



Service Bulletin

INFORMATION

Subject: Identifying Non-GM (Aftermarket) Engine and Transmission Calibrations for V6 and 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 Any V8 Gasoline Engine
2012-2013 Chevrolet Camaro — Equipped With V6 Engine RPO LFX

Attention: This Bulletin is effective beginning February 4, 2013. This bulletin applies to V6 and V8 gasoline engines ONLY. For Duramax™ diesel engines, refer to the latest version of Corporate Bulletin Number 08-06-04-006. 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 the 2012-2013 Chevrolet Camaro equipped with V6 engine RPO LFX, update the information, the E-mail address for submitting digital pictures to TACCVN@gmexpert.com — add sections for Service Agents Not Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization, Service Agents Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization, and change the term “Dealer” to “Service Agent”. Please discard Corporate Bulletin Number 09-06-04-026E (Section 06 – Engine/Propulsion System).

Engine, Transmission, Transfer Case, Rear Axle Components and Catalytic Converter Failures Due to Non-GM Engine and/or Transmission Control Module Calibrations Being Installed

Notice: Be advised that GM strongly recommends performing the Calibration Verification Procedure as outlined in this Bulletin, whenever diagnostics determine a hard part failure may have occurred 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 control module Calibration Verification Procedure be performed whenever diagnostics determine that catalytic converter replacement is necessary.

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 installed.

When alteration to the GM-released engine or transmission control module 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** Service Agent warranty Transaction submissions to any remaining warranty coverage, to the powertrain and driveline components whenever the presence of a non-GM 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 **Calibration Verification Procedures** for **ALL** Service Agents including Service Agents Not Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization and Service Agents Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization, using the Tech 2® or GDS 2 to identify the presence of non-GM control module calibrations.

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.

Information for Service Agents Not Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization

Notice: You are not required to e-mail TAC the digital Calibration Verification photos from the Tech 2® screen or GDS 2 screen shot. They must be retained in the Service Agent Vehicle History Service File.

1. The Service Department Personnel is **required** to complete the Calibration Verification Procedure including taking digital pictures from the Tech 2® Vehicle Information - Engine Calibration ID and Verification No. (Number) screen **or** the GDS 2 Calibration History Events screen shot in order to determine that there **are not** any non-GM engine or transmission control module calibrations present.
2. After completing the Calibration Verification Procedure, the Service Department personnel is **required** to retain the documentation showing the procedure was completed and also the digital pictures or screen shot that were taken, in the Service Agent Vehicle History Service File.
3. When returning an engine assembly a printed copy of the Tech 2® Vehicle Information - Engine Calibration ID and Verification No. (Number) screen digital photo or the GDS 2 Calibration History Events screen shot **must** be attached to the documentation being returned with the unit.
 - ⇒ If the Calibration Verification Procedure determines that there **are** non-GM engine or transmission control module calibrations present the Service Department Personnel **must** follow the same process as instructed in the section titled: **Information for Service Agents Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization**

Information for Service Agents Required to Call PQC for Powertrain/Drivetrain Assembly Replacement Authorization

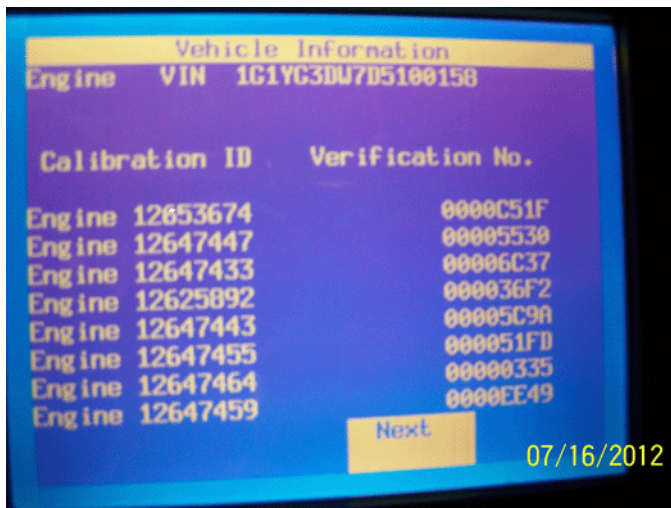
Notice: You are required to e-mail TAC the digital Calibration Verification photos from the Tech 2® screen or GDS 2 screen shot to the following address: TACCVN@gmexpert.com

- The Calibrations Group will require a digital picture (.jpg file format only) from the Tech 2® of the Vehicle Information - Engine Calibration ID and Verification No. (Number) screen according to the process outlined in this Bulletin.
- **OR**
- The Calibrations Group will require a screen shot (.jpg file format only) of the GDS 2 Calibration History Events Screen according to the process outlined in this Bulletin.

Using the Tech 2® to Retrieve Engine Calibration ID and Verification No. (Number) Information

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.





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 photos **MUST** be sent as a .jpg file. Non .jpg files are bounced by a firewall and will result in delays in processing the case until the photos are received in a viewable format. Keep all photos in **ONE** e-mail.

- Attach all photos as .jpg files to the e-mail. Send the photos and the following information to **TACCVN@gmexpert.com**

In the **Subject Line** of the e-mail include the following:

- The phrase: "**V8 Cal**".
- The complete: **VIN** .
- The **Service Agent BAC**.

- In the **Body** of the e-mail include the following:

- The complete: **VIN**.
- The **mileage**.
- The **Service Agent BAC**
- The **repair order (R.O.) number**.
- The **customer Complaint**.
- The **Cause of the Condition**.

- The Service Agent will receive an e-mail reply after the calibrations have been validated. The e-mail reply will advise the Service Agent if the calibrations are OEM.

⇒ If non-GM engine or transmission control module calibrations are determined to be present the Calibrations Group will forward the case to the appropriate Brand Quality Manager (BQM) for review. The BQM will then determine whether the warranty will be blocked and will respond to all parties concerned.

Notice: For Service Agents Required to Call PQC. Requests that are sent to the Calibrations Group are handled in the order in which they were received.

- 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 time allows the Calibrations Group to receive, review, verify the calibrations and set up a case for the request.

Be prepared to provide all the usual documentation that is normally required when requesting an assembly authorization from the PQC.

Notice: For Service Agents Not Required to Call PQC.

- If non-GM engine or transmission control module calibrations **are** determined to be present e-mail the photos and Calibration Verification documentation using the information **above** to the Calibrations Group at **TACCVN@gmexpert.com** for Brand Quality Manager (BQM) review.

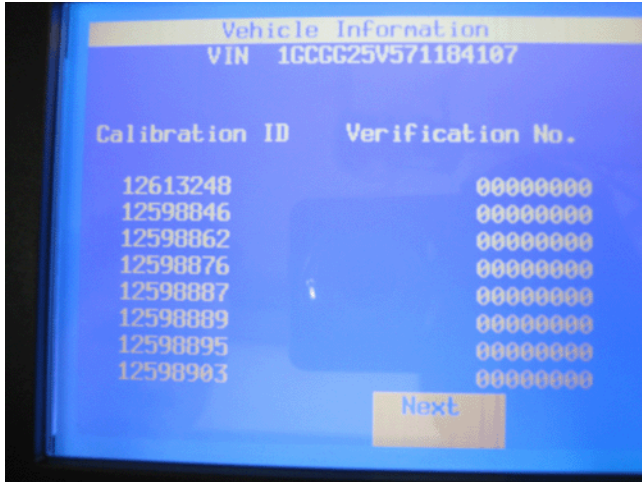
DO NOT contact GM Technical Assistance to discuss warranty concerns on the aftermarket calibrations. **ALL** questions and concerns about warranty should be directed to the District Manager Aftersales (DMA), in Canada the DM-CCSP (District Manager-Customer Care and Service Process).

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

Renaming a File to .jpg Format

- Go to: **Start or the Start** icon.
- Go to: **Accessories**.
- Go to: **Paint**.
- Select: the **file or screen** that you want to view.
- Press: the **Print Scrn** button.
- Select: **Paste**, to insert what you viewed.
- Select: **Save As** and save the file as a **.jpg** file.

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



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 Vehicles Using GDS 2

Notice: DO NOT e-mail photos from the GDS 2 System in the automatic format of a .png file. Your e-mail will arrive to the Calibrations Group with no photos attached.

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.

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	0000	
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	0000	
Engine Calibration Part Number History 6 Counter	Engine Control Module	0	
Engine Calibration Part Number History 7	Engine Control Module	0	
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	
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	

13. **Notice:** Typical view of a GDS 2 Calibration History Events Screen. GDS 2 is capable of displaying up to 10 Calibration History Events. 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 and the following information to **TACCVN@gmexpert.com** In the **Subject Line** of the e-mail include the following:
 - The phrase: **“V8 Cal”**.
 - The complete: **VIN**.
 - The **Service Agent BAC**.
18. In the **Body** of the e-mail include the following:
 - The complete: **VIN**.
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Notice: For Service Agents Required to Call PQC. 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 time allows the Calibrations Group to receive, review, verify the calibrations and set up a case for the request.

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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 Calibration Verification request.

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**.
5. 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.
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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