Description of Revisions: This bulletin replaces the version dated earlier in July 2007. The labor allowance table was modified to include an additional claim option.

General Information

In some weather conditions it may be possible for a Business Class M2 vehicle, manufactured prior to January 8, 2007, to experience a loss of air conditioning due to freezing of the evaporator core. Evaporator freezing symptoms can include complaints of a lack of airflow, or lack of cooling. In many cases the complaint cannot be reproduced at the service facility because the evaporator has already thawed. If a Business Class M2 vehicle, manufactured prior to January 8, 2007, exhibits symptoms of an evaporator freezing, and no other cause is found, it may be necessary to install a service harness and/or a drain tube. See Table 1 for the part numbers.

Business Class M2 vehicles built on or after January 8, 2007 have freeze protection built into the HVAC control unit. The jumper harness installed to fix vehicles built prior to January 8, 2007, cannot be installed on vehicles built on or after January 8, 2007. Doing so will cause a significant decrease in HVAC performance.

A drain tube should be installed on the evaporator drain of any Business Class M2 vehicle that does not already have one. This will help prevent hot engine air from causing false readings by the evaporator temperature probe.

IMPORTANT: It is extremely important that all of the inspections listed below be completed prior to installing a service harness. Many instances of evaporator freezing have been traced to refrigerant leaks and dirty air filters. These leaks must be repaired to restore A/C performance. If freezing is due to a problem with one of these systems, the harness will not be effective.

Inspections

Prior to performing the following inspections and procedures, park the vehicle on a level surface, set the parking brake, shut down the engine, and chock the tires.

Drain Tube Inspection

Check to see if a drain tube is installed on the evaporator condensate drain. If there is no drain tube installed, install one following the instructions in "Drain Tube Installation" below.

Cab Recirculation Air Filter Inspection

Check the cab recirculation air filter to see if it is significantly clogged. The filter is located behind the lower dash panel in front of the passenger seat.

1. Remove the three screws that attach the lower dash panel to expose the air filter/evaporator core access panel.
2. Remove the access panel and the air filter.
3. If the filter is significantly clogged, replace it and consider the cause of the freezing a lack of maintenance. Charge the customer for this repair. Install a drain tube if needed.
   - If the filter is not significantly clogged, leave the filter and access panel removed and go to the next inspection.

IMPORTANT: Do not operate the vehicle without a fresh air filter installed. The fresh air filter must be in place when the vehicle is in operation or the evaporator will become clogged and A/C function will be impaired.
Leak Inspection

1. Inspect the entire A/C system for refrigerant leaks. Refer to Section 83.00, Subject 220 of the Business Class M2 Workshop Manual for instructions.

2. If no leaks are detected, go to the next inspection.
   If a leak is found, recover the refrigerant, repair the leak, and charge the system. Refer to Group 83 of the Business Class M2 Workshop Manual for servicing instructions.

3. Install the filter and panels and return the vehicle to service. No further work is needed.
   In addition to the SRTs for leak checking and repairing the refrigerant leak, claim an additional 0.1 hours of diagnostic time to account for checking the air filter.

Refrigerant Charge Level Inspection

Verify that Freightliner Service Bulletin 83-112 has been completed if applicable.

If it has not been completed, do it now, and return the vehicle to service. No further work is needed. Install the filter and panels. Claim an additional 0.4 hours of diagnostic time for checking the air filter and performing the Leak Inspection procedure.

If it has been completed, go to the next procedure.

Procedures

Evaporator Probe Service Harness Installation

IMPORTANT: This procedure only applies to vehicles manufactured prior to January 8, 2007. Vehicles built on or after January 8, 2007 have freeze protection built into the HVAC control unit. The jumper harness cannot be added to vehicles built after January 8, 2007. Doing so will cause a significant decrease in HVAC performance.

If none of the other tests have confirmed an alternative failure, install the service harness. See Table 1 for the part number.

1. Find the harness for the evaporator temperature sensor where it plugs into the HVAC module. See Fig. 1.
2. Remove the plug from the sensor.
3. Install the service harness between the existing harness and the temperature sensor.
4. Secure the harness to adjacent wires with wire ties.
5. Install the filter and panels.

Drain Tube Installation

If there is no drain tube installed, assemble and install one as described below. See Table 1 for the part numbers.

1. Connect a collapsed "blooper" tube to a 90-degree rubber elbow as shown in Fig. 2.
2. Using a hose clamp, attach this drain tube assembly to the evaporator condensate drain located on the vehicle front wall. See Fig. 3.
Loss of A/C Due To Evaporator Freezing

Parts are available through the PDC. See Table 1 for the part numbers.

Fig. 1, Service Harness Installation (vehicles manufactured prior to January 8, 2007 only)

Fig. 2, Drain Tube Assembly

Fig. 3, Drain Tube Location

Parts

Parts are available through the PDC. See Table 1 for the part numbers.
Warranty

Normal warranty applies. When submitting claims, reference this bulletin by number in the story of the claim. Use the damage code and time guide information in Table 2 for the service harness installation.

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Table 2, Labor Allowance