

SAFETY RECALL

Mack Trucks Inc.
Greensboro, NC USA



Date	Number	Release	Page
04.2019	SC0417	01	1 (21)

Air Tank, Installation CXU, AN

SAFETY RECALL INFORMATION:

(April 2019)

Certain Mack CXU and AN trucks built from 01/16/2013 through 08/31/2018 were manufactured with inadequate air tank capacity for certain air system configurations. The installation of new air tanks and small modifications to the air tank configurations will correct the tank capacity inadequacies. Follow the installation instructions outlined in this Safety Recall.

Mack Trucks has received no reports of personal injury as a result of this condition. Therefore, Mack considers this as a proactive measure to protect the public and Mack's customers from the potential risk associated with this defect.

VEHICLES AFFECTED:

Certain Mack CXU, AN model trucks manufactured from 01/16/2013 through 08/31/2018.

VEHICLE IDENTIFICATION NUMBERS (VIN):

The number of vehicles affected by this recall is 9 (9 USA).

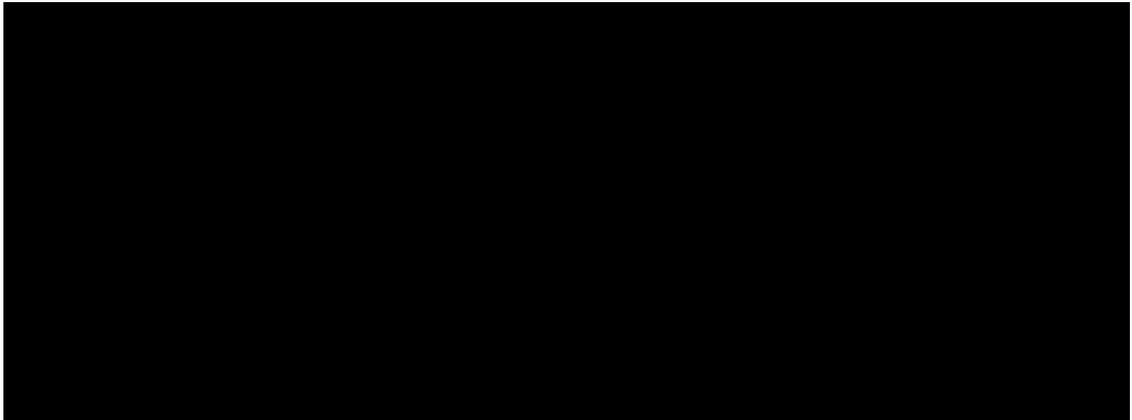
REQUIRED PARTS:

See the parts tables in the **Tank Parts List** section of this safety recall for each tank configuration's parts list.

NOTE: For any assistance concerning air tank installation (please include the recall # SC0417 to ensure proper support), submit an e-Service case to Mack tech support.

VIN LIST with REPAIR and PARTS LIST REFERENCE TABLE

1. Using the table below, find the VIN of the truck associated with this Safety Recall.
2. Note the repair procedure number and parts list number referenced.
3. Using the noted repair procedure number and parts list number, follow the appropriate installation procedures outlined in this Safety Recall.



REPAIR SCENARIOS

REPAIR SCENARIO 1:

Install 56.5L Air Tank

REPAIR SCENARIO 2:

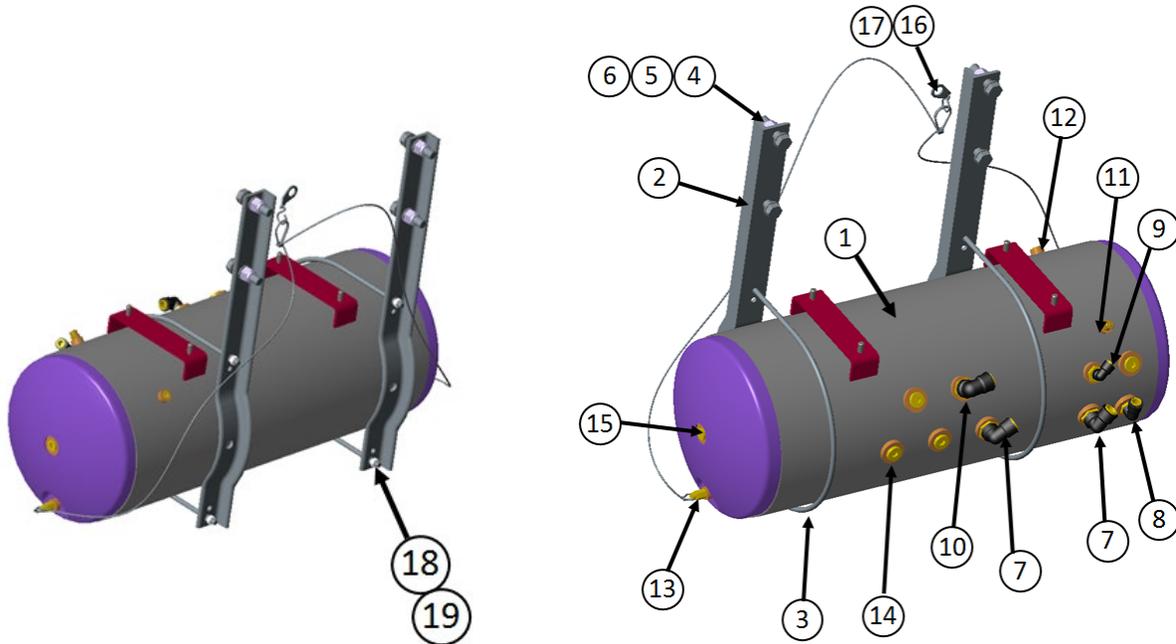
Install 34.3L Air Tank

REPAIR SCENARIO 3:

Install 18L Air Tank

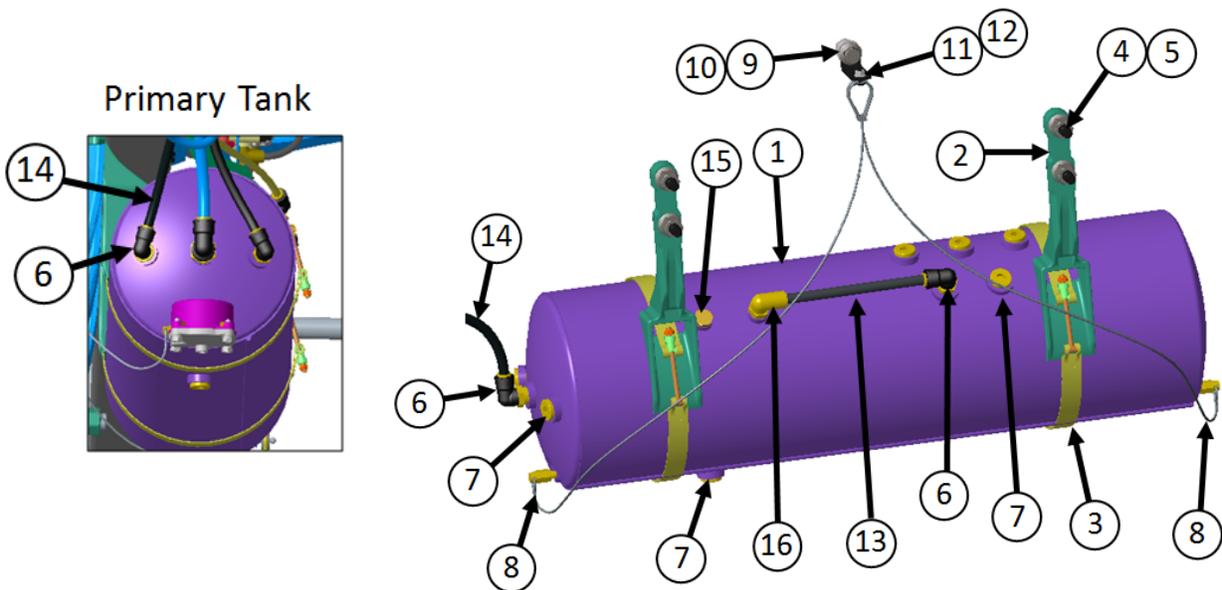
TANK PARTS LISTS:

56.5 L Air Tank Parts List



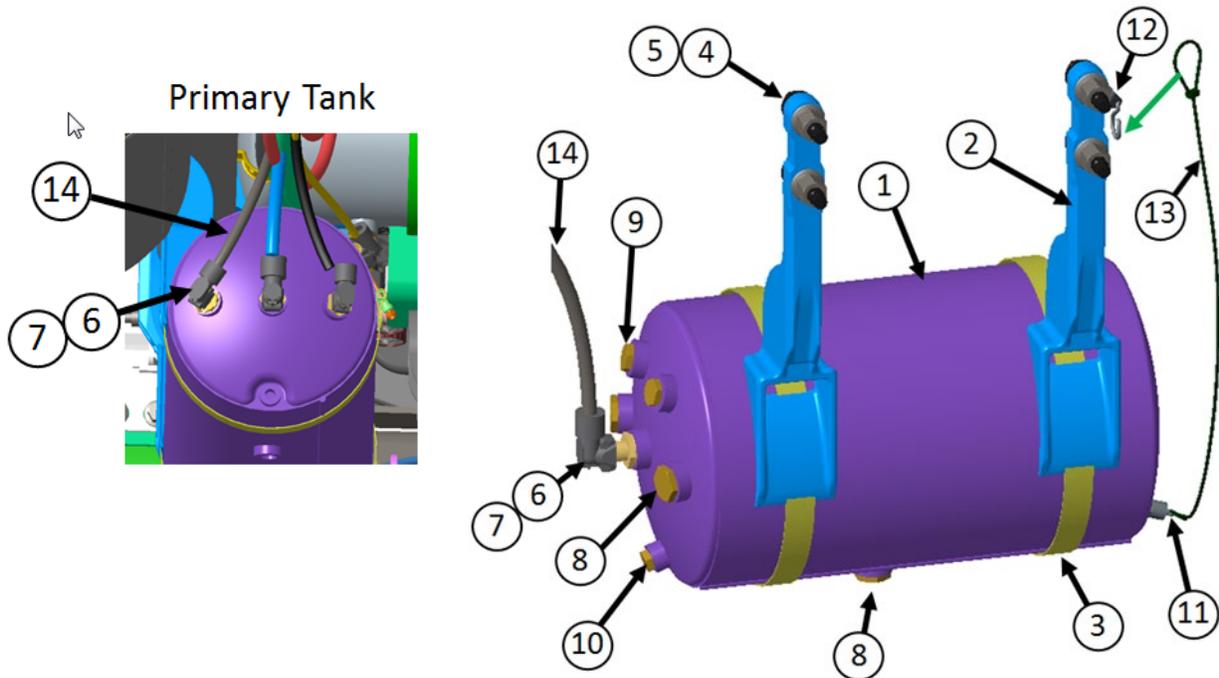
Repair Scenario 1 - Air Tank Parts List (56.5 L)			
Item	Part Number	Description	Qty
1	22945325	AIR TANK, STEEL, 305 DIA (56.5L)	1
2	25498538	BRACKET, AIR TANK	2
3	25037186	U-BOLT	3
4	25088509	FLANGE SCREW,	4
5	25089088	WASHER, 17.5*29*3.2	5
6	25173377	NUT RETAINER, HEX, 5/8" UNF	6
7	20999385	ELBOW NIPPLE, 15,9*M22X1,5 34 Nm (25 ft-lb)	7
8	20999390	ELBOW NIPPLE, 12,7*M22X1,5 34 Nm (25 ft-lb)	8
9	20999384	ELBOW NIPPLE, 9,5*M16X1,5 30 Nm (22 ft-lb)	9
10	20999388	ELBOW NIPPLE, 19,2 X M22*1,5, 34 Nm (25 ft-lb)	10
11	22723969	VALVE, PRESSURE RELEIF VALVE 20 ± 3 Nm (14 ± 2 ft-lb)	11
12	3082874	PLUG, 1/4NPTF*11,7 20 ± 3 Nm (14 ± 2 ft-lb)	12
13	22609588	DRAIN VALVE PLUS CABLE 20 ± 3 Nm (14 ± 2 ft-lb)	13
14	20710984	PLUG, CYL HEAD HEX SOCKET,22 34 Nm (25 ft-lb)	14
15	3082876	PLUG, 1/2" NPTF*15,5, 3/8 45 ± 6 Nm (33 ± 1 ft-lb)	15
16	25090637	SPACER	16
17	25086602	WIRE	17
18	20704747	TAB WASHER, LOCK-.683 OD	18
19	25095192	HEXAGON NUT,	19

34.3 L Air Tank Parts List



Repair Scenario 2 - Air Tank Parts List (34.3 L)			
Item	Part Number	Description	Qty
1	22943115	AIR TANK, STEEL, 240 DIA (34L)	1
2	21245643	BRACKET, AIR TANK	2
3	21341043	STRAP,	2
4	984857	FLANGE SCREW, M14*60	4
5	994522	FLANGE LOCK NUT, M14*22.9	4
6	20999384	ELBOW NIPPLE, 12,7 X M22*1,5 34 Nm (25 ft-lb)	3
7	20710984	PLUG, CYL HEAD HEX SOCKET 34 Nm (25 ft-lb)	6
8	23038240	DRAIN VALVE, PLUS CABLE 20 ± 3 Nm (14 ± 2 ft-lb)	2
9	984853	FLANGE SCREW, M14	1
10	992328	FLANGE NUT, M14	1
11	969422	SIX POINT SOCKET SCREW, M6	1
12	949278	FLANGE LOCK NUT, M6	1
13	945462	HOSE, 1/2 "	190 mm
14	945462	HOSE, 1/2 "	1895 mm
15	991062	PLUG, M16x1.5*9 30 Nm (22 ft-lb)	1
16	20515114	ELBOW NIPPLE, 12,7*M16*1,5 30 Nm (22 ft-lb)	1

18 L Air Tank Parts List



Repair Scenario 3 - Air Tank Parts List (18 L)

Item	Part Number	Description	Qty
1	22943623	AIR TANK, STEEL, 240 DIA (18L)	1
2	22936011	BRACKET, AIR TANK	2
3	21341043	STRAP,	2
4	984857	FLANGE SCREW, M14*60	4
5	994522	FLANGE LOCK NUT, M14*22.9	4
6	991084	SWIVEL, M22 34 Nm (25 ft-lb)	2
7	991966	ELBOW NIPPLE, 1/2 "	2
8	991063	PLUG, M22 34 Nm (25 ft-lb)	3
9	991062	PLUG, M16 30 Nm (22 ft-lb)	2
10	991061	PLUG, M12 20 Nm (14 ft-lb)	1
11	23061846	DRAIN VALVE PLUS CABLE 20 Nm (14 ft-lb)	1
11	23038227(ALT)	DRAIN VALVE PLUS CABLE 20 Nm (14 ft-lb)	1
12	25090637	SPACER	1
13	25086602	WIRE	1
14	945462	HOSE, 1/2	2850 mm

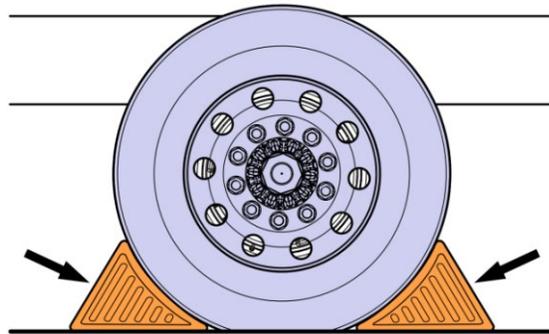
NOTE

Due to limited space within the frame of the truck, all parts used will require the technicians to select tank installation locations that do not interfere with existing components.

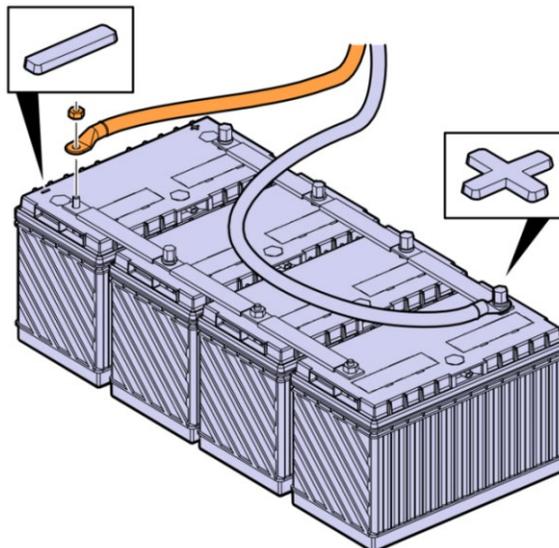
DECOMMISSIONING THE TRUCK FOR INSTALLATION:

NOTE
The Illustrations shown in this document are used for reference only and may differ slightly from the actual vehicle being serviced. However, the replacement procedure is represented as accurately as possible.

1. Secure the vehicle for service by parking on a flat and level surface, applying the parking brake, chocking the rear wheel, and placing the transmission in neutral.

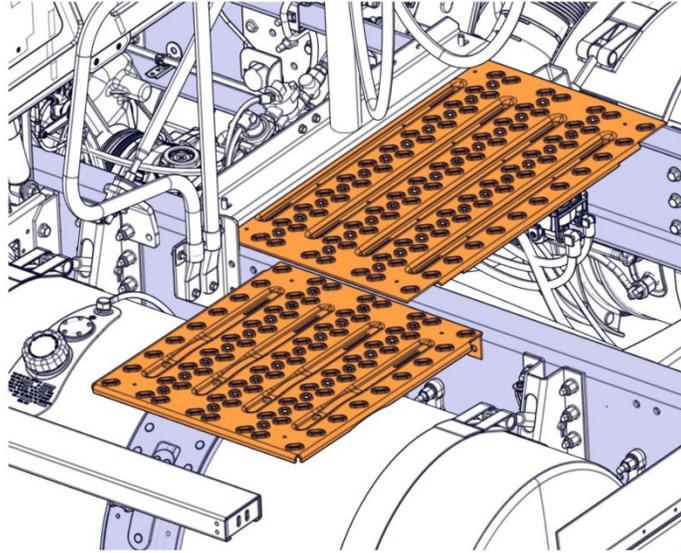


2. Disconnect the cable from the battery's negative (ground) terminal.

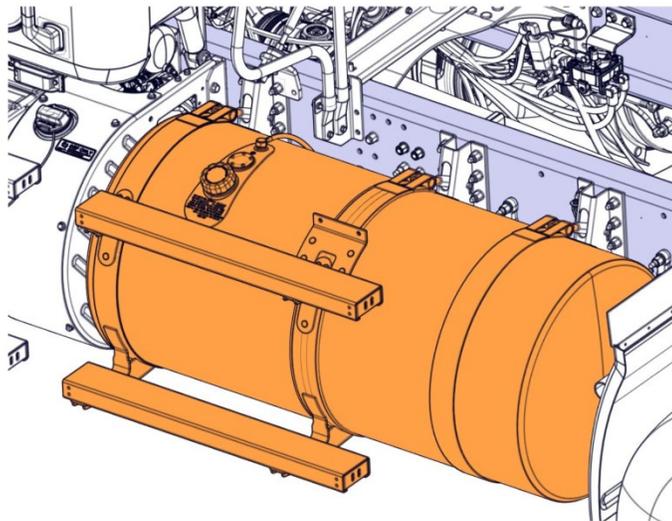


AIR TANK (56.5 L) REPLACEMENT FOR TRUCK REPAIR SCENARIO 1

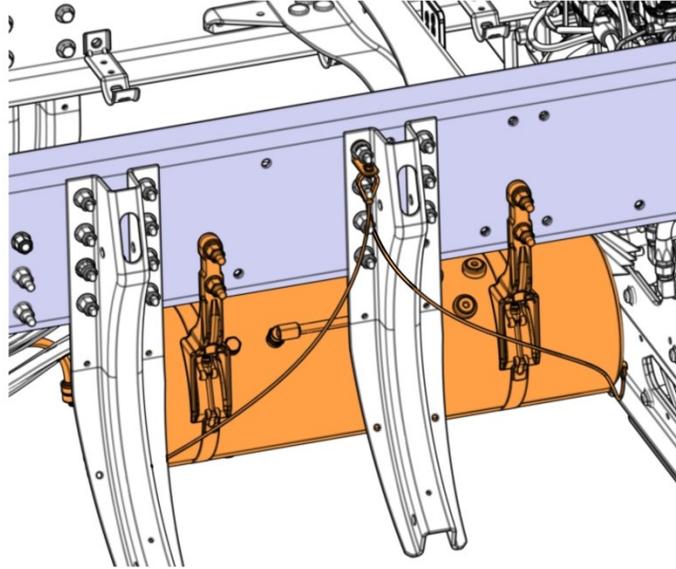
1. Drain the air system.
2. Remove any catwalk panels.



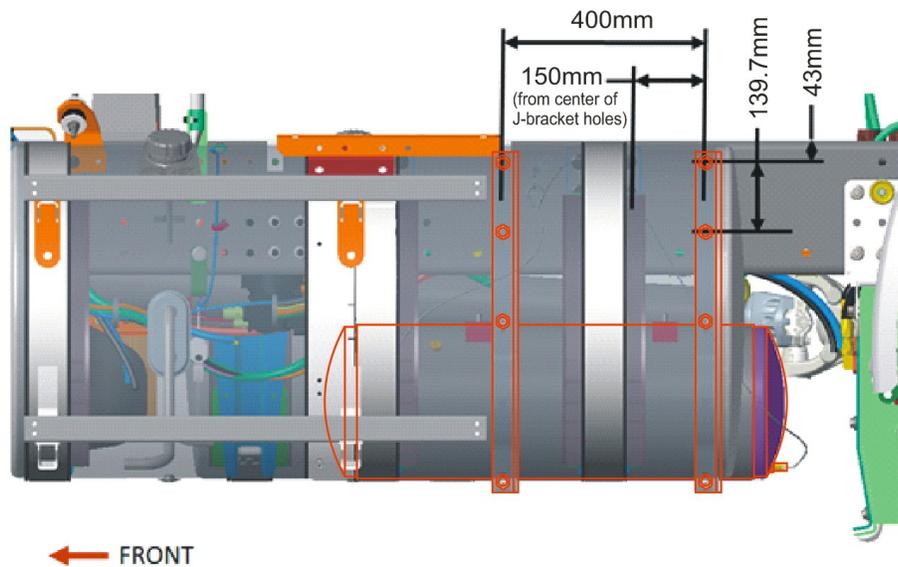
3. Drain and remove **Left Fuel Tank**.



4. Remove existing 34L air tank and brackets.



5. Locate, measure, and mark the appropriate location of the air tank brackets and mounting holes inside the frame. See the figure below for air tank routing and location.



6. Drill the frame, 4 holes X $16.7 +.127 / - 0$ mm ($0.65 +.005 / - 0$ in) Dia.

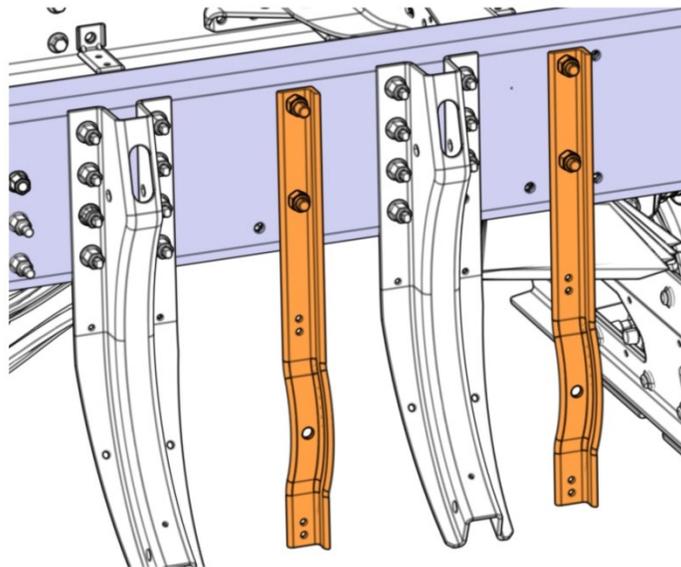
⚠ CAUTION

Check the frame for air lines, wire harnesses, or other components before drilling.

NOTE

Minimum distance between any 2 holes is 50 mm (1.96 in)
Minimum distance from bottom of frame rail 43 mm (1.69 in)

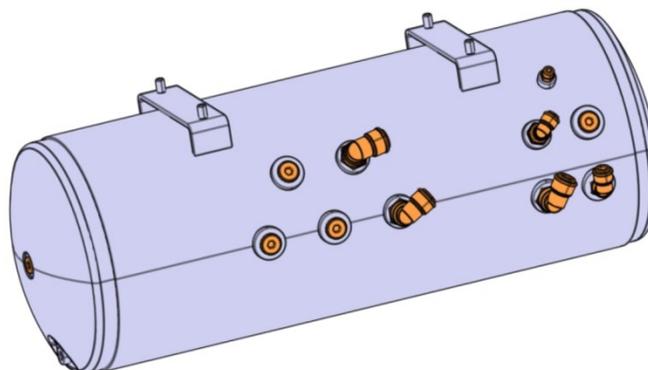
7. Install the air tank mounting brackets (1) and fasteners (2).
8. Tighten the fasteners to 175 ± 30 Nm (129 ± 22 ft-lb).



9. Install the air tank fittings and plugs on the 56.5 L replacement air tank (part number 22945325).

NOTE

See Repair Scenario 1, Air Tank Parts List (56.5 L) for fittings, plug part numbers, and installation references.



NOTE

Pipe fittings require an application of thread sealant during installation. Use thread sealant on pipe fittings only.

NOTE

O-ring fittings do not require an application thread sealant during installation.

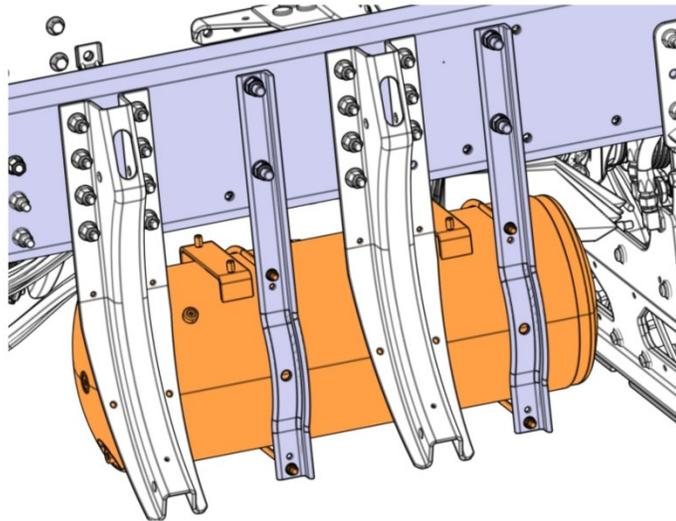
10. Using hand tools, tighten the air tank fittings to specification as shown in the **Repair Scenario 1 Air Tank Parts List (56.5 L)**.

11. Position the air tank and u-bolts on the mounting brackets.

NOTE

The tank drain should be within ± 5 degrees of the vertical position.

12. Using a torque wrench, tighten the air tank u-bolts to 40 ± 10 Nm (29 ± 2 ft-lb).



13. Position and connect the air lines.

14. Using cable ties, secure the air lines.

NOTE

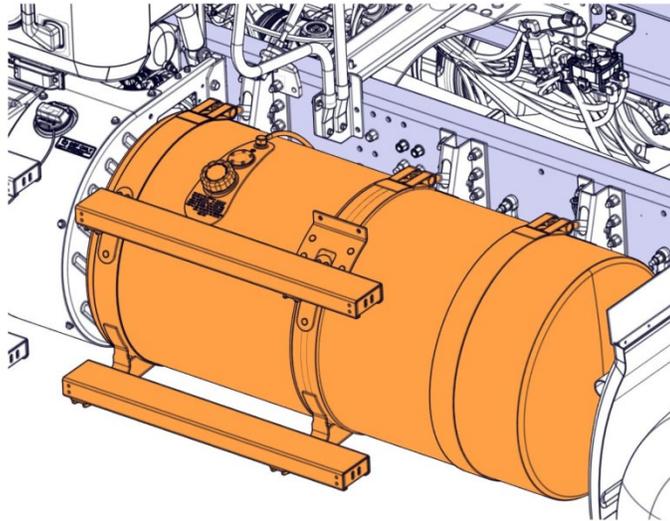
Air lines should be tied off every 457 mm (18 in).

NOTE

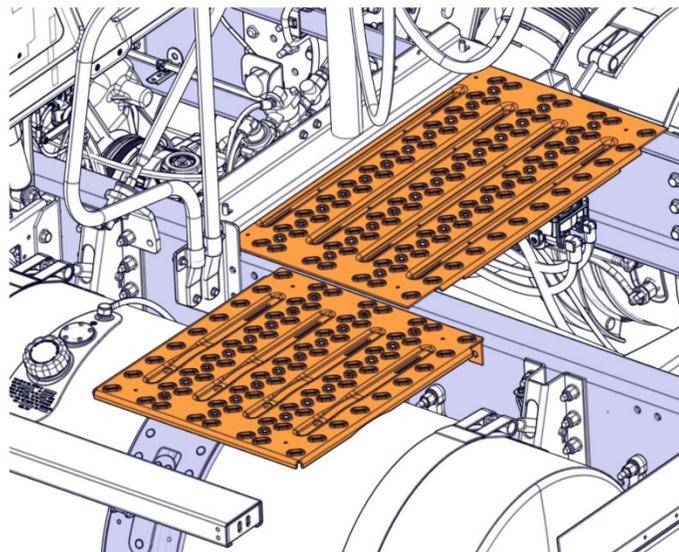
Ensure the air lines do not contact any moving parts or components.

15. Using new fasteners, re-install the fuel tank.

16. Tighten the fuel tank strap fasteners to 54 ± 7 Nm (39 ± 5 ft-lb).



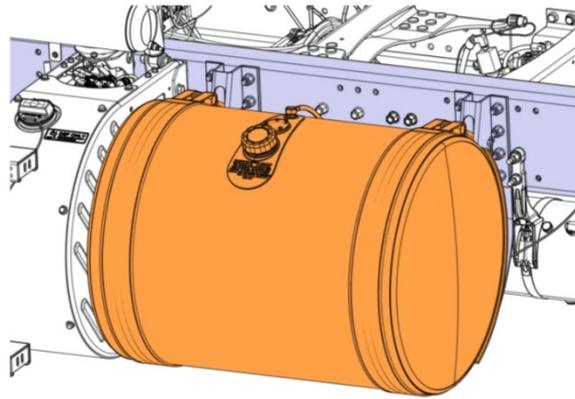
17. Re-install the catwalk panels.



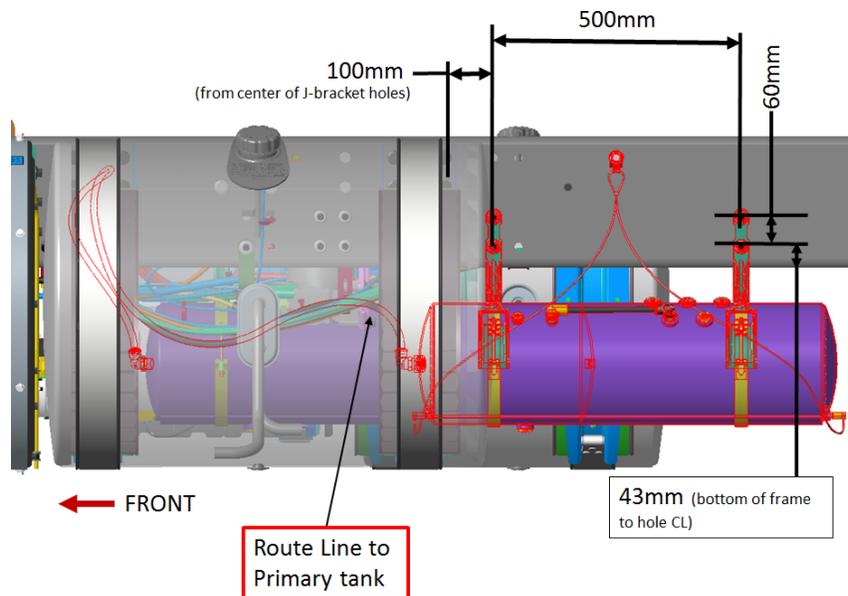
18. Proceed to **Commissioning the Truck for Operation** section.

AIR TANK (34.3 L) INSTALLATION FOR TRUCK REPAIR SCENARIO 2

1. Drain the air system.
2. Remove any catwalk panels.
3. Drain and remove **Left Fuel Tank**.



4. Locate, measure, and mark the appropriate location of the air tank brackets and mounting holes inside the frame. See the figure below for air tank location and routing.



5. Drill the frame, 4 holes X $15.5 +.127 / - 0$ mm ($0.61 +.005 / - 0$ in) Dia.

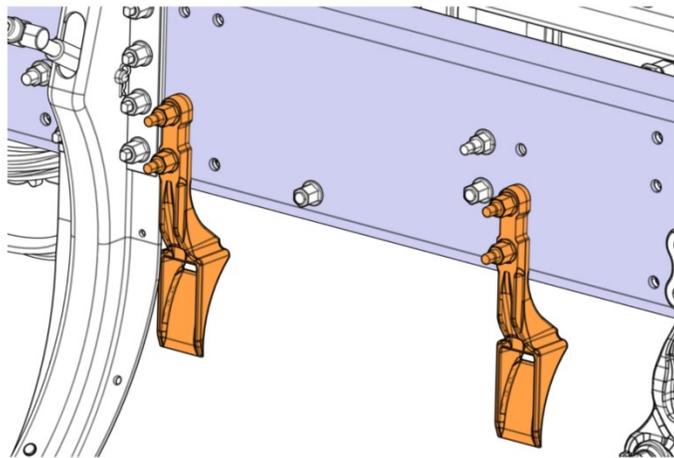
CAUTION

Check the frame for air lines, wire harnesses, or other components before drilling.

NOTE

Minimum distance between any 2 holes is 50 mm (1.96 in)
Minimum distance from bottom of frame rail 43 mm (1.69 in)

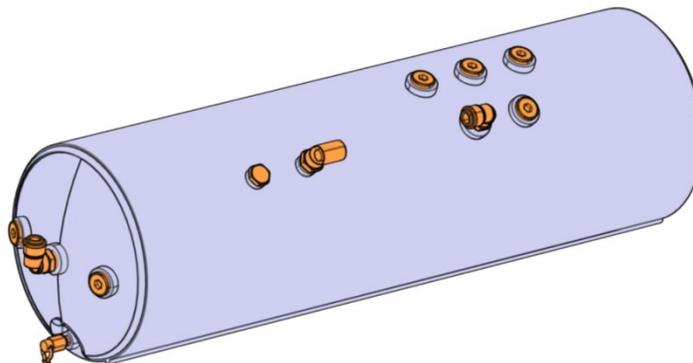
6. Install the air tank mounting brackets (1) and fasteners (2).
7. Tighten the fasteners to 175 ± 30 Nm (129 ± 22 ft-lb).



8. Install the air tank fittings and plugs on the 34.3 L additional air tank (part number 22943115).

NOTE

See Repair Scenario 2, Air Tank Parts List (34.3 L) for fittings, plug part numbers, and installation references.



NOTE

Pipe fittings require an application of thread sealant during installation. Use thread sealant on pipe fittings only.

NOTE

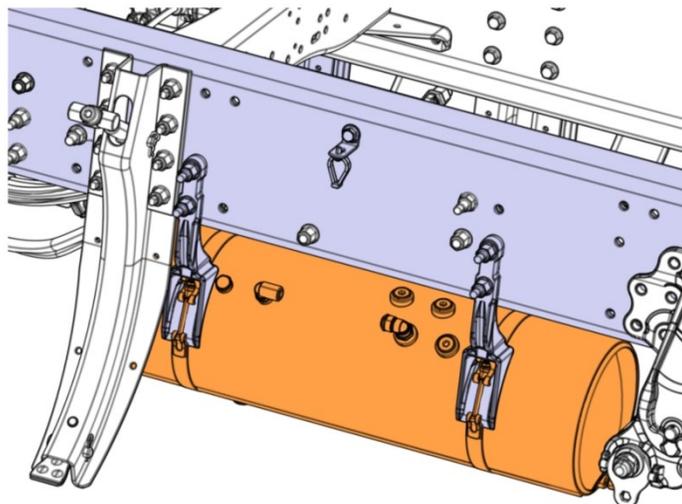
O-ring fittings do not require an application thread sealant during installation.

9. Using hand tools, tighten the air tank fittings to specification as shown in the **Repair Scenario 2, Air Tank Parts List (34.3 L)**.
10. Remove plug from the primary air tank and install fitting (part number 20999384). See the figure for 34.3 L air tank parts list for primary air tank fitting location on page 4.
11. Tighten the fitting to 34 Nm (25 ft-lb).
12. Position the air tank and straps on the mounting brackets.

NOTE

The tank drain should be within ± 5 degrees of the vertical position.

13. Using a torque wrench, tighten the air tank strap T-bolts to 10 ± 2.5 Nm (7 ± 1.8 ft-lb).



14. Position and connect the air lines.

15. Using cable ties, secure the air lines.

NOTE

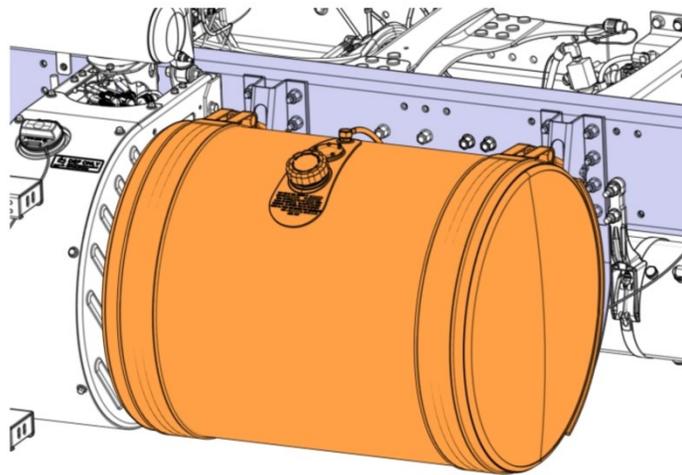
Air lines should be tied off every 457 mm (18 in).

NOTE

Ensure the air lines do not contact any moving parts or components.

16. Using new fasteners, re-install the fuel tank.

17. Tighten the fuel tank strap fasteners to 54 ± 7 Nm (39 ± 5 ft-lb).

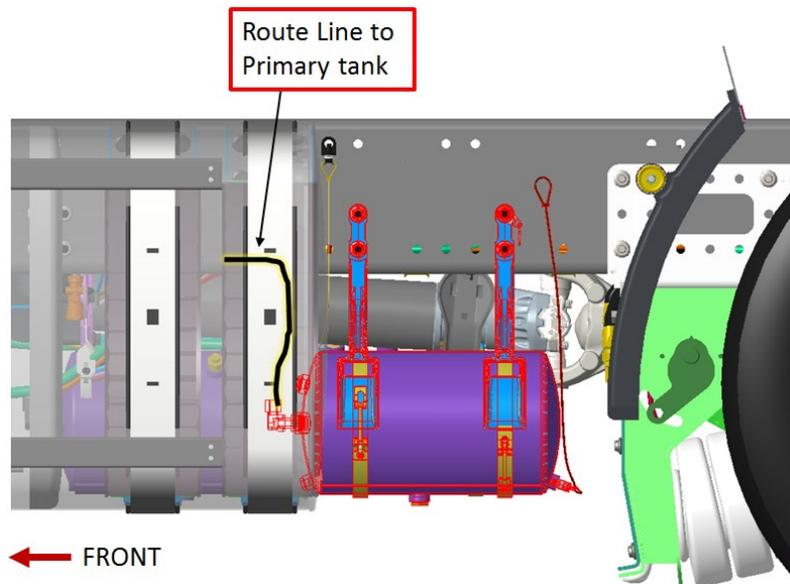


18. Re-install the catwalk panels.

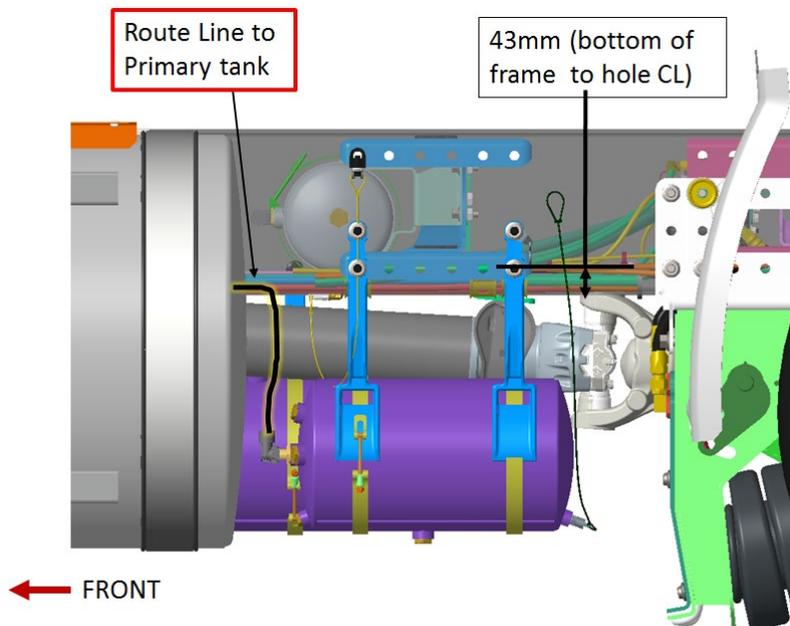
19. Proceed to **Commissioning the Truck for Operation** section.

AIR TANK (18 L) INSTALLATION FOR TRUCK REPAIR SCENARIO 3

1. Drain the air system.
2. Locate, measure, and mark the appropriate location of the air tank brackets and mounting holes inside the frame. See the images below for air tank location and routing.



Repair Scenario 3, 18L Air Tank Location and Routing



Repair Scenario 3, 18L Air Tank Alternate Location and Routing

3. Remove any existing hardware and brackets in the additional air tank location.
4. Drill the frame, 4 holes X 15.5 +.127 / - 0 mm (0.61 +.005 / - 0 in) Dia.

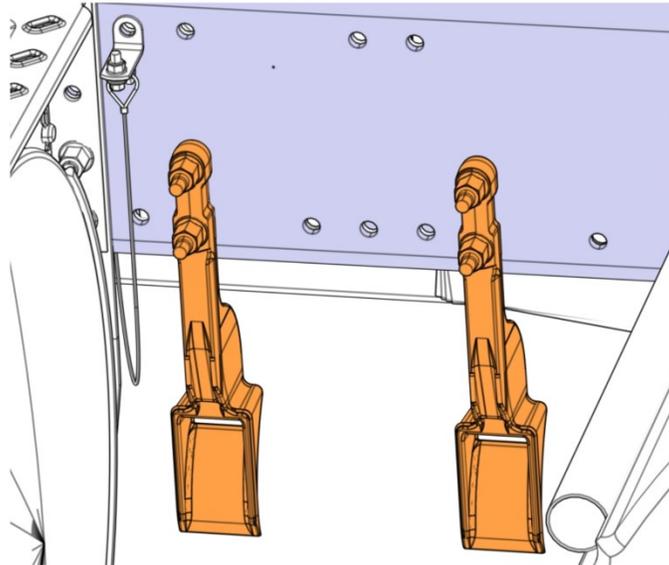
⚠ CAUTION

Check the frame for air lines, wire harnesses, or other components before drilling.

NOTE

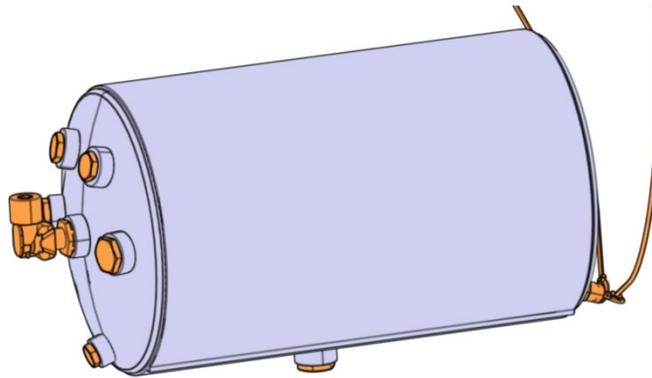
Minimum distance between any 2 holes is 50 mm (1.96 in)
Minimum distance from bottom of frame rail 43 mm (1.69 in)

5. Install the air tank mounting brackets, fasteners, and spacer (part number 25090637) in the top right fastener.
6. Tighten the fasteners to 175 ± 30 Nm (129 ± 22 ft-lb).



7. Install the air tank fittings and plugs on the 18 L additional air tank (part number 22943623).

NOTE
See Repair Scenario 3, Air Tank Parts List (18 L) for fittings, plug part numbers, and installation references.



NOTE
Pipe fittings require an application of thread sealant during installation. Use thread sealant on pipe fittings only.

NOTE
O-ring fittings do not require an application thread sealant during installation.

8. Using hand tools, tighten the air tank fittings to specification as shown in the **Repair Scenario 3, Air Tank Parts List (18 L)**.
9. Remove plug from the primary air tank and install fitting (part number 991084).

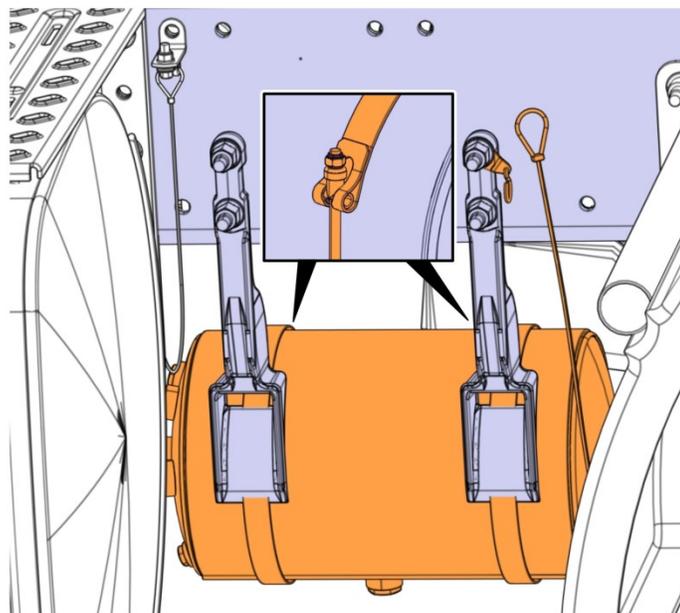
NOTE
See the figure for 18L air tank parts list for primary air tank fitting location on page 3.

10. Tighten the fitting to 34 Nm (25 ft-lb).

11. Position the air tank and straps on the mounting brackets.

NOTE
The tank drain should be within ± 5 degrees of the vertical position.

12. Using a torque wrench, tighten the air tank strap T-bolts to 10 ± 2.5 Nm (7 ± 1.8 ft-lb).



13. Position and connect the air lines.

14. Using cable ties, secure the air lines.

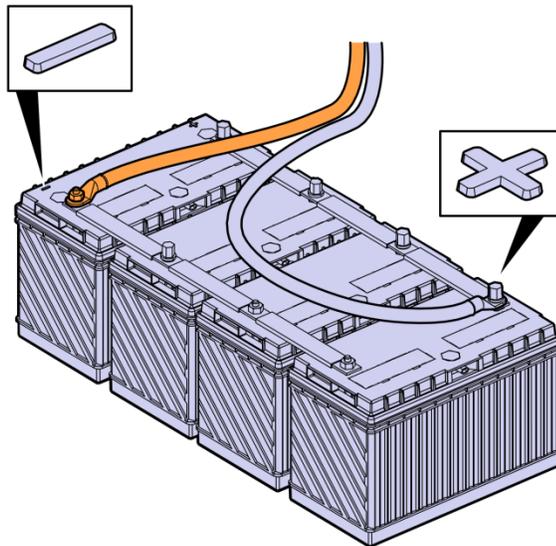
NOTE
Air lines should be tied off every 457 mm (18 in).

NOTE
Ensure the air lines do not contact any moving parts or components.

15. Proceed to **Commissioning the Truck for Operation** section.

COMMISSIONING THE TRUCK FOR OPERATION:

1. Connect the battery cable to the negative (ground) terminal.

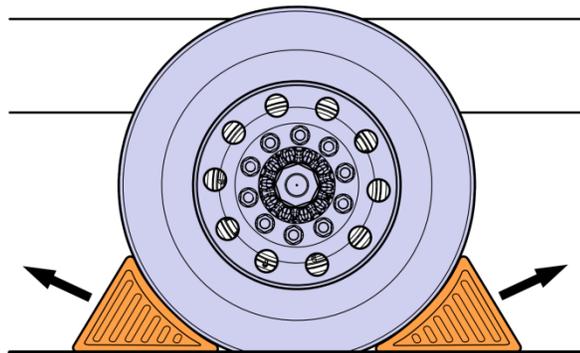


2. Start the truck, check the operation of the air brakes and check for air leaks.

NOTE

Run the engine until the correct pressure for the air brake system is obtained.

3. Remove the wheel chocks.



REIMBURSEMENT:

This repair is covered by an authorized Safety Recall campaign. Reimbursement is obtained through the normal claim handling process.	
	UCHP Reimbursement
Claim Type (Used when uploading from the Dealer business System)	40
Recall Status	
Vehicle repaired per instructions	
Labor Code	
Primary Labor Code (Air Tank, Installation) 56.5 L	5621-19-09-01 4.0 hrs
Labor Code (Air Tank, Installation) 34.3 L	5621-19-09-01 3.5 hrs
Labor Code (Air Tank, Installation) 18 L	5621-19-09-01 2.0 hrs
Causal Part	21113706, 21254708
Authorization Number	C6604

Dealers are to perform Safety Recall Campaigns on all subject vehicles at no charge to the vehicle owner regardless of mileage, age of vehicle or ownership (original purchaser or subsequent purchasers). Whenever vehicles are subject to a safety recall are brought to your dealership for service, or taken into your dealership vehicle inventory, it is strongly recommended that every effort be made to perform the recall correction before the vehicle is sold or released to the owner.