

Product Emission Recall

N222359341 DEF Pump May Activate Before Frozen DEF Is Sufficiently Thawed



Release Date: April 2022

Revision: 00

Attention: ONLY Chevrolet Medium Duty dealers can complete this recall repair.

| Make | Model | Model Year | | RPO | Description |
|-----------|-----------------------------------|------------|------|-----|--------------------------------|
| | | From | To | | |
| Chevrolet | Silverado 4500HD/5500HD/6500HD | 2022 | 2022 | L5D | 6.6L, 8-cylinder diesel engine |

Involved vehicles are identified on the Applicable Warranties section 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 | General Motors has decided to conduct a Voluntary Emissions Recall on certain 2022 Chevrolet Silverado 4500HD/5500HD/6500HD vehicles with a 6.6L diesel engine. In cold ambient temperatures when Diesel Emissions Fluid (DEF) in the DEF tank is frozen, the DEF tank pump may be activated before DEF has been sufficiently thawed by the heater. If this condition occurs, the control system may detect no DEF flow through the pump, set a Diagnostic Trouble Code (DTC), disable DEF dosing for the remainder of the drive cycle and alert the driver of an impending reduction in maximum vehicle speed. |
| Correction | Dealers are to reprogram the ECM. |

Parts

No parts are required for this repair.

Warranty Information

| Labor Operation | Description | Labor Time | Trans. Type | Net Item |
|-----------------|---|------------|-------------|----------|
| 9106066* | Verified Module Software or Calibration Level: Module Is Programmed with Same Level Software or Calibration | 0.2 | ZFAT | N/A |
| 9106067* | 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 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 SPS2 system as follows:

1. Open TLC on the computer used to program the vehicle.
2. Select and start SPS2.
3. Select Settings.
4. 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

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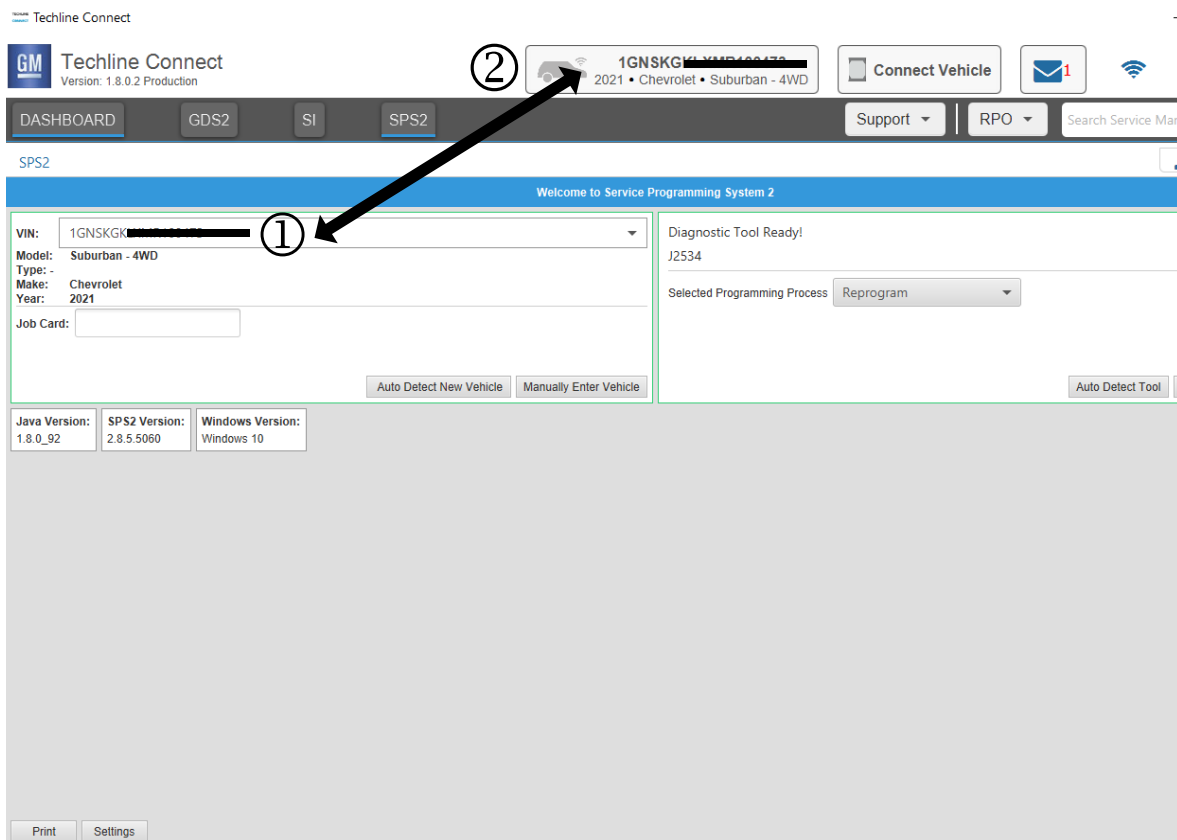
www.gmdesolutions.com for further information. If not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

- Follow the on-screen prompts regarding ignition power mode, but ensure that anything that drains excessive power (exterior lights, HVAC blower motor, etc) is off.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

Important: The service technician always needs to verify that the VIN displayed in the TLC left side drop down menu and the top center window match the VIN plate of the vehicle to be programmed prior to using Service Programming System 2 (SPS2) for programming or reprogramming a module.

- For the TLC application, service technicians need to always ensure that the power mode (ignition) is “ON” before reading the VIN from the vehicle’s VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in the TLC top center window after correctly reading the VIN from the vehicle does not match the VIN plate of the vehicle, manually type in the VIN characters from the vehicle VIN plate into the TLC top center window and use these for programming or reprogramming the subject module with the correct vehicle VIN and software and/or calibrations.
- The Engine Control Module (ECM) is the master module (for VIP vehicles) that TLC reads to determine the VIN of the vehicle. If the VIN read from the vehicle by TLC does not match the VIN plate of the vehicle, the ECM also needs to be reprogrammed with the correct VIN, software and calibrations that match the vehicle’s VIN plate.
- The Body Control Module (BCM) is the master module (for GEM vehicles) that TLC reads to determine the VIN of the vehicle. If the VIN read from the vehicle by TLC does not match the VIN plate of the vehicle, the BCM also needs to be reprogrammed with the correct VIN, software and calibrations that match the vehicle’s VIN plate.

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



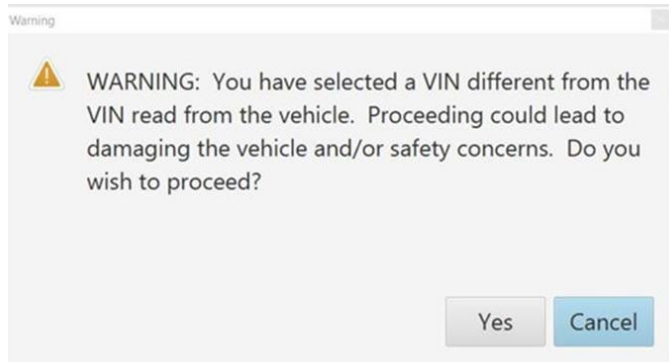
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Important: If the vehicle VIN DOES NOT match, the message below will be shown



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

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Important: Techline Connect screens shown above.

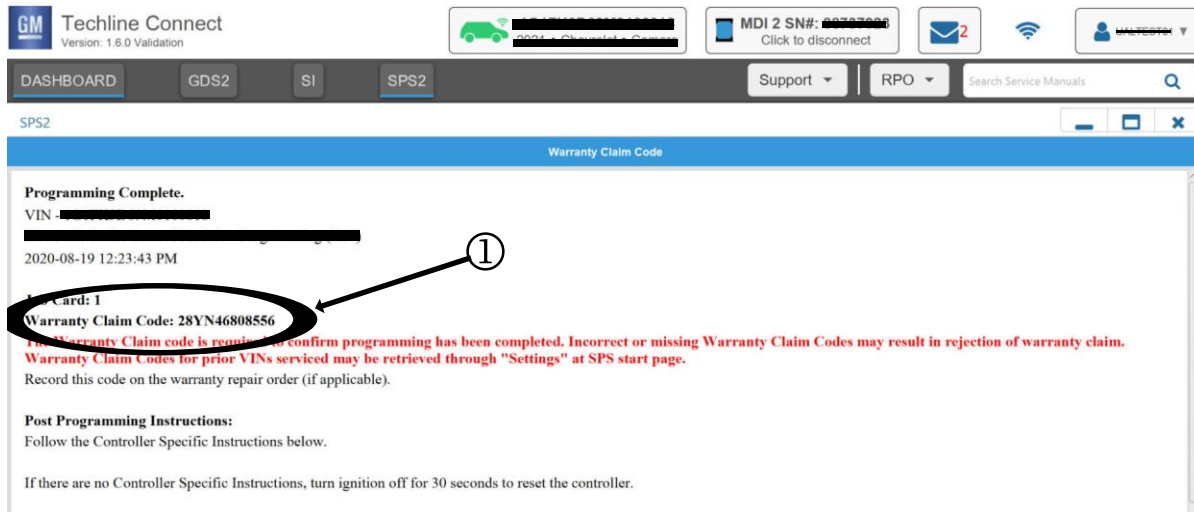
Important: If the same calibration/software warning is noted on the TLC Summary screen, select OK and follow screen instructions. After a successful programming event, the WCC is located in the Service Programming System dialogue box of the SPS Summary screen. No further action is required. Refer to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

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



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Note: The screenshot 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.
3. FOR ALL VEHICLES IN USA: Install a Recall Identification Label upon recall completion. See General Motors Service Policies and Procedures Manual, Recall Identification Label, for details.
4. CALIFORNIA VEHICLES ONLY: Complete a "Proof of Correction" certificate and provide to the vehicle owner upon recall completion.

Dealer Responsibility

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this recall 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.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this field action enters your vehicle inventory you must take the steps necessary to ensure the program correction has been made before selling the vehicle. In addition, for vehicles entering your facility for service, you are required to ensure the customer is aware of the open field action and make every reasonable effort to implement the program correction as set forth in this bulletin prior to releasing the vehicle.

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*****THE FOLLOWING 2 PARAGRAPHS ARE NOT FOR CANADA OR EXPORT*****

When a California emissions recall is completed by a GM dealer, the dealer must provide the vehicle owner a "Proof of Correction Certificate" which the owner may need to present to the California Department Of Motor Vehicles (DMV) when renewing their vehicle registration. Without this correction certificate, the owner may be unable to renew their vehicle registration.

Additional Certificates can be obtained, at no charge, from the 1Store application in GlobalConnect. Request GM Item Number 1825 when ordering.

Dealer Reports

For dealers with involved vehicles, a listing has been prepared and will be available through GM GlobalConnect Maxis Field Action Reports or sent directly to export dealers. The Inventory tab of the dealer reports will contain VINs that apply to this recall. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will contain customer names and addresses from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall may be a violation of law in several states.

Customer Notification

USA & Canada - General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

In order to ensure full protection under the emission warranty, and the right to participate in future recalls, the customer notification letter recommends that customers have their vehicles serviced as soon as possible. It also advises that failure to do so could legally be determined to be lack of proper maintenance. The vehicle may fail a state or local emission inspection test if the recall work is not completed.

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**

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May 2022

This notice applies to your vehicle, **VIN:** _____

Dear General Motors Customer:

This notice is sent to inform you that General Motors is conducting a voluntary emission recall that includes your vehicle.

Reason For This Recall: Your 2022 model year Chevrolet Silverado vehicle, equipped with a 6.6L, 8-cylinder diesel engine, has been certified to meet California and Federal emissions standards and may be releasing air pollutants which exceed these standards. In cold ambient temperatures when Diesel Emissions Fluid (DEF) in the DEF tank is frozen, the DEF tank pump may be activated before DEF has been sufficiently thawed by the heater. If this condition occurs, the control system may detect no DEF flow through the pump, set a Diagnostic Trouble Code (DTC), disable DEF dosing for the remainder of the drive cycle and alert the driver of an impending reduction in maximum vehicle speed.

What Will Be Done: Your GM dealer will reprogram the engine control module. This service will be performed for you at **no charge**. Eligibility for this service will not be denied solely due to your Chevrolet Silverado vehicle having non-GM parts or repairs performed by outlets other than a GM franchised dealer.

How Long Will The Repair Take? Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 30 minutes.

What You Should Do: Please contact your GM dealer as soon as possible. Instructions for making this correction have been sent to your dealer. Please ask your dealer if you wish to know how much time will be needed to schedule, process, and repair your vehicle.

When scheduling your appointment, confirm with the dealer that they service Medium Duty Trucks.

If you have any questions or need any assistance, just contact your dealer or the appropriate Customer Assistance Center at the number listed below.

For the hearing or speech impaired, please contact our Customer Assistance Center using the Telecommunication Relay Service by dialing 711 then providing the appropriate Customer Assistance Center number for your vehicle.

| Division | Number | Text Telephones (TTY) |
|-----------------------|----------------|-----------------------|
| Chevrolet | 1-800-222-1020 | 711 / 1-800-833-2438 |
| Puerto Rico – English | 1-866-467-9700 | |
| Puerto Rico – Español | 1-866-467-9700 | |
| Virgin Islands | 1-866-467-9700 | |

Emission Law Information: In order to ensure your full protection under the emission warranty made applicable to your vehicle by state and federal law, and your right to participate in future recalls, it is recommended that you have your vehicle serviced as soon as possible. Failure to do so could legally be determined to be lack of proper maintenance of your vehicle. Also, your vehicle may fail a state or local emission inspection if this recall is not accomplished.

IMPORTANT MESSAGE FOR CALIFORNIA RESIDENTS

The California Air Resources Board (CARB) requires vehicle emission recalls be completed prior to California registration renewal. Uncorrected emission recalls will result in the inability to renew your California vehicle registration.

At the time of emission recall completion, your California dealer will issue a "Proof of Correction Certificate". Keep this certificate and, if required, present it to the Department of Motor Vehicles when renewing your California registration as proof of recall completion.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your continued satisfaction with our products.

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Regina A. Carto
Vice President
Global Product Safety and Systems

GM Recall: N222359341

GLOBAL SAFETY FIELD INVESTIGATIONS
DCS6114
URGENT - DISTRIBUTE IMMEDIATELY

Date: April 5, 2022

Subject: N222359341 – Product Emission Recall
DEF Pump May Activate Before Frozen DEF is Sufficiently Thawed

Models: 2022 Chevrolet Silverado 4500HD/500HD/6500HD
Equipped with 6.6L, 8-cylinder Diesel Engine (RPO L5D)

To: All General Motors Medium Duty Dealers

General Motors is releasing Emission Recall N222359341 today. The total number of U.S. vehicles involved is approximately 235. Please see the attached bulletin for details.

Customer Letter Mailing

The customer letter mailing will begin in May.

Global Warranty Management (GWM)

The Required Field Action section on the Investigate Vehicle History (IVH) screen will be updated April 5, 2022. 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