Refrigerant Leaks Due to Improperly Tightened Fasteners 83-143

FLA COE
FLB COE
FLD Conventional
Business Class
FLC 112 Conventional
> Century Class Conventional
> Argosy COE
Cargo
> Columbia
> Coronado
> Business Class M2
> Cascadia
> 108SD/114SD

Freightliner Service Bulletin

General Information

On some EPA10 vehicles built prior to February 3, 2012, some refrigerant lines were not adequately tightened during installation at the factory, resulting in a slow leak. It is not necessarily an indication of a damaged component. Using approved electronic leak detection tools, as directed in the vehicle's workshop or troubleshooting manual, check the system for leaks. If a leak is discovered, the fastener at the connection may need tightening.

If a customer complains of an A/C performance issue, use the standard troubleshooting methods, as listed in the vehicle's workshop or troubleshooting manual, to determine the problem. If the problem is determined to be a leak in the refrigerant system, do not open the system before performing the following procedure.

Procedure

Refer to **Fig. 1** for some of the typical locations of potential leaks at port-block connections in the refrigerant system. The exact configuration may vary from one vehicle to the next, and some vehicles may have more connections than shown.

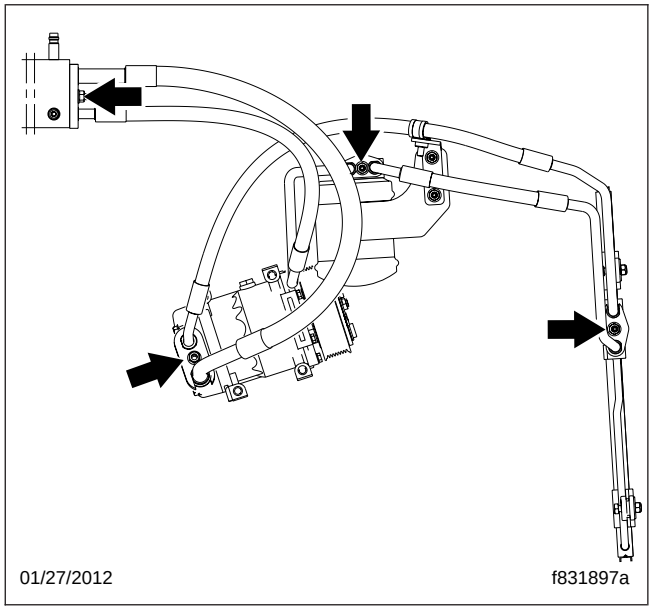

Fig. 1, Potential Leak Points in an A/C System

IMPORTANT: Do not open the refrigerant system before performing the following procedure.

1. Park the vehicle on a level surface, shut down the engine, and set the parking brakes. Chock the tires.

NOTICE

If the vehicle arrives with zero refrigerant system pressure, the receiver-drier will need to be replaced before the final evacuation and charging of the refrigerant system.

2. Verify that the refrigerant system is charged with enough refrigerant to test for leaks. If it is not, add a small charge of refrigerant for diagnosing the system.
3. Using approved electronic leak detection tools, check all of the refrigerant lines and connections for leaks.

4. If a leak is detected at any refrigerant-line port-block connection of the type shown in **Fig. 2**, first tighten the fastener 14 to 16 lbf·ft (19 to 22 N·m).

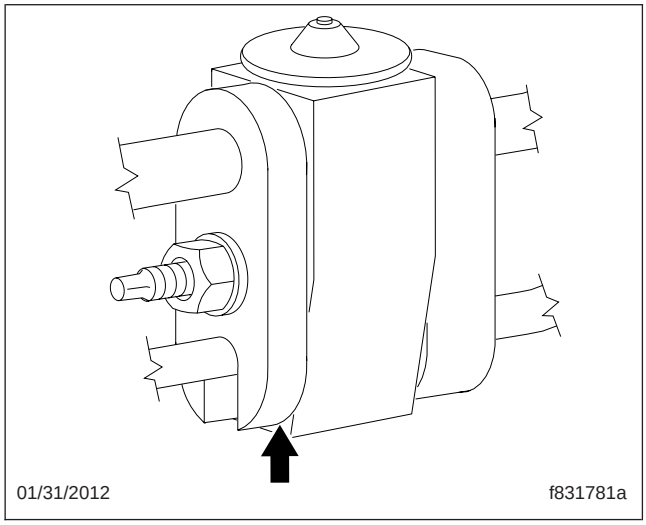

Fig. 2, Leak Points at Connections

5. Clear the area of any residual refrigerant and clean off any residual refrigerant oil and dye, then verify that no further leaks are present.
6. If a leak still exists, check the connection for damaged components following the replacement procedures in **Group 83** of the vehicle's workshop manual. If damaged components are found, use the standard SRT for replacing that component.
7. If the vehicle arrived with zero refrigerant system pressure, replace the receiver-drier as directed in **Group 83** of the vehicle's workshop manual.

IMPORTANT: Do not loosen any of the connections before setting the torque.

8. Verify that all of the remaining port-block connections (see **Fig. 2**) in the refrigerant system are tightened 14 to 16 lbf·ft (19 to 22 N·m).
9. Evacuate and charge the system to the appropriate level as directed in **Group 83** of the vehicle's workshop manual.

Warranty

This procedure is warrantable one time only per vehicle, and only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See **Table 1** for QuickClaim damage code and labor allowance information. Refer to this service bulletin by number at the beginning of the claim comments. See **Table 2** for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #:* field.

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QuickClaim Damage Code and Labor Allowance			
Damage Code	**SRT Code**	**Description**	**Time: Hours**
700-001021950	702-5014A	Lines, Refrigerant, Tighten, w/Drier, Sleeper Cab	1.8
700-001021950	702-5014B	Lines, Refrigerant, Tighten, w/Drier, Day Cab	1.4

Table 1, QuickClaim Damage Code and Labor Allowance

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	**Component Code**	**Cause Code**	**SRT Code**	**Description**	**Time: Hours**
Hose Assembly (See NOTE)	001-001-394	28	702-5014A	Lines, Refrigerant, Tighten, w/Drier, Sleeper Cab	1.8
Hose Assembly (See NOTE)	001-001-394	28	702-5014B	Lines, Refrigerant, Tighten, w/Drier, Day Cab	1.4

Table 2, OWL VMRS Codes and Labor Allowance

NOTE: Use 23-13202-000 as PFP, then select "O-Ring – A/C system, Refrigerant Line, Hose, Tubes, Plumbing" from the drop-down menu.