Bergstrom NITE Parked HVAC Performance Issues

FLA COE	**FLC 112 Conventional**	**> Columbia**	**Freightliner**
FLB COE	**> Century Class Conventional**	**> Coronado**	**Service Bulletin**
FLD Conventional	**Argosy**	**Business Class M2**	
Business Class	**Cargo**	**Cascadia**	

Description of Revisions: *This bulletin replaces the version dated February 2008. The related VMRS codes are added.*

General Information

IMPORTANT: This bulletin applies only to vehicles with Freightliner-installed NITE systems, manufactured between August 29, 2006 and December 1, 2007.

The Bergstrom NITE parked HVAC unit, located under the lower bunk, may have reduced cooling or heating output. If the vehicle was built before December 1, 2007, it may require a software update. The newest version of the NITE software includes revised compressor speeds and heater control parameters. Apply the new software using the service kit listed below. Only one service kit is needed per dealership, it can be re-used on other vehicles.
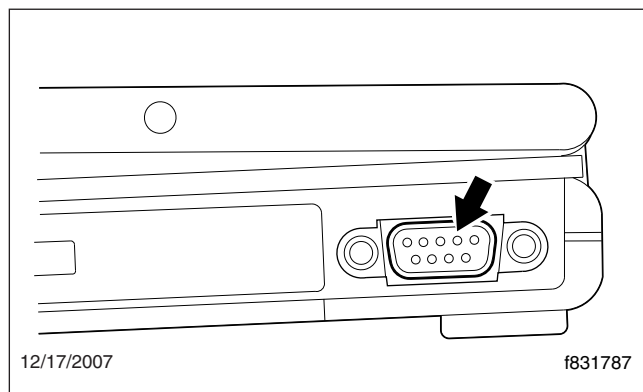
Parts

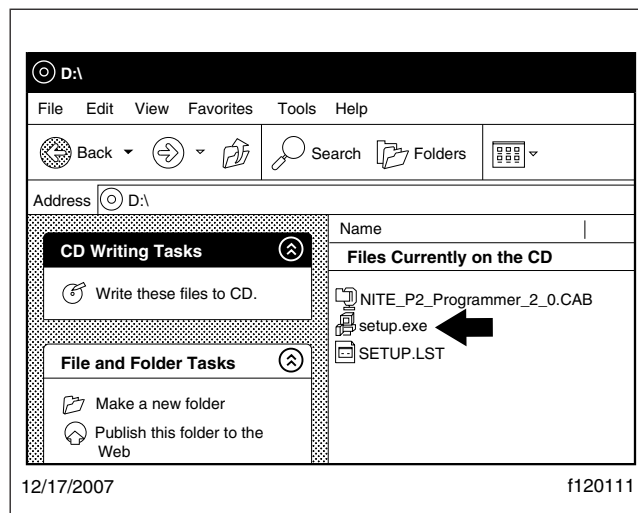Service kit P/N BSM 1000022770. The service kit includes:

- a CD;
- wire harness;
- and instructions.

Software Installation Procedure

1. Install the software from the enclosed CD on any PC, with Windows XP or 2000, that has an available RS-232 serial port. See **Fig. 1**.

2. Open the CD drive using Windows Explorer or the "My Computer" desktop icon. Double click on the file "setup.exe". See **Fig. 2**.

12/17/2007   f831787

Fig. 1, RS-232 Serial Port

12/17/2007   f120111

Fig. 2, setup.exe

3. Follow the default instructions on the screen to install the software. A window will pop up with the error message "An error occurred while registering the file C:\WINDOWS\system32\MFC42D.DLL". Click on "Ignore", and let the installation finish. See **Fig. 3**.

Vehicle Preparation

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

IMPORTANT: Leave the ignition in the OFF position during programming. The parked batteries between the rails will provide power to the parked HVAC unit. Do not change anything on the vehicle during programming (turn on the radio, start the truck, etc.). Changes in vehicle voltage during programming can cause the unit to fail programming. If this happens, try programming again. If the unit won't start programming, and you get a "Failed to Enter Serial Programming" message repeatedly, you will need to replace the unit control module.

2. Set the ignition switch to OFF.

3. Turn the Temperature setting on the parked HVAC unit control to full cold, and set the mode selector to Heat only. See **Fig. 4**.

Fig. 3, Ignore

Fig. 4, Temperature Settings

4. Raise the lower bunk and secure it out of the way.

5. Remove the electrical panel cover from the front of the parked HVAC unit. See **Fig. 5**.

Reprogramming the NITE HVAC Unit Control Module

1. Connect the RS-232 serial cable to the PC's serial port. Connect the small beige-colored adapter box (marked "TTL Adapter") to the RS-232 serial cable, then attach the programming wire harness to the adapter box. See **Fig. 6**.

Bergstrom NITE Parked HVAC Performance Issues

83-122

FLA COE
FLB COE
FLD Conventional
Business Class

FLC 112 Conventional
> Century Class Conventional
Argosy
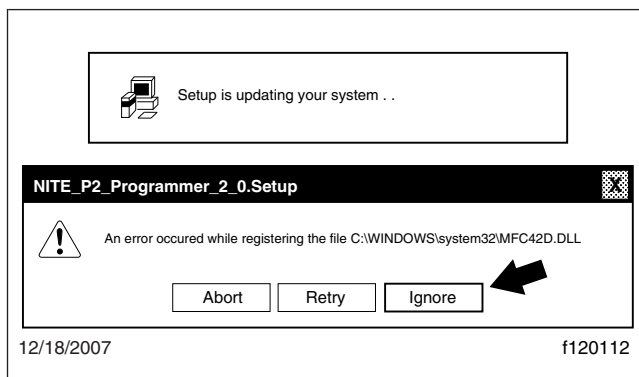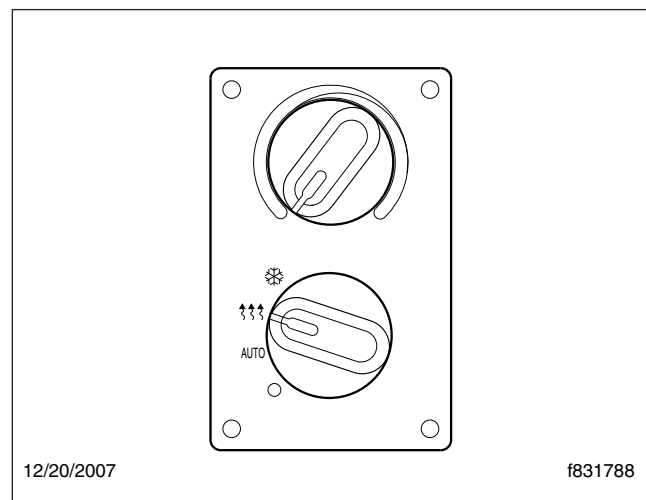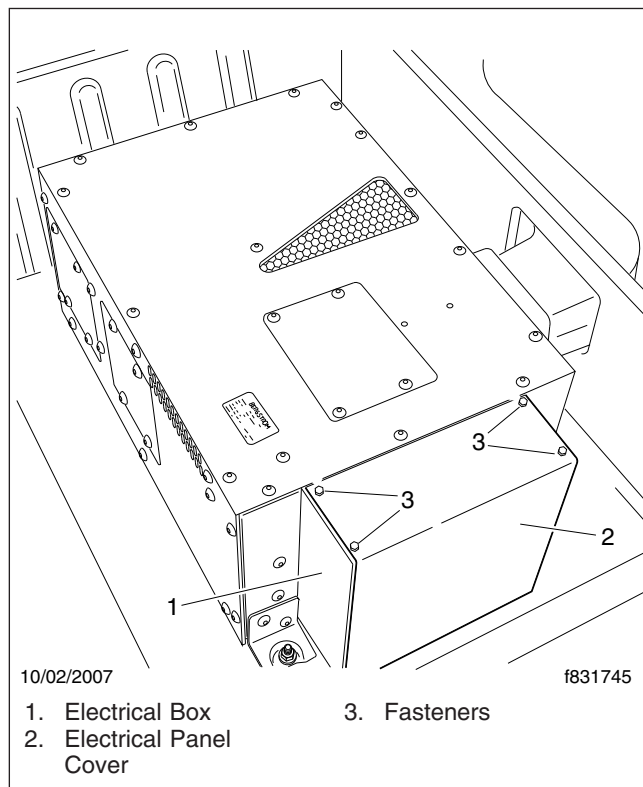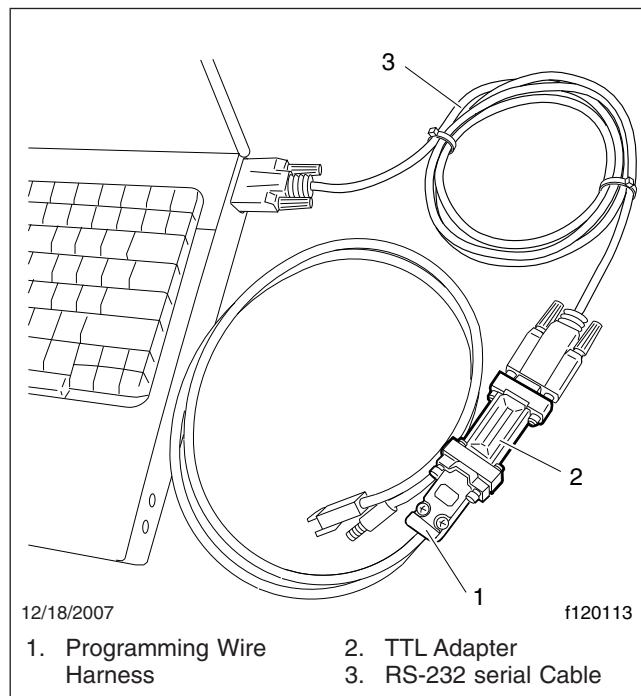Cargo

> Columbia
> Coronado
Business Class M2
Cascadia

**Freightliner
Service Bulletin**

10/02/2007   f831745

1. Electrical Box   3. Fasteners
2. Electrical Panel
    Cover

Fig. 5, Electrical Panel Access

12/18/2007   f120113

1. Programming Wire   2. TTL Adapter
    Harness   3. RS-232 serial Cable
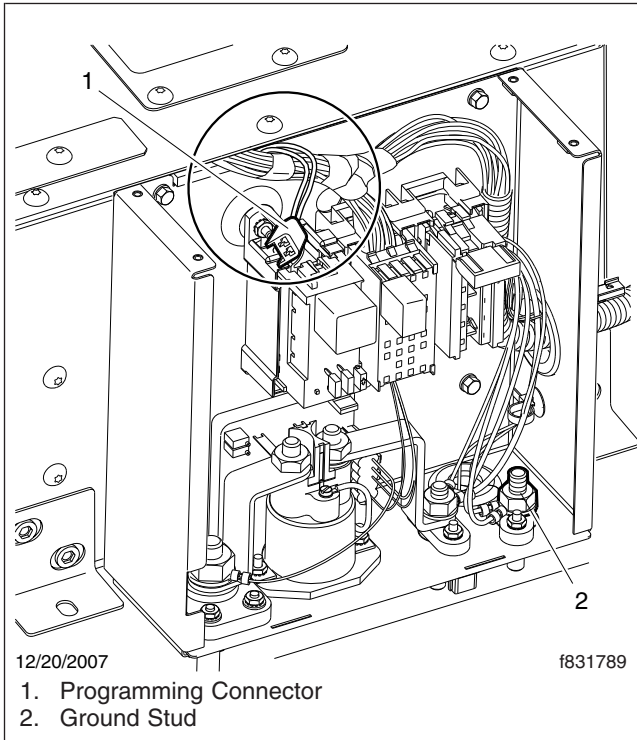
Fig. 6, Computer Connecting Harness

2. Start the program "NITE_P2_PROGRAMMER" by clicking Start (usually in the lower left corner), then selecting "Programs", "Bergstrom Apps", then "NITE_P2_Programmer".

3. Attach the alligator clip to the ground stud, which is on the far right (driver's) side of the box and has a black plastic bracket. Plug the programming harness in to the 2-way connector (with blue and white wires) at the top passenger side of the electrical center. See **Fig. 7** and **Fig. 8**.

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

12/20/2007   f831789
1. Programming Connector
2. Ground Stud

Fig. 7, Unit Connection Points

12/20/2007   f831790
1. Programming Connector Connected
2. Alligator Clip on Ground Stud

Fig. 8, Proper Connection

4. After the unit has been on for at least 10 to 15 seconds, click on the "Program" button. If you don't have a good connection, a box "Failed to Enter Serial Programming" will pop up. If this pops up, double check your connections. If everything is correct, the "Programming" bar graph will fill in as the unit is being programmed. The unit will take approximately one minute to program. Once reprogramming is complete, a box "ATC successfully programmed" will pop up, and the parked HVAC unit will restart by itself.

5. Turn the unit off for 15 to 30 seconds. Change the temperature setting to full cold, and set the mode selector to A/C ONLY. The unit should go to maximum blower and compressor speed (just like in AUTO), as long as the sleeper is 70°F (21°C) or warmer.

6. Disconnect the programming harness and ground clip.

7. Install the electrical center cover.

8. Lower the bunk.

Warranty

Normal warranty applies. See **Table 1** for damage code and labor allowance information, and refer to this bulletin by number in the story of the claim.

Damage Code and Labor Allowance				
VMRS CK33	**Damage Code**	**SRT Code**	**Description**	**Time: hours**
001-004-021	599-001A04130	599-5003A	ECU, NITE System, Reprogram	0.3

Table 1, Damage Code and Labor Allowance
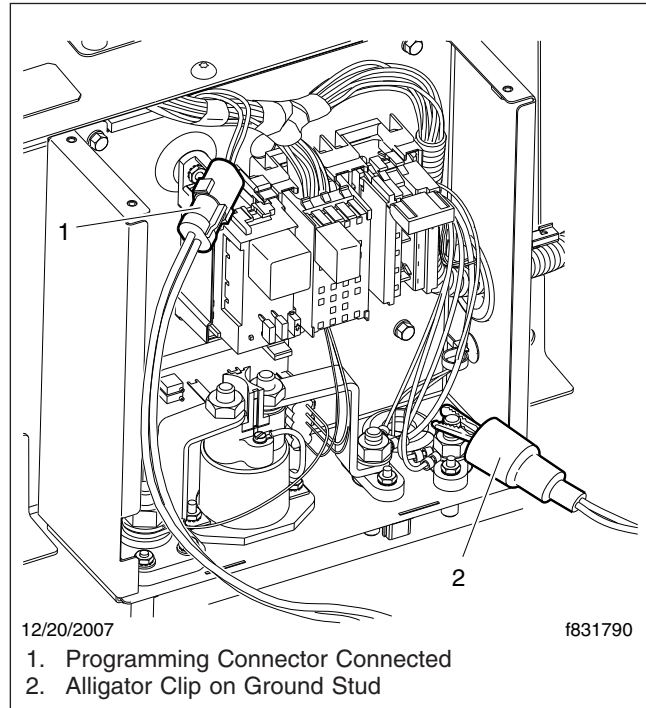
FLA COE
FLB COE
FLD Conventional
Business Class

FLC 112 Conventional
> Century Class Conventional
Argosy
Cargo

> Columbia
> Coronado
Business Class M2
Cascadia

Freightliner
Service Bulletin

NOTE:

Component Code / VMRS = 001-004-021 CONTROL ASSEMBLY - HVAC SYSTEM