



Service Bulletin

Bulletin No.: 25-NA-042

Date: March, 2025

TECHNICAL

Subject: ECM Calibration Update for P2BAA

This Bulletin Replaces PIP6040. Please Discard all Versions of PIP6040.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission :
		from	to	from	to		
Chevrolet	Silverado 4500HD/ 5500HD/6500HD	2023	2023			L5D	

Involved Region or Country	North America
Condition	Some customers may comment on a check engine lamp illuminated in the DIC. Technician may find DTC P2BAA.
Cause	The cause of the condition may be software anomalies setting the DTC.
Correction	Reprogram the Engine Control Module.

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 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.

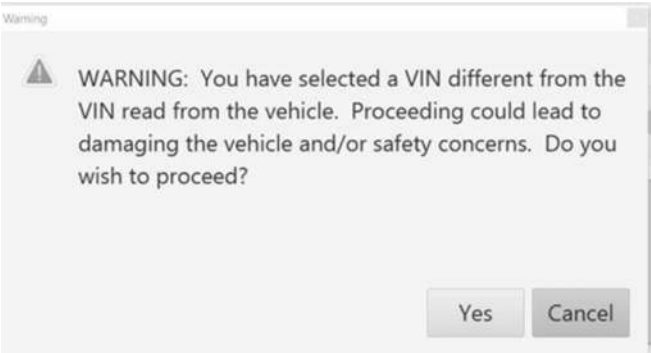
- If the VIN that shows up in the TLC top center window after correctly reading the VIN from the vehicle does not match the VIN plate of the vehicle, manually type in the VIN characters from the vehicle VIN plate into the TLC top center window and use these for programming or reprogramming the subject 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.

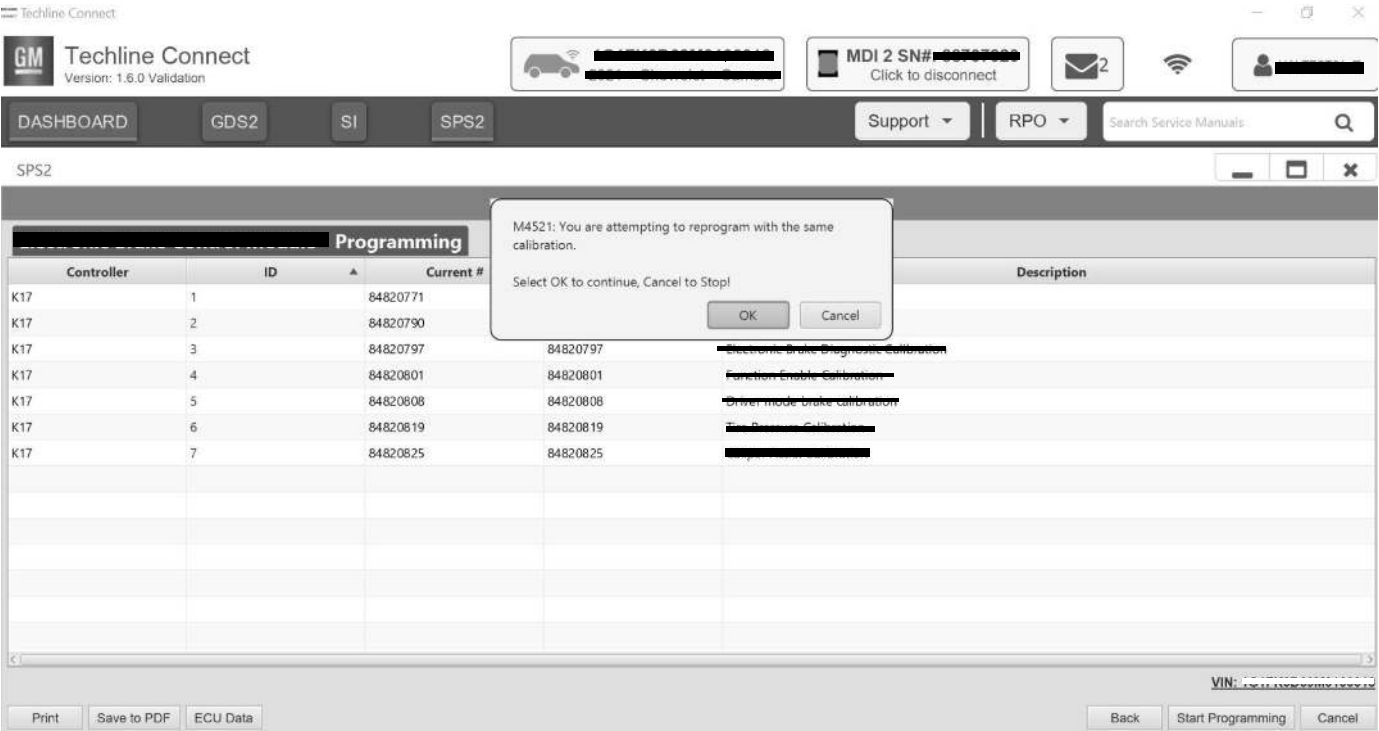
The screenshot displays the Techline Connect SPS2 interface. At the top, the 'Techline Connect' header includes the GM logo and version '1.8.0.2 Production'. Below this is a navigation bar with 'DASHBOARD', 'GDS2', 'SI', and 'SPS2' tabs. The 'SPS2' tab is active, showing a 'Welcome to Service Programming System 2' message. On the left, a form contains fields for 'VIN:', 'Model:', 'Type:', 'Make:', 'Year:', and 'Job Card:'. The 'VIN:' field is a dropdown menu with the value '1GNSKGM1XP100175' selected, marked with a circled '1'. To the right of this form, a box displays 'Diagnostic Tool Ready!' and 'J2534'. Below this, a 'Selected Programming Process' dropdown is set to 'Reprogram'. At the top right, a 'Connect Vehicle' button is next to a vehicle status box showing '1GNSKGM1XP100175' and '2021 • Chevrolet • Suburban - 4WD', marked with a circled '2'. A large black arrow points from the circled '2' to the circled '1'. At the bottom left, there are 'Print' and 'Settings' buttons. At the bottom right, there are 'Auto Detect New Vehicle', 'Manually Enter Vehicle', 'Auto Detect Tool', and 'Manual' buttons. System information at the bottom left shows 'Java Version: 1.8.0_92', 'SPS2 Version: 2.8.5.5060', and 'Windows Version: Windows 10'.

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



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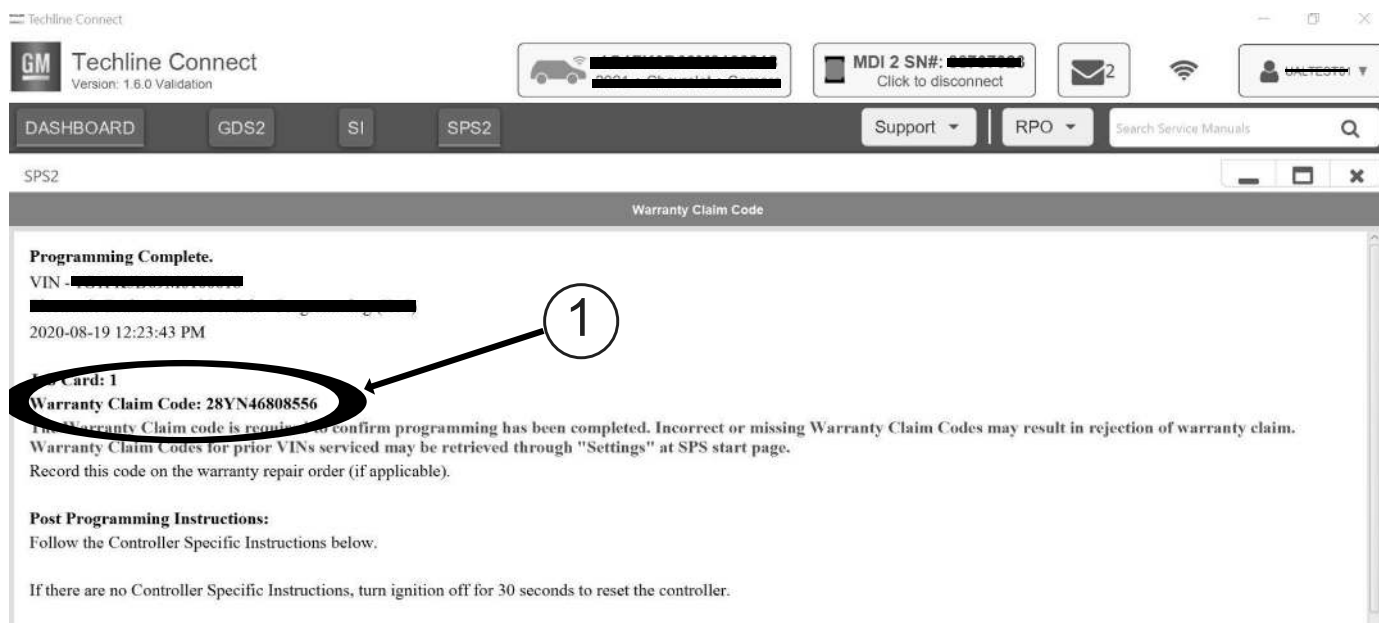


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Important: Techline Connect screens shown above.

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.

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



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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.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
*2810075	Engine Control Module Reprogramming with SPS	Use Published Labor Operation Time

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

Labor Operation	Description	Labor Time
Labour Time [Top] Labour Operation Code: Additional labour op code information: SPS Warranty Claim Code:		

- 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.

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Warranty Claim Code Information Retrieval

The screenshot shows the 'Warranty Claim Code' window. The table contains the following data:

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

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.

Version	1
Modified	Released March 17, 2025

