

GLOBAL SAFETY FIELD INVESTIGATIONS
DCS5743
URGENT - DISTRIBUTE IMMEDIATELY

Date: April 7, 2021

Subject: N212331790 - Service Update
NOx Sensor False Failure

Models: 2021 Chevrolet Silverado 2500/3500 HD
2021 GMC Sierra 2500/3500 HD
Equipped with 6.6L, 8-Cylinder Diesel Engine (RPO L5P)

To: All General Motors Dealers

General Motors is releasing Service Update N212331790 today. The total number of U.S. vehicles involved is approximately 29,707. Please see the attached bulletin for details.

Global Warranty Management (GWM)

The Required Field Action section on the Investigate Vehicle History (IVH) screen will be updated April 8, 2021 or sooner. A list of involved vehicles in dealer new inventory is attached to this message. Please hold all warranty transactions until IVH has been updated.

END OF MESSAGE
GLOBAL SAFETY FIELD INVESTIGATIONS

Service Update

N212331790 NOx Sensor False Failure



Release Date: April 2021

Revision: 00

Attention: This service update includes vehicles in dealer inventory and customer vehicles that return to the dealership for any reason. This bulletin will expire at the end of the involved vehicle's New Vehicle Limited Warranty period.

Make	Model	Model Year		RPO	Description
		From	To		
Chevrolet	Silverado 2500/3500 HD	2021	2021	L5P	6.6L, 8-cylinder diesel engine
GMC	Sierra 2500/3500 HD				

Involved vehicles are marked "open" on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition	Certain 2021 model year Chevrolet Silverado HD and GMC Sierra HD may incorrectly present the MIL/Service Engine Soon Light being illuminated and technicians may find DTC P11D5.
Correction	Dealers are to reprogram the engine control module. This correction applies to vehicles registered in cold weather US states and Canadian Provinces.

Parts

No parts are required for this repair.

Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9105409*	Verified Module Software or Calibration Level: Engine Control Module Is Programmed with Same Level Software or Calibration	0.2	ZFAT	N/A
9105410*	Engine Control Module Reprogramming with SPS	0.3		

Important: * To avoid warranty transaction rejections, carefully read and follow the instructions below:

- The Warranty Claim Code must be accurately entered in the "Warranty Claim Code" field of the transaction.
- When more than one Warranty Claim Code is generated for a programming event, it is required to document all Warranty Claim Codes in the "Correction" field on the job card. Dealers must also enter one of the codes in the "Warranty Claim Code" field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS/SPS2.

Warranty Claim Code Information Retrieval

If the Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

- Open TIS/TLC on the computer used to program the vehicle.
- Select and start SPS/SPS2.
- Select Settings.
- Select the Warranty Claim Code tab.

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Service Procedure

Caution: Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

Note: Carefully read and follow the instructions below.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

Service Update

N212331790 NOx Sensor False Failure



- Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, etc.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

Caution: Be sure the VIN selected in the drop down menu (1) is the same as the vehicle connected (2) before beginning programming.

The screenshot shows the Techline Connect SPS2 interface. At the top, there is a header with the GM logo and 'Techline Connect Version: 1.8.0.2 Production'. Below this is a navigation bar with 'DASHBOARD', 'GDS2', 'SI', and 'SPS2' tabs. A 'Connect Vehicle' button is visible. The main area is titled 'Welcome to Service Programming System 2'. On the left, there is a form for vehicle information: VIN (1GNSKGM1YMD108472), Model (Suburban - 4WD), Type (-), Make (Chevrolet), Year (2021), and Job Card. A circled '1' points to the VIN dropdown menu. On the right, there is a 'Diagnostic Tool Ready!' section with 'J2534' and a 'Selected Programming Process' dropdown set to 'Reprogram'. A circled '2' points to the vehicle connection status area at the top right. At the bottom left, there are 'Print' and 'Settings' buttons. At the bottom right, there is a text label '5743643'.

The screenshot shows the Techline Connect SPS2 interface during a programming process. A dialog box is displayed in the center with the message: 'M4521: You are attempting to reprogram with the same calibration. Select OK to continue, Cancel to Stop!'. Below the dialog box is a table with columns: Controller, ID, Current #, and Description. The table contains 7 rows of data for K17 controllers. At the bottom, there are 'Print', 'Save to PDF', and 'ECU Data' buttons on the left, and 'Back', 'Start Programming', and 'Cancel' buttons on the right. A text label '5644477' is located at the bottom right.

Controller	ID	Current #	Description
K17	1	84820771	
K17	2	84820790	
K17	3	84820797	
K17	4	84820801	
K17	5	84820808	
K17	6	84820819	
K17	7	84820825	

Service Update

N212331790 NOx Sensor False Failure



The screenshot shows the Service Programming System (SPS) Summary screen. A table lists various controllers with their IDs, current and selected numbers, and descriptions. A dialog box is overlaid on the screen, displaying an error message: "M4521: You are attempting to reprogram with the same calibration. Select OK to continue, Cancel to Stop!". Below the table is a section for Vehicle Data with columns for Attribute and Value. At the bottom, there are buttons for Print, < Back, Next >, and Cancel. The VIN field is partially visible as "VIN: [redacted]".

Controller	Id	Current #	Selected #	Description
[redacted]	1	84758789	84758789	[redacted]
[redacted]	2	84790857	84790857	[redacted]
[redacted]	4	84557555	84557555	[redacted]
[redacted]	5	84681582	84681582	[redacted]
[redacted]	7	84690692	84690692	[redacted]
[redacted]	8	84662691	84662691	[redacted]
[redacted]	9	84678464	84678464	[redacted]

5431207

Important: Techline Connect and TIS2WEB screens shown above.

Important: If the same calibration/software warning is noted on the TLC or SPS Summary screen, select OK and follow screen instructions. After a successful programming event, the WCC is located in the Service Programming System dialogue box of the SPS Summary screen. No further action is required. Refer to the Warranty section of the bulletin.

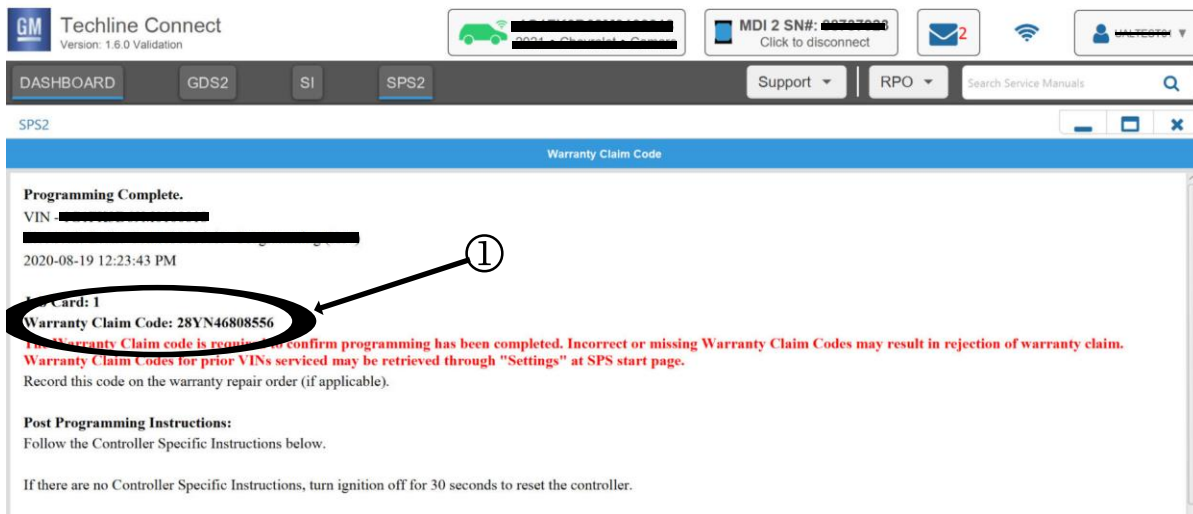
Important: When programming a module in GM's new Vehicle Intelligence Platform, or VIP, the power mode (ignition) needs to be off or errors may occur. This involves the 2020 Chevrolet Corvette, Cadillac CT5 and CT4, full-size Chevrolet, GMC, Cadillac SUVs and Buick Envision. Serial Data Message Authentication also needs to have the ignition off.

Service Update

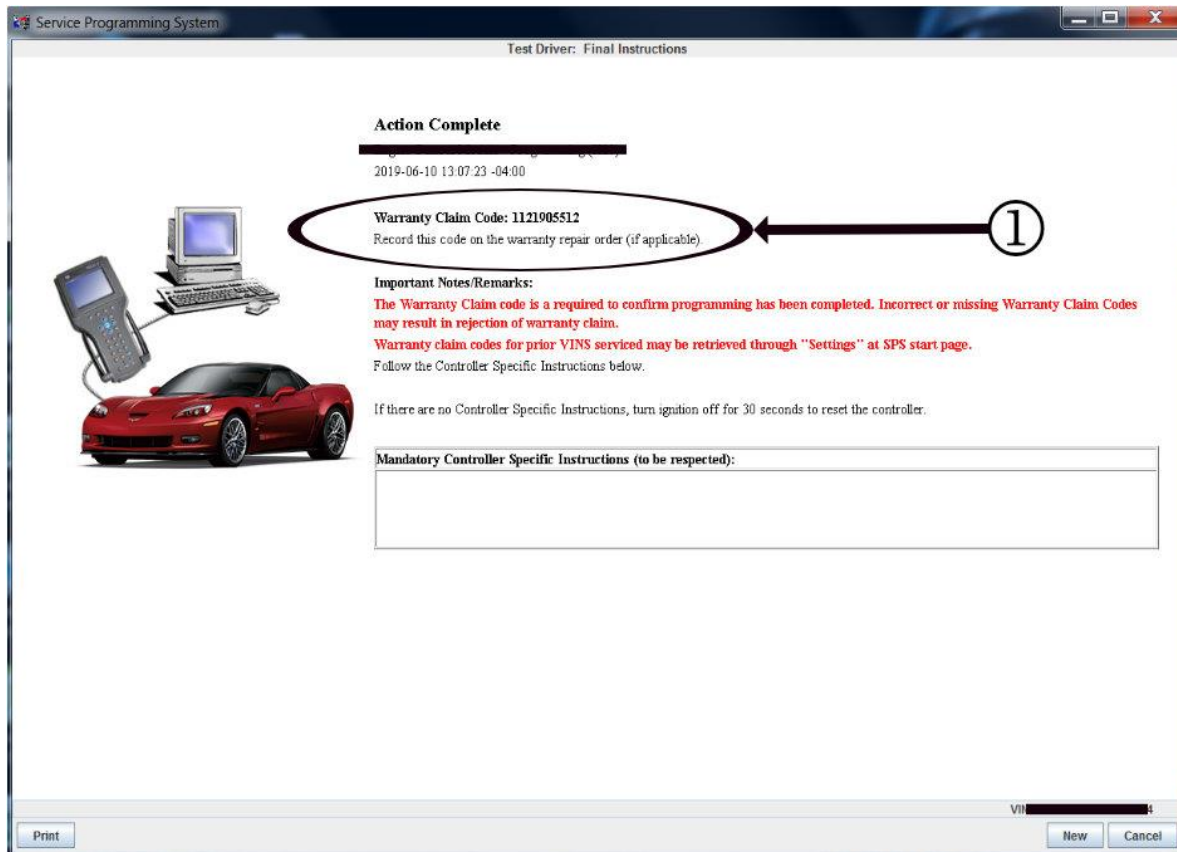
N212331790 NOx Sensor False Failure



1. Reprogram the Engine Control Module. Refer to *K20 Engine Control Module: Programming and Setup* in SI.



5644478



5431209

Note: The screenshots above are an example of module programming and may not be indicative of the specific module that is being programmed. Module selection and VIN information have been blacked out.

Important: To avoid warranty transaction rejections, you **MUST** record the warranty claim code provided on the Warranty Claim Code (WCC) screen shown above on the job card. Refer to callout 1 above for the location of the WCC on the screen.

2. Record SPS Warranty Claim Code on job card for warranty transaction submission.

Service Update

N212331790 NOx Sensor False Failure



Dealer Responsibility

Whenever a vehicle subject to this service update enters your vehicle inventory or is in your facility for service in the future, and the vehicle is still covered under the New Vehicle Limited Warranty, you must take the steps necessary to be sure the service update correction has been made before selling or releasing the vehicle.

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this bulletin must be held and inspected/repaired per the service procedure of this bulletin before customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system, or once again be used in the CTP program.

Dealer Reports

The Inventory tab of the Open Vehicle Report will contain Service Update Bulletin VINs that apply to this field action. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will not contain Service Update Bulletin VIN data because the intent of a Service Update Bulletin is to not inconvenience a customer with a special trip for service. Service Update Bulletins are to be completed when the customer is in for a regularly scheduled visit.

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 tools, equipment, 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 dealer for information on whether your vehicle may benefit from the information.



**We Support
Voluntary Technician
Certification**