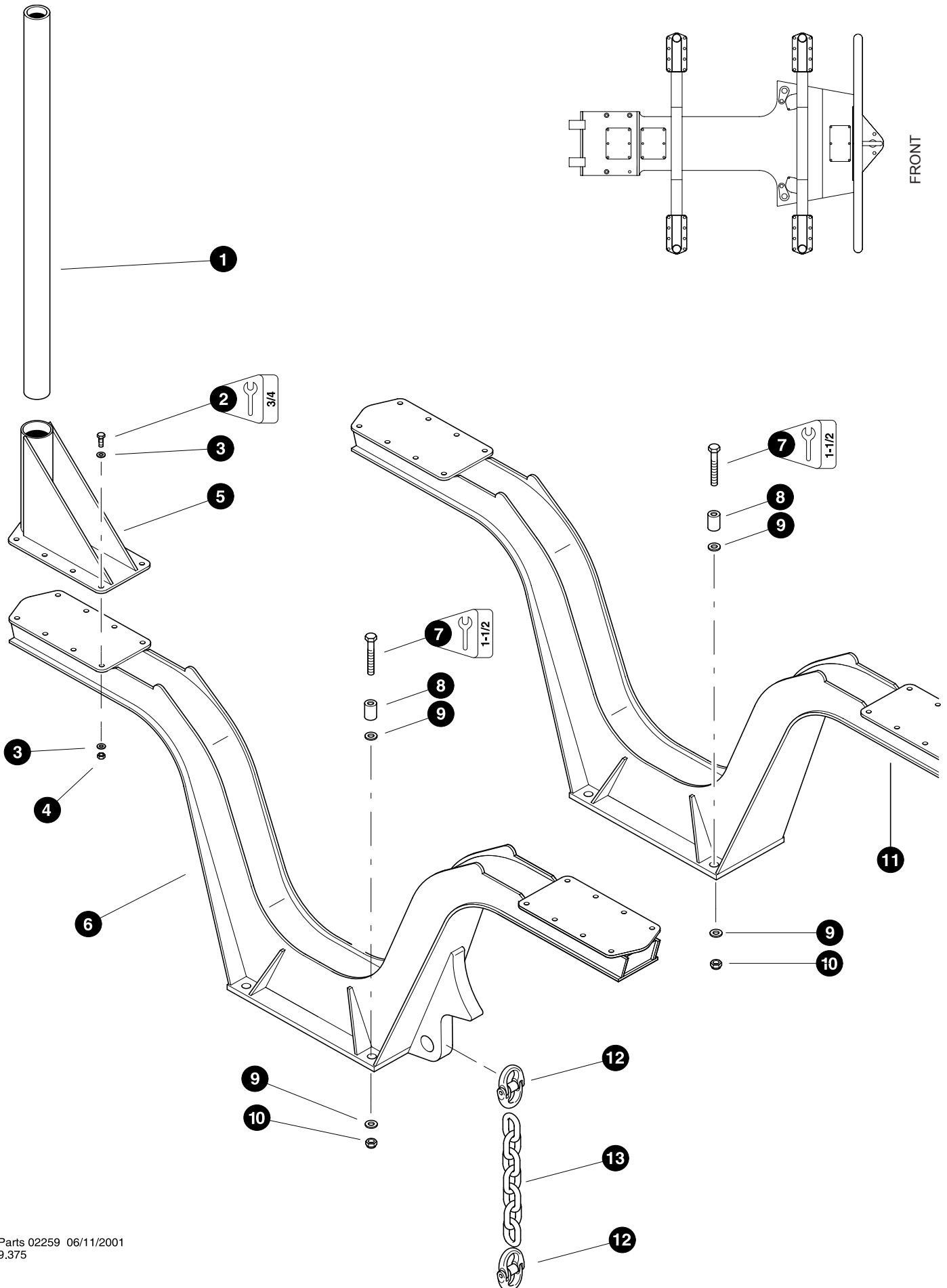


## FLOATING BUNK INSTALLATION (Typical)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                          | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|--------------------------------------|-------------|
| 1   | REF      | 1   |  | REAR FRAME WELDMENT .....            | FR-1        |
| 2   | 15549-FB | 2   |                                                                                   | BOLT - 3/4" x 2"                     |             |
| 3   | 18570-FB | 2   |                                                                                   | WASHER, pin retaining                |             |
| 4   | 15550-FB | 2   |                                                                                   | WASHER, SAE flat - 3/4"              |             |
| 5   | 23434-FB | 2   |                                                                                   | PIN, floating bunk - 2-1/2" x 7-7/8" |             |
| 6   | 13481-FB | 1   |                                                                                   | WELDMENT, FLOATING BUNK - FWD (2.5") |             |



See referenced page for component or assembly breakdown.



Parts 02259 06/11/2001  
9,375

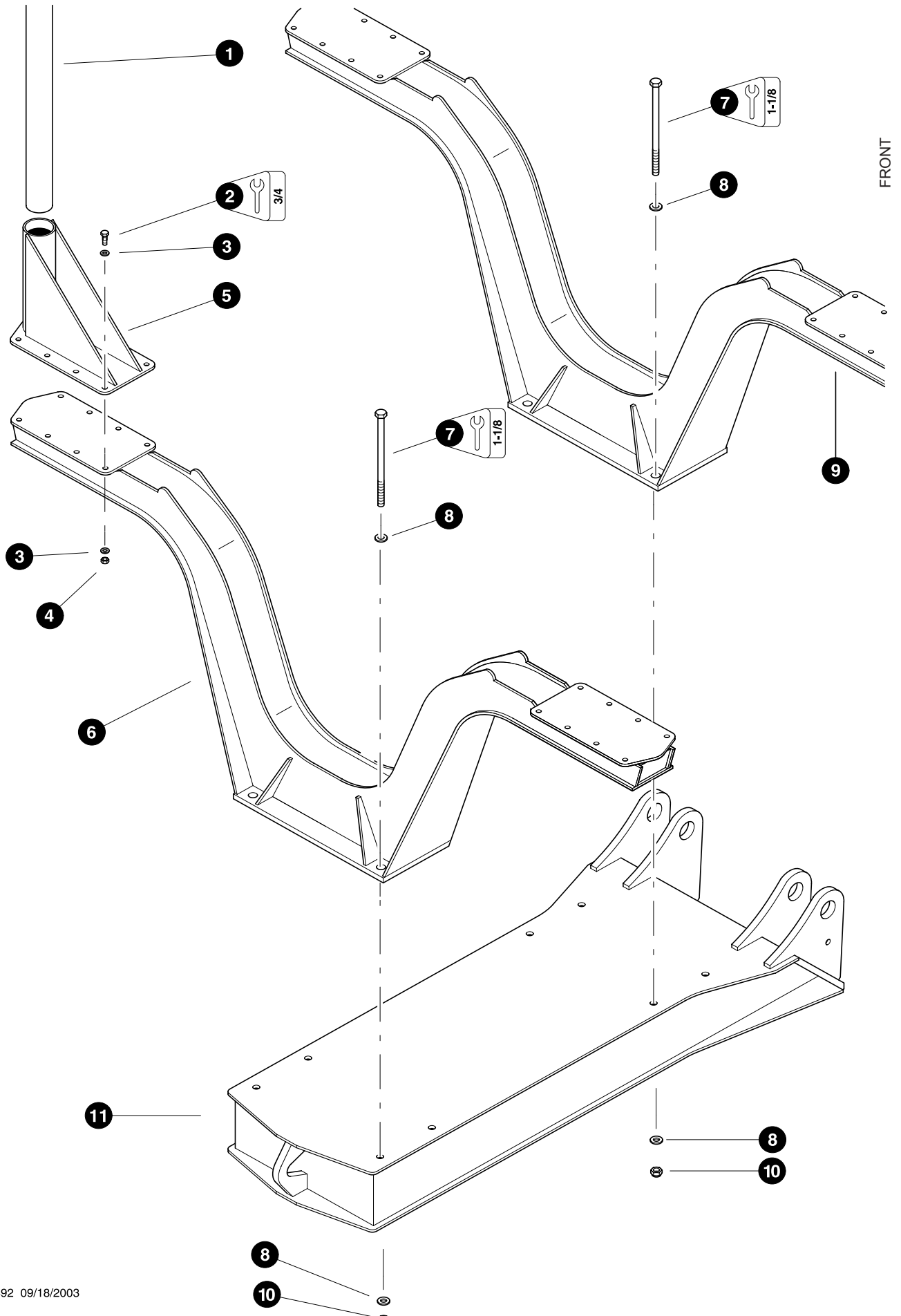
## LOG BUNK & STAKE INSTALLATION (Typical - Forwarder)

### (Rear Frame Installation)

| REF | PART #   | QTY | DESCRIPTION                                                                                                                   | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 21013-FB | 4   | TUBE, log stake                                                                                                               |             |
| 2   | 10736-FB | 24  | BOLT - 1/2" x 2"                                                                                                              |             |
| 3   | 15534-FB | 48  | WASHER, SAE flat - 1/2"                                                                                                       |             |
| 4   | 10815-FB | 24  | NUT, lock - 1/2"                                                                                                              |             |
| 5   | 80398-FB | 4   | WELDMENT, log stake pocket                                                                                                    |             |
| 6   | 50982-FB | 1   | BUNK, log bunk w/axle stops and 2" riser - <i>(Used on machines with Standard 700/50x26.5 or Optional 750/50x26.5 wheels)</i> |             |
| 7   | 50263-FB | 8   | BOLT - 1"X 5.5" <i>(Used when mounting log bunk to the rear frame)</i>                                                        |             |
| 8   | 12463-FB | 8   | SPACER, 1"                                                                                                                    |             |
| 9   | 18532-FB | 16  | WASHER, SAE flat - 1"                                                                                                         |             |
| 10  | 18253-FB | 16  | NUT, lock - 1"                                                                                                                |             |
| 11  | 50981-FB | 1   | BUNK, log bunk w/ 2" riser - <i>(Used on machines with Standard 700/50x26.5 or Optional 750/50x26.5 wheels)</i>               |             |
| 12  | 24416-FB | 4   | LINK, connecting - 3/4"                                                                                                       |             |
| 13  | 24442-FB | 2   | CHAIN, axle stop - 3/4" <i>(7 Links)</i>                                                                                      |             |

#### **Note:**

When ordering log bunk weldments, be sure to specify whether or not an axle stop is required.  
See illustration at left.





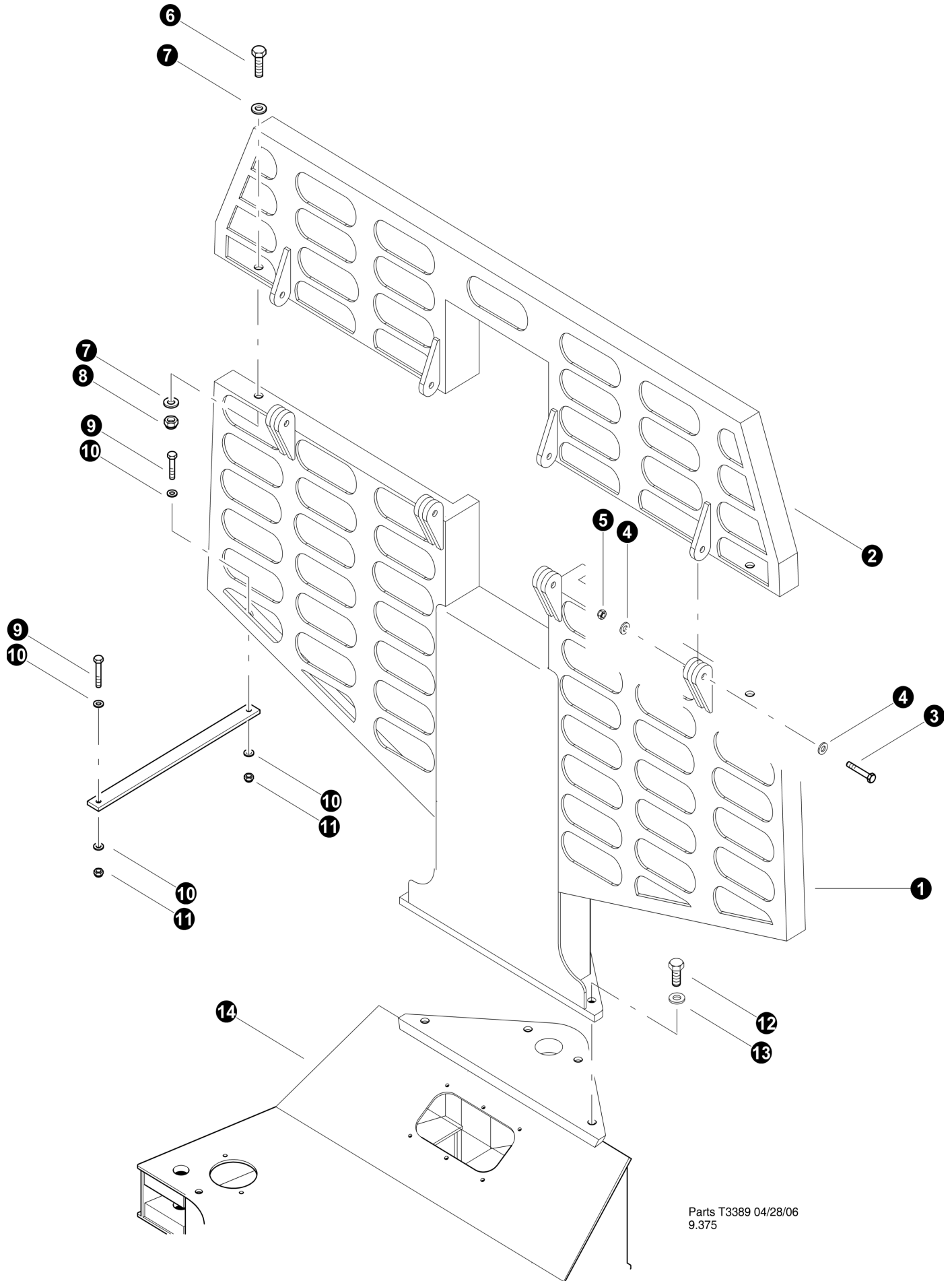
## LOG BUNK & STAKE INSTALLATION (Typical - Forwarder)

### (Floating Bunk Installation)

| REF | PART #   | QTY | DESCRIPTION                                                                                                 | SEE SECTION |
|-----|----------|-----|-------------------------------------------------------------------------------------------------------------|-------------|
| 1   | 21013-FB | 4   | TUBE, log stake                                                                                             |             |
| 2   | 10736-FB | 24  | BOLT - 1/2" x 2"                                                                                            |             |
| 3   | 15534-FB | 48  | WASHER, SAE flat - 1/2"                                                                                     |             |
| 4   | 10815-FB | 24  | NUT, lock - 1/2"                                                                                            |             |
| 5   | 80398-FB | 4   | WELDMENT, log stake pocket                                                                                  |             |
| 6   | 50981-FB | 3   | BUNK, log bunk - 28" <i>(Used on machines with<br/>Standard 700/50x26.5 or Optional 750/50x26.5 wheels)</i> |             |
| 7   | 20905-FB | 8   | BOLT - 3/4"X 12" <i>(Used when mounting log bunk<br/>to the floating bunk)</i>                              |             |
| 8   | 15550-FB | 16  | WASHER, SAE flat - 3/4"                                                                                     |             |
| 9   | 80742-FB | 2   | BUNK, log bunk - <i>(Used on machines with<br/>Standard 700/50x26.5 or Optional 750/50x26.5 wheels)</i>     |             |
| 10  | 10817-FB | 16  | NUT, lock - 3/4"                                                                                            |             |
| 11  | REF.     | 1   |  FLOATING BUNK ..... FB-1  |             |



See referenced page for component or assembly breakdown.



Parts T3389 04/28/06  
9.375

## HEADACHE RACK INSTALLATION

(Typical - Forwarder)  
(Machines built 030806 and after)

| REF | PART #    | QTY |   | DESCRIPTION                             | SEE SECTION |
|-----|-----------|-----|---|-----------------------------------------|-------------|
| -   | 52238-FB  | 1   | ☐ | HEADACHE RACK ASSY. - TF-830 STRAIGHT   |             |
| 1   | 52236-FB  | 1   |   | HEADACHE RACK BASE-REPAIR PART - STRT   |             |
| 2   | 52237-FB  | 1   |   | HEADACHE RACK TOP-REPAIR PART           |             |
| 3   | 10841-FB  | 4   |   | BOLT - .75" X 3.5"                      |             |
| 4   | 15550-FB  | 8   |   | WASHER, SAE FLAT - .75"                 |             |
| 5   | 10817-FB  | 4   |   | NUT, LOCK - 3/4                         |             |
| 6   | 15552-FB  | 2   |   | BOLT - 1" x 2-1/2"                      |             |
| 7   | 15579-FB  | 4   |   | WASHER, FLAT 1"                         |             |
| 8   | 18253-FB  | 2   |   | NUT, LOCK - 1"                          |             |
| 9   | 15526-FB  | 4   |   | BOLT - .625" X 2"                       |             |
| 10  | 10771-FB  | 8   |   | WASHER, SAE FLAT - .625"                |             |
| 11  | 10816-FB  | 4   |   | NUT, LOCK - .625"                       |             |
| 12  | 51989b-FB | 2   |   | BAR, STABILIZER - LOG RACK 830 SWEPT BK |             |
| 13  | 15552-FB  | 4   |   | BOLT - 1" x 2-1/2"                      |             |
| 14  | 15579-FB  | 4   |   | WASHER, FLAT 1"                         |             |
| 15  | REF.      | 1   | ☐ | REAR FRAME .....                        | FR-1        |

☐ Kit or Assembly - includes all items indented underneath.

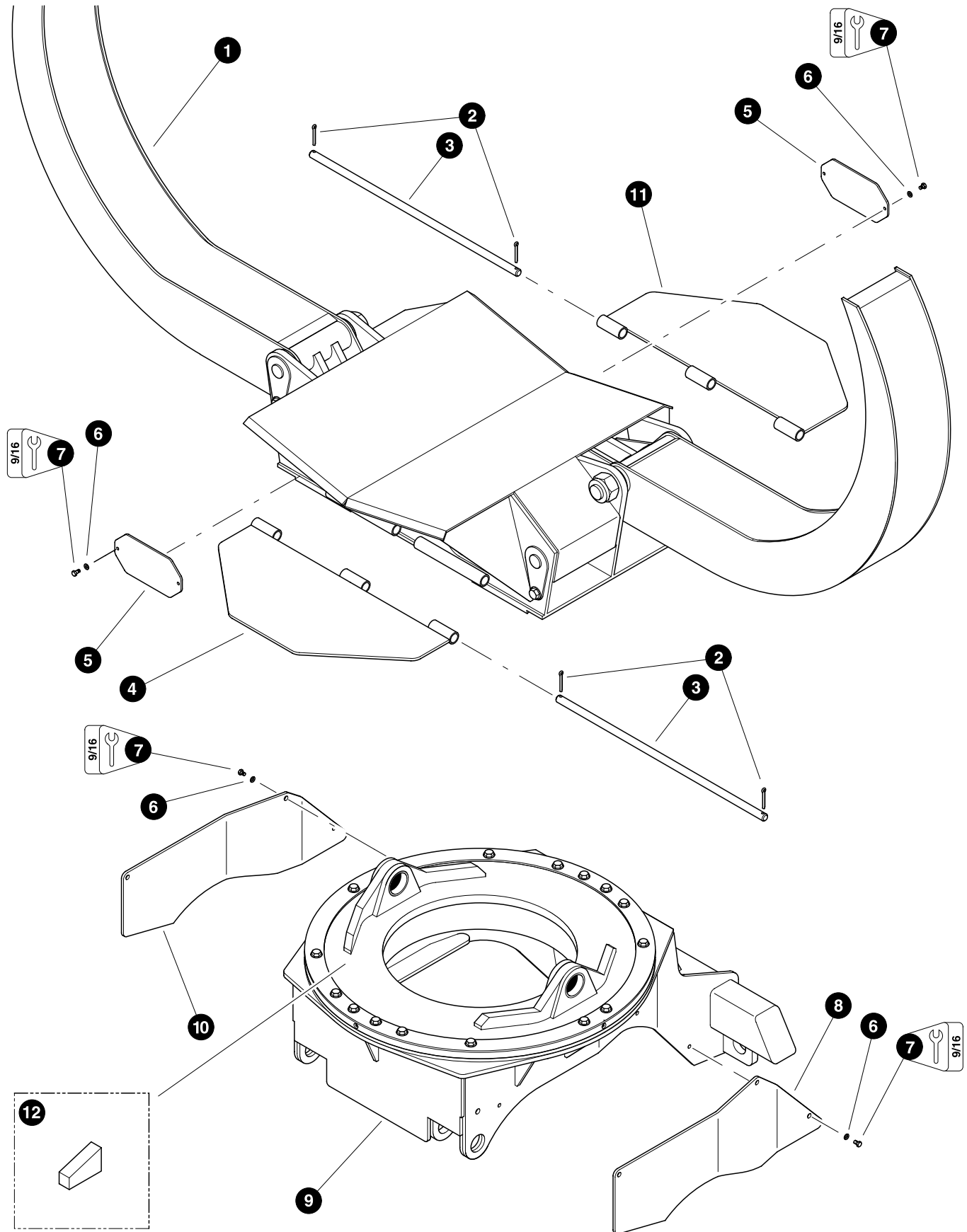
☐ See referenced page for component or assembly breakdown.

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# ***Section CB-1***

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***Clam Bunk -  
Structural***



Parts 01916 11/27/2000  
9.375

## CLAM BUNK ACCESS COVERS & GUARDS

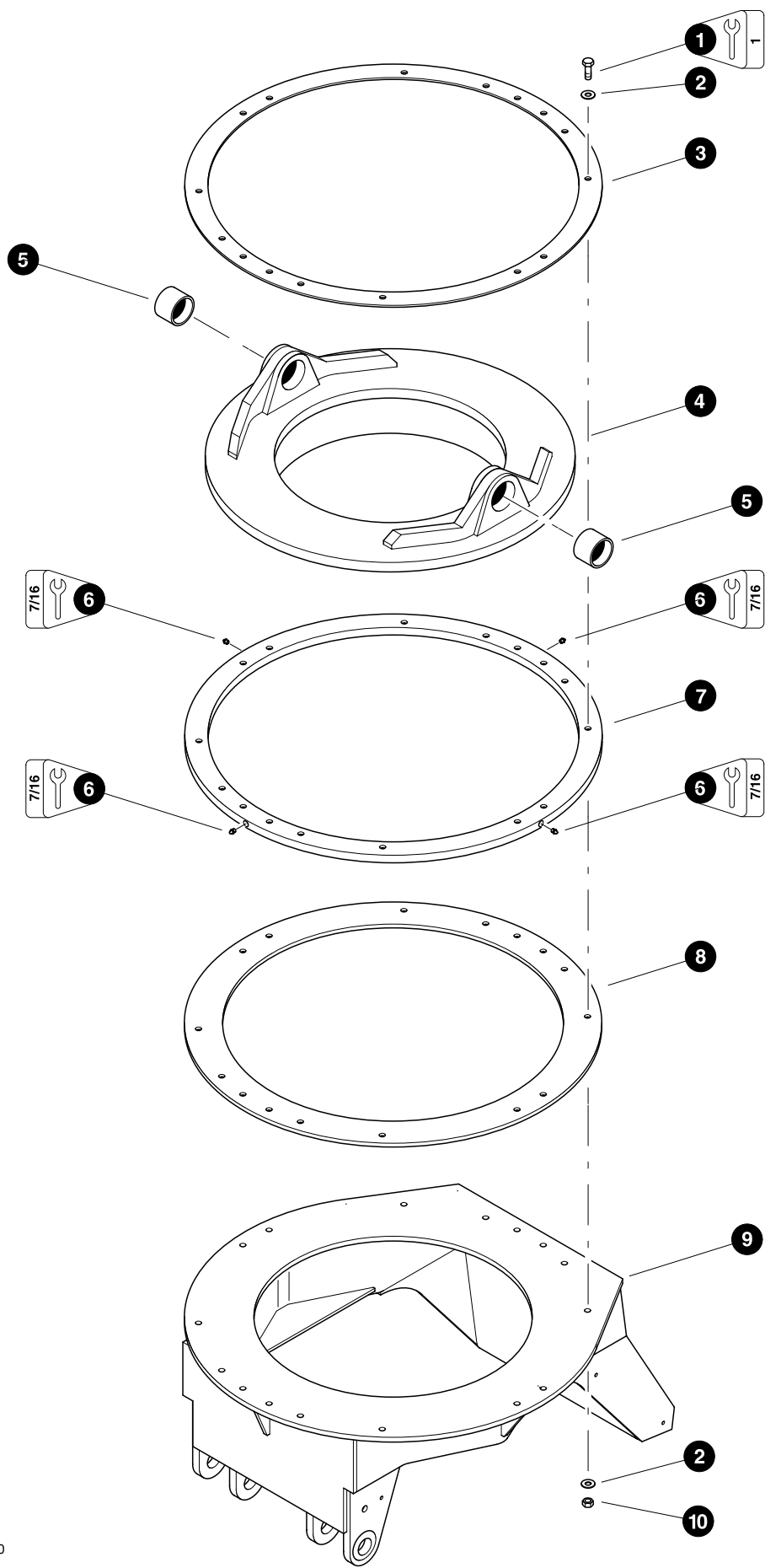
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                             | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------|-------------|
| -   | 23992-CB | 1   |  | CLAM BUNK COMPLETE (2.5" Pins)          |             |
| 1   | REF.     | 1   |  | CLAM BUNK UPPER COMPONENTS .....        | CB-1        |
| 2   | 20249-CB | 4   |                                                                                   | PIN, cotter - 1/4" x 2"                 |             |
| 3   | 13390-CB | 2   |                                                                                   | SHAFT, hinge cover                      |             |
| 4   | 13385-CB | 1   |                                                                                   | COVER, hinge                            |             |
| 5   | 13415-CB | 4   |                                                                                   | COVER, access - arm mounting base       |             |
| 6   | 15528-CB | 14  |                                                                                   | WASHER, SAE flat - 3/8"                 |             |
| 7   | 11707-CB | 14  |                                                                                   | BOLT - 3/8" x 1"                        |             |
| 8   | 13488-CB | 1   |                                                                                   | COVER, access - clam mounting base - RH |             |
| 9   | REF.     | 1   |  | CLAM BUNK LOWER BASE COMPONENTS .....   | CB-1        |
| 10  | 13489-CB | 1   |                                                                                   | COVER, access - clam mounting base - LH |             |
| 11  | 13416-CB | 1   |                                                                                   | COVER, hinged - Front                   |             |



See referenced page for component breakdown.



Kit or Assembly - includes all items indented underneath.



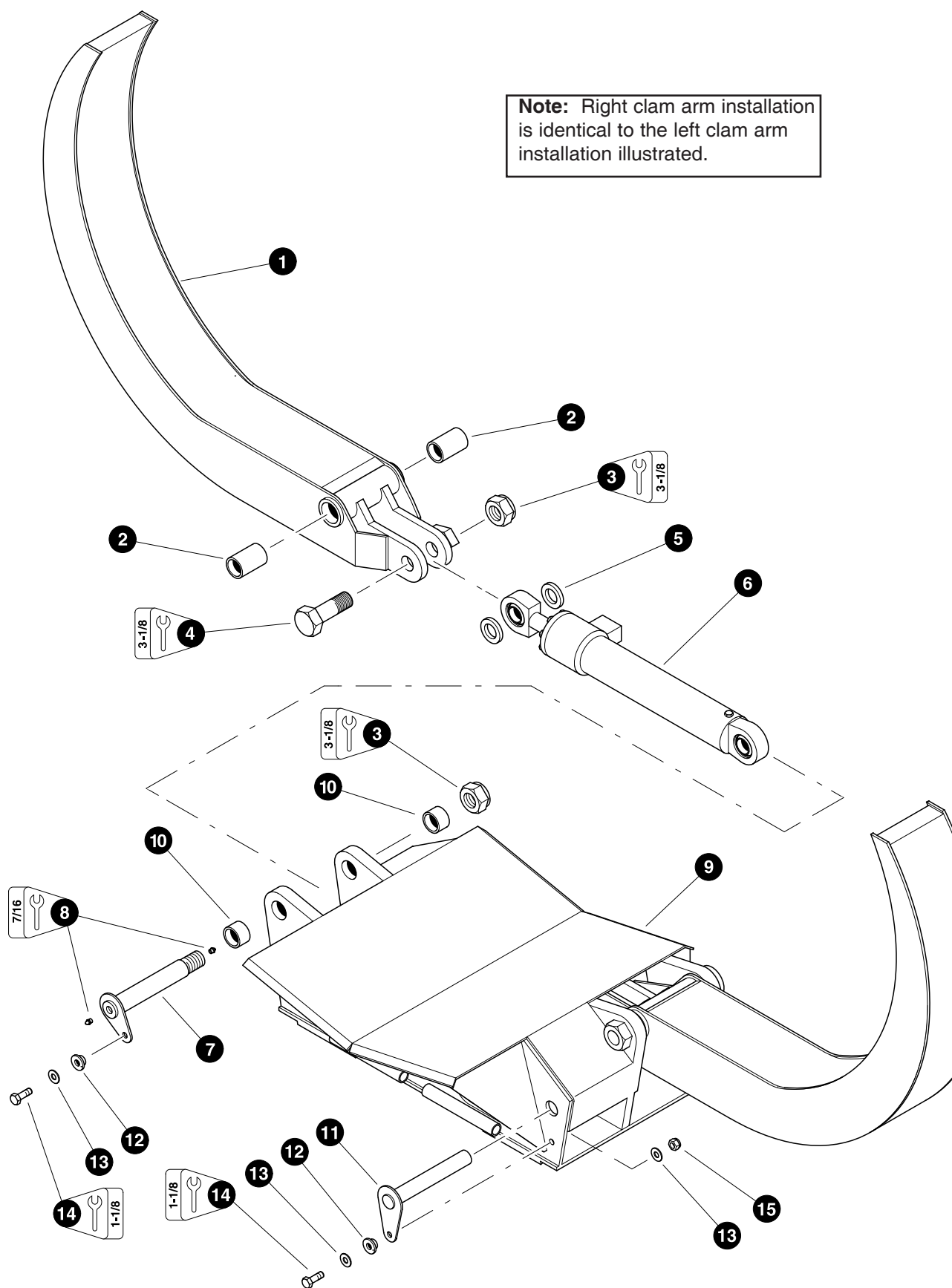
Parts 01909 11/22/2000  
9.375



## CLAM BUNK LOWER BASE COMPONENTS

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

☐ Kit or Assembly - includes all items indented underneath.



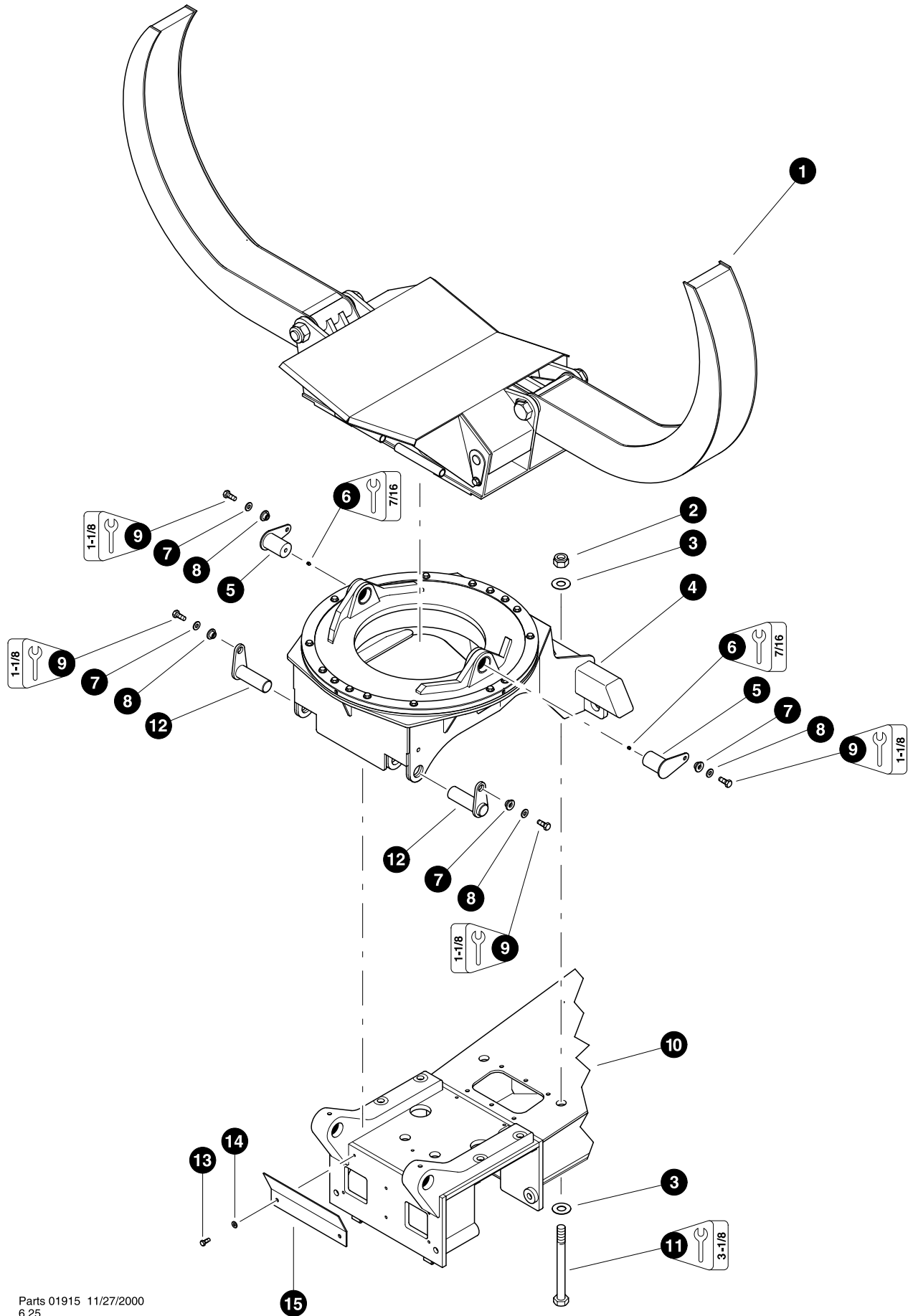
Parts 02016 12/12/2001  
9.375

## CLAM BUNK ARM INSTALLATION

| REF | PART #   | QTY |   | DESCRIPTION                      | SEE SECTION |
|-----|----------|-----|---|----------------------------------|-------------|
| 1   | 13535-CB | 2   | ☐ | WELDMENT, clam bunk arm          |             |
| 2   | 11704-CB | 2   |   | BUSHING - 2-1/2" x 4-1/4"        |             |
| 3   | 10728-CB | 4   |   | NUT, nylock - 2"                 |             |
| 4   | 20251-CB | 2   |   | PIN, clam cylinder rod - 2" x 7" |             |
| 5   | 20758-CB | 4   |   | SPACER                           |             |
| 6   | REF.     | 2   | 📖 | CLAM BUNK CYLINDER. . . . .      | CB-2        |
| 7   | 13533-CB | 2   | ☐ | PIN, clam arm - 2-1/2" x 18"     |             |
| 8   | 10704-CB | 4   |   | FITTING, grease                  |             |
| 9   | 13531-CB | 1   | ☐ | WELDMENT, clam arm base          |             |
| 10  | 13532-CB | 4   |   | BUSHING - 2" x 1-3/4"            |             |
| 11  | 19542-CB | 2   |   | PIN, clam cylinder base          |             |
| 12  | 18570-CB | 4   |   | WASHER, pin retaining            |             |
| 13  | 15550-CB | 6   |   | WASHER, SAE flat - 3/4"          |             |
| 14  | 10775-CB | 4   |   | BOLT - 3/4" x 2-1/2"             |             |
| 15  | 10817-CB | 2   |   | NUT, lock - 3/4"                 |             |

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component breakdown.



Parts 01915 11/27/2000  
6.25

## CLAM BUNK UNIT INSTALLATION

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                           | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------|-------------|
| 1   | REF.     | 1   |  | CLAM BUNK UPPER COMPONENTS .....      | CB-1        |
| 2   | 19614-CB | 2   |                                                                                   | NUT, lock - 1-1/2"                    |             |
| 3   | 19613-CB | 4   |                                                                                   | WASHER, flat - 1-1/2"                 |             |
| 4   | REF.     | 1   |  | CLAM BUNK LOWER BASE COMPONENTS ..... | CB-1        |
| 5   | 19544-CB | 2   |  | PIN, clam bunk pivot                  |             |
| 6   | 10704-CB | 1   |                                                                                   | FITTING, grease                       |             |
| 7   | 18570-CB | 4   |                                                                                   | WASHER, pin retaining                 |             |
| 8   | 15550-CB | 4   |                                                                                   | WASHER, SAE flat - 3/4"               |             |
| 9   | 10549-CB | 4   |                                                                                   | BOLT - 3/4" x 2"                      |             |
| 10  | REF.     | 1   |  | REAR FRAME WELDMENT                   |             |
| 11  | 20415-CB | 2   |                                                                                   | BOLT - 1-1/2" x 19"                   |             |
| 12  | 23434-CB | 2   |                                                                                   | PIN, floating bunk - 2-1/2" x 7-7/8"  |             |
| 13  | 10783-CB | 2   |                                                                                   | BOLT, 1/2" x 1"                       |             |
| 14  | 15534-CB | 2   |                                                                                   | WASHER, 1/2" sae                      |             |
| 15  | 13487-CB | 1   |                                                                                   | COVER, Rear Clam Bunk                 |             |



See referenced page for component breakdown.



Kit or Assembly - includes all items indented underneath.

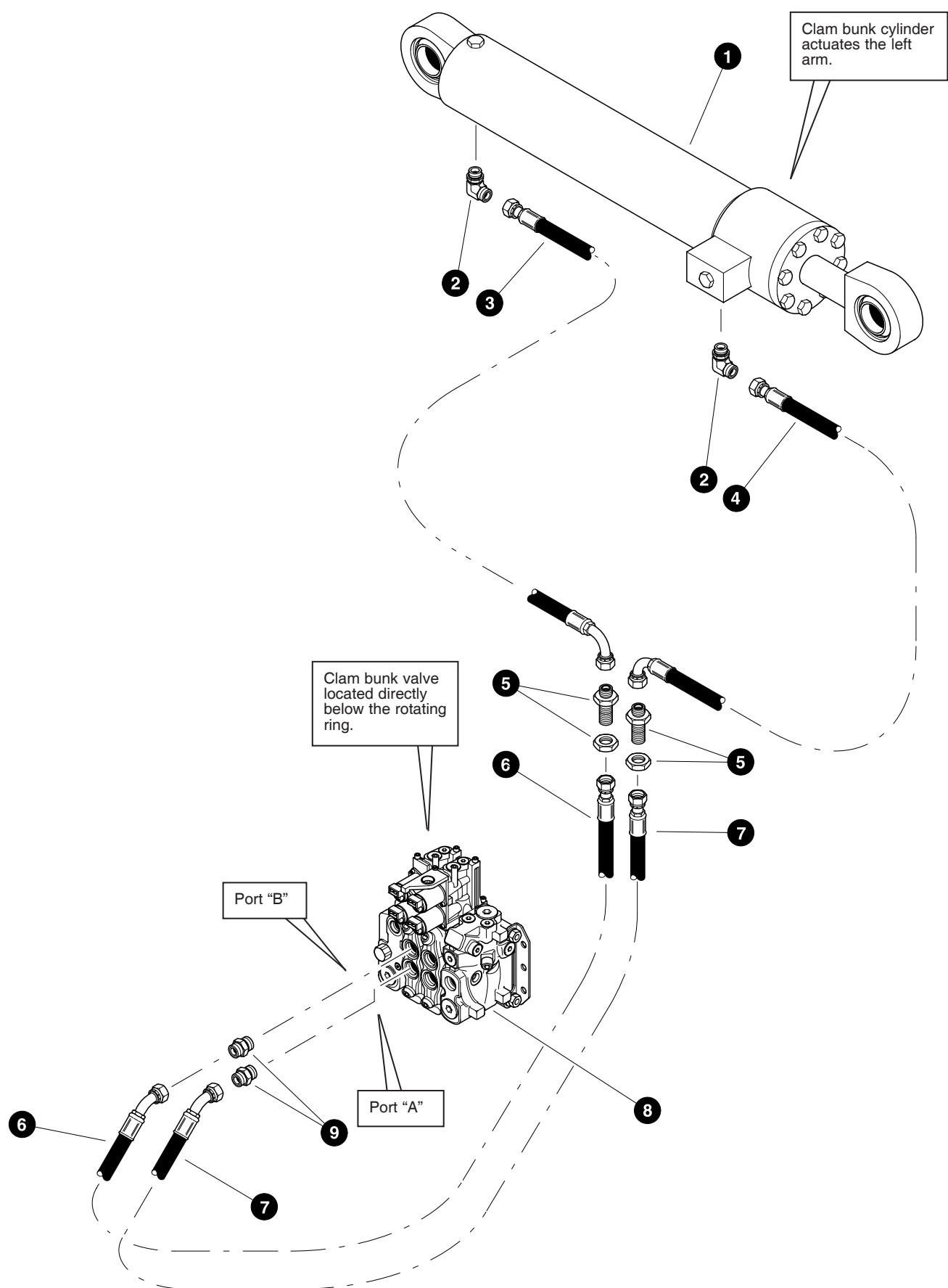
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## ***Section CB-2***

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### ***Clam Bunk - Hydraulic Circuits & Components***





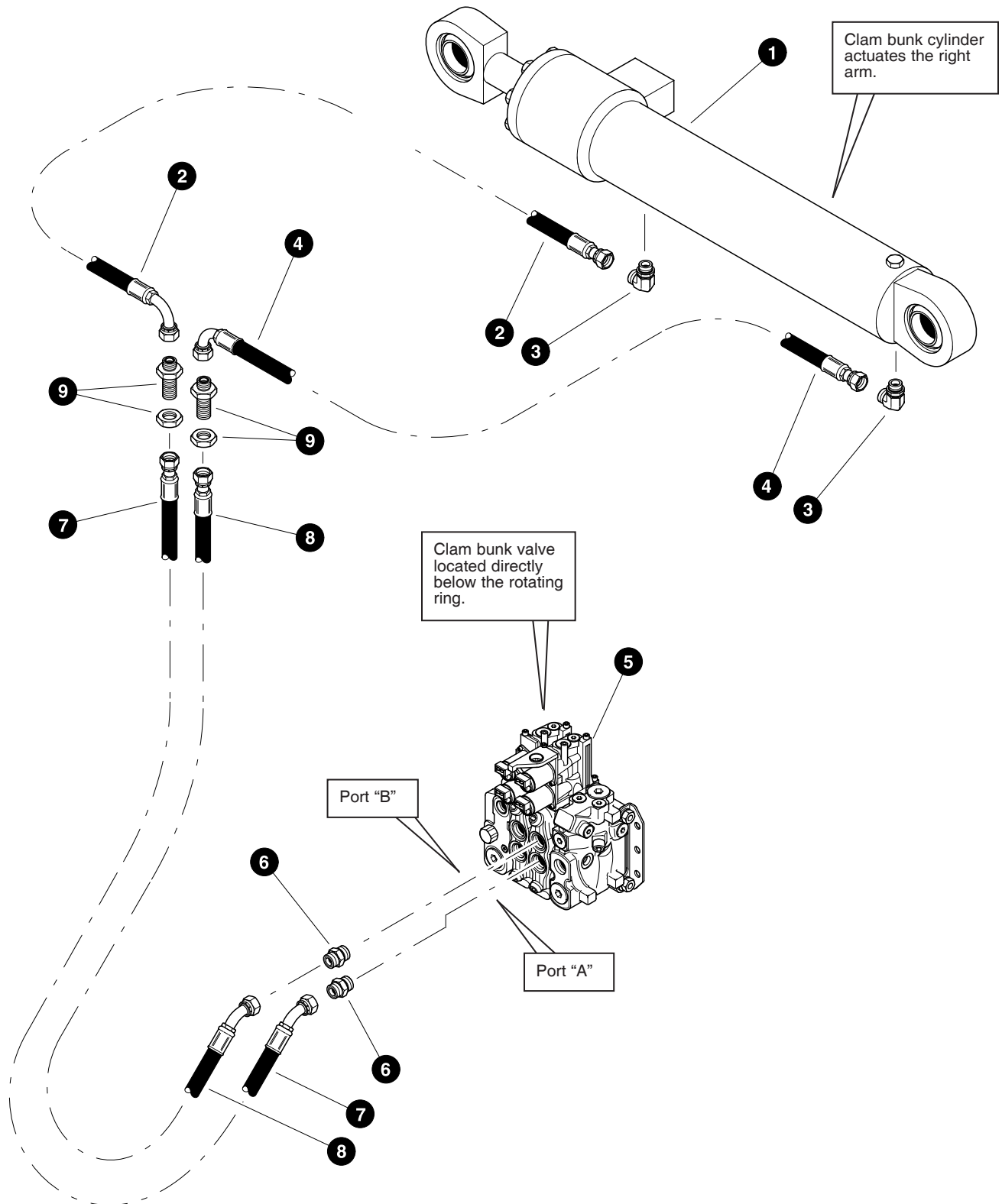
## CLAM BUNK ARM LINES

### (Clam Bunk Valve To Left Clam Bunk Cylinder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | CLAM BUNK CYLINDER. . . . .                                                                               | CB-2        |
| 2   | 16360-CB | 2   |                                                                                   | ELBOW, 90° - FF1868T-0808S                                                                                |             |
| 3   | 17483-CB | 1   |                                                                                   | HOSE ASSEMBLY - 4019-08-080S-0809 ( <i>Clam bunk cylinder base port to left front bulkhead fitting</i> )  |             |
| 4   | 20195-CB | 1   |                                                                                   | HOSE ASSEMBLY - 4031-08-080S-0809 ( <i>Clam bunk cylinder rod port to right front bulkhead fitting</i> )  |             |
| 5   | 20196-CB | 2   |                                                                                   | CONNECTOR, straight bulkhead - FF1994T-0808S                                                              |             |
| 6   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 4045 -08-080S-0809 ( <i>Clam bunk cylinder rod port to right front bulkhead fitting</i> ) |             |
| 7   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 4046 -08-080S-0809 ( <i>Clam bunk cylinder rod port to right front bulkhead fitting</i> ) |             |
| 8   | REF.     | 1   |  | CLAM BUNK CONTROL VALVE. . . . .                                                                          | CB-3        |
| 9   | 15115-CB | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                       |             |



See referenced page for component or assembly breakdown.



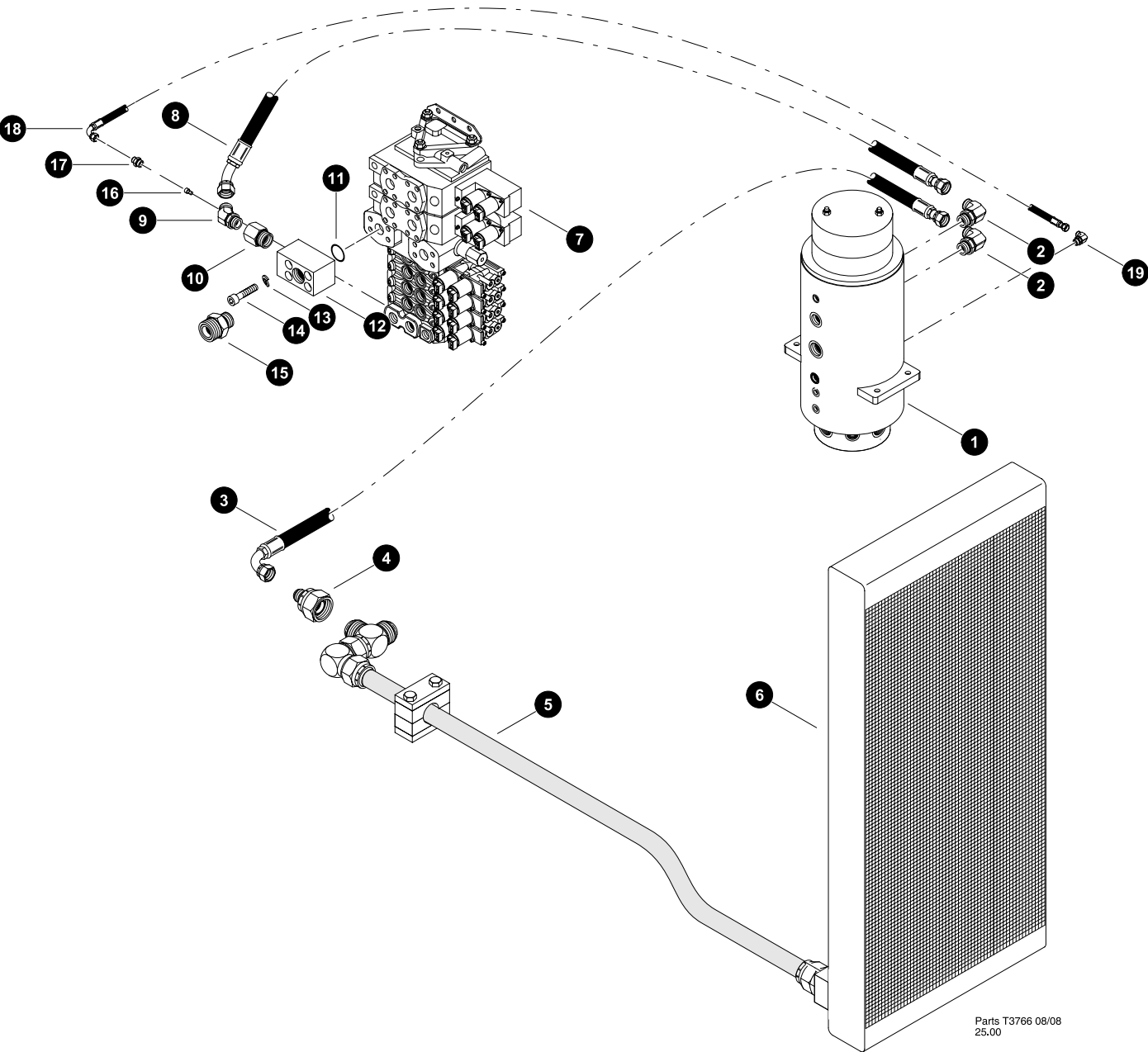
## CLAM BUNK ARM LINES

### (Clam Bunk Valve To Right Clam Bunk Cylinder)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                                               | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | CLAM BUNK CYLINDER. . . . .                                                                               | CB-2        |
| 2   | 16360-CB | 2   |                                                                                   | ELBOW, 90° - FF1868T-0808S                                                                                |             |
| 3   | 20195-CB | 1   |                                                                                   | HOSE ASSEMBLY - 4031-08-080S-0809 ( <i>Clam bunk cylinder rod port to left rear bulkhead fitting</i> )    |             |
| 4   | 17483-CB | 1   |                                                                                   | HOSE ASSEMBLY - 4019-08-080S-0809 ( <i>Clam bunk cylinder base port to right rear bulkhead fitting</i> )  |             |
| 5   | REF.     | 1   |  | CLAM BUNK CONTROL VALVE. . . . .                                                                          | CB-3        |
| 6   | 15115-CB | 2   |                                                                                   | CONNECTOR, straight - FF1852T-0810S                                                                       |             |
| 7   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 4048 -08-080S-0809 ( <i>Clam bunk cylinder rod port to right front bulkhead fitting</i> ) |             |
| 8   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 4047 -08-080S-0809 ( <i>Clam bunk cylinder rod port to right front bulkhead fitting</i> ) |             |
| 9   | 20196-CB | 2   |                                                                                   | CONNECTOR, straight bulkhead - FF1994T-0808S                                                              |             |



See referenced page for component or assembly breakdown.



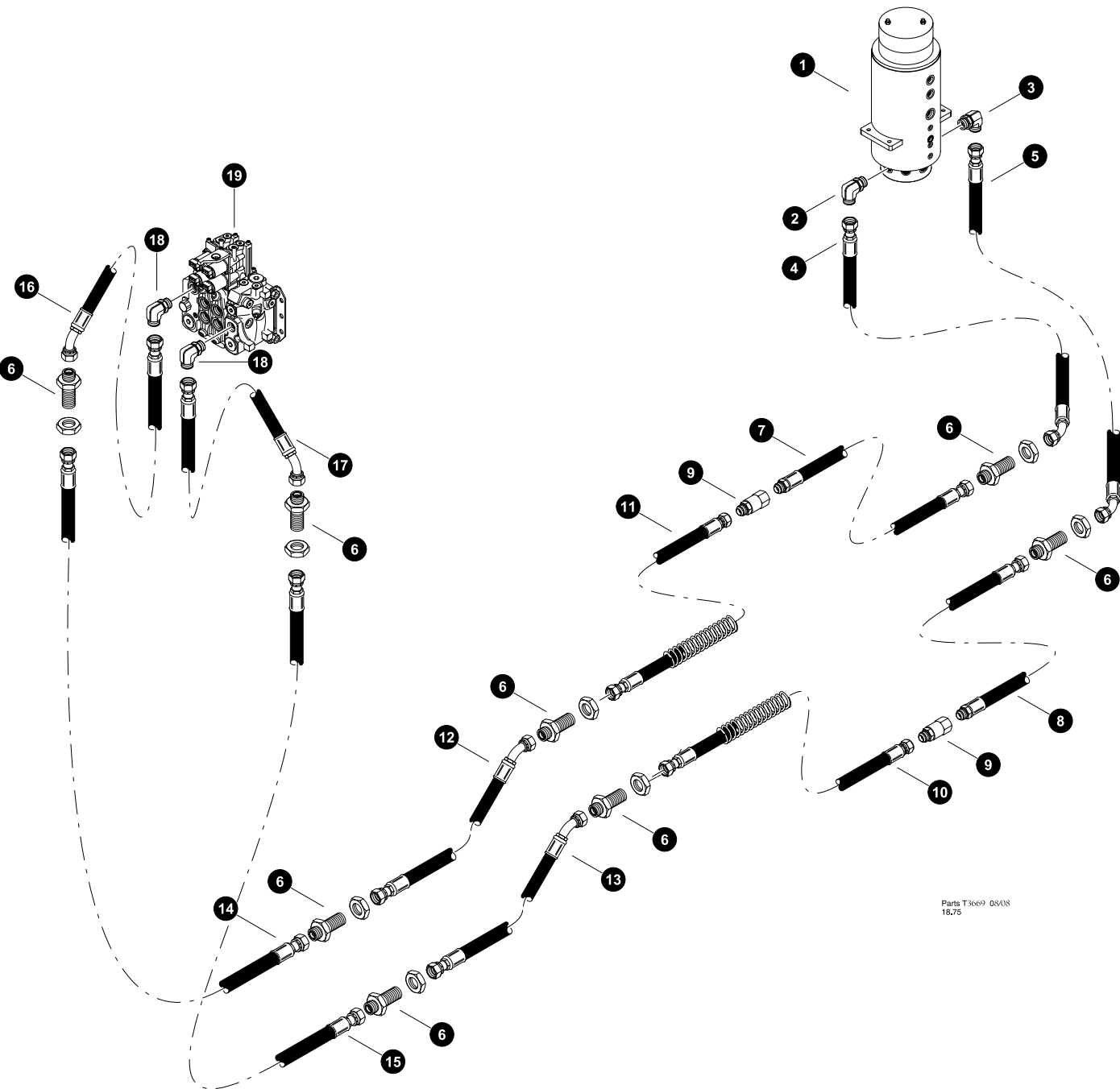
## CLAM BUNK VALVE PRESSURE AND TANK

### (Rotory Manifold to LS, Pressure and Tank)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                         | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTORY MANIFOLD . . . . .                                           | UP-1        |
| 2   | 17688-CB | 1   |                                                                                   | ELBOW, 90 - FF1868T-1212S                                           |             |
| 3   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2046 12-12OS-12J9 (port 9 to return tee)            |             |
| 4   | 53180-CB | 1   |                                                                                   | FITTING, REDUCER TUBE END - 24-12                                   |             |
| 5   | REF      | 1   |                                                                                   | RETURN TUBE . . . . .                                               | LH-2        |
| 6   | REF      | 1   |                                                                                   | HYDRAULIC OIL COOLER . . . . .                                      | UP-3        |
| 7   | REF      | 1   |                                                                                   | VOAC CONTROL VALVE . . . . .                                        | LH-1        |
| 8   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2042 12-12OS-12O4 (port 11 to valve pressure block) |             |
| 9   | 19127-CB | 1   |                                                                                   | ELBOW, 45 - FF2068T-1212S                                           |             |
| 10  | 25040-CB | 1   |                                                                                   | BUSHING, REDUCER - 6410-16-12                                       |             |
| 11  | 15377-LH | 1   |                                                                                   | O-RING - 1"                                                         |             |
| 12  | 42113-CB | 1   |                                                                                   | MANIFOLD, K220 INLET - 2 PORT 1" CODE 62                            |             |
| 13  | -        | 4   |                                                                                   | WASHER, lock                                                        |             |
| 14  | 17710-LH | 4   |                                                                                   | BOLT, ALLEN HEAD - 12MM-1.75P X 70MM                                |             |
| 15  | 17063-LH | 1   |                                                                                   | CONNECTOR, STR - FF1852T-2016S                                      |             |
| 16  | -CB      | 1   |                                                                                   | BOLT, ALLEN HEAD - 5MM-0.8P X 20MM                                  |             |
| 17  | 15124-HR | 1   |                                                                                   | CONNECTOR, STR. - 0406                                              |             |
| 18  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2035 04-04OS-04O9 (port 5 to LSP on Valve)          |             |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



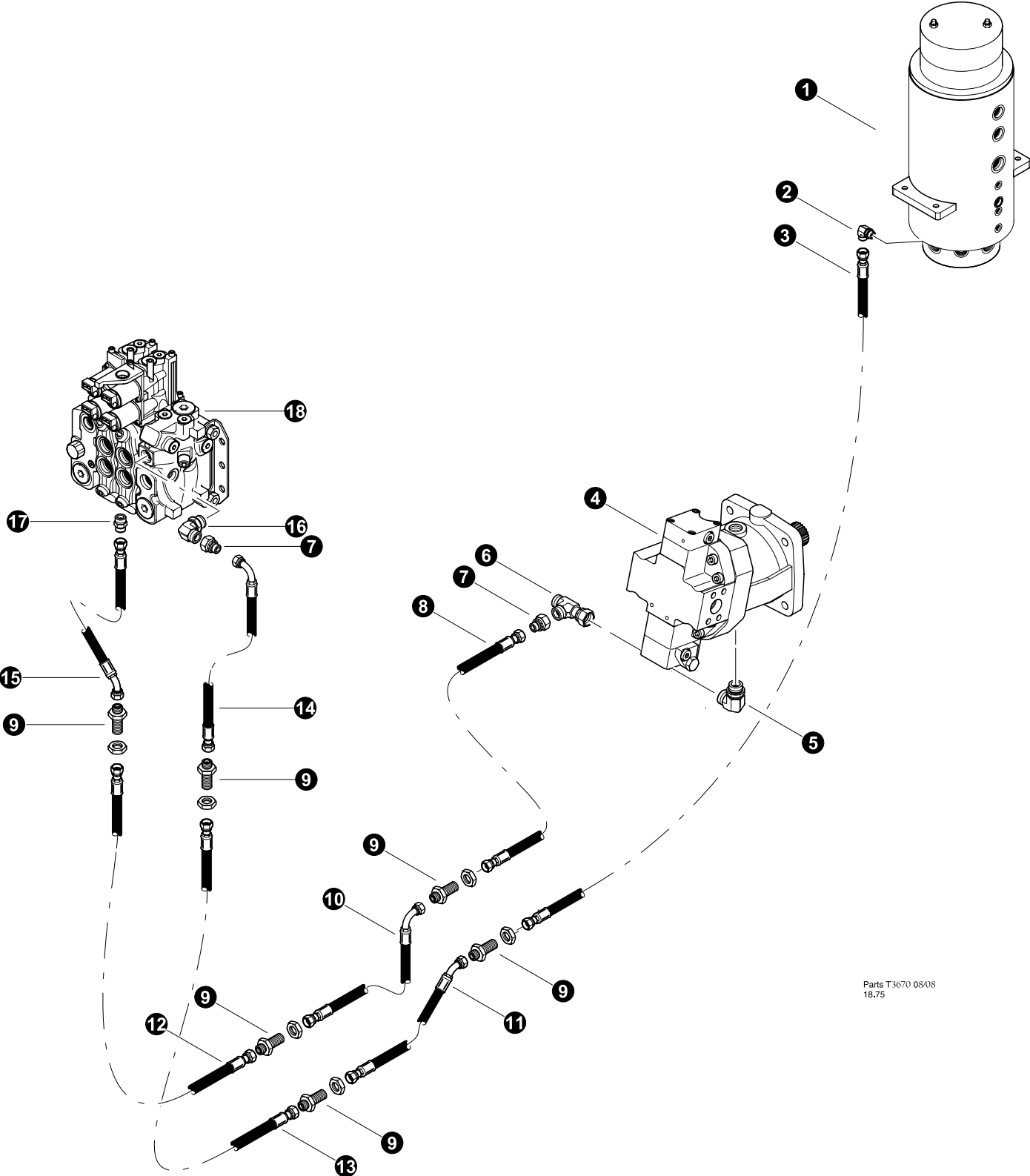
Parts T3069 08/08  
18,75

## CLAM BUNK VALVE PRESSURE AND TANK (Clam Bunk Valve To Rotary Manifold)

| REF | PART #   | QTY |                                                                                    | DESCRIPTION                                                                  | SEE SECTION |
|-----|----------|-----|------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |   | ROTORY MANIFOLD . . . . .                                                    | UP-1        |
| 2   | 17688-CB | 1   |                                                                                    | ELBOW, 90 - FF1868T-1212S                                                    |             |
| 3   | 17688-CB | 1   |                                                                                    | ELBOW, 90 - FF1868T-1212S                                                    |             |
| 4   | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4037-12-120S-1204 ( <i>rotory manifold #9 to bulkhead</i> )  |             |
| 5   | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4031-12-120S-1204 ( <i>rotory manifold #11 to bulkhead</i> ) |             |
| 6   | 17009-CB | 8   |                                                                                    | CONNECTOR, STR BULKHEAD - 2700-12                                            |             |
| 7   | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12MJ ( <i>swivel to bulkhead</i> )            |             |
| 8   | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12MJ ( <i>swivel to bulkhead</i> )            |             |
| 9   | 18782-CB | 2   |                                                                                    | SWIVEL, INLINE STR LS2406-1212                                               |             |
| 10  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4044.5-12-120S-12JS ( <i>swivel to bulkhead</i> )            |             |
| 11  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4044.5-12-120S-12JS ( <i>swivel to bulkhead</i> )            |             |
| 12  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045-12-120S-12O4 ( <i>bulkhead to bulkhead</i> )            |             |
| 13  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045-12-120S-12O4 ( <i>bulkhead to bulkhead</i> )            |             |
| 14  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12OS ( <i>bulkhead to bulkhead</i> )          |             |
| 15  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12OS ( <i>bulkhead to bulkhead</i> )          |             |
| 16  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12O4 ( <i>valve pressure to bulkhead</i> )    |             |
| 17  | -CB      | 1   |                                                                                    | HOSE ASSEMBLY - 4045.5-12-120S-12O4 ( <i>valve tank to bulkhead</i> )        |             |
| 18  | 17688-CB | 2   |                                                                                    | ELBOW, 90 - FF1868T-1212S                                                    |             |
| 19  | REF.     | 1   |  | CLAM BUNK CONTROL VALVE. . . . .                                             | CB-3        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.



Parts T3670 08/08  
18.75



## CLAM BUNK VALVE LS and Drain

### (Clam Bunk Valve To Rotary Manifold)

| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                                 | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------|
| 1   | REF.     | 1   |  | ROTORY MANIFOLD . . . . .                                                   | UP-1        |
| 2   | 16540-CB | 1   |                                                                                   | ELBOW, 90 - FF1868T-0404S                                                   |             |
| 3   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2134-04-040S-040S ( <i>rotory manifold #5 to bulkhead</i> ) |             |
| 4   | REF.     | 1   |  | WHEEL DRIVE MOTOR . . . . .                                                 | FF-5        |
| 5   | 15372-CB | 1   |                                                                                   | ELBOW, 90 - FF1868T-0812S                                                   |             |
| 6   | 20066-CB | 1   |                                                                                   | TEE - 8 S5OLO-S - BRANCH                                                    |             |
| 7   | 19221-CB | 1   |                                                                                   | CONNECTOR, REDUCER - ORS FF2281T-0408S                                      |             |
| 8   | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2068-04-040S-040S ( <i>case tee to bulkhead</i> )           |             |
| 9   | 18582-CB | 1   |                                                                                   | CONNECTOR, STR BULKHEAD - FF1994T-0404S                                     |             |
| 10  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2053-04-040S-0409 ( <i>bulkhead to bulkhead</i> )           |             |
| 11  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2047-04-040S-0404 ( <i>bulkhead to bulkhead</i> )           |             |
| 12  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2045-04-040S-040S ( <i>bulkhead to bulkhead</i> )           |             |
| 13  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2045-04-040S-040S ( <i>bulkhead to bulkhead</i> )           |             |
| 14  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2017-04-040S-0409 ( <i>bulkhead to drain</i> )              |             |
| 15  | -CB      | 1   |                                                                                   | HOSE ASSEMBLY - 2009-04-040S-0404 ( <i>bulkhead to load sense</i> )         |             |
| 16  | 16360-CB | 1   |                                                                                   | ELBOW, 90 - FF1868T-0808S                                                   |             |
| 17  | 15124-CB | 1   |                                                                                   | CONNECTOR, STR - FF1852T-0406S                                              |             |
| 18  | REF.     | 1   |  | CLAM BUNK CONTROL VALVE. . . . .                                            | CB-3        |

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

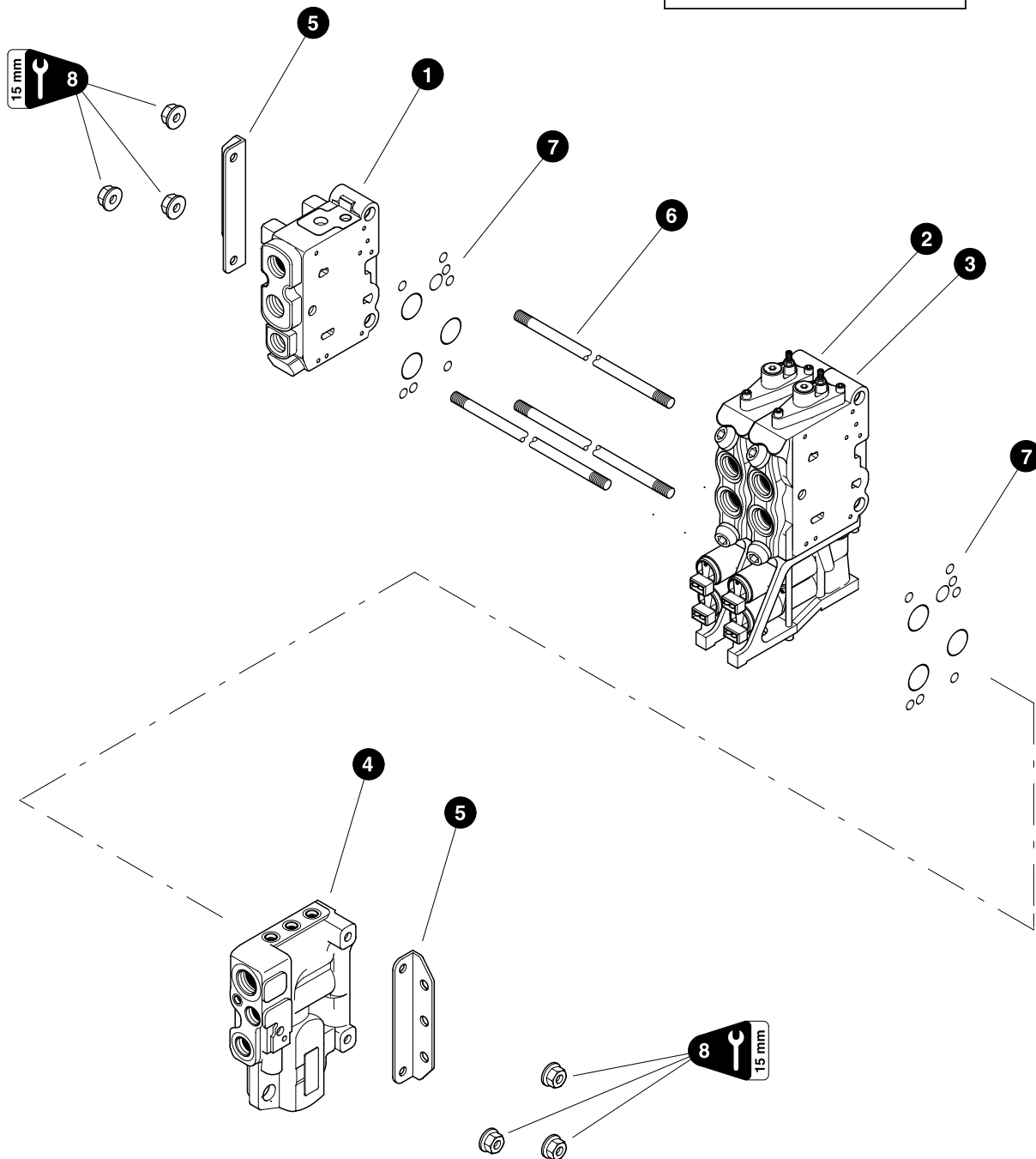
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## ***Section CB-3***

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### ***Clam Bunk - Main Control Valve and Cylinders***

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



## CLAM BUNK CONTROL VALVE (VOAC L90LS)

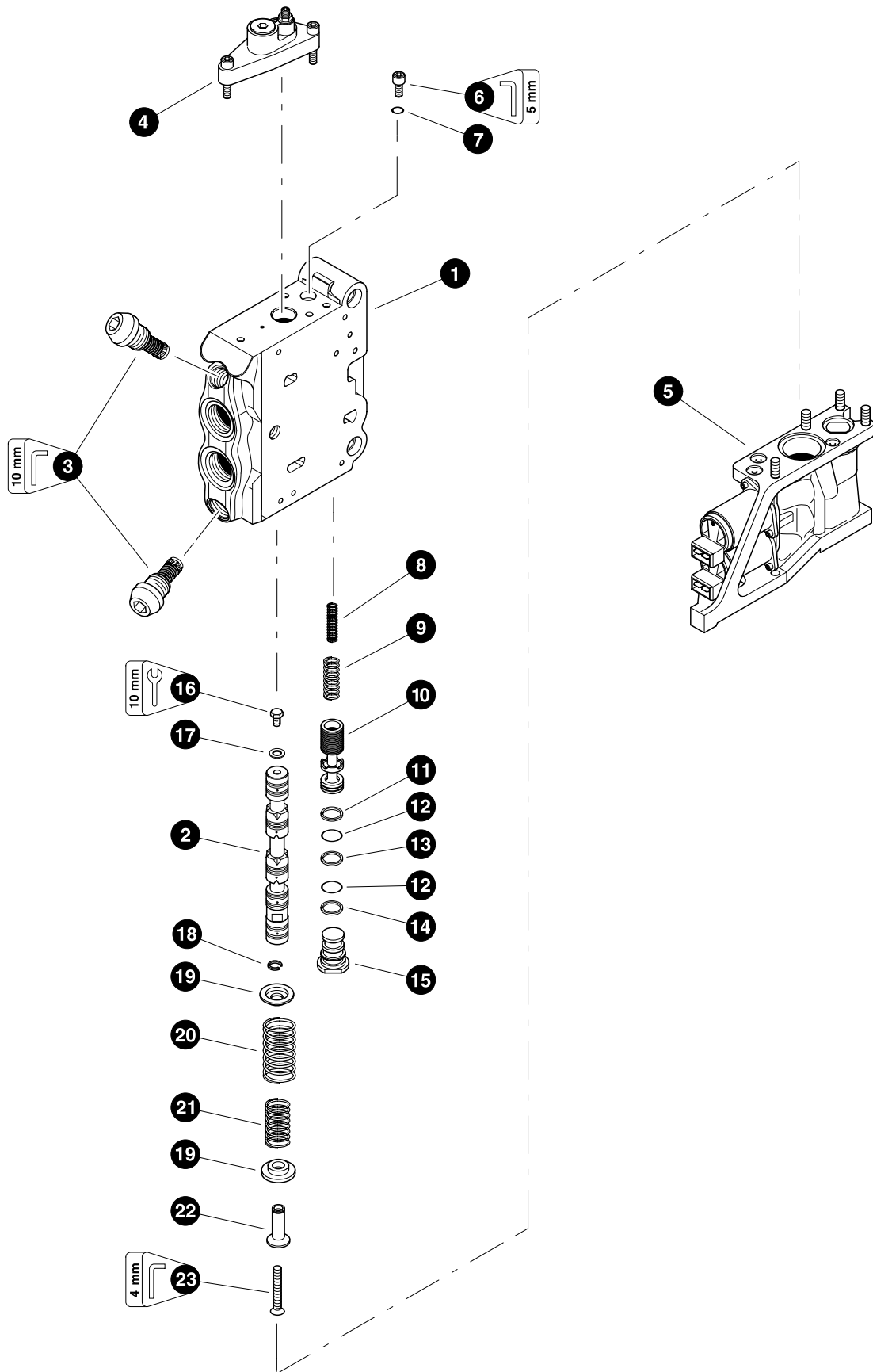
| REF | PART #   | QTY |                                                                                   | DESCRIPTION                                                       | SEE SECTION |
|-----|----------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------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

 Kit or Assembly - includes all items indented underneath.

 See referenced page for component or assembly breakdown.

### **Note #1:**

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



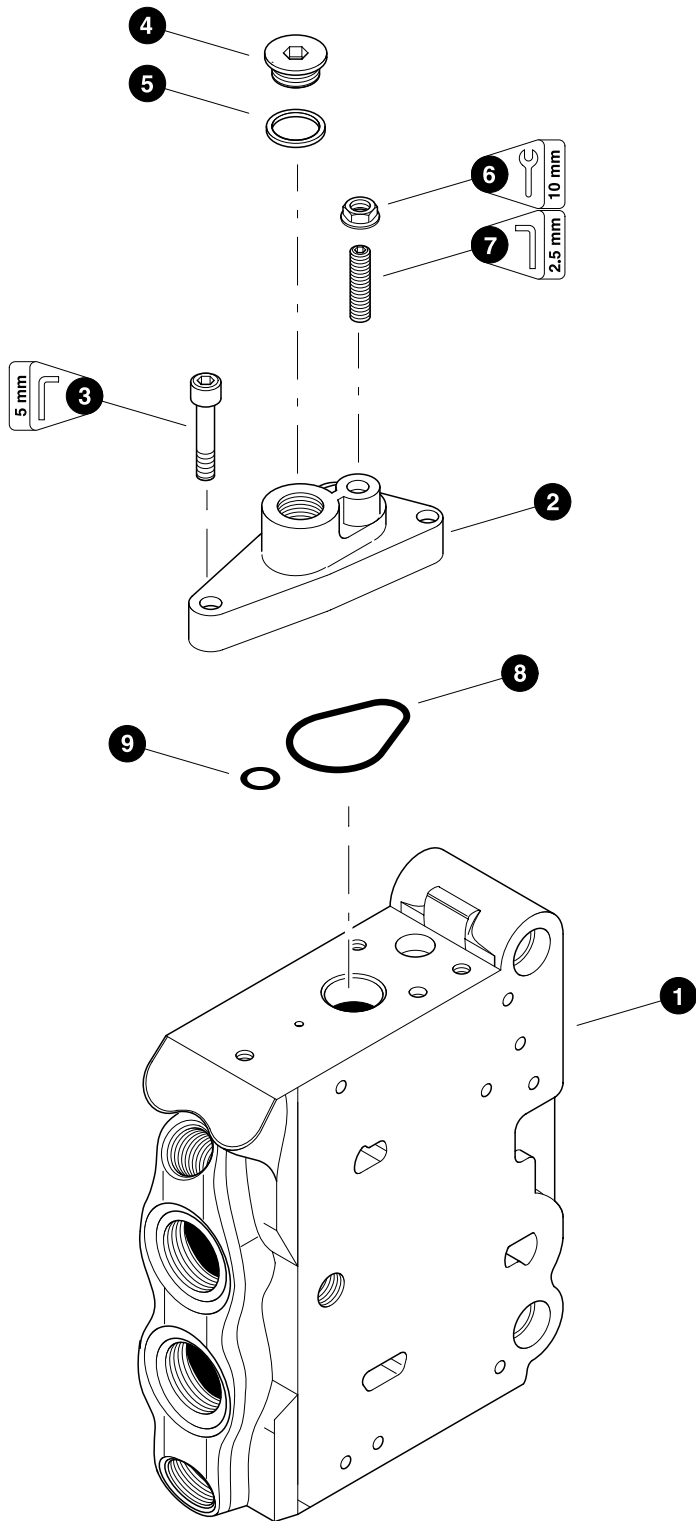
Parts 01318 09/15/99  
37.50

## WORK VALVE SECTION (VOAC L90LS)

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

☐ Kit or Assembly - includes all items indented underneath.

📖 See referenced page for component or assembly breakdown.



Parts 01734 08/08/2000  
75.00



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

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



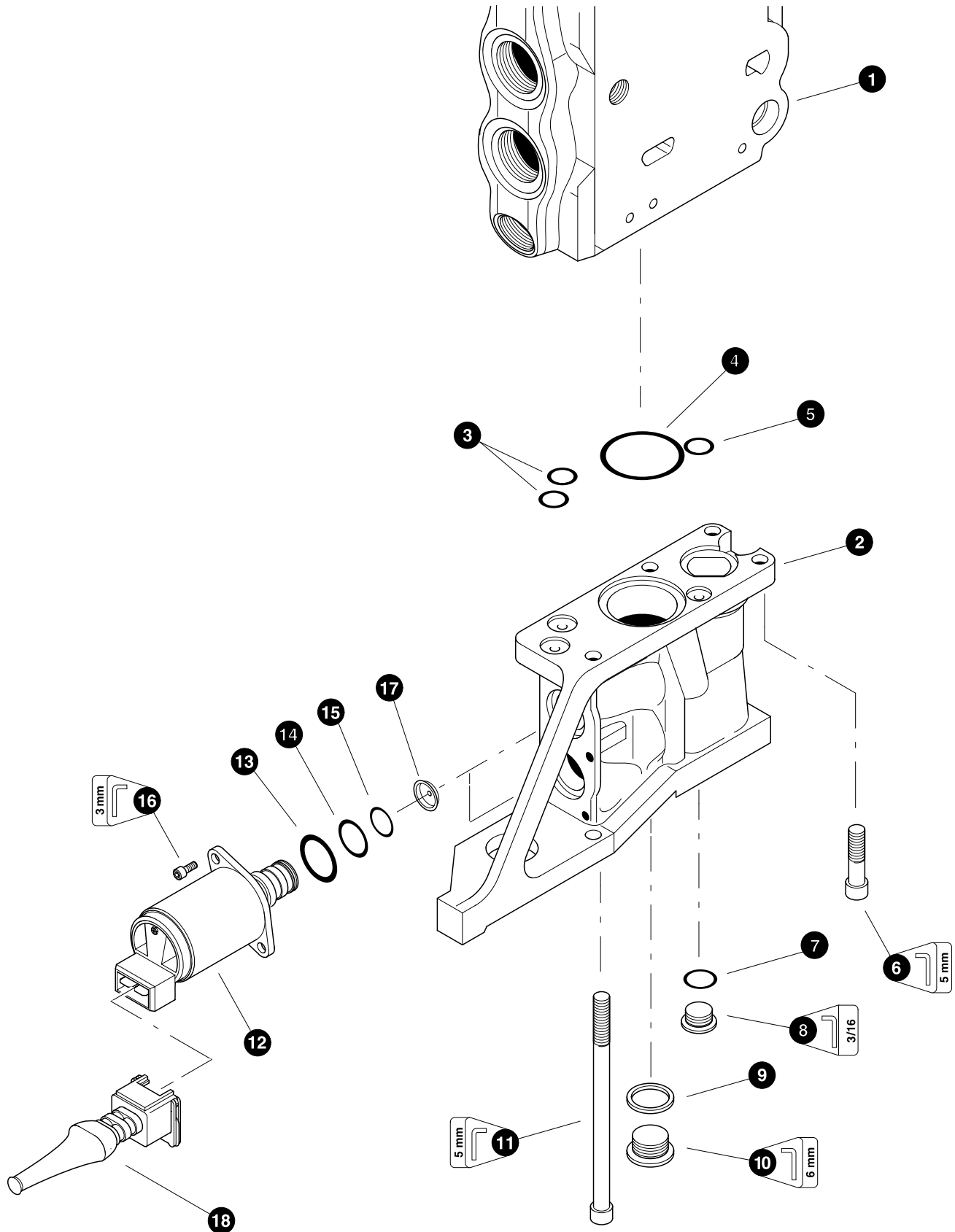
See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.



Included in seal repair kit PN# 23415-CB.



Parts 01735 02/21/2003  
75.00

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

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



See referenced page for component or assembly breakdown.



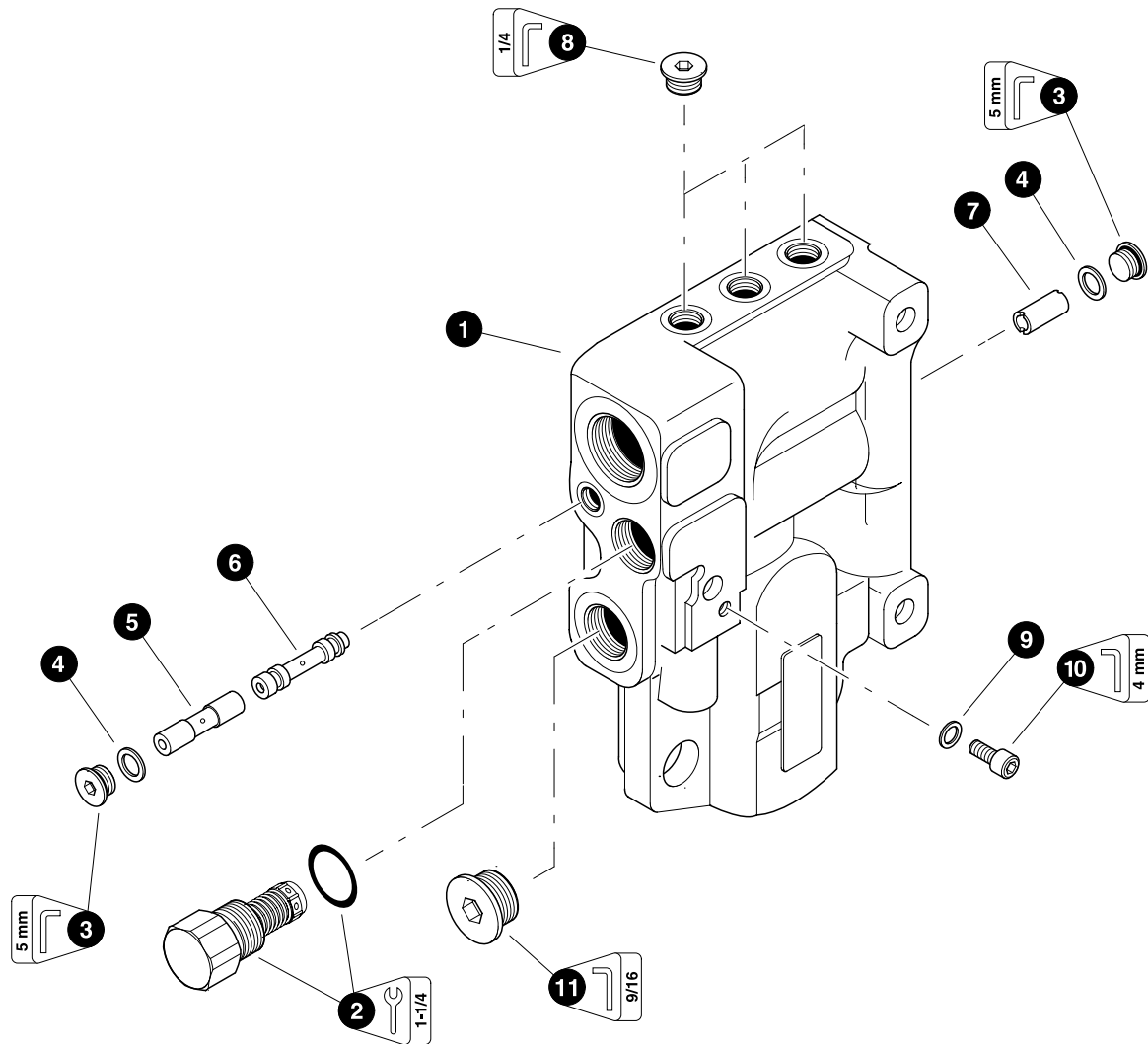
Kit or Assembly - includes all items indented underneath.



Included in seal repair kit PN# 23418-CB.



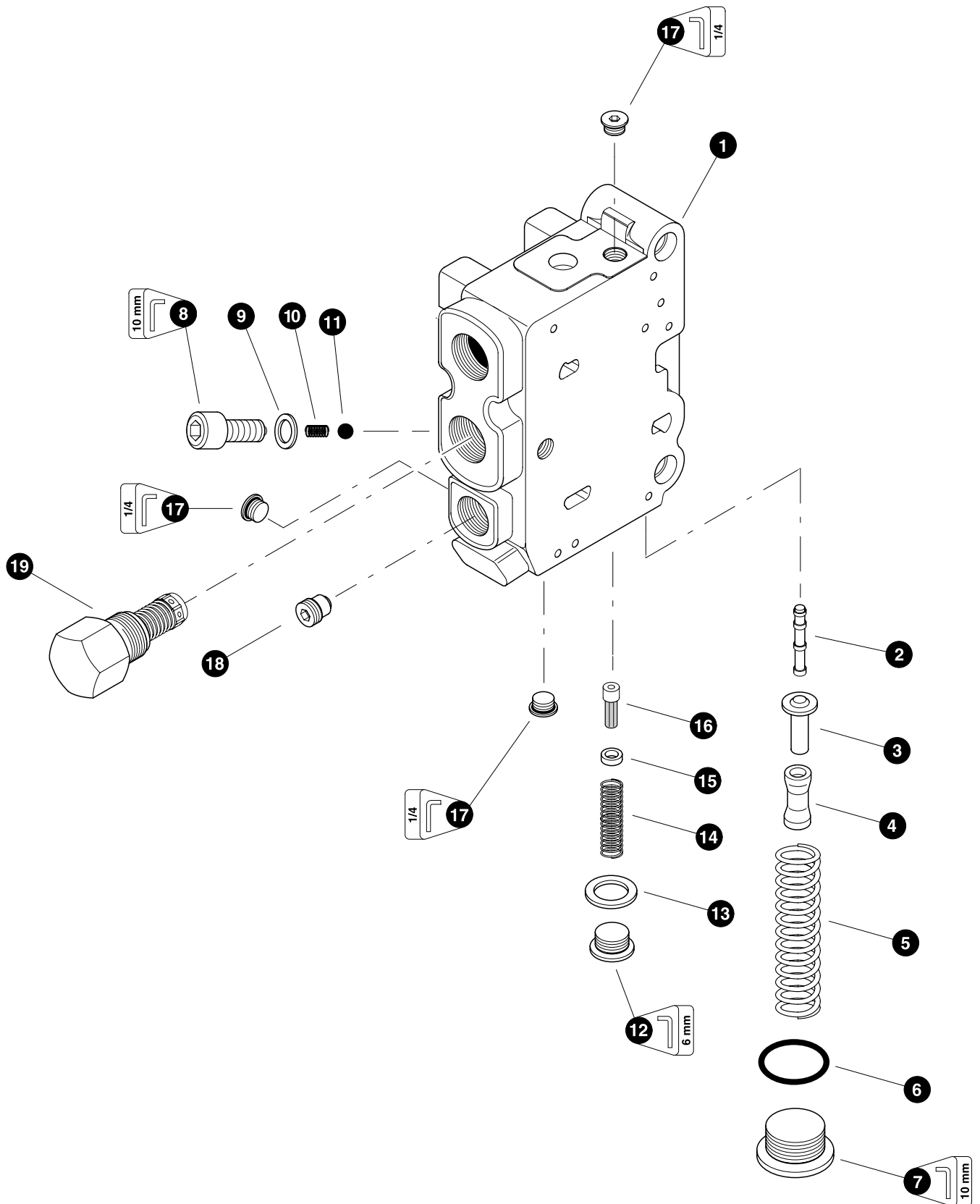
Included in seal repair kit PN# 23417-CB.



## INLET VALVE SECTION (VOAC L90LS)

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

☐ Kit or Assembly - includes all items indented underneath.

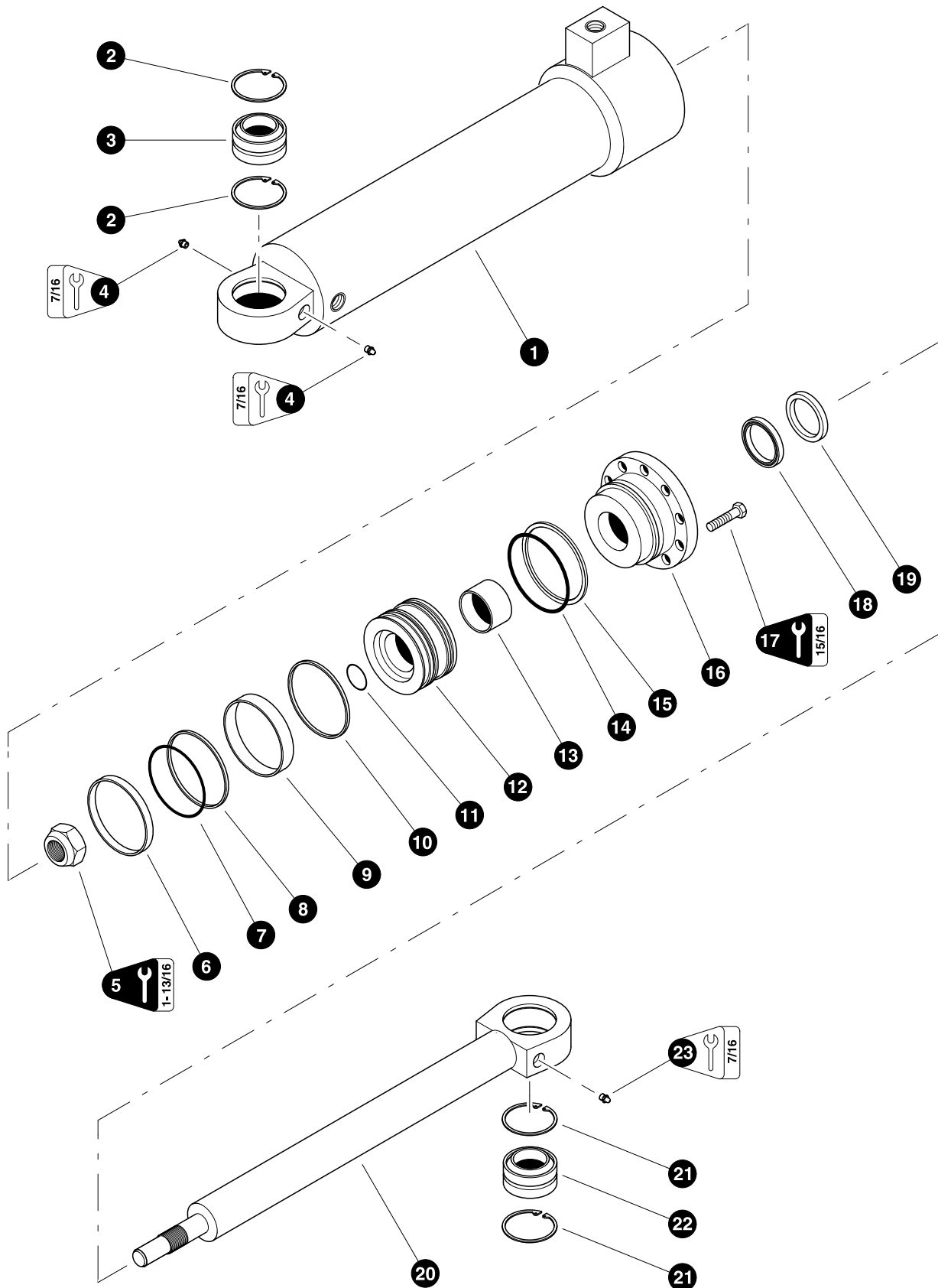


Parts 01319 09/16/99  
62.00

## OUTLET VALVE SECTION (VOAC L90LS)

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

☐ Kit or Assembly - includes all items indented underneath.



00268 09/08/97  
18.75



## CLAM ARM CYLINDER (Jarp)

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

☐ Kit or Assembly - includes all items indented underneath.

⌘ Included in seal repair kit Part # 19964-LB.

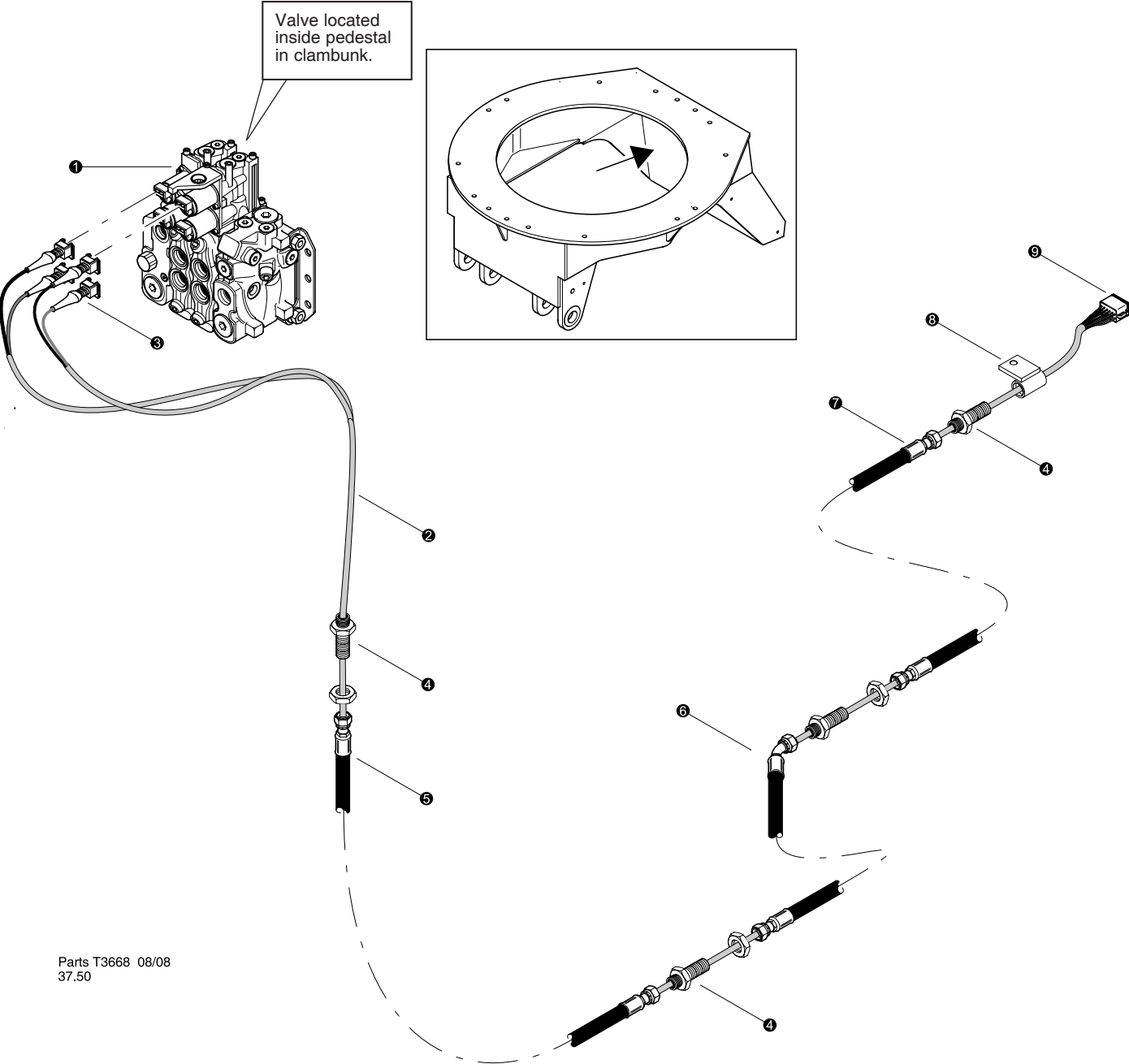
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## ***Section CB-4***

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### ***Clam Bunk - Electrical Harness***



## ELECTRICAL CONNECTIONS

### (Clam Bunk Control Valve)

| REF | PART #   | QTY  |   | DESCRIPTION                             | SEE SECTION |
|-----|----------|------|---|-----------------------------------------|-------------|
| 1   | REF      | 1    |   | CLAM BUNK CONTROL VALVE .....           | CB-3        |
| 2   | 25122-CB | 18ft | ☐ | WIRE - 18 GA. 8 CONDUCTOR (500' SPOOL)  |             |
| 3   | 19482-CB | 4    |   | CONNECTOR, CONTROL VALVE KIT            |             |
| 4   | 50037-CB | 1    |   | CONNECTOR, STR BULKHEAD - 832-TT-10     |             |
| 5   | -CB      | 1    |   | HOSE ASSEMBLY - 2051-10-100S-100S       |             |
| 6   | -CB      | 1    |   | HOSE ASSEMBLY - 2045-10-100S-1004       |             |
| 7   | -CB      | 1    |   | HOSE ASSEMBLY - 2053-10-100S-100S       |             |
| 8   | 22202-CB | 1    |   | BRACKET, VENT MOUNT - REAR (3/4NPT)     |             |
| 9   | -CB      | 1    |   | CONNECTOR, DEUTCH 12 SOCKET (AD13018-1) |             |
| -   | 53176-CB | 12   |   | SOCKET 16GA,                            |             |
| -   | -CB      | 1    |   | WEDGE LOCK, (AD13017-1)                 |             |



See referenced page for component or assembly breakdown.



Kit or Assembly - includes all items indented underneath.

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