



**IMPORTANT SERVICE
INFORMATION FOR:**

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT
- ✓ WARRANTY PERSONNEL

BULLETIN NUMBER:
SB20-H-001

ISSUE DATE:
FEBRUARY 2020

GROUP:
BRAKES

DTC P0027 AIR DRYER LINE REROUTING

AFFECTED VEHICLES

- 2018-2019 MY Isuzu FTR vehicles
Produced prior to January 2, 2019

CONDITION

Some customers may complain about an illuminated check engine light setting shortly after starting the engine. If the reason for the check engine light illuminating is DTC P0027, the most likely cause is low brake air pressure.

DTC P0027 may set when the brake air pressure is very low or at 0 psi at the time the vehicle is started. The brake air pressure can be depleted (resulting in low or 0 psi) after the air system has been serviced or the vehicle has been stored for a long period of time.

If DTC P0027 continues to set even though there are no air system leaks that may be quickly depleting the air supply or causing delays in the buildup of air pressure and the exhaust brake is functioning properly, follow the service procedure in this bulletin to reroute air dryer lines for improved air support to the exhaust brake.

SERVICE PROCEDURE

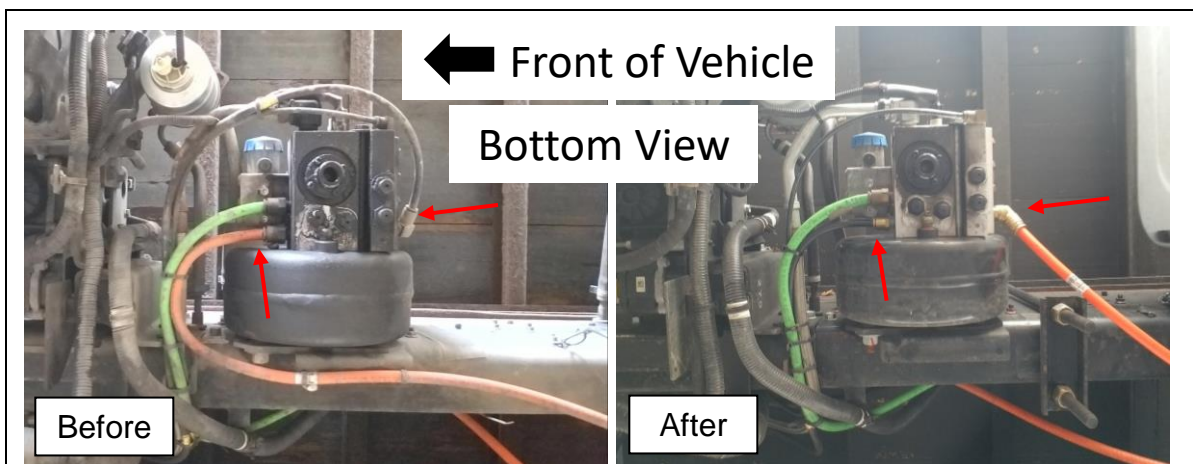


Figure 1 – Before and After Rerouting Air Dryer Lines

1. Place the vehicle in park, apply the parking brake, and turn engine off.

2. Drain air from the air brake system (see Figure 2) by pulling the lanyards, as shown in Figure 3, on the primary and secondary air reservoirs until system is completely empty.

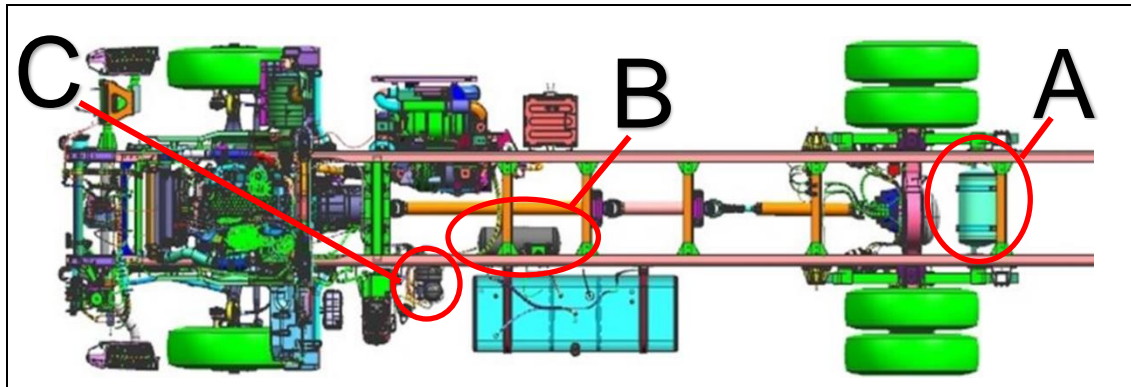


Figure 2

- A. Primary reservoir
- B. Secondary reservoir
- C. Air Dryer

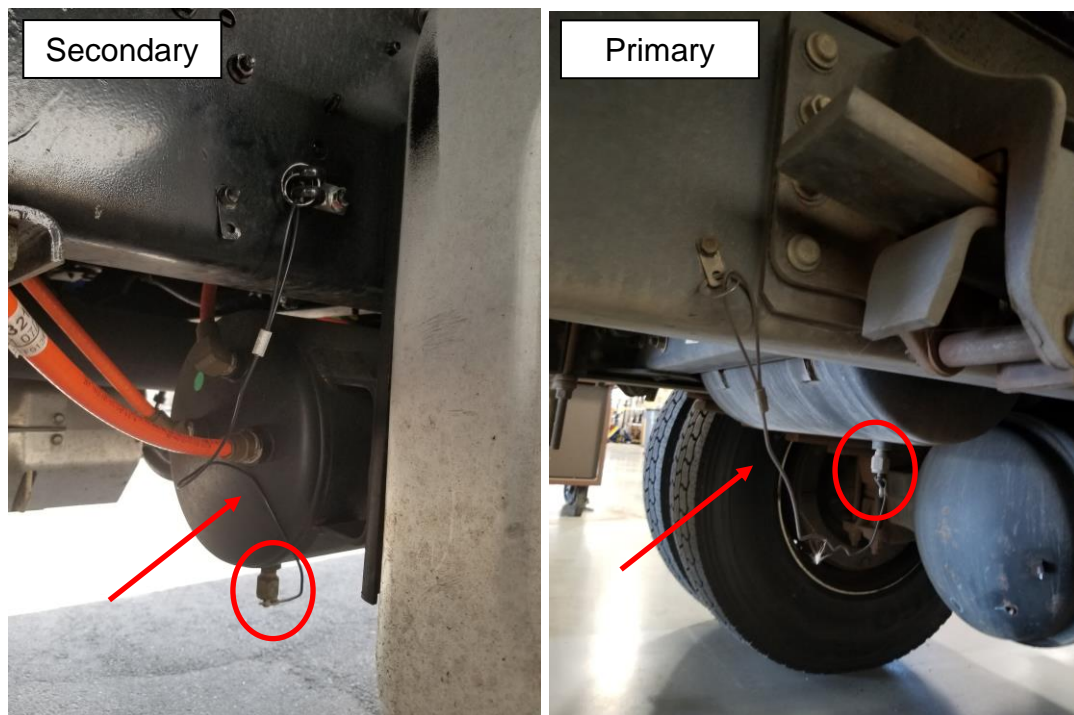
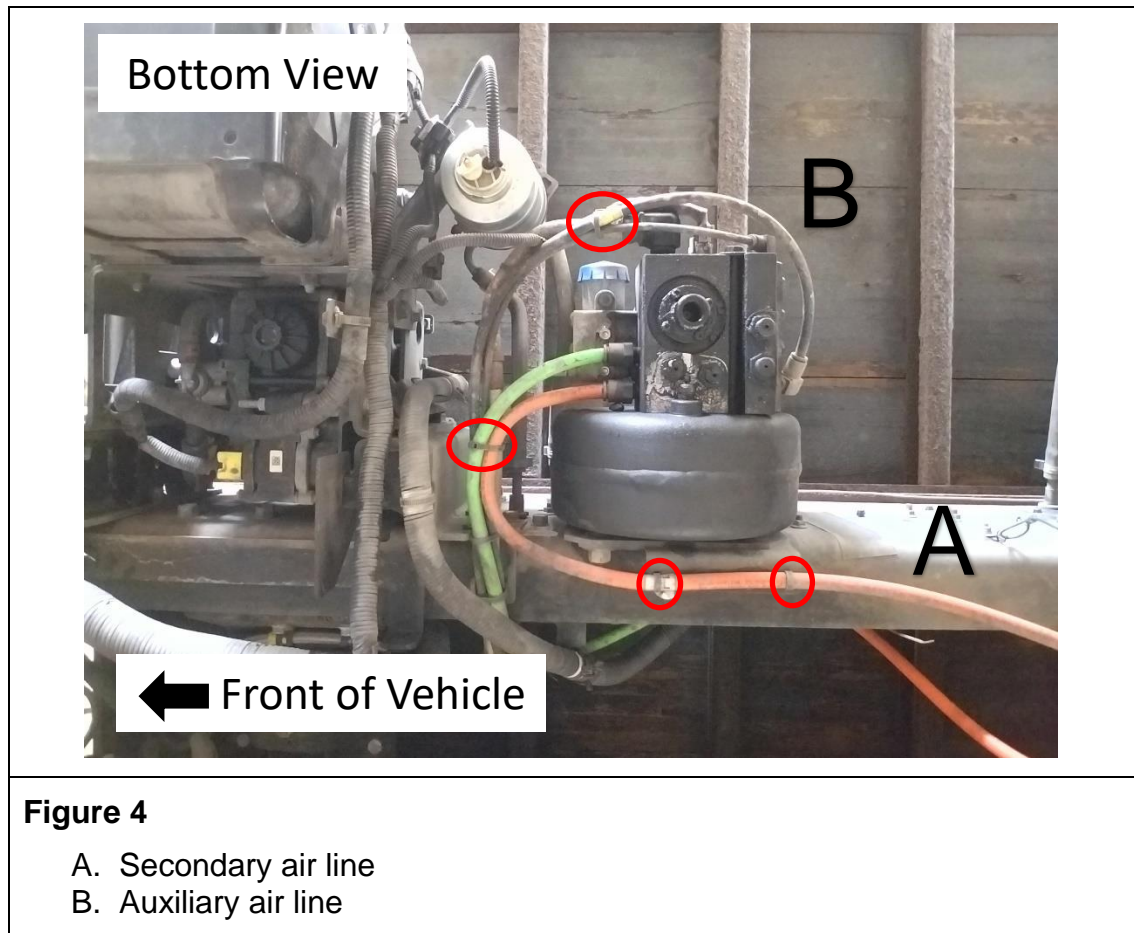


Figure 3

- A. Arrow points to lanyard.
- B. Circle shows reservoir drain valve.

3. Remove four (4) tie straps holding the auxiliary and secondary air lines in place. (See Figure 4.)



4. Disconnect the 1/2" line from "22 SEC" connector at the air dryer (see Figure 5) and the other end from the secondary reservoir.
5. Disconnect one end of the 3/8" exhaust brake air line from "23 AUX" connector at the air dryer connector. (See Figure 5.)

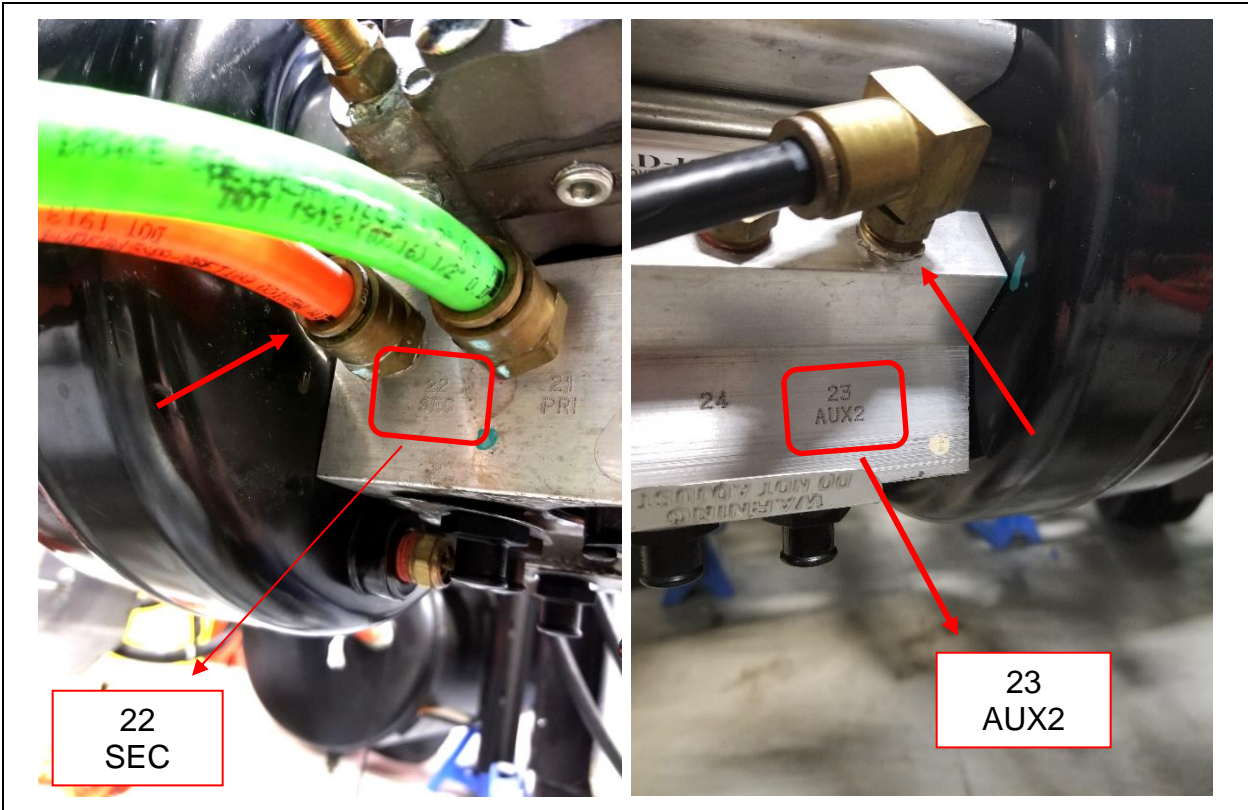


Figure 5

- Remove the two connectors from air dryer located at ports “22 SEC” and “23 AUX” and discard. (See Figure 6.)

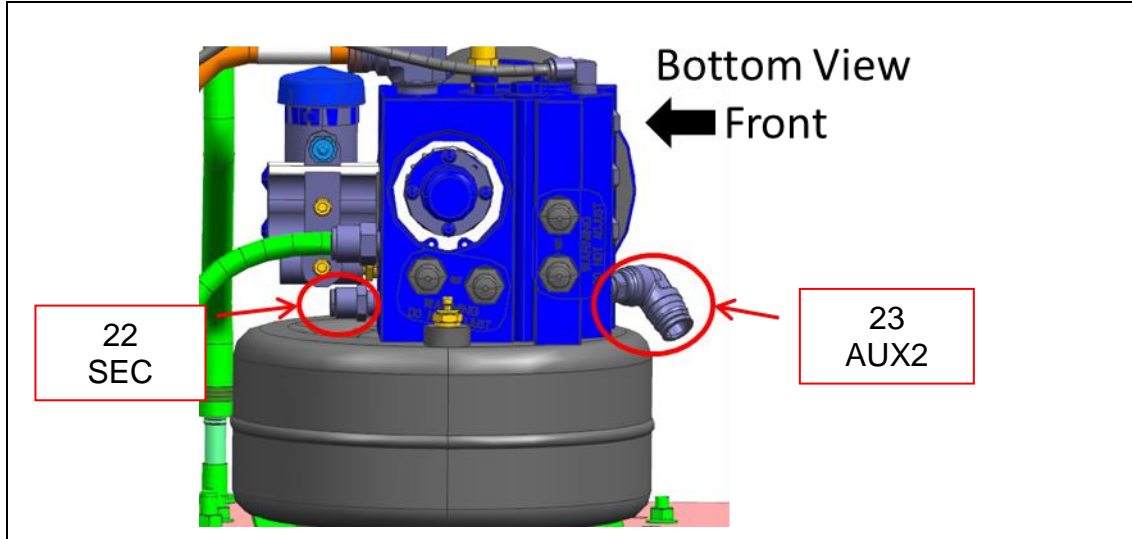


Figure 6

- Apply Teflon tape onto threads of the new, straight 3/8 x 1/4 PTC connector. Install into the air dryer port 22 SEC and torque to 13.5±2.7 Nm (10±2 lb-ft). (See Figure 7, “A”.)

- Apply Teflon tape onto threads of the new, 90° swivel, ½ x ¼ PTC connector. Install into the air dryer port 23 AUX and torque to 13.5±2.7 Nm (10±2 lb-ft). (See Figure 7, “B”.)

CAUTION: When putting Teflon tape onto the connectors do not wrap over the port openings as this may cause component damage and/or brake system malfunction could occur.

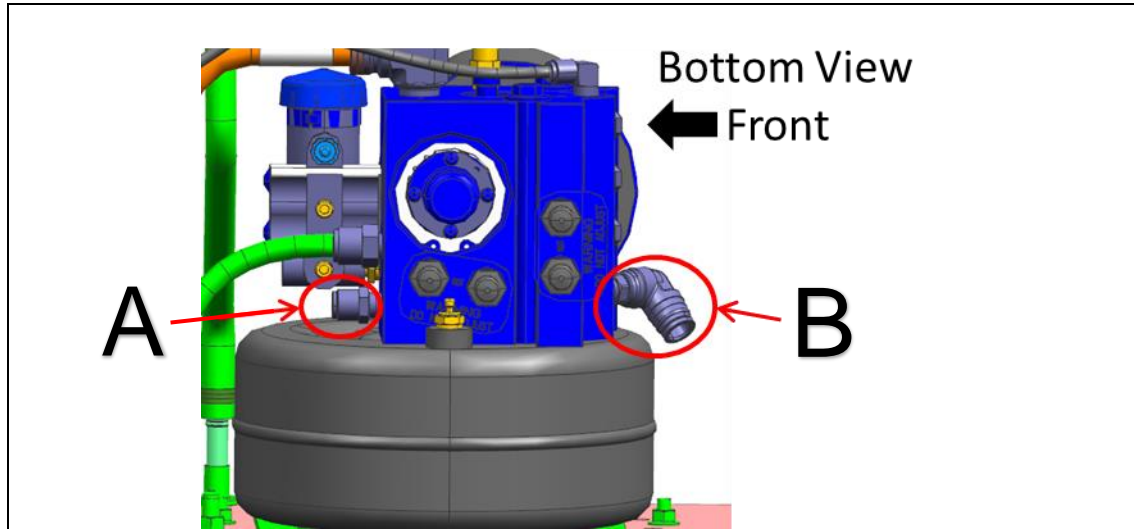


Figure 7

- With a marker, mark and cut the ½” line to 380mm as measured from end that connects to reservoir. (See Figures 8 and 9.)



Figure 8

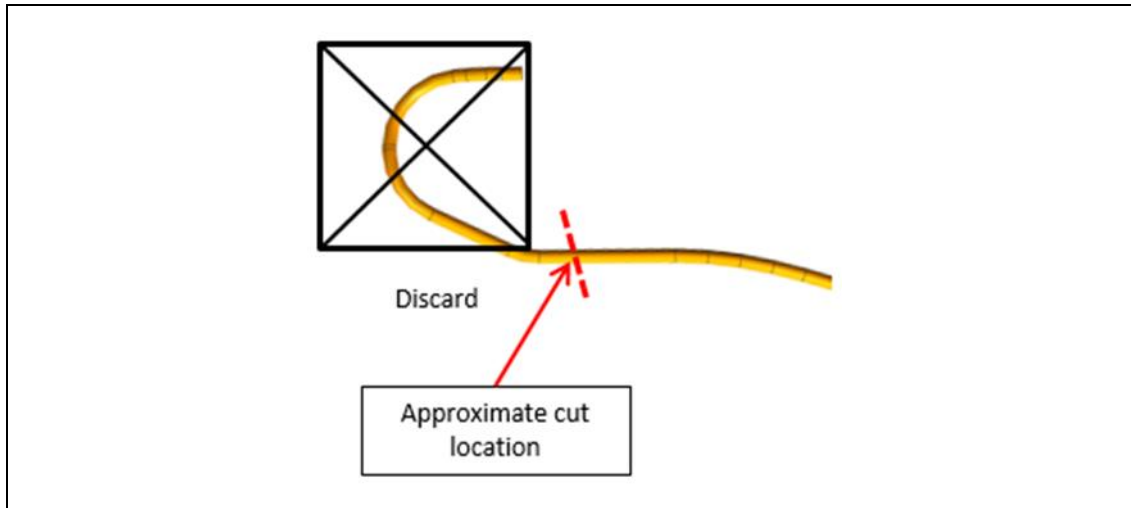


Figure 9

10. With a marker, draw a new insertion depth line ending 24.4mm (1 inch) from cut end. (See Figure 10.)

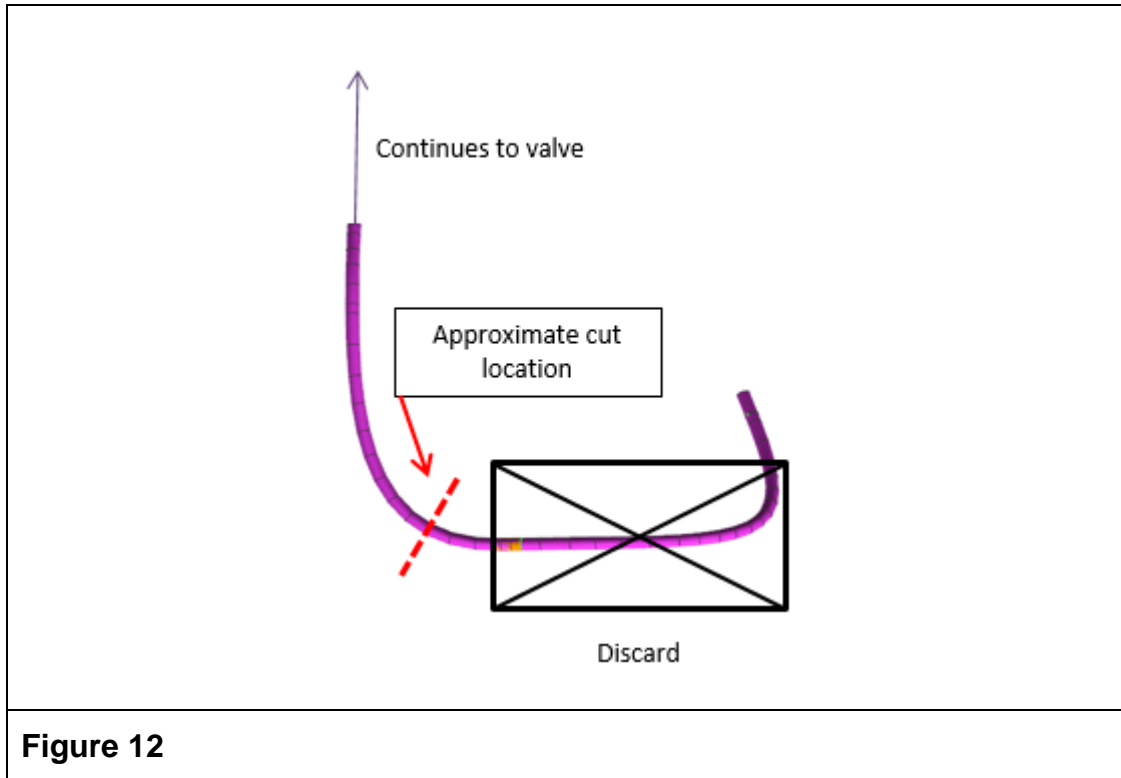


Figure 10

11. With a marker, mark and cut the 3/8 inch line to 400mm as measured from end that connects to the dryer. (See Figures 11 and 12.)



Figure 11 – Dryer harness disconnected solely for purposes of this photo



12. With a marker, draw a new insertion depth line ending 19.8 mm (25/32 inch) from cut end.
13. Insert the 1/2" line with cut end into swivel connector at port 23 AUX on the air dryer and other end into reservoir. (See Figure 13.)
14. Insert the 3/8" line into air dryer connector at port 22 SEC. (See Figure 13.)

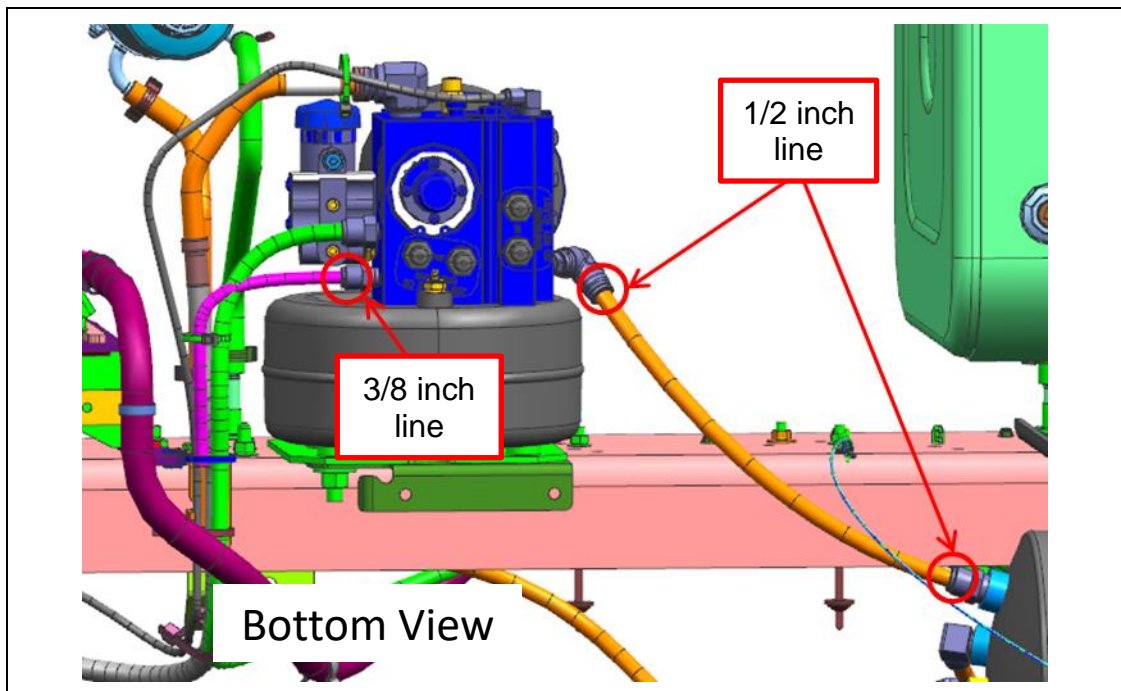


Figure 13

NOTE: Ensure lines are firmly inserted into connectors up to insertion marks to prevent air leakage.

15. Install tie straps in locations shown in Figure 14.

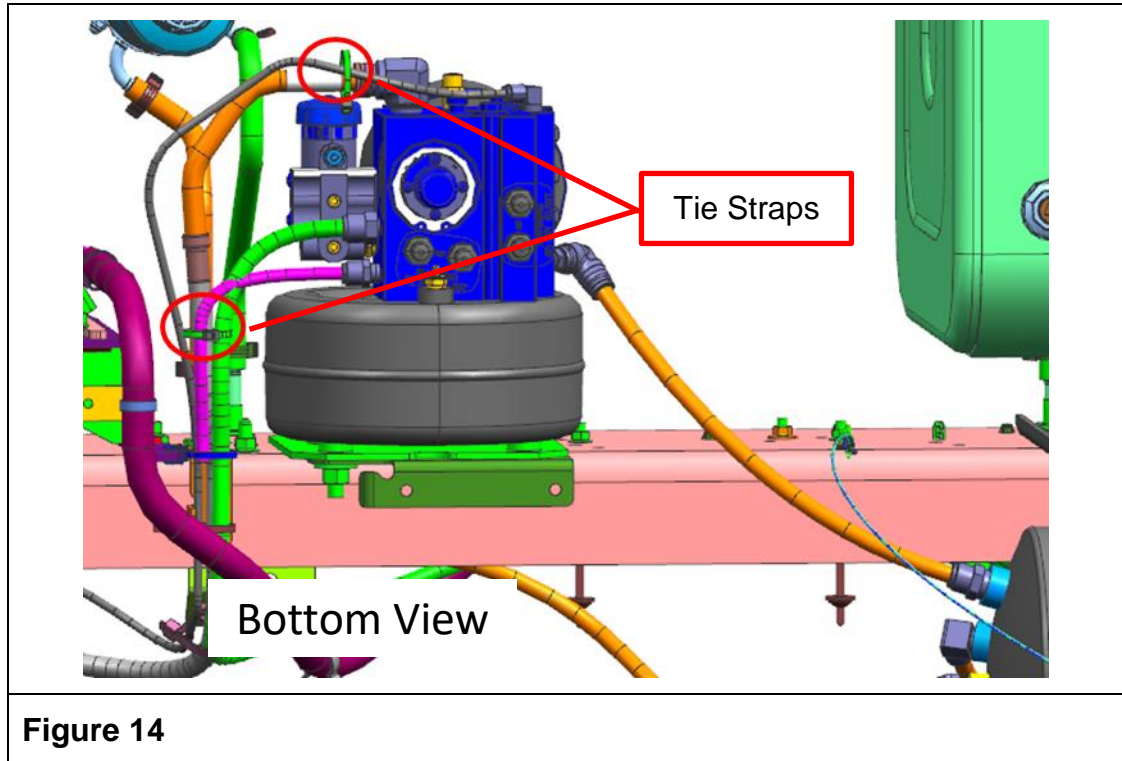


Figure 14

16. Move the secondary air reservoir manual drain lanyard to new location by removing the lanyard ring from current mounting location. (See Figure 15.)
17. Attach the lanyard ring to the new p-clip. Remove the nut from the new location. Install p-clip on stud, install nut, and torque to 22.8 ± 6.8 Nm (16.8 ± 5 ft-lb) as shown in Figure 16.



Figure 15

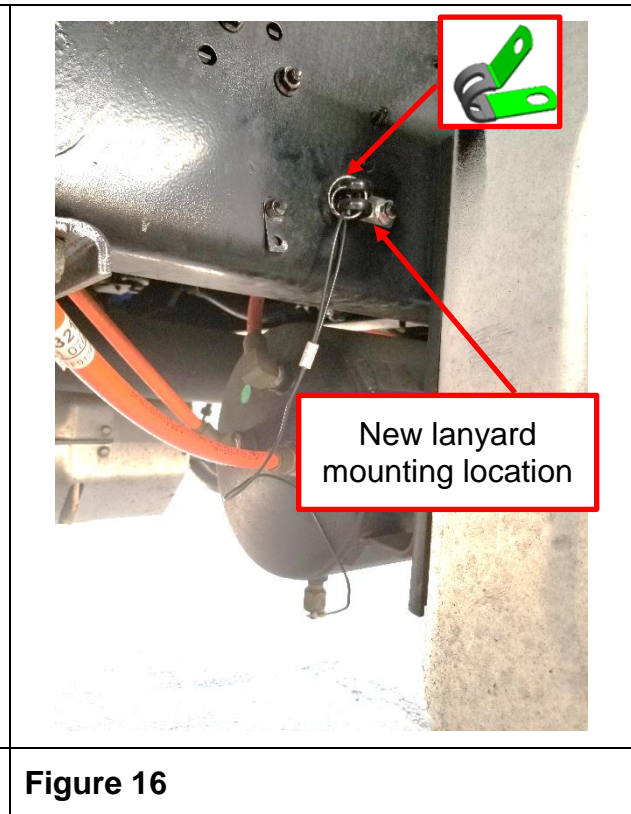


Figure 16

18. Using brake cleaner, clean the locations where new identification labels will be mounted, as shown by red rectangles in Figures 17 and 18.

19. Affix new labels to air dryer. Place “SEC” label over “AUX2” marking. (See Figure 17.) Place “AUX2” label over “SEC” marking. (See Figure 18.)

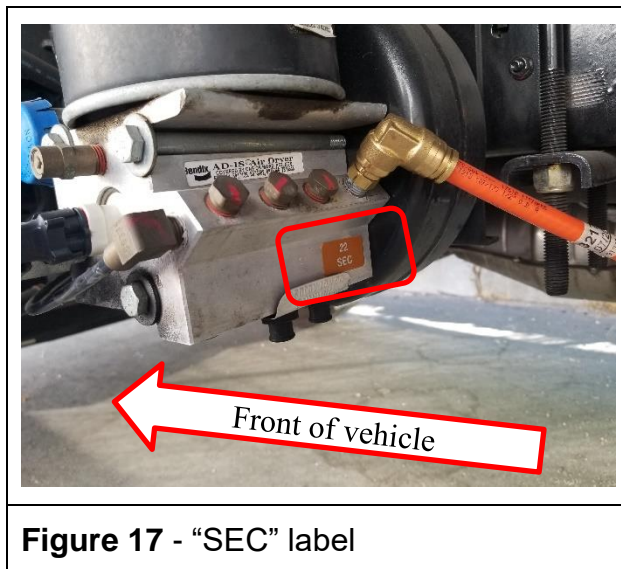


Figure 17 - “SEC” label

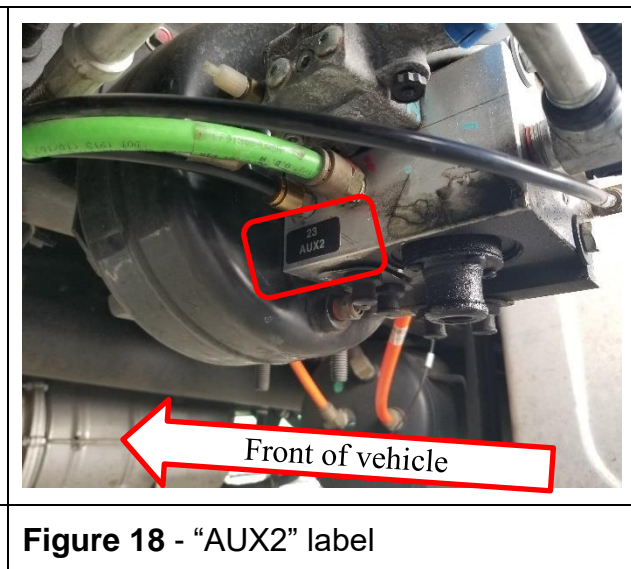


Figure 18 - “AUX2” label

20. Refill air system and check for leaks. If a leak is found, ensure air lines are fully inserted into connectors and confirm there is no more leakage.

PARTS INFORMATION

The following new parts are available from AIPDN:

Part Number	Description	Qty
8-98320-358-0	FITTING ASM; MALE CONNECTOR 3/8 PTC X ¼ NPT	1
8-97548-534-0	FITTING ASM; MALE CONNECTOR 1/2 PTC X ¼ NPT	1
8-11509-087-0	TIE STRAP	2
0-95235-866-0	CLIP; PLATE, TYPE A3, W/COATING	1
2-90LB0-001-0	AUX2 LABEL	1
2-90LB0-000-0	SEC LABEL	1

WARRANTY INFORMATION

Labor Operation Code	Description	Labor Time
H2370	AIR DRYER LINE REROUTING	0.5