



# Service Bulletin

Bulletin No.: 21-NA-105

Date: May, 2021

## TECHNICAL

**Subject:** Engine Control Module Calibration for DTC P0171 and P0174 Set

**This bulletin replaces PIP5779A. Please discard PIP5779A.**

Brand:	Model:	Model Year:		Breakpoint Date:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Colorado	2020	2021	SOP	May 1, 2021	LGZ	
GMC	Canyon	2020	2021	SOP	May 1, 2021	LGZ	

<b>Involved Region or Country</b>	United States, Canada, Mexico, S. Korea
<b>Additional Options (RPOs)</b>	
<b>Condition</b>	<p>Some customers may comment that the MIL is illuminated.</p> <p>Some technicians may find the following DTCs set in the Engine Control Module (ECM) at the same time.</p> <p><b>Note:</b> At times on very low mileage vehicles, usually under 1800 miles (3,000 kilometers) have seen Lean codes DTC P0171 and P0174 setting on these vehicles.</p> <ul style="list-style-type: none"><li>• P0171 Fuel Trim System Lean Bank 1</li><li>• P0174 Fuel Trim System Lean Bank 2</li></ul>
<b>Cause</b>	The cause of the condition may be software anomalies.
<b>Correction</b>	<p>After performing the normal visual inspection mentioned below.</p> <ul style="list-style-type: none"><li>• PCV hoses and oil separator connections loose or not completely snapped on</li><li>• Oil filler caps loose</li><li>• Oil filler adapter cracked</li><li>• Oil level sensor (dipstick) not fully seated</li></ul> <p>Whether you find any concerns or not, check for the most current level of software in the Engine Control Module (ECM). Reprogram the ECM to the most current level of software.</p> <p>Run the vehicle to determine that the DTC does not reset. If codes reset use SI to perform further diagnostics on the codes that set.</p>

### Service Procedure

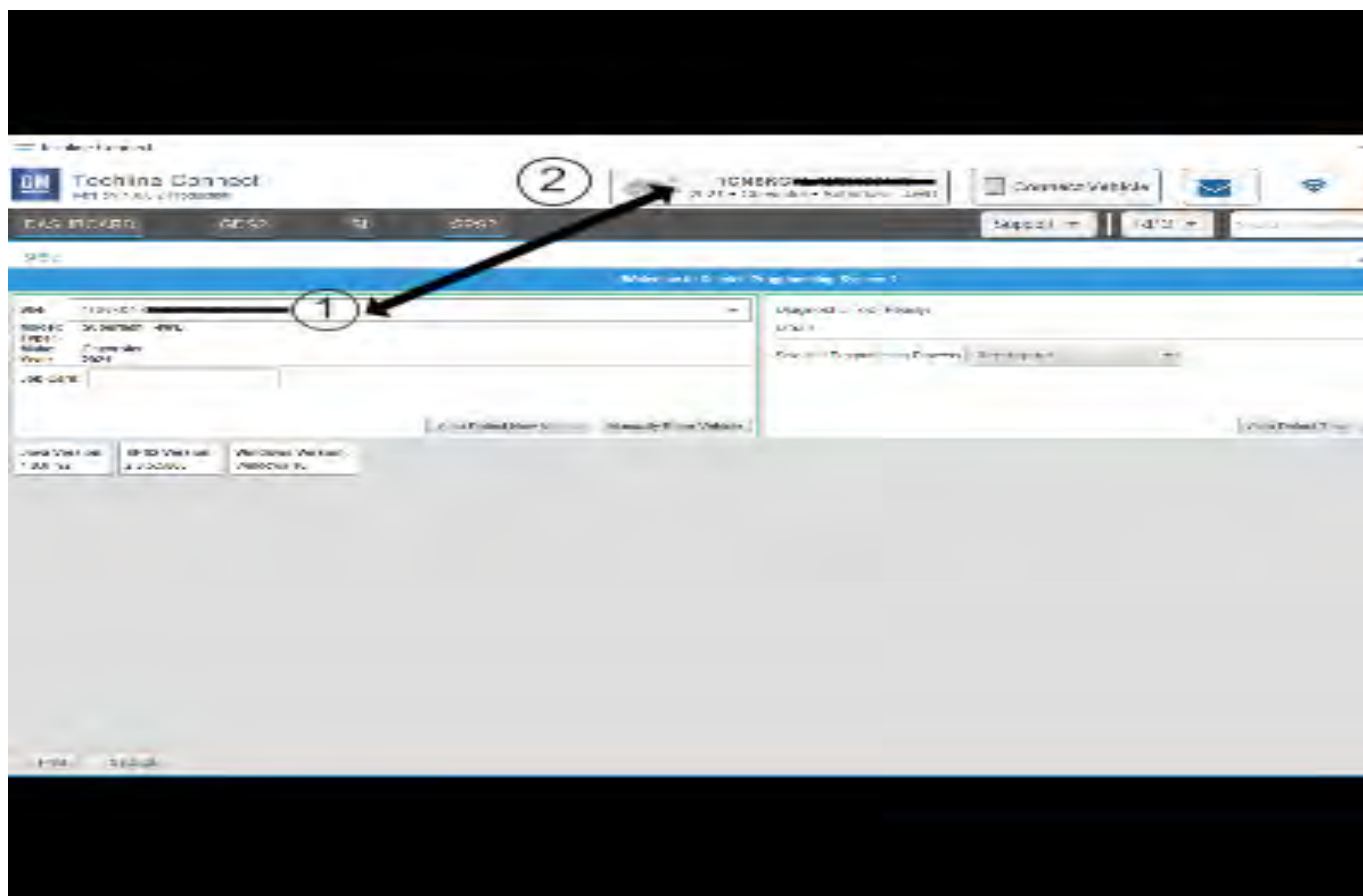
**Caution:** Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

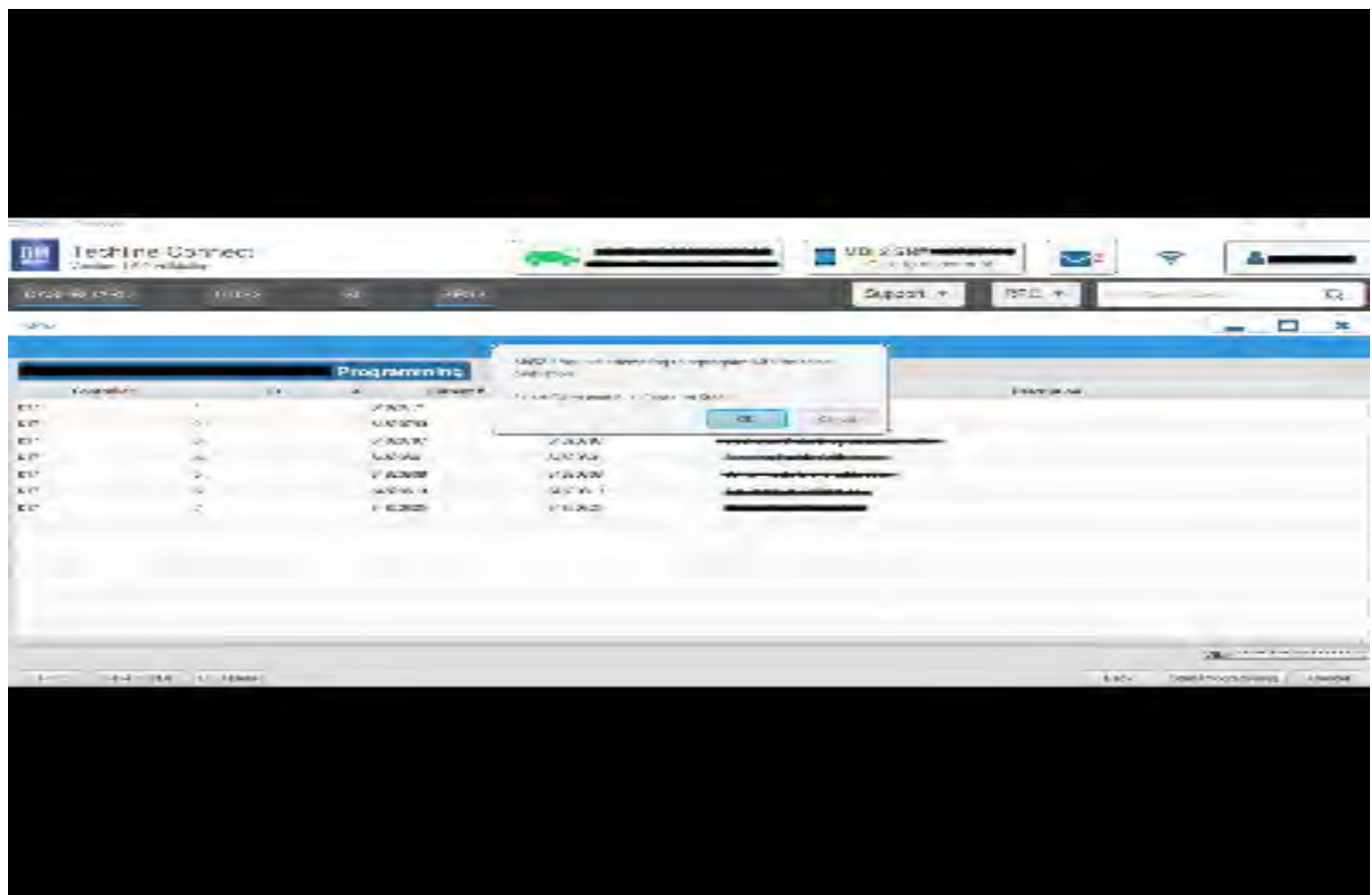
**Note:** Carefully read and follow the instructions below.

- 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.

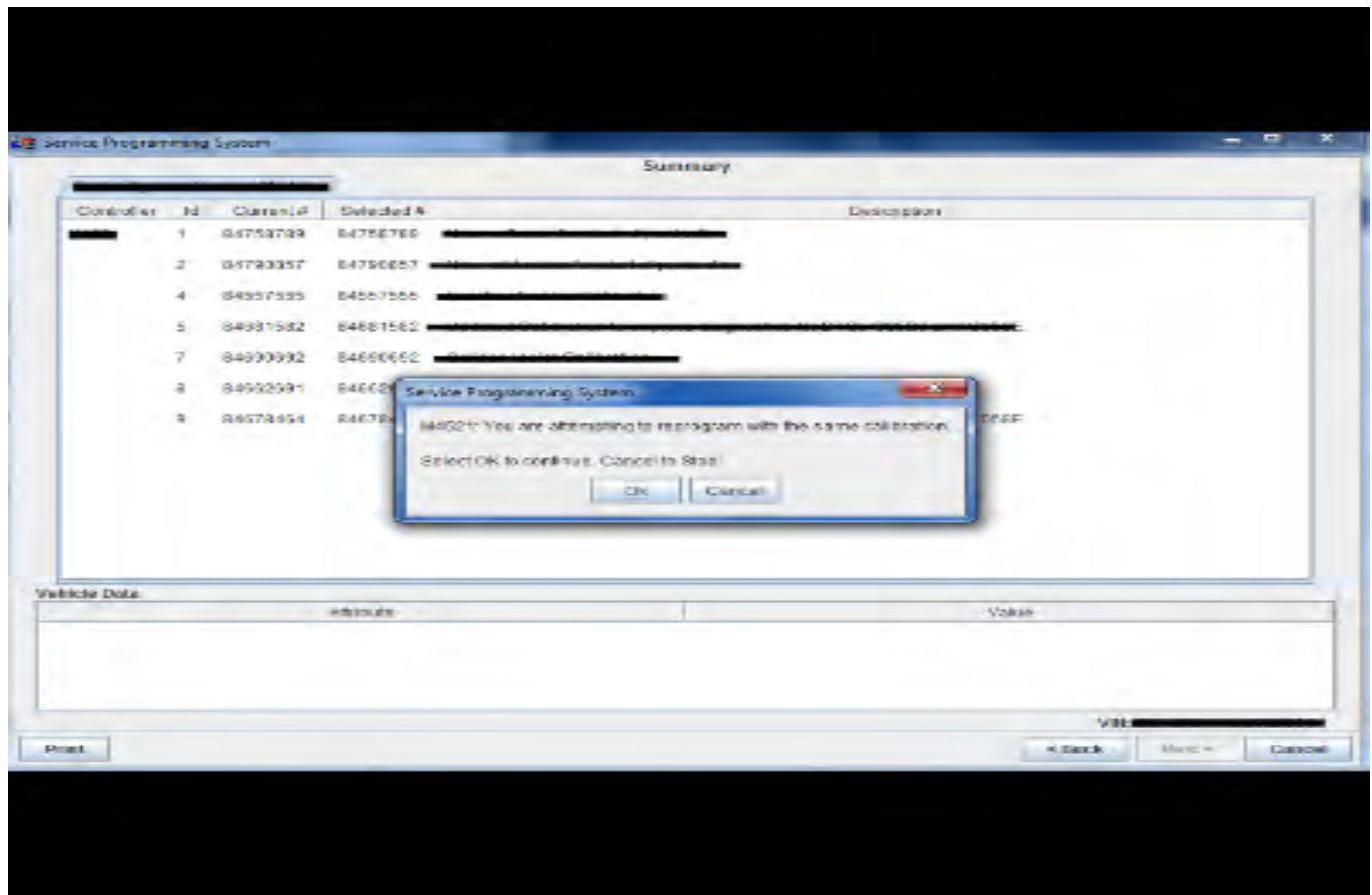
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to [www.gmdesolutions.com](http://www.gmdesolutions.com) for further information. 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.

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





5644477



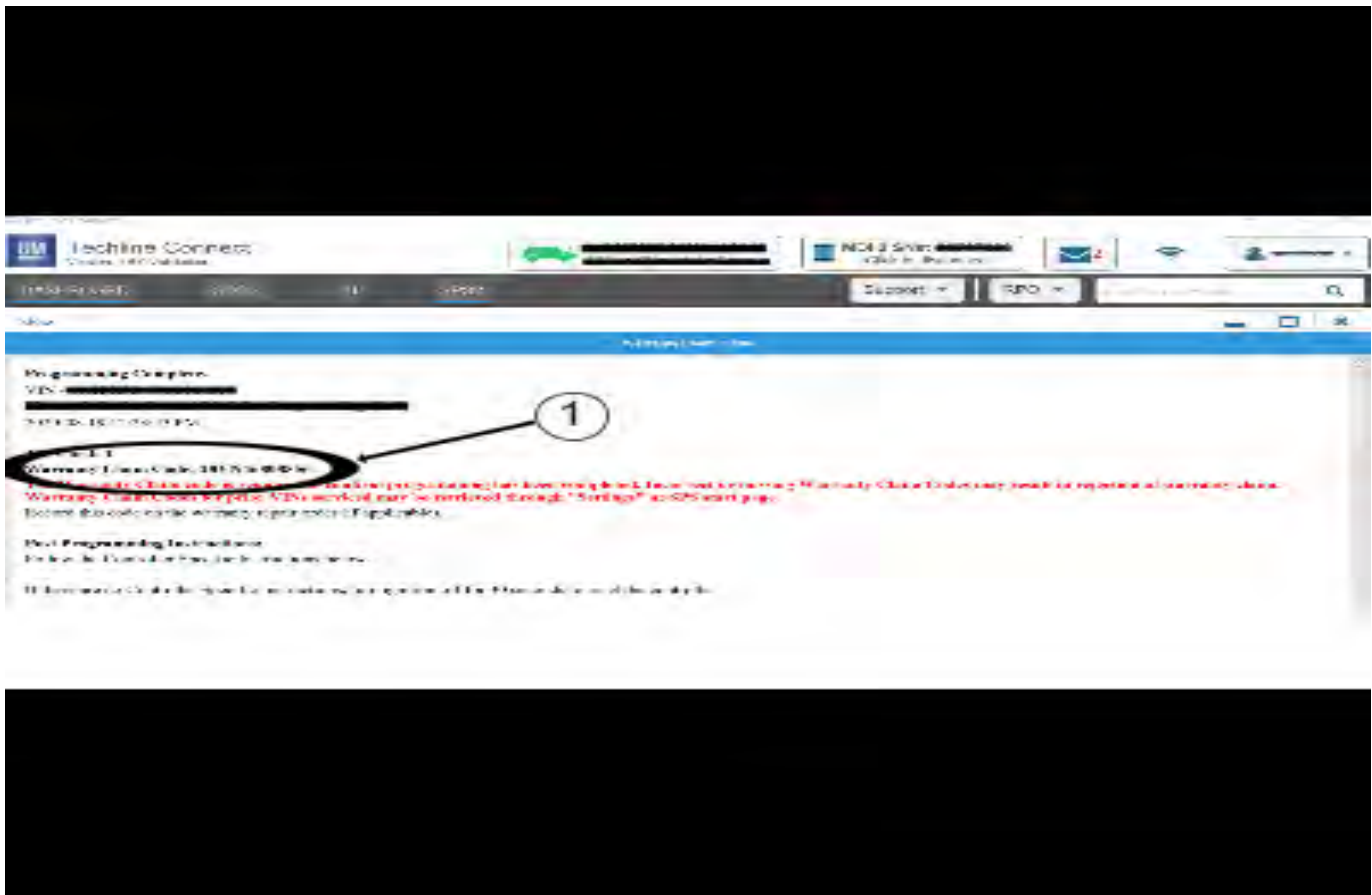
5431207

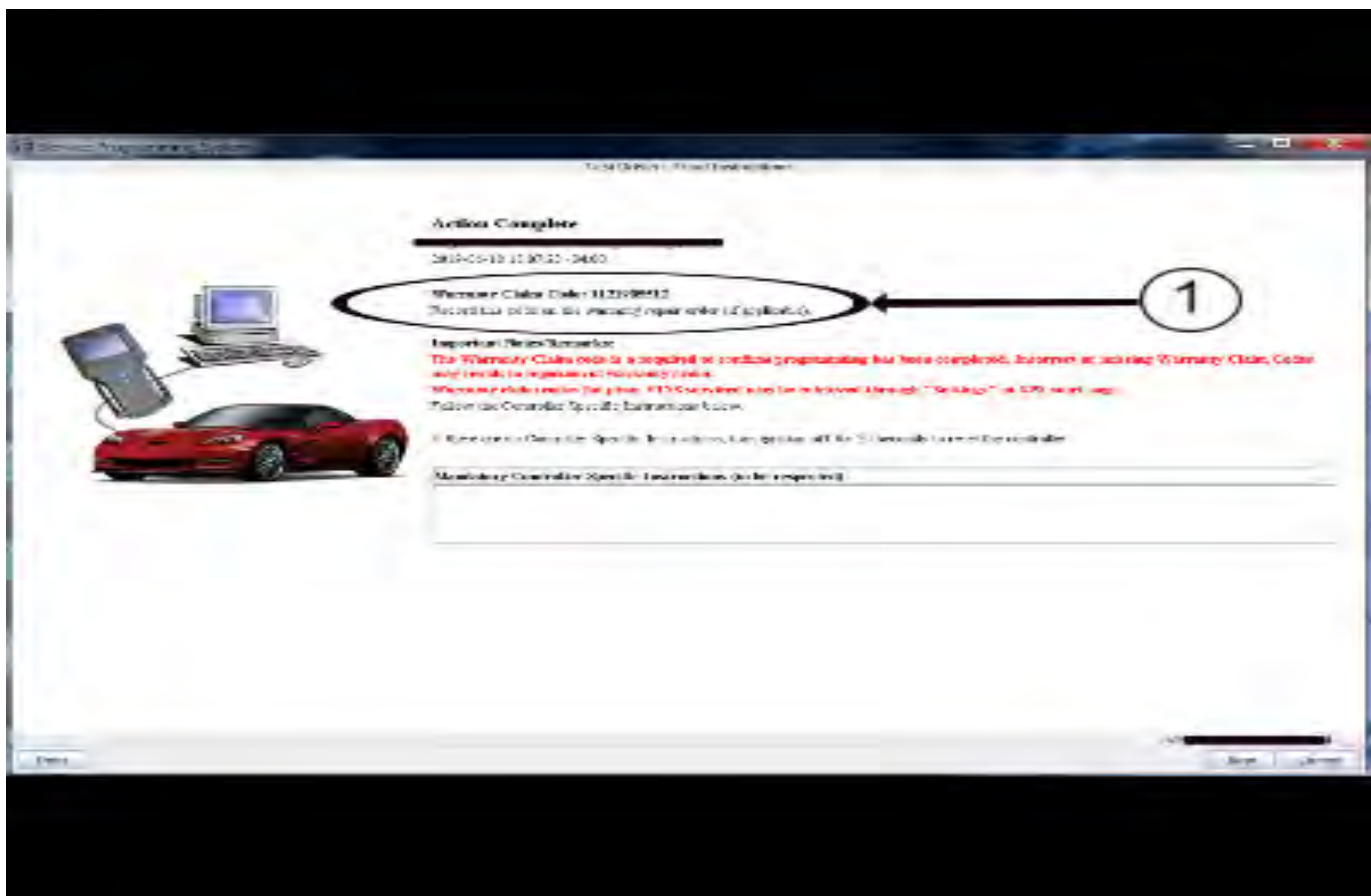
**Important:** Techline Connect and TIS2WEB screens shown above.

**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, as well as the upcoming full-size Chevrolet, GMC, Cadillac SUVs and Buick Envision. Serial Data Message Authentication also needs to have the ignition off.

1. Reprogram the ECM. Refer to *Engine Control Module Reprogramming with SPS* in SI.





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 SPS Warranty Claim Code (WCC) screen shown above on the job card. Refer to callout 1 above for the location of the WCC on the SPS screen

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

## Warranty Information

Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information. 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)

Labor Operation	Description	Labor Time
*2887288	Engine Control Module Reprogramming with SPS for DTC P0171 and P0174	0.3 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**

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

1. Open TLC/TIS on the computer used to program the vehicle.
2. Select and start SPS/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.

<b>Version</b>	1
<b>Modified</b>	Released April 29, 2021

