



Service Bulletin

INFORMATION

Subject: Identifying Non-GM ECM Calibration Use and Power-up Hardware Detection in Duramax Diesel Engines Using GDS 2

Attention: In order to process an engine/transmission/drivetrain hard part Warranty Transaction, the Service Personnel must retrieve and save the required GDS 2 screen shot information as outlined below for the specific vehicle, before disassembly or removing the engine/transmission/drivetrain components from the vehicle. Always refer to the GM Service Policy and Procedures Manual for the latest GM Policy and Procedures Information.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado	2017	2017			L5P	
GMC	Sierra						

Involved Region or Country	North America, Israel
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Information

General Motors Position on Aftermarket Power-Up Devices

General Motors does not support or endorse the use of devices or modifications that when installed, increase the engine horsepower and torque.

This bulletin outlines the procedures 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 indicate that an exhaust aftertreatment system component replacement is necessary.

Various Symptoms Caused by an Aftermarket Power-Up Kit or Hardware

- Poor performance
- Drivability concerns
- Increased emissions
- Knocking noise
- Engine damage
- Smoke from exhaust

GDS2 Software Updates and Screen Views

GDS 2 Software updates are available when released and are indicated by the following prompt: *Diagnostic Package Updates Available*. Whenever this prompt is displayed, *press the Update (1) button* to download the latest available software version.

Typical GDS 2 screen views may vary due to Model Year, Model, Engine, Transmission and other Equipment, and for example if the view was saved as a "Report" or as a single screen shot .jpg, .jpeg or .png file. It also depends on the GDS 2 software version currently being used by the Service Technician.

GDS 2 Screen Shots Required by the Calibration Group — 2017 Chevrolet Silverado Typical View of Screen Shots Generated as a Report

Notice: *BEFORE authorizing any Duramax® diesel engine or transmission replacement, the Calibration Group will require copies of both of the following GDS 2 screens in the .jpg, .jpeg or .png file format:*

Engine Control Module – Calibration History Screen

- Navigate to:
 - ⇒ Module Diagnostics
 - ⇒ Engine Control Module
 - ⇒ Identification Information
 - ⇒ Calibration History
- On this screen, you should see:
 - ⇒ Calibration History Buffer
 - ⇒ Number of Calibration History events stored
 - ⇒ Calibration Part Number History
 - ⇒ Calibration Verification Number History
 - ⇒ Engine Calibration Part Number History X Counter



Global Diagnostic System 2

Calibration History

Overview	
Vehicle Identification Number (VIN)	1GT12TEV3HF100164
Report Creation Date	2017-03-07 11:39:33 EST
Vehicle Configuration Property	
Make	GMC
Model	Sierra
Model Year	2017
Engine Identifier	6.6L (LSP)
System Information Property	
VCI Serial Number	MDI: 22129187
Vehicle Session Creation Date	2017-03-07 11:19:41
Test Start Time	2017-03-07 11:39:26 EST

Calibration History			
Control Module	Parameter Name	Value	Unit
Engine Control Module	Calibration History Buffer	Unlocked	
Engine Control Module	Number of Calibration History Events Stored	10	
Engine Control Module	Calibration Part Number History 1	12683726	
Engine Control Module	Calibration Verification Number History 1	DC8D	
Engine Control Module	Engine Calibration Part Number History 1 Counter	1	
Engine Control Module	Calibration Part Number History 2	12683016	
Engine Control Module	Calibration Verification Number History 2	522D	
Engine Control Module	Engine Calibration Part Number History 2 Counter	1	
Engine Control Module	Calibration Part Number History 3	0	
Engine Control Module	Calibration Verification Number History 3	FFFF	
Engine Control Module	Engine Calibration Part Number History 3 Counter	127	
Engine Control Module	Calibration Part Number History 4	0	
Engine Control Module	Calibration Verification Number History 4	FFFF	
Engine Control Module	Engine Calibration Part Number History 4 Counter	127	
Engine Control Module	Calibration Part Number History 5	0	
Engine Control Module	Calibration Verification Number History 5	FFFF	
Engine Control Module	Engine Calibration Part Number History 5 Counter	127	
Engine Control Module	Calibration Part Number History 6	0	
Engine Control Module	Calibration Verification Number History 6	FFFF	
Engine Control Module	Engine Calibration Part Number History 6 Counter	127	
Engine Control Module	Calibration Part Number History 7	0	
Engine Control Module	Calibration Verification Number History 7	FFFF	
Engine Control Module	Engine Calibration Part Number History 7 Counter	127	
Engine Control Module	Calibration Part Number History 8	0	
Engine Control Module	Calibration Verification Number History 8	FFFF	
Engine Control Module	Engine Calibration Part Number History 8 Counter	127	
Engine Control Module	Calibration Part Number History 9	0	
Engine Control Module	Calibration Verification Number History 9	FFFF	
Engine Control Module	Engine Calibration Part Number History 9 Counter	127	
Engine Control Module	Calibration Part Number History 10	0	
Engine Control Module	Calibration Verification Number History 10	FFFF	
Engine Control Module	Engine Calibration Part Number History 10 Counter	127	

Capture a photo of the Calibration History screen, verify all of the data listed above is on the photo as well as the VIN at the bottom of the screen.

- It may be required to scroll the screen and take multiple photos to capture all of the calibration history events. Save photo(s) and attach it to the email.

Note: Repeated "FFFF"s or "0000"s are harmless. They are place holders, and are not actual calibrations. It is not necessary to photograph extra screens containing only this type of calibration (FFFF's or 0000's).

Another option is to select the Create Report button in the upper right of the screen. Save the report and attach it to the email.

Notice: *This is a typical GDS 2 report generated by selecting the "Create Report" button, and taken from a Model Year 2017 Silverado showing the VIN,*

Transmission Control Module (TCM) - Data Display

- Navigate to:
 - ⇒ Module Diagnostics
 - ⇒ Transmission Control Module
 - ⇒ Data Display
 - ⇒ Transmission Data
- On this screen, you should see:
 - ⇒ Calculated Engine Torque
 - ⇒ Maximum Transmission Calculated Engine Torque

Global Diagnostic System 2

Data Display

Overview

Vehicle Identification Number (VIN)	1GT12TEY3HF100164
Report Creation Date	2017-03-07 11:41:26 EST

Vehicle Configuration Property

Make	GMC
Model	Sierra
Model Year	2017
Engine Identifier	6.6L (L8P)

System Information Property

VCI Serial Number	MDI: 22129167
Vehicle Session Creation Date	2017-03-07 11:19:41
Test Start Time	2017-03-07 11:41:15 EST

Transmission Data

Control Module	Parameter Name	Value	Unit
Transmission Control Module	Calculated Engine Torque	6	lb ft
Transmission Control Module	Maximum Transmission Calculated Engine Torque	695	lb ft
Transmission Control Module	Driver Demanded Engine Torque	39	lb ft
Transmission Control Module	Calculated Throttle Position	0	%
Transmission Control Module	Turbine Speed	554	RPM
Transmission Control Module	Transmission OSS	598	RPM
Transmission Control Module	Transmission OSS	0	RPM
Transmission Control Module	Current Gear	Park	
Transmission Control Module	Gear Command	Park/Neutral	
Transmission Control Module	SHIFT Solenoid Valve 1	On	
Transmission Control Module	SHIFT Solenoid Valve 2	On	
Transmission Control Module	SHIFT Solenoid Valve 3	On	
Transmission Control Module	SHIFT Solenoid Valve 1 Debris Clearing Command	0	Counts
Transmission Control Module	SHIFT Solenoid Valve 1 Debris Clearing Command	Inactive	
Transmission Control Module	SHIFT Solenoid Valve 2 Debris Clearing Command	0	Counts
Transmission Control Module	SHIFT Solenoid Valve 2 Debris Clearing Command	Inactive	
Transmission Control Module	SHIFT Solenoid Valve 3 Debris Clearing Command	0	Counts
Transmission Control Module	SHIFT Solenoid Valve 3 Debris Clearing Command	Inactive	
Transmission Control Module	Gear Ratio	6.00:1	
Transmission Control Module	Transmission Range Switch	Park	
Transmission Control Module	Transmission Fluid Pressure Switch 1	Low	
Transmission Control Module	Transmission Fluid Pressure Switch 2	Low	
Transmission Control Module	Transmission Fluid Pressure Switch 3	Low	
Transmission Control Module	Transmission Fluid Pressure Switch 4	High	
Transmission Control Module	Transmission Range Switch A/B/C/P	Low/High/Low	
Transmission Control Module	Driver Shift Control Mode	Inactive	
Transmission Control Module	Driver Shift Request	Inactive	
Transmission Control Module	Transmission Fluid Temperature	151	°F
Transmission Control Module	Transmission Hot Mode	No	
Transmission Control Module	Ignition Voltage	13.70	V
Transmission Control Module	Pressure Control Solenoid Valve 1	232.0	PSI
Transmission Control Module	Pressure Control Solenoid Valve 2 Pressure Command	0.0	PSI
Transmission Control Module	Line Pressure Control Solenoid Valve Pressure Command	67.1	PSI
Transmission Control Module	TCC Pressure Control Solenoid Valve Command	0.0	PSI
Transmission Control Module	TCC Slip Speed	16	RPM
Transmission Control Module	Tow/Haul Mode	Disabled	
Transmission Control Module	Engine Run Time	00:02:35	

Control Module Name	Control Module Status	DTC Count	DLC Pin
Transmission Control Module	No DTCs Stored	0	6, 14

Capture a photo of the Data Display screen, verify all of the data listed above is on the photo as well as the VIN at the bottom of the screen.

- Save photo and attach it to the email.

Another option is to select the Create Report button in the upper right of the screen. Save the report and attach it to the email.

Notice: This is a typical GDS 2 report generated by selecting the "Create Report" button, and taken from a Model Year 2017 Silverado showing the: VIN and Maximum Transmission Calculated Engine Torque Parameter

Instructions for E-Mailing the Required Information and .jpg, .jpeg or .png Files to the Calibration Group

1. E-mail copies of the files to TACCVN@gm.com

Note: Properly providing the requested information in Step 2 and Step 3 is extremely important.

2. In the *Subject* line of the E-mail include the phrase "Duramax® diesel", the complete VIN and Service Agent BAC.

Important: DO NOT cut and paste the GDS 2 screen shots into the body of the e-mail. The .jpg, .jpeg or .png files must be sent as e-mail ATTACHMENTS.

3. In the *Body* of the E-mail include the following:

- 3.1. Complete VIN
- 3.2. Mileage

- 3.3. Job Card Number (R.O. Number)
 - 3.4. Service Agent BAC.
 - 3.5. Service Personnel Name (Manager or Technician)
 - 3.6. A complete and comprehensive description of the customer concern and cause of the concern.
 - 3.7. Include any additional information as to why the Service Personnel believes that there may be aftermarket calibrations or hardware installed on the vehicle.
4. When sending the e-mail to the Calibration Group, the .jpg, .jpeg or .png files *must be "attached" to the e-mail*, in order to properly validate the calibration.
 5. E-mails that are sent without all of the above information and attachments as outlined, may be returned to the sender with a request for the missing information.
 6. Remember to review e-mail replies for further information from the Calibration Group.
 7. The Service Agent will receive an e-mail reply from the Calibration Group after the calibrations have been validated. The e-mail reply will advise the Service Agent if the calibrations are OEM.
 8. The Service Personnel may call the PQC after receiving their e-mail notification from the Calibration Group informing them that the calibrations are OEM if required to do so for Warranty Requirements. Be prepared to provide all of the usual documentation that is normally required when requesting an assembly authorization from the PQC.
 - If the Calibration 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 Service Agent's District Manager Aftersales (DMA) in the United States and in Canada to the District Manager - Customer Care and Service Process (DM - CCSP).

Warranty Information

- The Service Management must be involved in any situation that would justify the use of labor operation 0600014.
- Notify the Service Agent's District Manager Aftersales (DMA) in the United States and in Canada the District Manager - Customer Care and Service Process (DM - CCSP).
- All claims will have to be routed to the Warranty Support Center (WSC) for approval.
- Please refer to the latest version of Corporate Bulletin Number 09-00-89-016, Labor Operation 0600014 - Suspected Tampering or Vehicle Modifications for important information.

Labor Operation	Description	Labor Time
0600014*	Suspected Tampering or Vehicle Modifications	0.2 hr
*This is a unique Labor Operation for Bulletin use only.		

Version	1
Modified	

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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