



# Service Bulletin

Bulletin No.: 22-NA-201

Date: October, 2022

## TECHNICAL

**Subject:** MIL L5P ECM/TCM Update with DTCs Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 2500HD/3500HD	2020	2021			L5P	
GMC	Sierra 2500HD/3500HD	2020	2021			L5P	

<b>Involved Region or Country</b>	United States, Canada, Mexico, Australia, New Zealand, Middle East, Israel, Palestine
<b>Additional Options (RPOs)</b>	
<b>Condition</b>	<p>Some customers may comment on a MIL (Malfunction Indicator Lamp) Illuminated in the DIC.</p> <p>The technician may find one or more of the following codes:</p> <ul style="list-style-type: none"> <li>• DTC P01CB Cylinder 1 Injection Timing Retarded</li> <li>• DTC P01CC Cylinder 1 Injection Timing Advanced</li> <li>• DTC P01CD Cylinder 2 Injection Timing Retarded</li> <li>• DTC P01CE Cylinder 2 Injection Timing Advanced</li> <li>• DTC P01CF Cylinder 3 Injection Timing Retarded</li> <li>• DTC P01D0 Cylinder 3 Injection Timing Advanced</li> <li>• DTC P01D1 Cylinder 4 Injection Timing Retarded</li> <li>• DTC P01D2 Cylinder 4 Injection Timing Advanced</li> <li>• DTC P01D3 Cylinder 5 Injection Timing Retarded</li> <li>• DTC P01D4 Cylinder 5 Injection Timing Advanced</li> <li>• DTC P01D5 Cylinder 6 Injection Timing Retarded</li> <li>• DTC P01D6 Cylinder 6 Injection Timing Advanced</li> <li>• DTC P01D7 Cylinder 7 Injection Timing Retarded</li> <li>• DTC P01D8 Cylinder 7 Injection Timing Advanced</li> <li>• DTC P01D9 Cylinder 8 Injection Timing Retarded</li> <li>• DTC P01DA Cylinder 8 Injection Timing Advanced</li> <li>• DTC P020A Cylinder 1 Injection Timing</li> <li>• DTC P020B Cylinder 2 Injection Timing</li> <li>• DTC P020C Cylinder 3 Injection Timing</li> <li>• DTC P020D Cylinder 4 Injection Timing</li> <li>• DTC P020E Cylinder 5 Injection Timing</li> <li>• DTC P020F Cylinder 6 Injection Timing</li> <li>• DTC P021A Cylinder 7 Injection Timing</li> <li>• DTC P021B Cylinder 8 Injection Timing</li> <li>• DTC P02CC Cylinder 1 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02CD Cylinder 1 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02CE Cylinder 2 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02CF Cylinder 2 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02D0 Cylinder 3 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02D1 Cylinder 3 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02D2 Cylinder 4 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02D3 Cylinder 4 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02D4 Cylinder 5 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02D5 Cylinder 5 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02D6 Cylinder 6 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02D7 Cylinder 6 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02D8 Cylinder 7 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02D9 Cylinder 7 Injector Exceeded Maximum Learning Limit</li> <li>• DTC P02DA Cylinder 8 Injector Exceeded Minimum Learning Limit</li> <li>• DTC P02DB Cylinder 8 Injector Exceeded Maximum Learning Limit</li> </ul>
<b>Cause</b>	The cause of the condition may be software anomalies in the ECM and TCM.
<b>Correction</b>	<p>Please update the ECM and TCM.</p> <p><b>Note:</b> If the vehicle sets DTCs U0100 and P0700, the ECM was updated but the TCM was not. Please update the TCM.</p>

## 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.

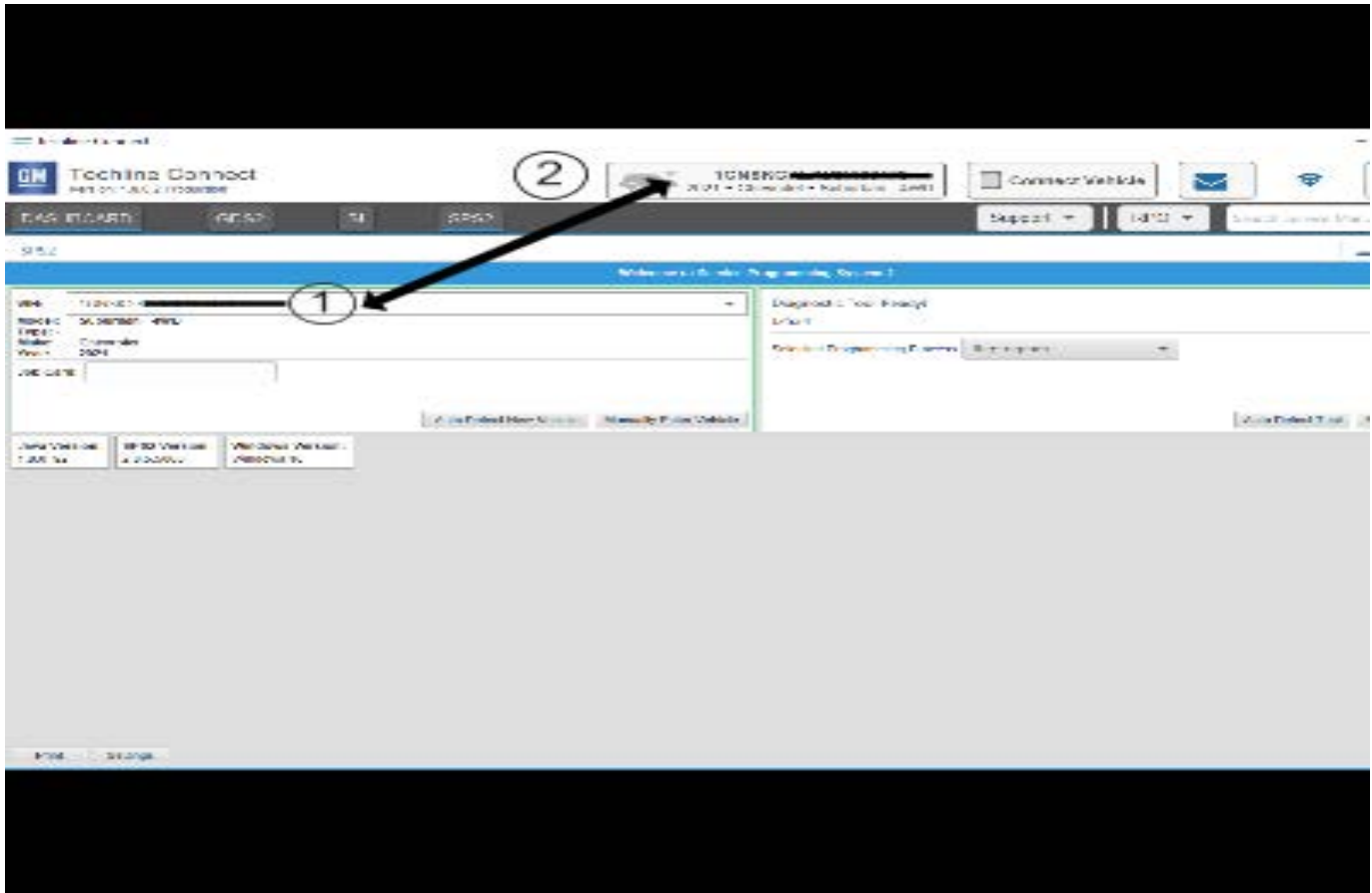
**Caution:** Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

- 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.

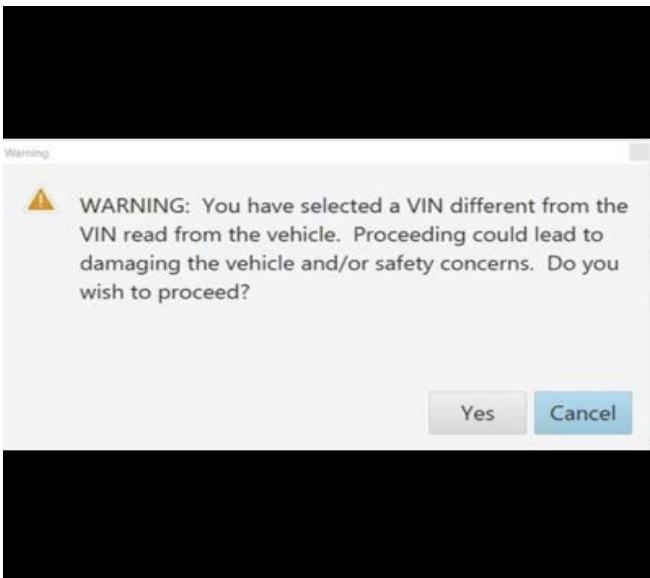
- For the TLC application, service technicians need to always ensure that the power mode (ignition) is "ON" before reading the VIN from the vehicle's VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in 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.

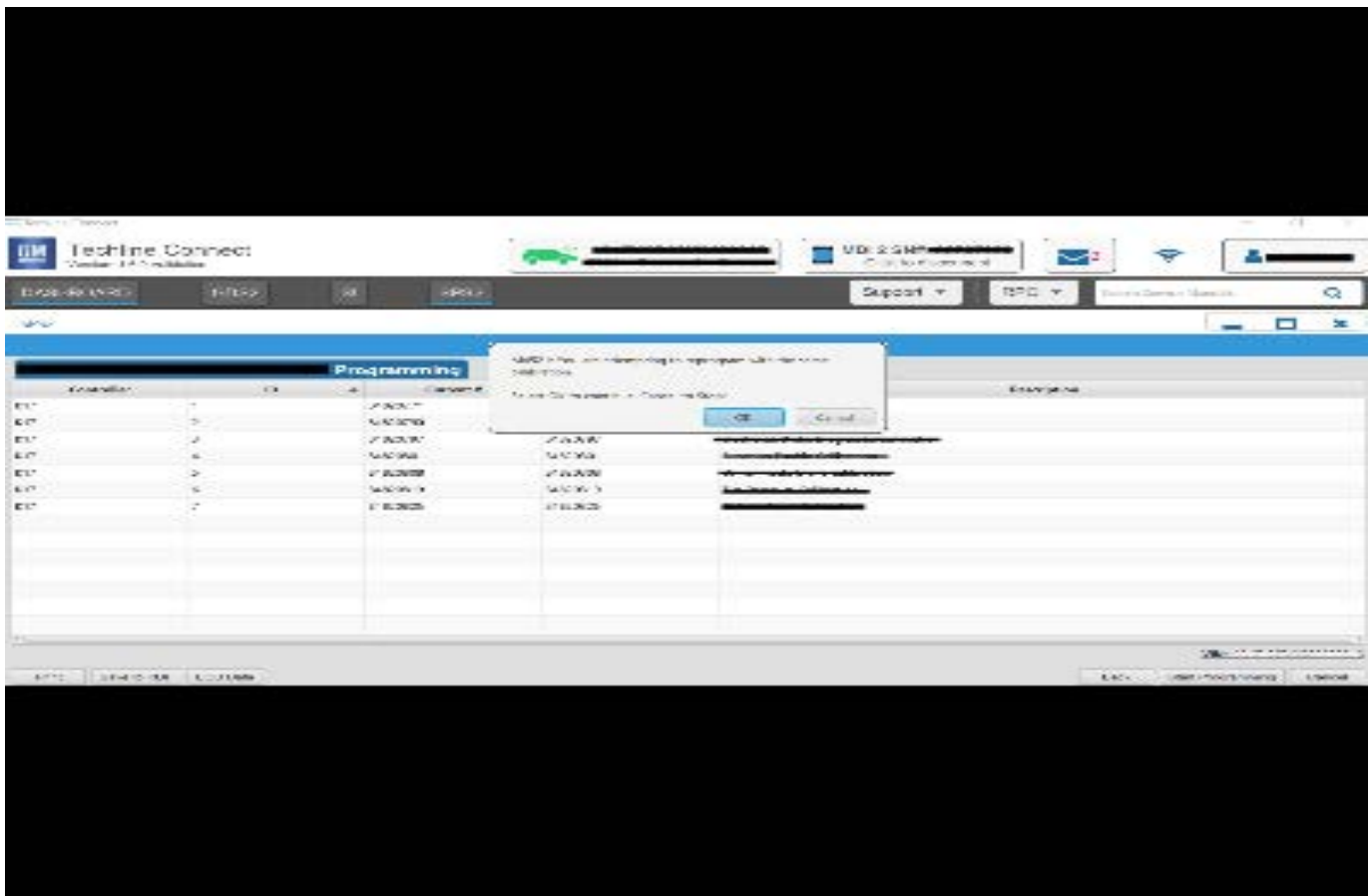


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**Important:** If the vehicle VIN DOES NOT match, the message below will be shown



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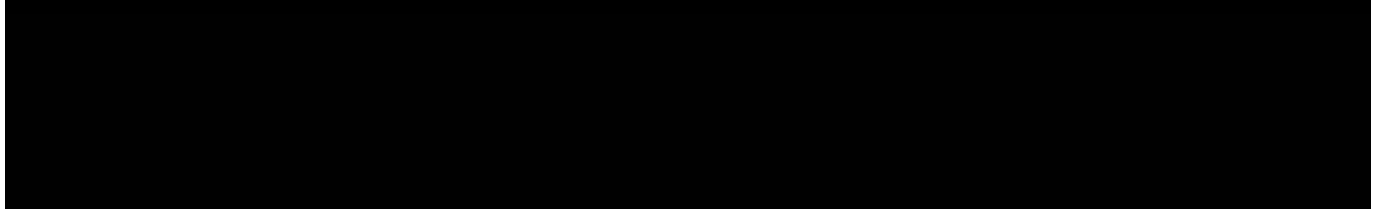


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**Important:** Techline Connect and TIS2WEB screens shown above.

**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.

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



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**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.

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

### Warranty Information

**Important:** Warranty coverage code E2 applies for this module programming event. ECM reprogramming is covered for 8 years/80,000 miles (U.S.) or 8 years/130,000 km (Canada).

For vehicles repaired under the Emission coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information:

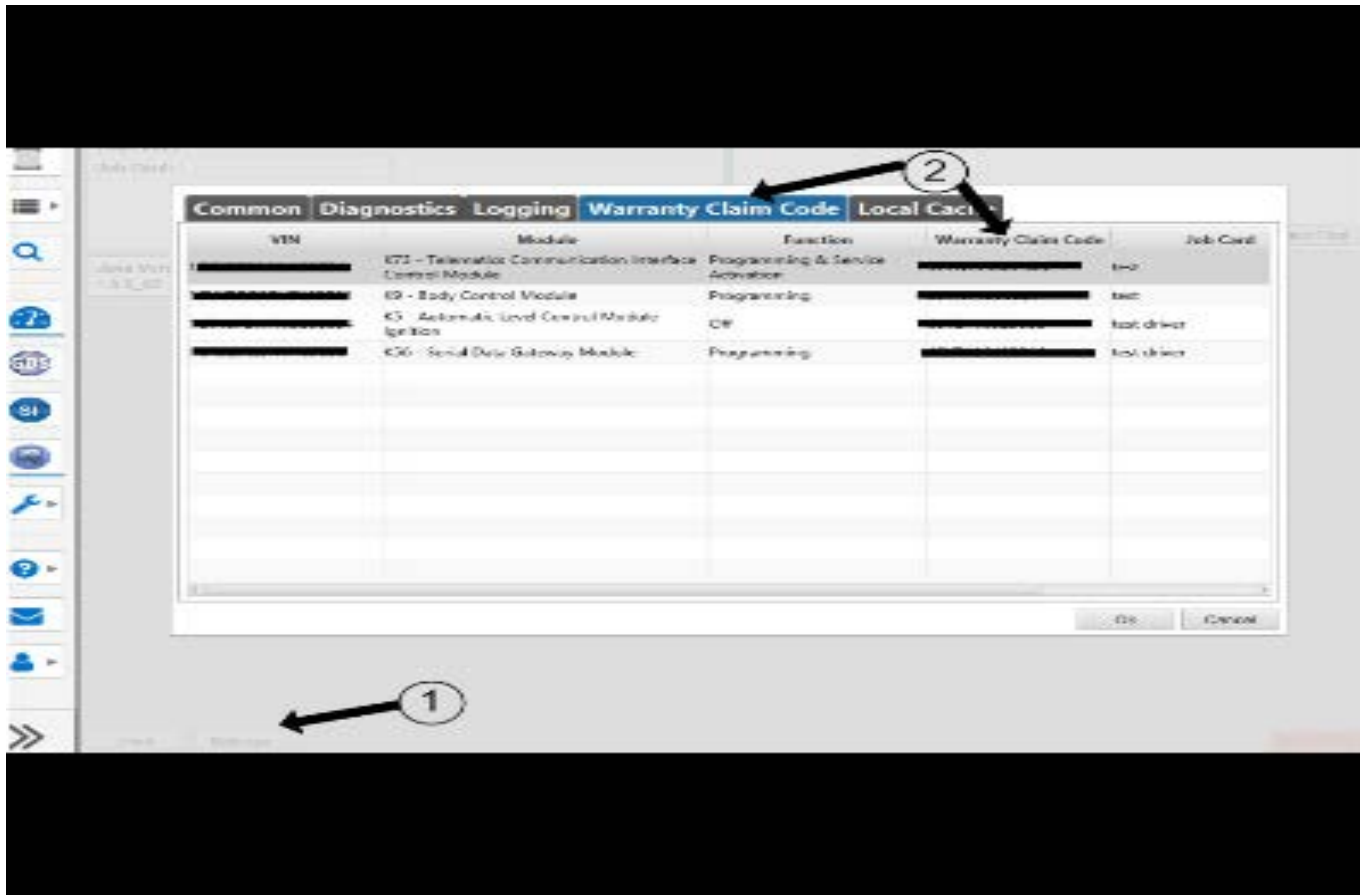
Labor Operation	Description	Labor Time
*2889008	ECM and TCM Update for Injection Timing DTC Errors	0.6 hr

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

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

- The Warranty Claim Code must be accurately entered in the "SPS 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 "SPS 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



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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 October 14, 2022

Keywords: P01CB, P01CC, P01CD, P01CE, P01CF, P01D0, P01D1, P01D2, P01D3, P01D4, P01D5, P01D6, P01D7, P01D8, P01D9, P01DA, P020A, P020B, P020C, P020D, P020E, P020F, P021A, P021B,

P02CC, P02CD, P02CE, P02CF, P02D0, P02D1, P02D2, P02D3, P02D4, P02D5, P02D6, P02D7, P02D8, P02D9, P02DA and/or P02DB

