

Service Bulletin

INFORMATION

- Subject:Identifying Non-GM (Aftermarket) Engine and Transmission Calibrations for V8 Gasoline Engines Using
Tech 2® or Global Diagnostic System 2 (GDS 2)Models:2006-2013 GM Passenger Cars and Light Duty Trucks
Equipped with V8 Gasoline Powered Engines OnlyAttention:This bulletin applies to V8 gasoline powered engines ONLY. For Duramax™ diesel powered engines, refer
- to the latest version of Corporate Bulletin Number 08-06-04-006. Please, always refer to the GM Service Policy and Procedures Manual — Article: 1.2.2.12 for the latest GM Policy and Procedures Information. This bulletin is being revised to add additional text to the "Attention" statement and to advise the Service Department

This bulletin is being revised to add additional text to the "Attention" statement and to advise the Service Department Personnel that they must always refer to the GM Service Policy and Procedures Manual Article: 1.2.2.12 for the latest GM Policy and Procedures Information. Please discard Corporate Bulletin Number 09-06-04-026D (Section 06 – Engine/Propulsion System).

Notice: The PQC has a process to confirm the ECM/PCM calibration is GM issued. BEFORE authorizing any V8 gasoline engine replacement, the PQC requires the Calibrations Group to verify that the engine calibrations are OEM.

- The Calibrations Group will require a digital picture (.jpg file only) from the Tech 2® of the Vehicle Information- (Engine) Calibration ID and Verification No. (number) screen, according to the process that is outlined in this bulletin.
- The Calibrations Group will require a screen shot (.jpg file only) of the GDS 2 Calibration History Events screen according to the process that is outlined in this bulletin.

General Motors is identifying an increasing number of engine, transmission and catalytic converter part failures that are the result of non-GM (aftermarket) engine and transmission control calibrations being used.

When alteration to the GM-released engine or transmission control calibrations occurs, it subjects powertrain and driveline components (engine, transmission, transfer case, driveshaft and rear axle) to stresses that were not tested by General Motors. It is because of these unknown stresses, and the potential to alter reliability, durability and emissions performance, that GM has adopted a policy that prevents any **UNAUTHORIZED** dealer warranty claim submissions to any remaining warranty coverage, to the powertrain and driveline components whenever the presence of a non-GM (aftermarket) calibration is confirmed – even if the non-GM control module calibration is subsequently removed.

Warranty coverage is based on the equipment and calibrations that were released on the vehicle at time of sale, or subsequently updated by GM. That's because GM testing and validation matches the calibration to a host of criteria that is essential to assure reliability, durability and emissions performance over the life of the warranty coverage and beyond. Stresses resulting from calibrations different from those tested and released by GM can damage or weaken components, leading to poor performance and or shortened life.

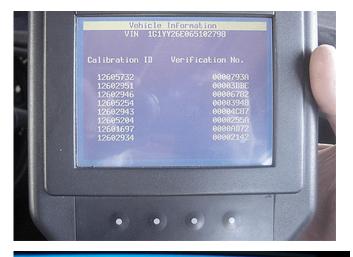
Additionally, non-GM (aftermarket) issued engine control modifications often do not meet the same emissions performance standards as GM issued calibrations. Depending on state statutes, individuals who install engine control module calibrations that put the vehicle outside the parameters of emissions certification standards may be subject to fines and/or penalties.

This bulletin outlines the procedure when using the Tech 2® or GDS 2 to identify the presence of non-GM (aftermarket) calibrations. GM recommends performing this check whenever a hard part failure is seen on internal engine, transmission, transfer case or rear axle components, and before disassembly, repair or replacement of an engine, transmission, transfer case or rear axle assembly under warranty. It is also recommended that the engine calibration verification procedure be performed whenever diagnostics determine that catalytic converter replacement is necessary.

If a non-GM calibration is found and verification has taken place through GM, the remaining powertrain and driveline warranty may be blocked and notated in

Global Warranty Management (GWM) and the dealership will be notified. This block prevents any UNAUTHORIZED warranty claim submission.

- 1. Connect the Tech 2® to the vehicle.
- 2. Go to: Diagnostics and build the vehicle.
- 3. Select: Powertrain.
- 4. Select: Engine.
- 5. Select: Engine Control Module or PCM.
- 6. *Select: Module ID Information or I/M Information System if the Module ID Information selection is not available.
- 7. *If "I/M information System" was selected, it may be necessary to select "Vehicle Information" in order to display the calibration information.
 - ⇒ If the CVN information is displayed as "N/A", it will be necessary to contact the TCSC at 1-800-828-6860 for English or 1-800-503-3222 for French to obtain the CVN information.



	Information YG3DU7D5100158
Calibration ID	Verification No.
Eng ine 12653674 Eng ine 12647447 Eng ine 12647433 Eng ine 12625892 Eng ine 12647443 Eng ine 12647455 Eng ine 12647464 Eng ine 12647459	0000C51F 00005530 00006C37 000036F2 00005C9A 000051FD 00000335 0000EE49 Next 07/16/2012

Notice: The Tech 2[®] Vehicle Information - Calibration ID and Verification No. screen will differ slightly depending on vehicle and model year.

Take a CLEAR digital picture of the Tech 2[®] Vehicle Information screen showing the entire VIN, (Engine) Calibration ID and Verification No. (Numbers). Two examples of the Tech 2[®] Vehicle Information - (Engine) Calibration ID and Verification No. screens are shown. Retain the printout information and the Tech 2[®] screen photograph with the repair order.

Notice: All pictures MUST be sent as a .jpg file. Keep all photos in ONE e-mail.

9. E-mail a copy of the picture to tacsnapshot@gm.com. In the Subject line of the e-mail include the phrase "V8 Cal" as well as the complete VIN and Dealer BAC.

In the **Body** of the e-mail, include the VIN, mileage, R.O. number and BAC. Include a brief description of the customer concern and cause of the concern.

Notice: The dealer will receive an e-mail reply after the calibrations have been validated. The e-mail reply will advise the dealer if the calibrations are OEM.

- 10. Allow two hours for the Calibrations Group to verify the calibrations and set up the case details.
 - ⇒ If the Calibrations Group determines that the calibrations ARE aftermarket calibrations, DO NOT contact GM Technical Assistance to discuss

warranty concerns on the aftermarket calibrations. **ALL** questions and concerns about warranty should be directed to the District Manager Aftersales (DMA), in Canada the DM-CCSP (District Manager-Customer Care and Service Process).

The Calibrations Group will update the appropriate PQC or TAC case with the results of the V8 Calibration Verification request.

Notice: Requests that are sent to the Calibrations Group are handled in the order in which they were received.

11. You may call the PQC two hours after submitting the e-mail to the Calibrations Group (or after the results have been received by e-mail) for authorization to replace the assembly. This will provide the Calibrations Group time to receive, review and set up a case on the request. Please be prepared to provide all the usual documentation that is normally required when requesting an assembly authorization from the PQC.

Tech 2® Displaying All Zeroes for the Verification Numbers on the Vehicle Information - Calibration ID and Verification No. (Number) Screen

VIN 100	VIN 1CCCC25V571184107					
Calibration ID	Verification No.					
12613248	0000000					
12598846	0000000					
12598862	0000000					
12598876	0000000					
12598887	0000000					
12598889	0000000					
12598895	0000000					
12598903	0000000					
	Next					

If the Tech 2® that you are using displays all zeroes for the Verification Numbers as shown, then perform the following steps:

- 1. Update the Tech 2® with the latest software from TIS2WEB.
- 2. Turn OFF the ignition for 90 seconds.
- 3. Connect the Tech 2® to the vehicle.
- 4. Turn ON the ignition, and build the vehicle. Observe the Tech 2[®] Vehicle Information Calibration ID and Verification No. (Number) screen for proper operation.
 - ⇒ If the Tech 2® screen still does not display properly, then turn OFF the ignition for 90 seconds again. Turn ON the ignition and observe the same screen for proper operation.

Retrieving Calibrations From a Global A Vehicle Using GDS 2

This information applies to Global A vehicles and is typical of the procedure that will be used.

- 1. Turn OFF the ignition.
- 2. Connect the MDI to the Data Link Connector (DLC) of the vehicle.

Notice: Use the USB port to make the following MDI connection:

3. Connect the MDI to a PC or laptop that has been downloaded with the GDS 2 application from TIS2WEB.

Notice: At least one Diagnostic Package must be installed on the PC to perform diagnostics. If GDS 2 was just installed, select: Add New Diagnostic Package and then select a: Diagnostic Package to download.

- 4. Click: On the GDS 2 icon on the PC.
- 5. Click: On the Diagnostics icon.
- 6. Select: The serial number of the MDI being used.
- 7. Select: The Enter icon.
- 8. Select: Module Diagnostics.
- 9. Select: Engine Control Module.

Notice: Due to the model selected, vehicle build, software and RPO variations, GDS 2 may ask for additional information in Step 10.

- 10. Select: Engine ID, if prompted.
- 11. Select: ID Information.
- 12. The Diagnostics page will appear.

Typical View of a GDS 2 Calibration History Events Screen

alibration History		Save Report	🚯 Add Snapshot Bookmark		
Diagnostic Data Display Line Graph					
Calibration History					-
Parameter Name	Control Module	Value	Unit		
Vehicle Identification Number (VIN)	Engine Control Module	2G1FK3DJ8C9122813			
Calibration History Buffer	Engine Control Module	Unlocked			
Engine Calibration Part Number History 1	Engine Control Module	12646748			
Calibration Verification Number History 1	Engine Control Module	7159			
Engine Calibration Part Number History 1 Counter	Engine Control Module	1			
Engine Calibration Part Number History 2	Engine Control Module	0			
Calibration Verification Number History 2	Engine Control Module	0000			
Engine Calibration Part Number History 2 Counter	Engine Control Module	255			
Engine Calibration Part Number History 3	Engine Control Module	0			
Calibration Verification Number History 3	Engine Control Module				
Engine Calibration Part Number History 3 Counter	Engine Control Module	255			
Engine Calibration Part Number History 4	Engine Control Module	0			
Calibration Verification Number History 4	Engine Control Module	0000		=	
Engine Calibration Part Number History 4 Counter	Engine Control Module	255			
Engine Calibration Part Number History 5	Engine Control Module	0			
Calibration Verification Number History 5	Engine Control Module	0000			
Engine Calibration Part Number History 5 Counter	Engine Control Module	0			
Engine Calibration Part Number History 6	Engine Control Module 0				
Calibration Verification Number History 6	Engine Control Module	Engine Control Module 0000			
Engine Calibration Part Number History 6 Counter	Engine Control Module				Ė
Engine Calibration Part Number History 7	Engine Control Module				
Calibration Verification Number History 7	Engine Control Module	0000			
Engine Calibration Part Number History 7 Counter	Engine Control Module	0			
Engine Calibration Part Number History 8	Engine Control Module	0			
Calibration Verification Number History 8	Engine Control Module	0000			0
Engine Calibration Part Number History 8 Counter	Engine Control Module	0			
Engine Calibration Part Number History 9	Engine Control Module	0			
Calibration Verification Number History 9	Engine Control Module	0000		-	
Back Feedback	Home	Module	3	Enter	
SDS 2 v.9.5.00200 • GM Global v2012.6.0 • VIN: 2G1FK3DJ8C9122813 • 2012,Che		-		4 1 2 2 1	2

Notice: GDS 2 is capable of displaying up to 10 Calibration History Events.

- **13.** Select: Calibration History from the drop down menu in order to display the following items on the screen:
 - Calibration History Buffer
 - Number of Calibration History Events Stored
 - Calibration Part Number History
 - Calibration Verification Number History
- 14. Select: Save Report.
- 15. Select : Print.
- 16. Retain a copy of the screen shot with the repair order.

Notice: All screen shots MUST be sent as a .jpg file. Keep all photos in ONE e-mail.

17. E-mail a copy of the screen shot to tacsnapshot@gm.com. In the Subject line of the e-mail include the phrase "V8 Cal" as well as the complete VIN and Dealer BAC.

In the **Body** of the e-mail, include the VIN, mileage, R.O. number and BAC. Include a brief description of the customer concern and cause of the concern.

Notice: The dealer will receive an e-mail reply after the calibrations have been validated. The e-mail reply will advise the dealer if the calibrations are OEM.

- 18. Allow two hours for the Calibrations Group to verify the calibrations and set up the case details.
 - ⇒ If the Calibrations Group determines that the calibrations ARE aftermarket calibrations, DO NOT contact GM Technical Assistance to discuss warranty concerns on the aftermarket calibrations. ALL questions and concerns about warranty should be directed to the District Manager Aftersales (DMA), in Canada the DM-CCSP (District Manager-Customer Care and Service Process).

The Calibrations Group will update the appropriate PQC or TAC case with the results of the V8 Calibration Verification request.

Notice: Requests that are sent to the Calibrations Group are handled in the order in which they were received.

19. You may call the PQC two hours after submitting the e-mail to the Calibrations Group (or after the results have been received by e-mail) for authorization to replace the assembly. This will provide the Calibrations Group time to receive, review and set up a case on the request. Please be prepared to provide all the usual documentation that is normally required when requesting an assembly authorization from the PQC.

Creating a .jpg File From a GDS 2 Calibration History Events Screen Shot

- 1. Click: On the Start icon.
- 2. Click: On All Programs.
- 3. Click: On Accessories.
- 4. Click: On Paint.
- Navigate: To the Calibration History Events screen, using the instructions provided in the section titled Retrieving Calibrations From a Global A Vehicle Using GDS 2
- 6. Press: The Print Scrn button on the keyboard.
- 7. Go to: Paint.
- 8. Select: Paste.
- 9. Select: Save As.
- 10. Select: Desktop.
- 11. Select: File name. Name the file. As an example use the VIN.
- **12.** Select: **Save as type**, using the drop down menu.
- 13. Select: JPEG.

Warranty Information

- The Dealership Service Management must be involved in any situation that would justify the use of labor operation Z1111.
- Notify the District Manager Aftersales (DMA), in Canada the DM-CCSP (District Manager-Customer Care and Service Process) of the situation.
- All claims will have to be routed to the Warranty Support Center (WSC) for approval.
- Please refer to Corporate Bulletin Number 09-00-89-016, Labor Operation Z1111 Suspected Tampering or Vehicle Modifications for important information.

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
Z1111	Suspected Tampering or Vehicle Modifications	0.2 hr

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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