



Countries: CANADA, UNITED STATES Document ID: IK0800558
 Availability: ISIS, FleetISIS, NotSIR Revision: 3
 Major System: ELECTRICAL SYSTEM Created: 11/30/2017
 Current Language: English Last Modified: 1/26/2018
 Other Languages: NONE Author: Jon Pierce
 Viewed: 1778

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Title: Instrument Cluster Relearn Procedure

Applies To: All units that have just completed AFC 17904 - 17917

CHANGE LOG

Please refer to the change log text box below for recent changes to this article:

01/26/2018 - edited keyword search
 1/18/2017 - title changed as this article does not apply to just the AFC - information added to show how to get the latest version of DLB
 12/7/2017 - Article reactivated to accomodate trucks that were programmed with an older version of DLB
 12/4/ 2017 - article retired because DLB had been updated
 11/30/2017 - Initial Article Release

DESCRIPTION

This document will guide the user through forcing the cluster into a relearn procedure. There could be an issue with the cluster not relearning necessary information after programming or installing a new cluster. This problem seems to occur the most when the cluster is advancing to version 40400. (Refer to Figure 1)

Normal Operation:

With the most up to date version of DLB installed the cluster should automatically perform a relearn any time the BCM is updated or changed.

SYMPTOM(s)

After performing one of the associated AFCs for cluster programing, the DEF gauge may be showing empty with the light on, or a warning light that was previously not on is now on.

Diagnostic Trouble Code(s) & Dashboard Indicator Light(s):

N/A

Customer Observations or Concerns:

DEF gauge is reading empty but was dropped off with fluid in the tank.

SPECIAL TOOL(s) / SOFTWARE

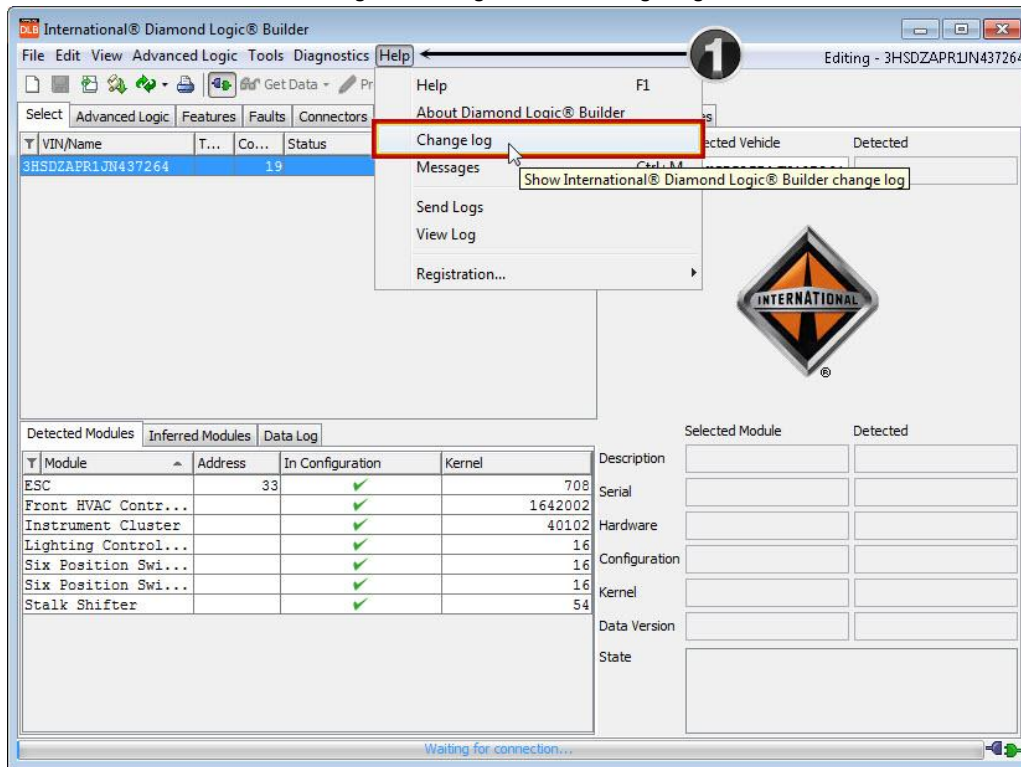
Tool Description	Instructions
Diamond Logic Builder	You will need Level 2 Dealer access to complete this change.

Check to ensure Diamond Logic® Builder has updated to the most current version

- DLB should automatically update when it is opened, and the EZ-Tech® is connected to the internet

- It is possible your companies' internet may prevent DLB from updating
- Open the DLB Change Log and verify your DLB version

Figure 1 - Navigate to DLB Change Log



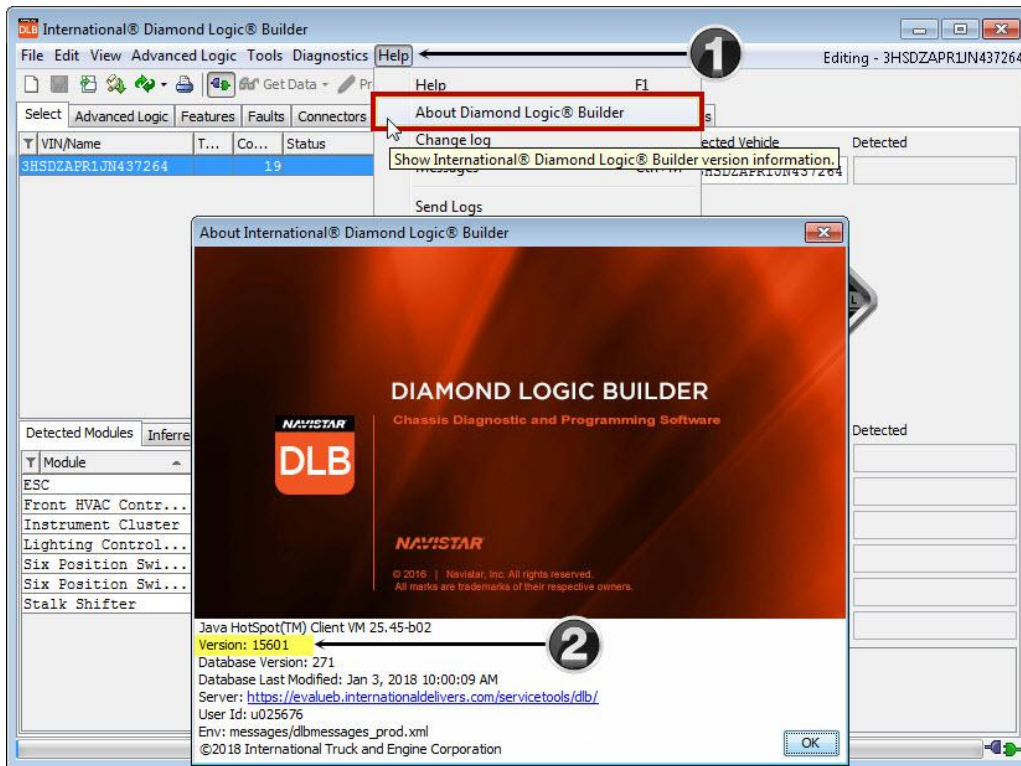
Help Menu - Click on Change Log

NOTE:

You can also access the DLB Change Log by [Clicking Here](#)

2. Access the Help Menu - Click on About Diamond Logic® Builder
3. A pop-up box will appear and display the DLB information
 - Reference the Version information that is displayed

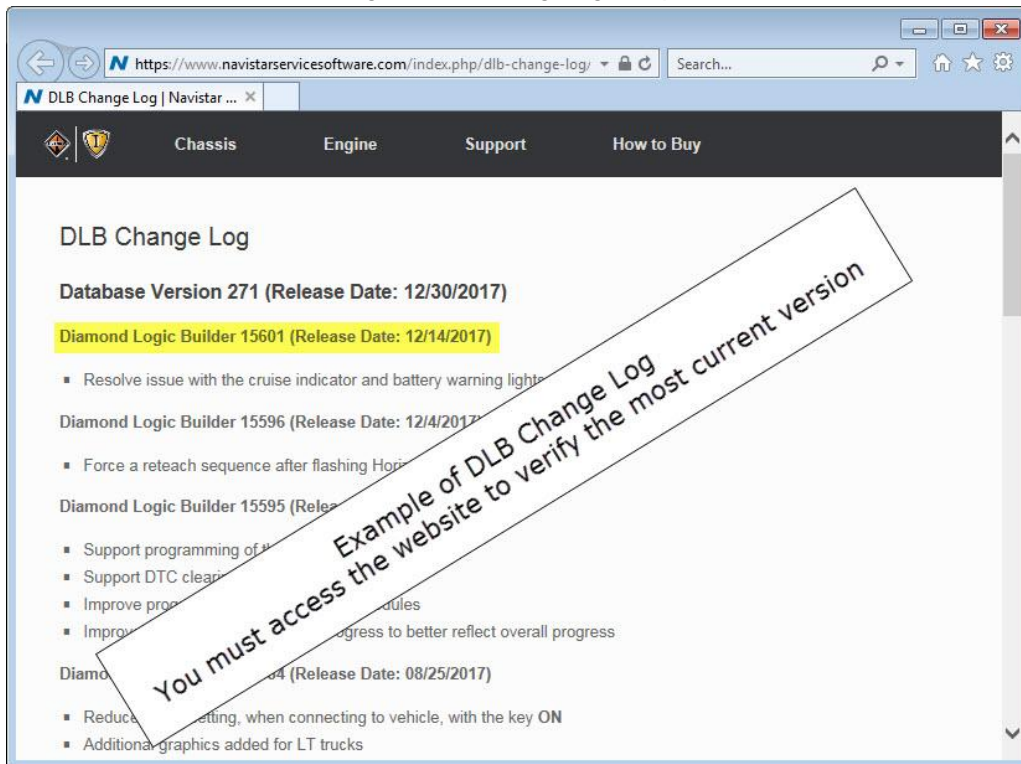
Figure 2 - About Diamond Logic Builder - Check Version



1. Help Menu - Click on About Diamond Logic® Builder
2. Version Information

4. Your Version of DLB should match the most recent Version displayed on the DLB Change Log

Figure 3 - DLB Change Log Example




- Example of DLB Change Log Website - [Click Here](https://www.navistarservicesoftware.com/index.php/dlb-change-log/) to access website


SERVICE PARTS INFORMATION

Not Applicable

DIAGNOSTIC STEP(s)

 WARNING:
<p>You will be prosecuted to the extent possible under the law if you illegally access, use, alter, damage, disclose or destroy this computer system, data or documentation. International Truck and Engine Corporation will not be liable for personal injury or equipment damage resulting from the use of the Diamond Logic® Builder program. Users are encouraged to perform comprehensive vehicle testing of all programs created with Diamond Logic® Builder before releasing equipment for public sale or usage.</p>

CAUTION:
<p>Verify the batteries are fully charged and the body controller and instrument cluster are awake.</p>

Step	Action	Decision
1	<p>DIAGNOSTIC:</p> <p>After completing the AFC, is the DEF gauge stuck on "Empty" or are there any additional warning lights on that were not on previously?</p> 	<p>Yes. Go to Step 2</p> <hr/> <p>No. Return To Service</p>

Step	Action	Decision
2	<p>DIAGNOSTIC:</p> <p>Attempt to get the cluster to enter a relearn cycle on its own. Cycle the key off for 5 seconds, then turn on for 20 seconds. If the cluster went into a relearn mode, the screen will go dark and the gauges will cycle, then the pattern will repeat. After the relearn is completed, the DEF gauge and other warning lights should now be reacting normally.</p> <p>Is the cluster operating correctly?</p>	<p>Yes - return to service</p> <hr/> <p>No - Proceed to repair steps</p>

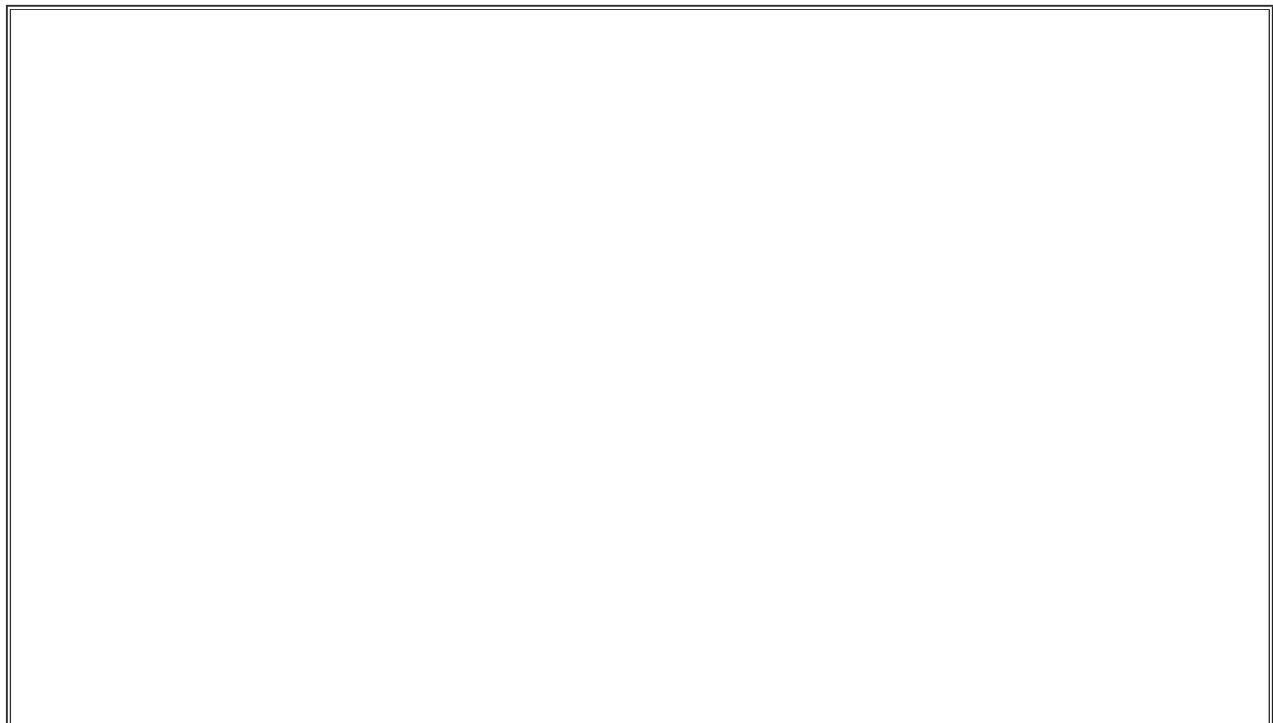
The screenshot displays the International Diamond Logic software interface. The main window shows a list of VINs and their corresponding configurations. The selected VIN is 3HSDZAPR7HNS05545. Below this, a table lists detected modules and their configurations. The 'Instrument Cluster' module is highlighted, showing a detected part number of 40400. The software also displays a logo for International and a warning message: 'Odometer has not been reset.'

VIN/Name	Template	Configurati...	Status	Description
402233				
1TRVAC_Sis-Fine1	✓		59	
1BTL5AZT6BJ595003			10	
1BTD6QJH6H119575			18 Modified	
1BTVYANT75J19315			11	
1BTVYANT6J209923			10	
3BAE5T20K6L756953			45	
3BAE5A4H4L11373			17 Modified	
3HSDJ3N008031263			23	
3HSDJ3N047N519350			23 Modified	
3HSDZAPR7HNS05545			80	
3HSDZTR62N157515			29	43 AC6
3HSEKZTR62N1630298			17 Modified	
4DRBDC3H9B751144			7	
4DRBDC3H9B751403			14	
lock test	✓		6	

Module	Data Link	In Configu...	Detec...	Address	Part Num...	Hardware	Kernel Name	Kernel	Detected Part Num...	Detected Kernel	Description
Driver Door Pod	Driver...	✓	✓	284	406196SC	0	Horizon: DoorSP...		107	406196SC	107
Passenger Door...	Driver...	✓	✓	257	4057699CC	0	Horizon: DoorSp...		107	4057699CC	107
Stalk Shifter	Driver...	✓	✓	5		0	Horizon: Stalk...		54		54
Instrument Cl...	Driver...	✓	✓	23		0	Horizon: Instr...		40400		40400
Front HVAC Co...	Driver...	✓	✓	25		0	Horizon: HVAC app		1746002		1746002
ESC	Driver...	✓	✓	89	4044470C5	50	ESC	708	4044470C5		708
Lighting Cont...	Driver...	✓	✓	55		0	Horizon: LCH		16		16
Stk Position ...	Driver...	✓	✓	154		0	Horizon: MUX		16		16
Stk Position ...	Driver...	✓	✓	152		0	Horizon: MUX		16		16
Engine	Driver...	✓	✓	0							0
Transmission	Driver...	✓	✓	3							0
Brakes - Syst...	Driver...	✓	✓	13							0
Retarder - EN...	Driver...	✓	✓	15							0
Forward Facin...	Driver...	✓	✓	45							128795
Passenger-Opt...	Driver...	✓	✓	58							0
Communication...	Driver...	✓	✓	76							0
Safety Direct...	Driver...	✓	✓	209							39

Figure #1 : Instrument Cluster Version

REPAIR STEP(s)



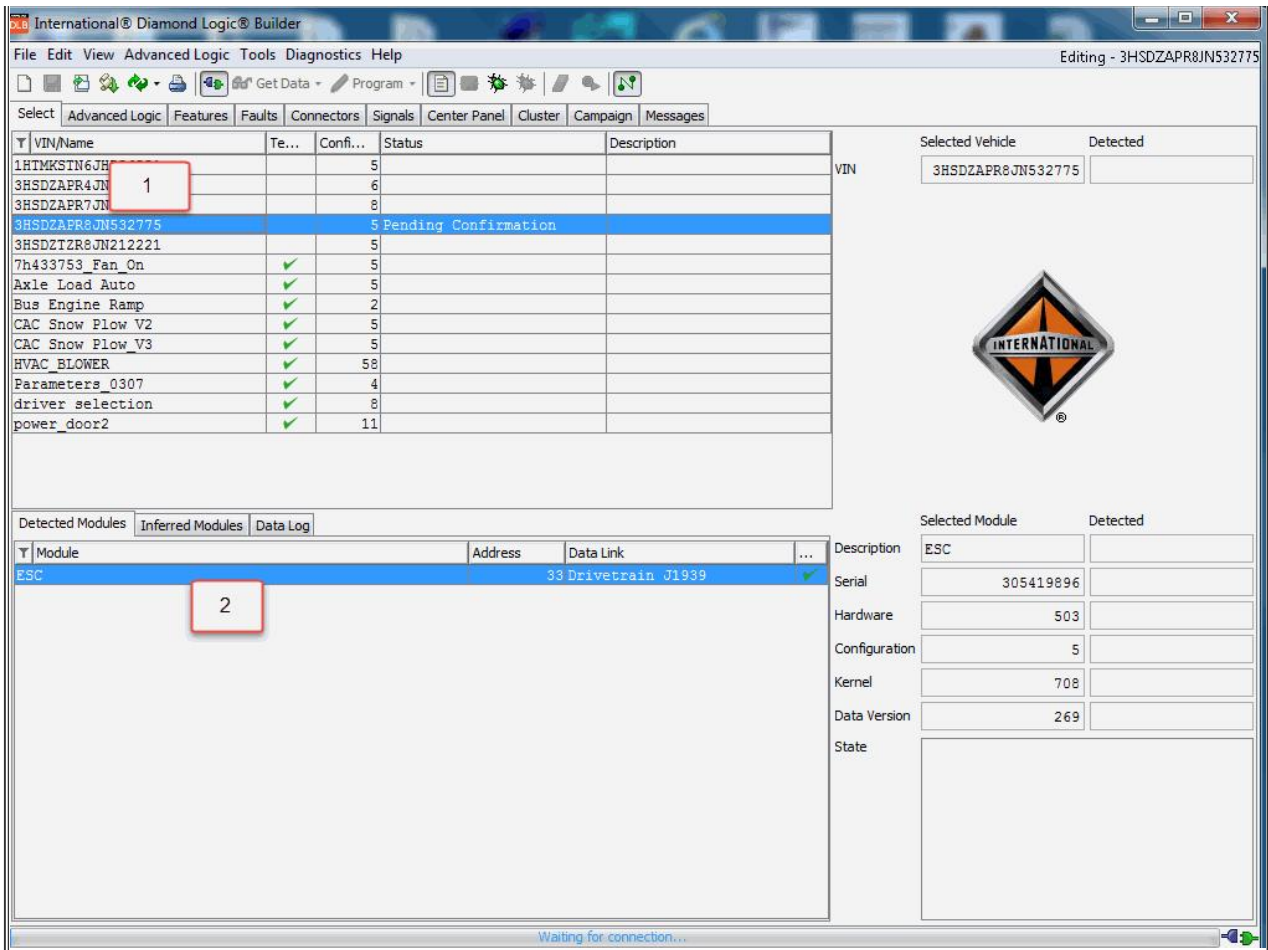


Figure #2: DLB Home Screen

- Item 1: Selected VIN
- Item 2: Detected Module

1. Verify the key is in the off position.
2. If still connected to DLB from AFC programming, disconnect from truck than reconnect.
3. Verify that the selected chassis number (Figure 2 Item 1) matches the chassis you are working on.
4. Under the detected modules screen, verify the ESC is highlighted (Figure 2 Item 2).
5. Select the Features tab.



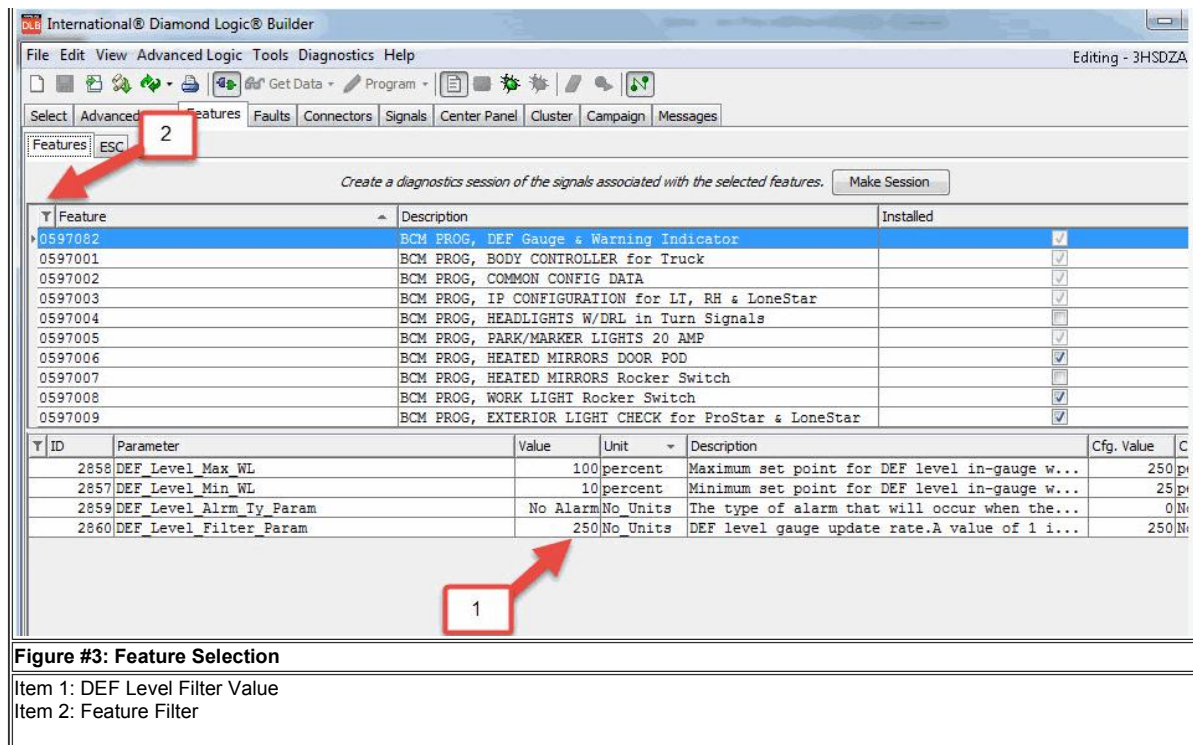


Figure #3: Feature Selection

Item 1: DEF Level Filter Value
Item 2: Feature Filter

6. Select the filter button (Figure 3 Item 2).
7. Once the filter pop up opens, search feature code 0597082 .
8. Drop down to the parameters tab and clear out the "250" (Figure 3 Item 1) update rate.
9. Type in "245" into the value box and press enter. (Figure 3 Item 1)
10. Program Icon should now be visible - program the body controller.
11. After Programming is completed, you have now created "new" information for the cluster to learn.
12. Turn the key to the on position and wait a few seconds. The cluster screen should go dark, then light up and sweep (the dark screen/light/sweep will occur twice). After the relearn is completed, verify that the DEF gauge is now working properly and possible warning lights that were on before should now be extinguished.
13. Clear all codes in the modules prior to returning to service via DLB.
14. If the gauge does not start working correctly, repeat steps 1 -12. If you still continue to have issues, please open a Technical Service Case file.

WARRANTY INFORMATION

Warranty Claim Coding:

Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

Standard Repair Time(s):

Refer to the [SRT Manual](#) for Repair Times

OTHER RESOURCES

[Master Service Information Site](#)

[Body Controller Resource Center](#)

 Hide Details

Feedback Information

Viewed: 1777
Helpful: 9
Not Helpful: 0

No Feedback Found