

General Information

A user guide and software are available at accessfreightliner.com to program the ECM and BCM modules, as well as other functions. To use the software, an adaptor harness (NXN 10001488) must be ordered from the parts distribution center (PDC). Regular vehicle identification number (VIN) updates will be required as the population increases; VIN updates will occur on a quarterly basis. If working on a vehicle that is newer than the last update, call Freightliner Custom Chassis Corporation (FCCC) at 1-864-206-3519, and a single calibration file can be created.

GM Software Installation

1. In AccessFreightliner, go to "Support" and click "Download Center."
2. Under "Programs," select "FCCC GM Engine Programmer/Diagnostics." See [Fig. 1](#).
3. Follow the directions in the user guide to create a shortcut on the computer desktop.

GM Engine Programming Procedure

1. With a computer connected to the vehicle using adaptor harness NXN 10001488, turn the ignition to the ON position and double click the GMLAN icon on the desktop to begin.

Make certain the three lights at the bottom left of the screen are green. See [Fig. 2](#). If the three lights are not green, verify that all cable connections are secure and the ignition is ON.

2. Choose the module to be programmed. Module options include:
 - engine control module (ECM)
 - body control module (BCM), or
 - program all
3. Next, enter the vehicle identification number (VIN) and click "Ok" at the bottom right of the screen. Either the complete VIN can be entered or the last six digits. See [Fig. 3](#).
4. A confirmation screen will appear. Verify that the correct VIN is shown, then click "Process" at the bottom right of the screen. See [Fig. 4](#).
5. A graphic will display the progress of the programming transfer as shown in [Fig. 5](#).
6. Once the transfer is complete, a confirmation screen will appear. See [Fig. 6](#). Turn the ignition OFF, then turn the ignition ON.
7. Test start the vehicle to confirm that the programming was successful.
8. Set the manufacturing enable counter (MEC) to zero. See the instructions for "Setting the Manufacturing Enable Counter (MEC)."

Setting the Manufacturing Enable Counter (MEC)

IMPORTANT: The MEC procedure is **required** when an ECM is replaced.

1. From the desktop, open the GMLAN Programmer tool.
2. Make certain the three lights at the bottom left of the screen are green. See [Fig. 2](#).
3. Click the "Read Info" button.

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Support > Download Center

SUPPORT

Download Center

Here you will find the latest programs, upgrades, patches and miscellaneous files for programs used by Freightliner Software users. Click the file name to view a description and download the file(s).

Programs

Adobe® Acrobat® Reader™	Jan 30, 2001
FCCC Ametek instrument cluster re-flash program	Jan 7, 2012
→ FCCC GM Engine Programmer/Diagnostics	Jul 27, 2013
Java Soft JVM Version 1.5.01 Manual Installation (Required for Paragon)	Mar 29, 2007
Microsoft Office PowerPoint Viewer 2003/2007	Jun 28, 2008
MSXML parser 4.0 Manual Installer	Mar 29, 2007
Information regarding Meritor Toolbox	Jun 22, 2013
Web PartsPro version 5.1.31	Aug 20, 2011
Larson CGM Viewer (Required for EZWiring 2.0)	Jan 14, 2012

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Fig. 1, Download Center Screen

NOTE: The MEC can only be set after a new ECM is ready to be finalized and the following items have been verified:

- ECM VIN matches the chassis VIN
- ECM VIN matches the BCM VIN

If the VINs are not correct, see the "GM Engine Programming Procedure" instructions.

4. On the left-hand side of the screen, click the "Diagnostics" button.
5. Next, at the top of the screen, click the "MEC" button.
6. A pop-up window asks if you want to set the MEC value at zero. Click "OK."

Recreational Vehicle > Walk-In Van
School Bus S2
Shuttle Bus

Freightliner Custom Chassis
Service Bulletin

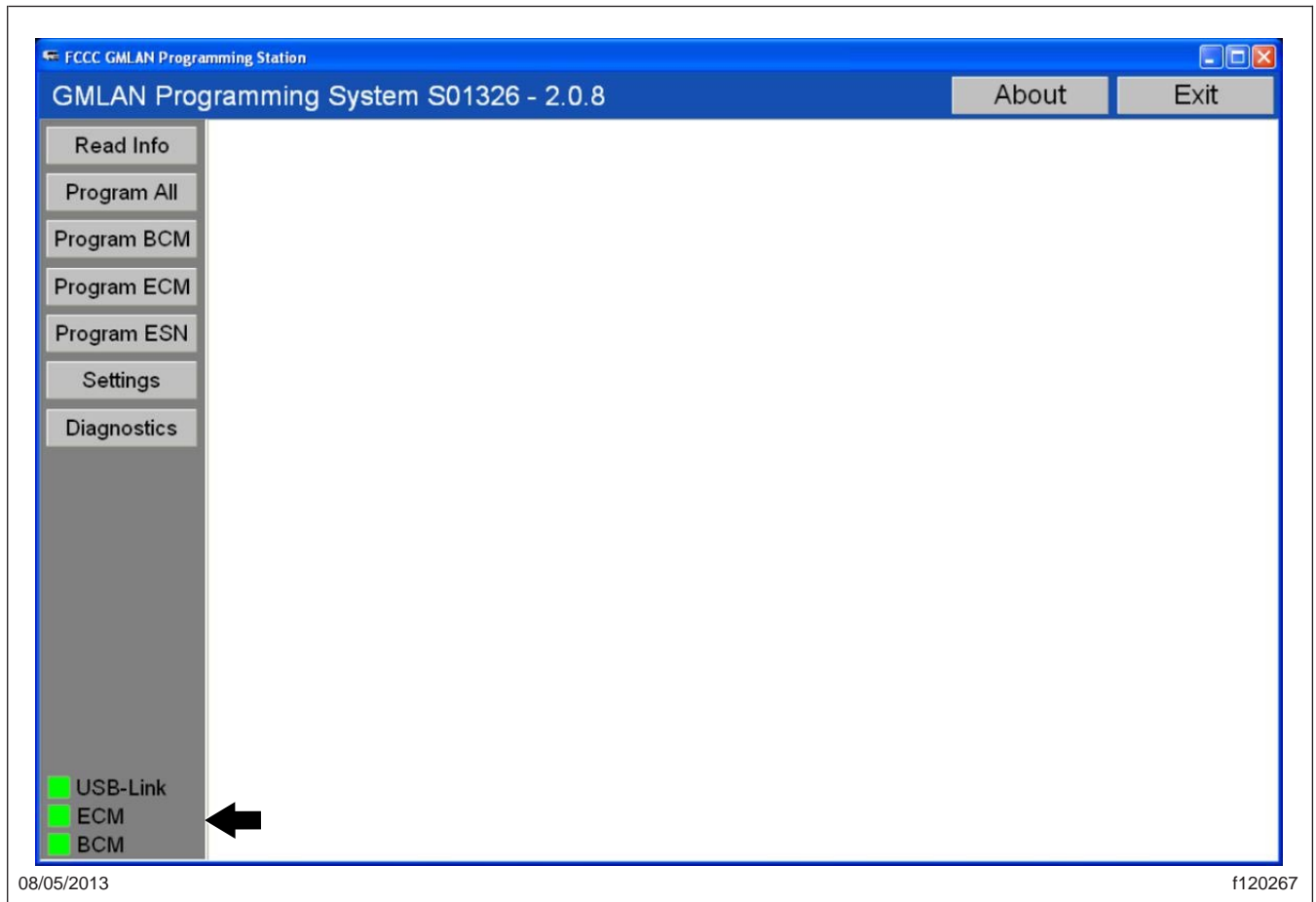


Fig. 2, GMLAN Initial Program Screen

7. Enter zero as the new MEC value.
8. Once the MEC has been changed, a "Successfully written" pop-up window verifies the change.
9. Click the "Read Info" button and verify that the ECM and BCM VINs match. See [Fig. 7](#).
10. Verify that the MEC is set to zero. See [Fig. 8](#).
11. After the MEC is set to zero, turn the ignition OFF for two minutes, then start the vehicle and verify that the immobilizer is not active.

Case Learn Procedure

The case learn procedure is **required** when any of the following service procedures are performed, regardless of whether DTC P0315 is set:

- crankshaft position sensor replacement
- crankshaft balancer replacement
- crankshaft replacement

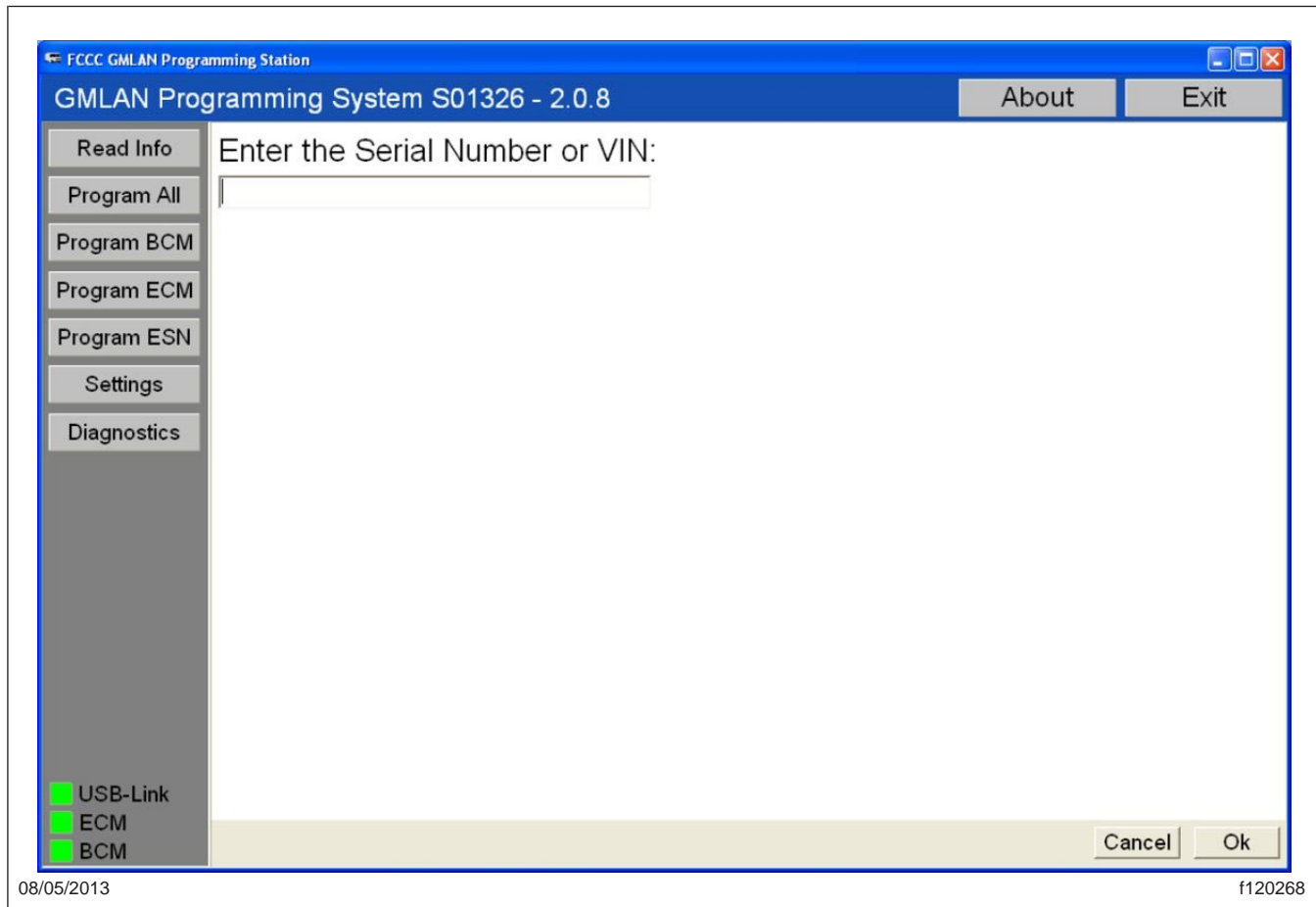


Fig. 3, Entering the VIN

- engine replacement
 - ECM replacement
 - engine repairs that disturb the crankshaft to crankshaft position sensor relationship
1. With the ignition ON, observe the DTC information with a scan tool. Verify that the only DTCs that are set are:
 - DTC P0300
 - DTC P0308
 - DTC P0315

If any other DTCs are set, the vehicle may not perform the case learn procedure.

2. From the desktop, open the GMLAN Programmer tool.
3. Make certain the three lights at the bottom left of the screen are green. See [Fig. 2](#).
4. On the left-hand side of the screen, click the "Diagnostics" button.

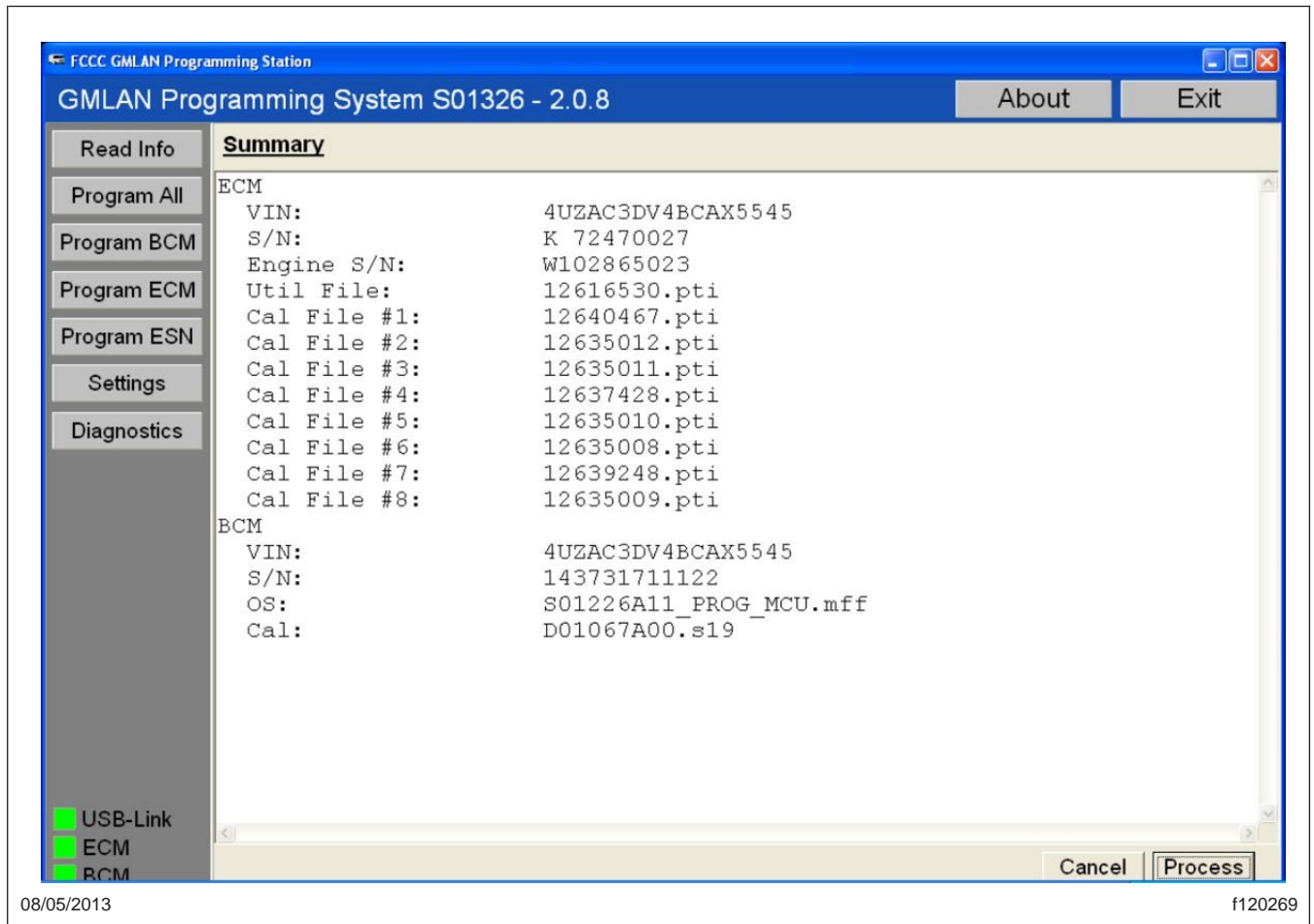


Fig. 4, Confirmation Screen

5. Next, at the top of the screen, click the "CASE" button.
6. Close the hood and follow the on-screen instructions.
 The engine must be at operating temperature for the steps that follow.

7. A pop-up window, shown in [Fig. 9](#), tells you to do the following:
 - Apply parking brake.
 - Shift the transmission to park.
 - Turn off the A/C.

8. Start and idle the engine.

IMPORTANT: The program monitors the component signals to determine if all of the conditions are met to continue with the case learn procedure.

9. Click "Next" to enable the CASE learn procedure. Do not accelerate beyond the rpm value (approximately 4400) for fuel cut-off.

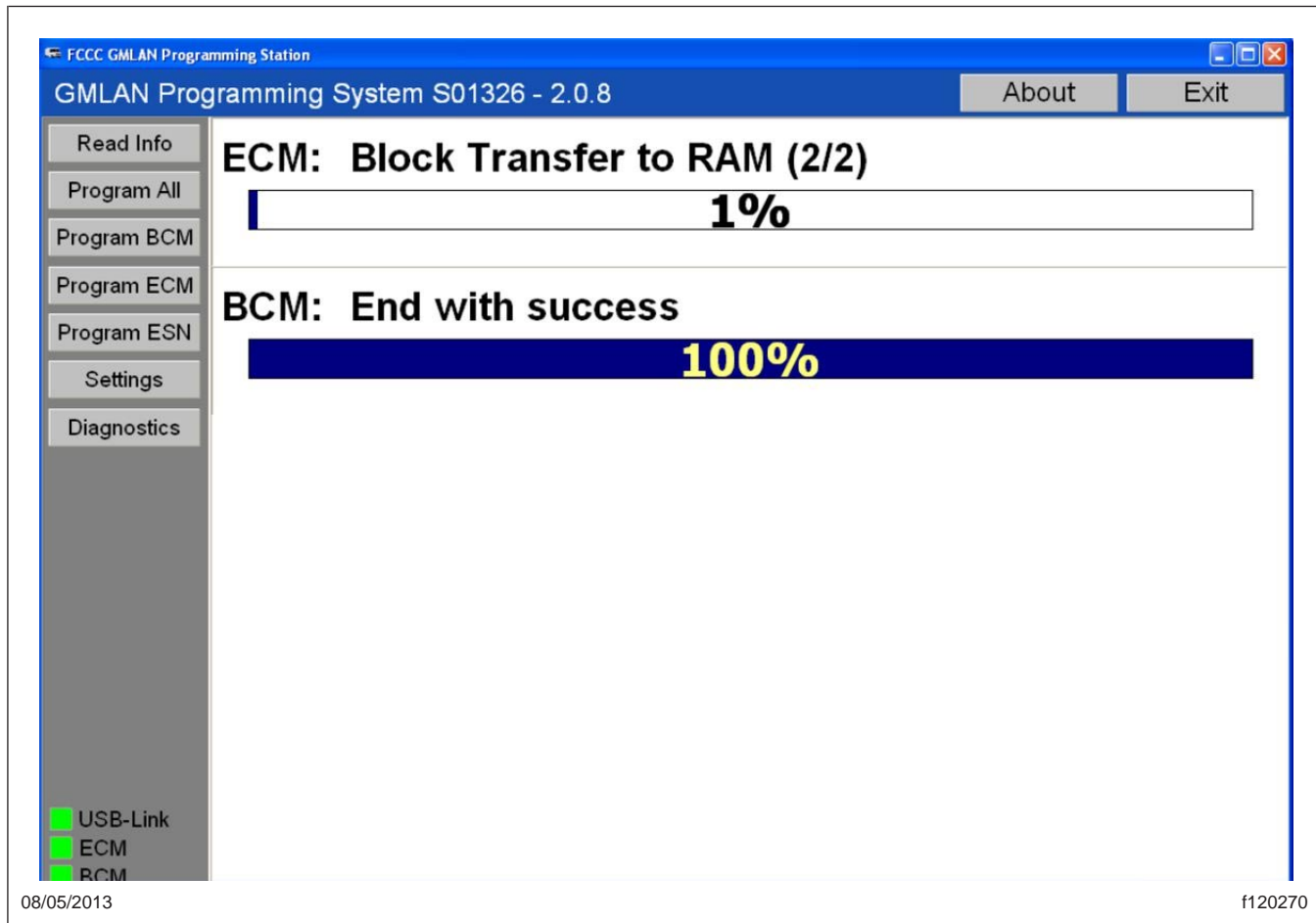


Fig. 5, Programming Transfer Display Screen

10. Click "OK", then accelerate to wide-open throttle and release the throttle when fuel cut-off occurs (the engine cuts back).
11. A pop-up window displays "Learn Status: Learned this ignition."
12. Verify that no DTCs are set. This indicates that the CASE learn procedure is complete.
If the scan tool indicates DTC P0315, the learn process failed.
13. When the learn procedure has successfully completed, turn the ignition OFF for two minutes to store the crankshaft values in the ECM.

Warranty

This is an informational bulletin only. Warranty does not apply.

Recreational Vehicle > Walk-In Van
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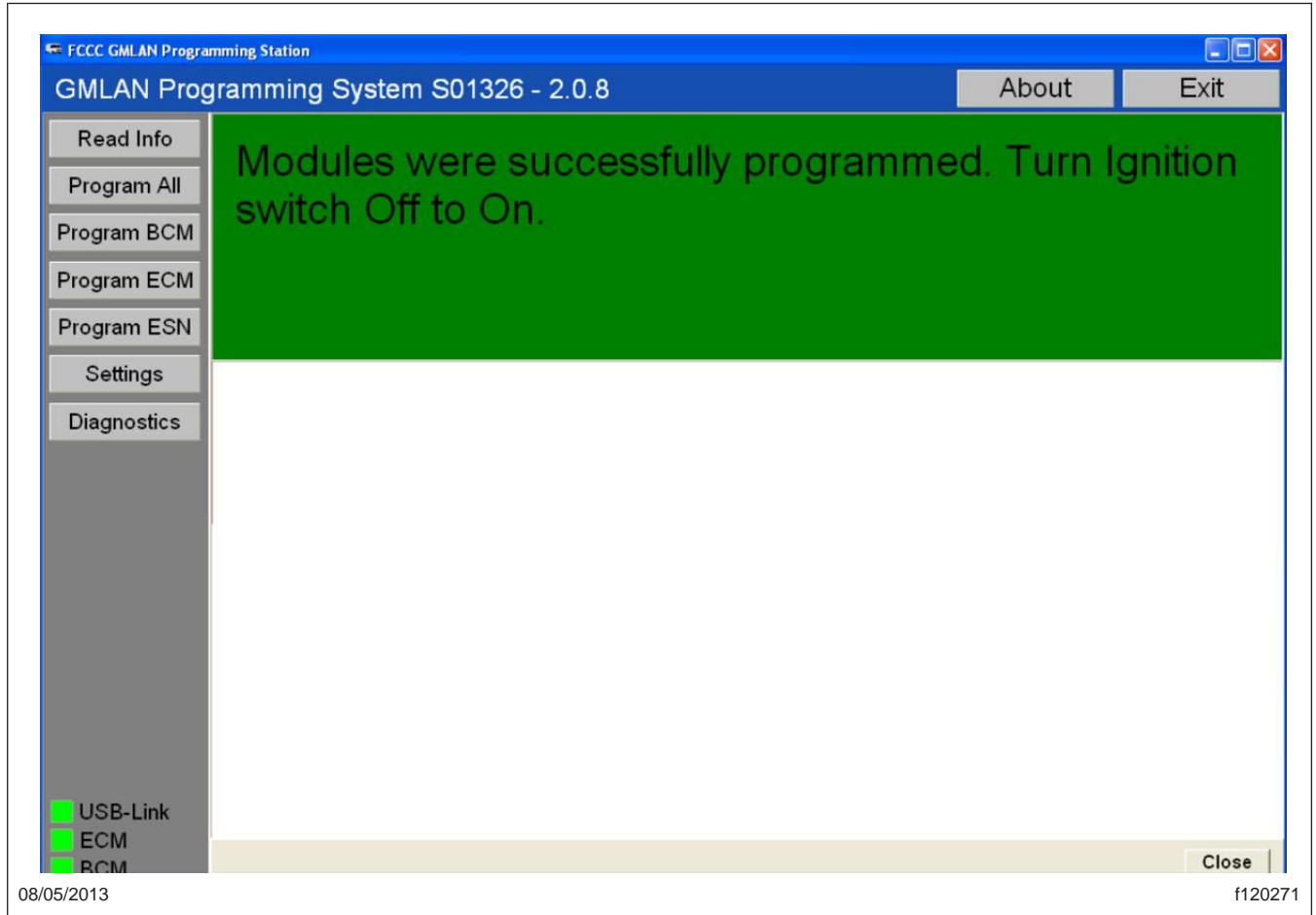


Fig. 6, Modules Programmed Confirmation Screen

The screenshot shows the 'FCCC GMLAN Programming Station' window. The title bar reads 'GMLAN Programming System S01326 - 2.0.8'. On the left is a navigation menu with options: Read Info, Program All, Program BCM, Program ECM, Program ESN, Settings, and Diagnostics. The main area displays a 'VEPS Detailed Programming Report' for an 'Unknown' vehicle. The report lists the following details:

- ECM VIN: 4UZAEDV8ECFM8518 (indicated by a black arrow)
- ECM S/N: K 72470027
- ECM Engine S/N:
- ECM MEC: 250
- ECM State Code: 0
- ECM State Msg: Fully Programmed
- ECM Cal #0: 12647136
- ECM Cal #1: 12654014
- ECM Cal #2: 12648221
- ECM Cal #3: 12648220
- ECM Cal #4: 12648232
- ECM Cal #5: 12648219
- ECM Cal #6: 12648217
- ECM Cal #9: 12647135
- ECM Cal #10: 12648245
- ECM Cal #11: 12601244

On the right side of the report, the BCM information is listed:

- BCM VIN: 4UZAEDV8ECFM8518 (indicated by a black arrow)
- BCM S/N: 143731711122
- BCM OS: S01226A11

Below the report is a 'Status' table with the following columns: Module Name, Module S/N, Result Code, and Result Msg. The table is currently empty. At the bottom right of the window are 'Print' and 'Close' buttons. In the bottom left corner, there are status indicators for 'USB-Link', 'ECM', and 'BCM', all of which are currently off (represented by red X's).

Fig. 7, ECM/BCM VINs Match

Gasoline Engine Electronic Control Module (ECM) and Body Control Module (BCM) Programming

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ECM VIN:	4UZAEDV8ECFM8518	BCM VIN:	4UZAEDV8ECFM8518
ECM S/N:	K 72470027	BCM S/N:	143731711122
ECM Engine S/N:		BCM OS:	S01226A11
ECM MEC:	0		
ECM State Code:	0		
ECM State Msg:	Fully Programmed		
ECM Cal #0:	12647136		
ECM Cal #1:	12654014		
ECM Cal #2:	12648221		
ECM Cal #3:	12648220		
ECM Cal #4:	12648232		
ECM Cal #5:	12648219		
ECM Cal #6:	12648217		
ECM Cal #9:	12647135		
ECM Cal #10:	12648245		
ECM Cal #11:	12601244		

Below the report is a 'Status' table with columns: Module Name, Module S/N, Result Code, and Result Msg. The table is currently empty. At the bottom left, there are three status indicators: USB-Link (green), ECM (green), and BCM (green). At the bottom right, there are 'Print' and 'Close' buttons. The date '08/05/2013' is in the bottom left corner, and 'f120274' is in the bottom right corner.

Fig. 8, MEC is Set to Zero

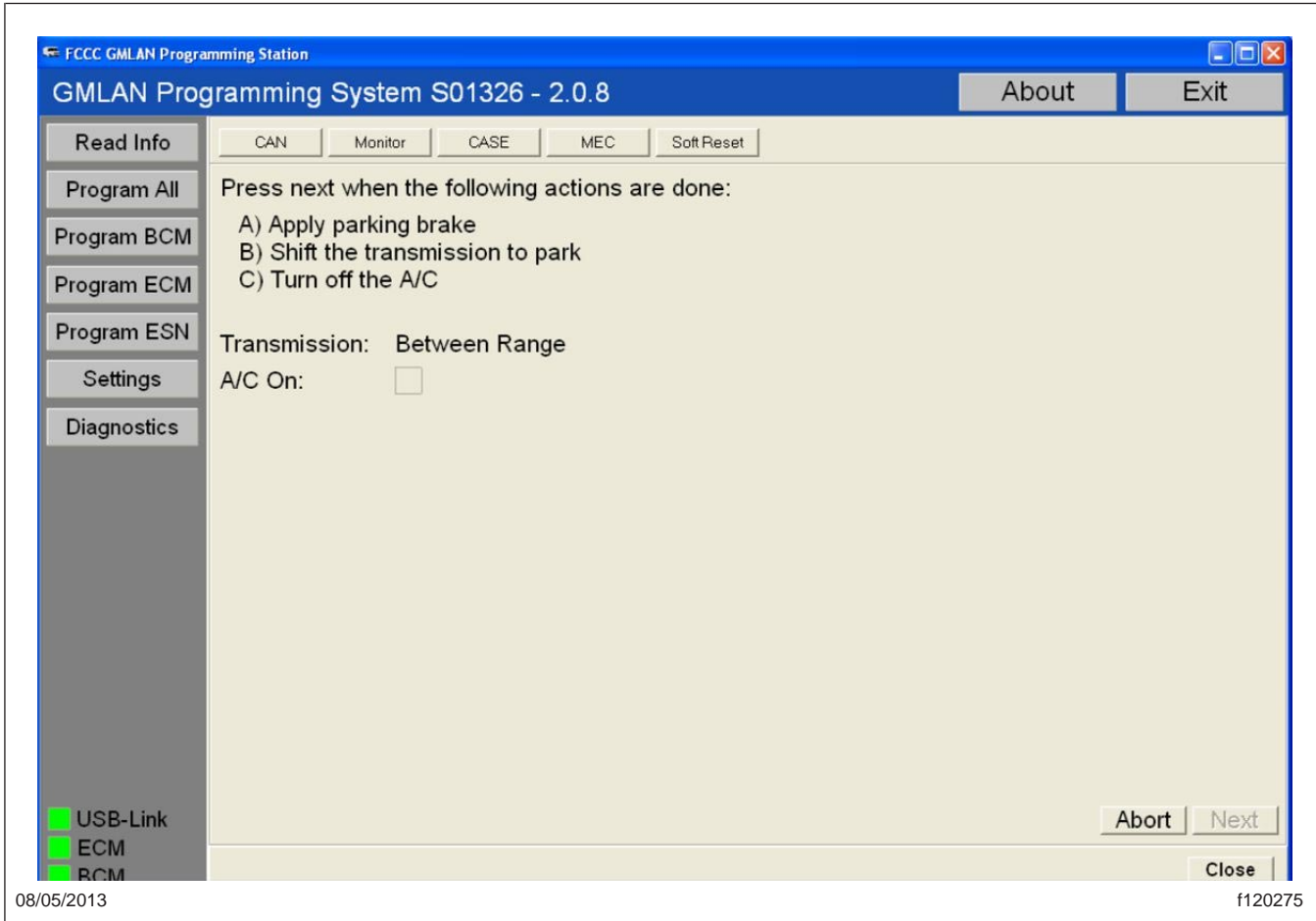


Fig. 9, CASE Learn Instruction Window