



# Service Bulletin

Bulletin No.: 24-NA-097

Date: June, 2024

## TECHNICAL

**Subject: DTC P20EE DEF Control Unit Recalibration**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Low Cab Forward Trucks	2022	2024			5.2L (4HK1)	
	Medium Duty 4500HD 4500XD 5500HD 5500XD						

<b>Involved Region or Country</b>	North America
<b>Additional Options (RPOs)</b>	L1B
<b>Condition</b>	Some customers may comment on a Malfunction Indicator Lamp (MIL) illuminated in the Driver Information Center (DIC). Technician may find DTC P20EE Diesel Exhaust Fluid (DEF) System NOx Trap Low Efficiency set current or in recent history.
<b>Cause</b>	The cause of the condition may be software anomalies or not be apparent.
<b>Correction</b>	New calibrations for the DEF Control Unit (DCU) have been developed to address this concern. Reprogram the DCU with the latest software and calibration using the Isuzu Diagnostic Service System (IDSS) if the calibration part number does NOT match the calibration numbers listed under Parts Information.

### Service Procedure

**Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.**

**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.

- 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](http://www.gmdesolutions.com) for further information. If not available, connect a fully charged 12 V 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.

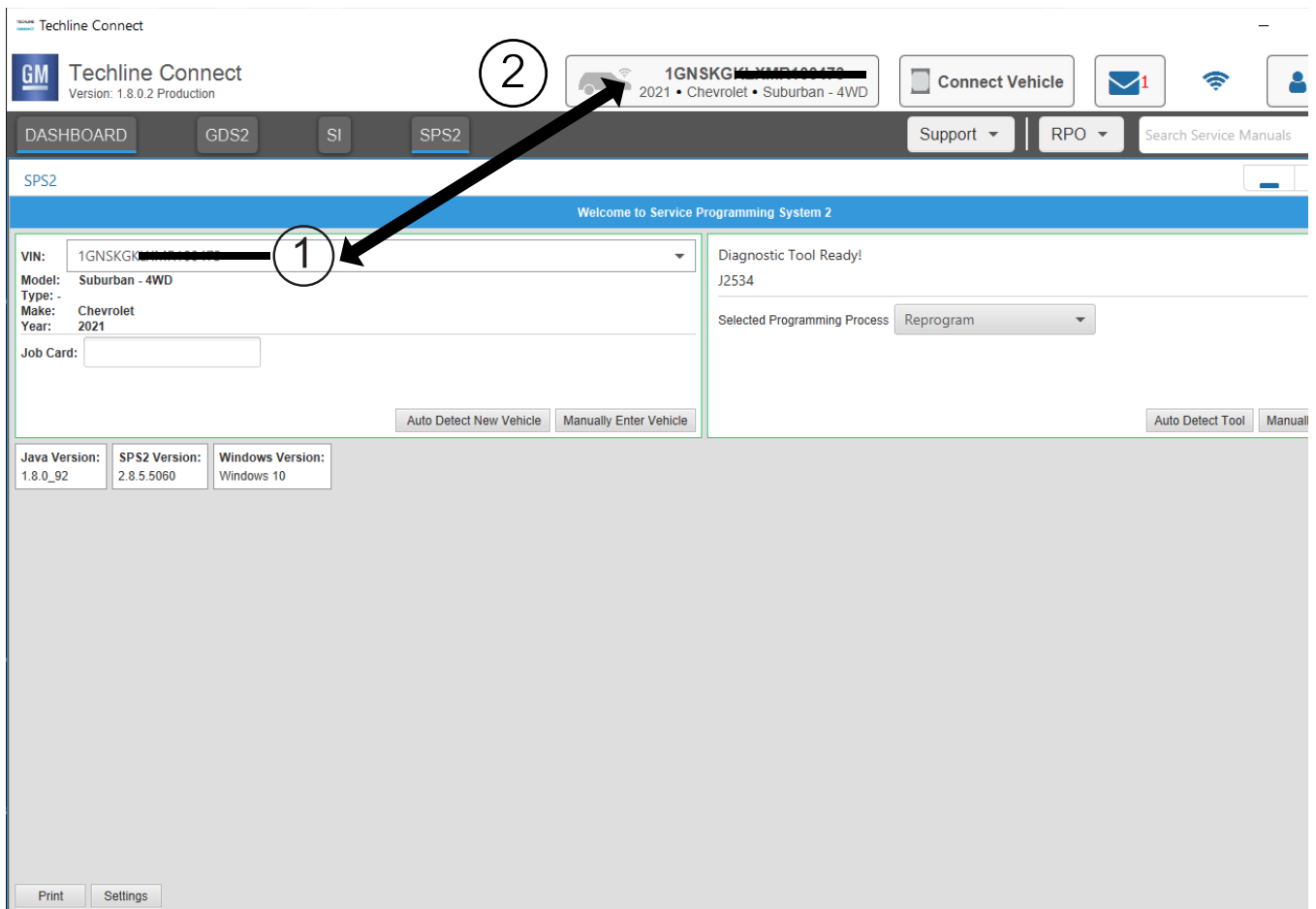
**Important:** The service technician always needs to verify that the VIN displayed in the TLC left side drop down menu and the top center window match the VIN plate of the vehicle to be programmed prior to using Service Programming System 2 (SPS2) for programming or reprogramming a module.

- 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.

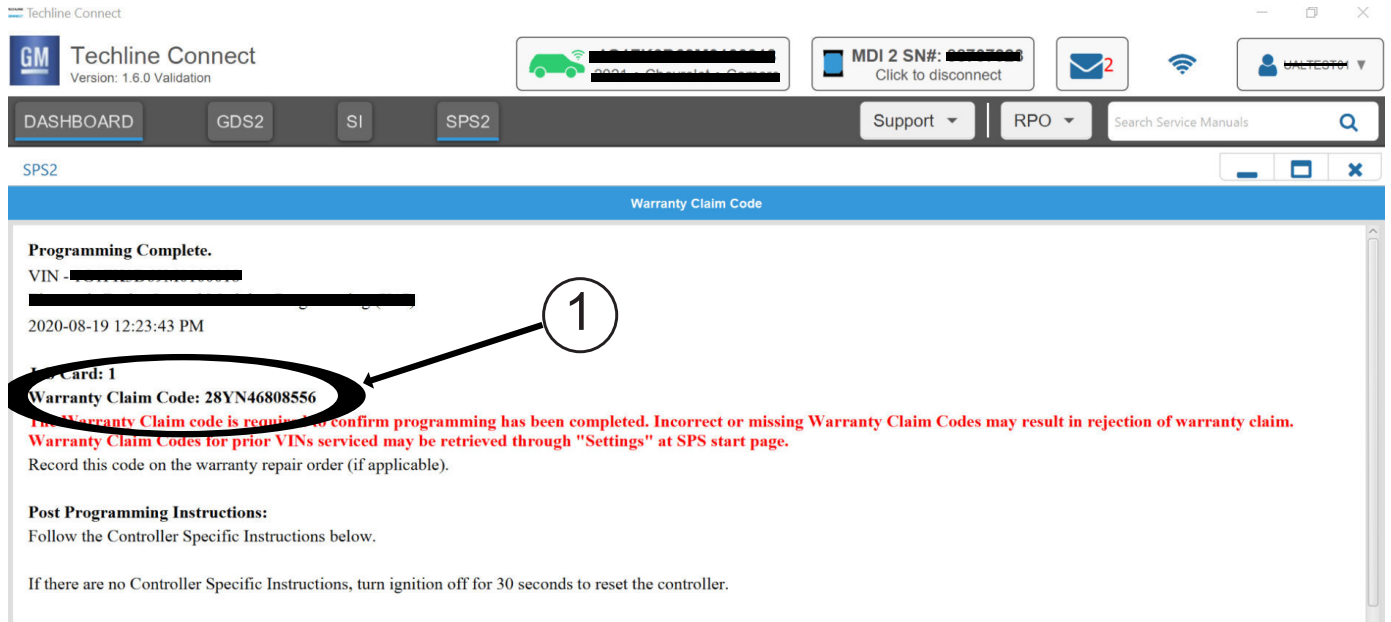
**Caution:** Be sure the VIN selected in the drop down menu (1) is the same as the vehicle connected (2) before beginning programming.



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





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**Note:** The screenshot above is 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.

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

### Parts Information

Model Year	Vehicle	Calibration Number
2022	N-Series	55229784
2023–2024		55228945

### Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
L8006	DTC P20EE DCU Recalibration	0.4 hr

\*This is a unique Labor Operation for Bulletin use only.

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

Labor Operation	Description	Labor Time
<p>Labour Time <a href="#">[Top]</a></p> <p>Labour Operation Code:</p> <p>Additional labour op code information: <input type="text"/></p> <p>SPS Warranty Claim Code: <input type="text"/></p>		
<p>6125814</p> <ul style="list-style-type: none"><li>The Warranty Claim Code must be accurately entered in the "Warranty Claim Code" field of the transaction.</li><li>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.</li></ul>		

### Warranty Claim Code Information Retrieval

The screenshot shows a software interface with a 'Warranty Claim Code' dialog box. The dialog box has tabs for 'Common', 'Diagnostics', 'Logging', 'Warranty Claim Code', and 'Local Cache'. The 'Warranty Claim Code' tab is active and contains a table with the following data:

VIN	Module	Function	Warranty Claim Code	Job Card
[REDACTED]	K73 - Telematics Communication Interface Control Module	Programming & Service Activation	[REDACTED]	test
[REDACTED]	K9 - Body Control Module	Programming	[REDACTED]	test
[REDACTED]	K5 - Automatic Level Control Module Ignition	Off	[REDACTED]	test driver
[REDACTED]	K56 - Serial Data Gateway Module	Programming	[REDACTED]	test driver

Arrow 1 points to the 'Settings' button in the bottom left corner of the interface. Arrow 2 points to the 'Warranty Claim Code' tab in the dialog box.

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 (1).

4. Select the Warranty Claim Code tab (2).

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.

<b>Version</b>	1
<b>Modified</b>	Released June 06, 2024

