



# Service Bulletin

Bulletin No.: 21-NA-177

Date: February, 2022

## TECHNICAL

**Subject:** Service Power Steering Message Illuminated on Driver Information Center (DIC), DTC C0051 58 – Steering Wheel Angle Sensor Error Stored or in History

This bulletin replaces PIT5842. Please discard all copies of PIT5842.

| Brand:    | Model:      | Model Year: |      | Build Date: |                   | Engine: | Transmission: |
|-----------|-------------|-------------|------|-------------|-------------------|---------|---------------|
|           |             | from        | to   | from        | to                |         |               |
| Buick     | Encore GX   | 2020        | 2022 | SOP         | December 10, 2021 | —       | —             |
| Chevrolet | Trailblazer | 2021        | 2022 |             |                   |         |               |

|                            |                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Involved Region or Country | United States, Canada                                                                                                                                                                                                                                                                                                                                               |
| Condition                  | Some customers may comment on a Service Power Steering message illuminated on the Driver Information Center (DIC). There will be no driveability or steering related issues other than the message.<br>Technicians may find DTC C0051 SYM58 (Steering Wheel Angle Sensor Performance) will be stored in the K43 Power Steering Control Module or in recent history. |
| Cause                      | The cause of the condition may be software anomalies.                                                                                                                                                                                                                                                                                                               |
| Correction                 | Reprogram the Power Steering Control Module.                                                                                                                                                                                                                                                                                                                        |

### 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.

- " 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 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.

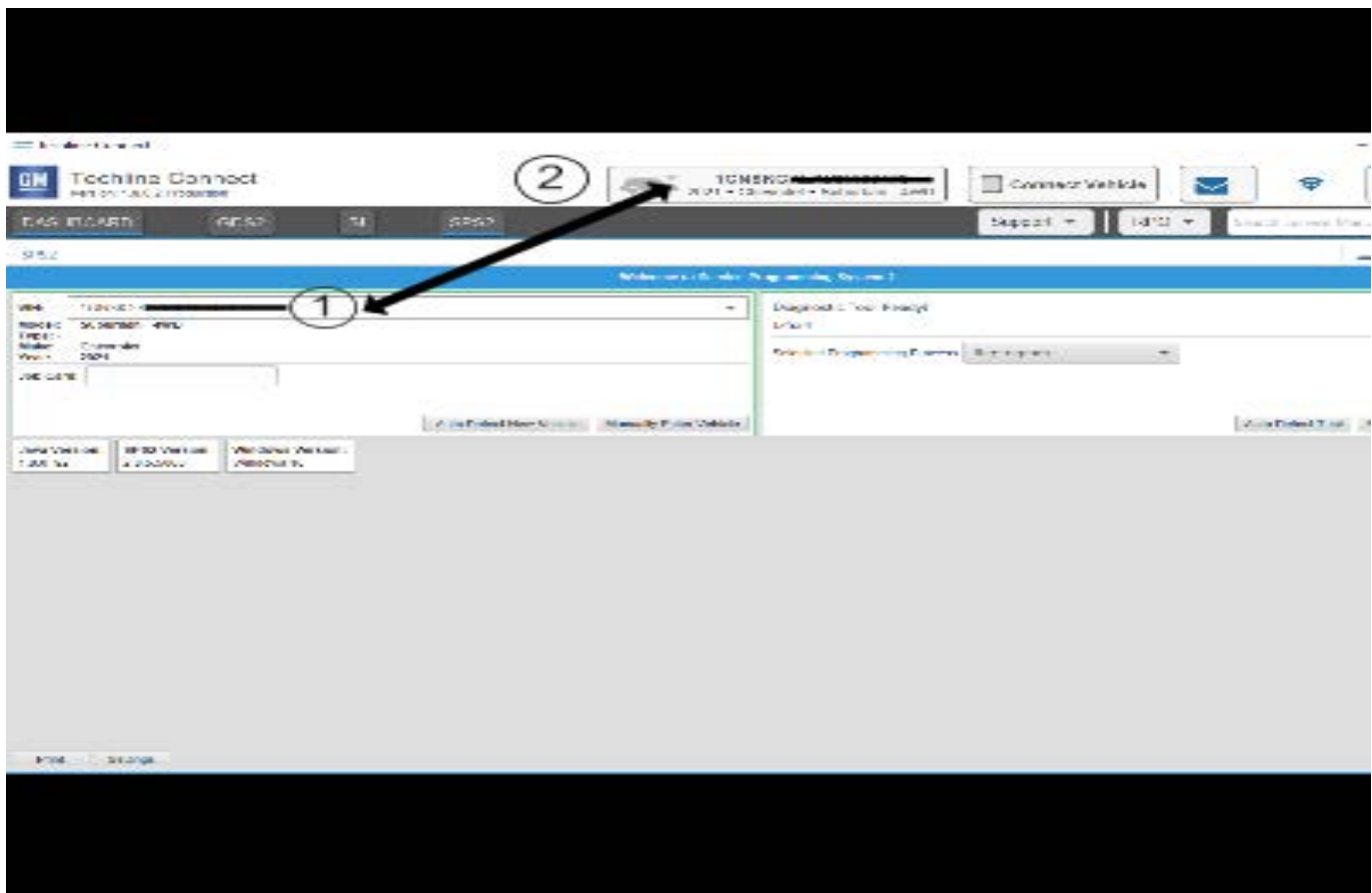
**Important:** The service technician always needs to verify that the VIN displayed in the TLC left side drop down menu and the top center window match the VIN plate of the vehicle to be programmed prior to using Service Programming System 2 (SPS2) for programming or reprogramming a module.

- " 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.

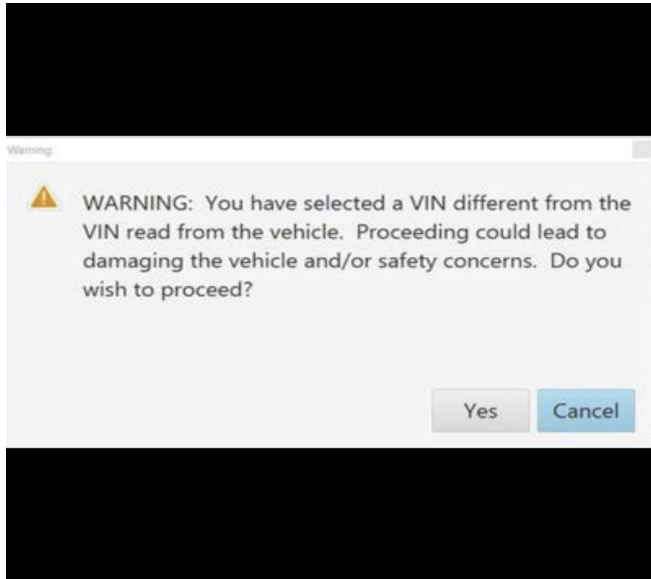
- " If the VIN that shows up in the TLC top center window after correctly reading the VIN from the vehicle does not match the VIN plate of the vehicle, manually type in the VIN characters from the vehicle VIN plate into the TLC top center window and use these for programming or reprogramming the subject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

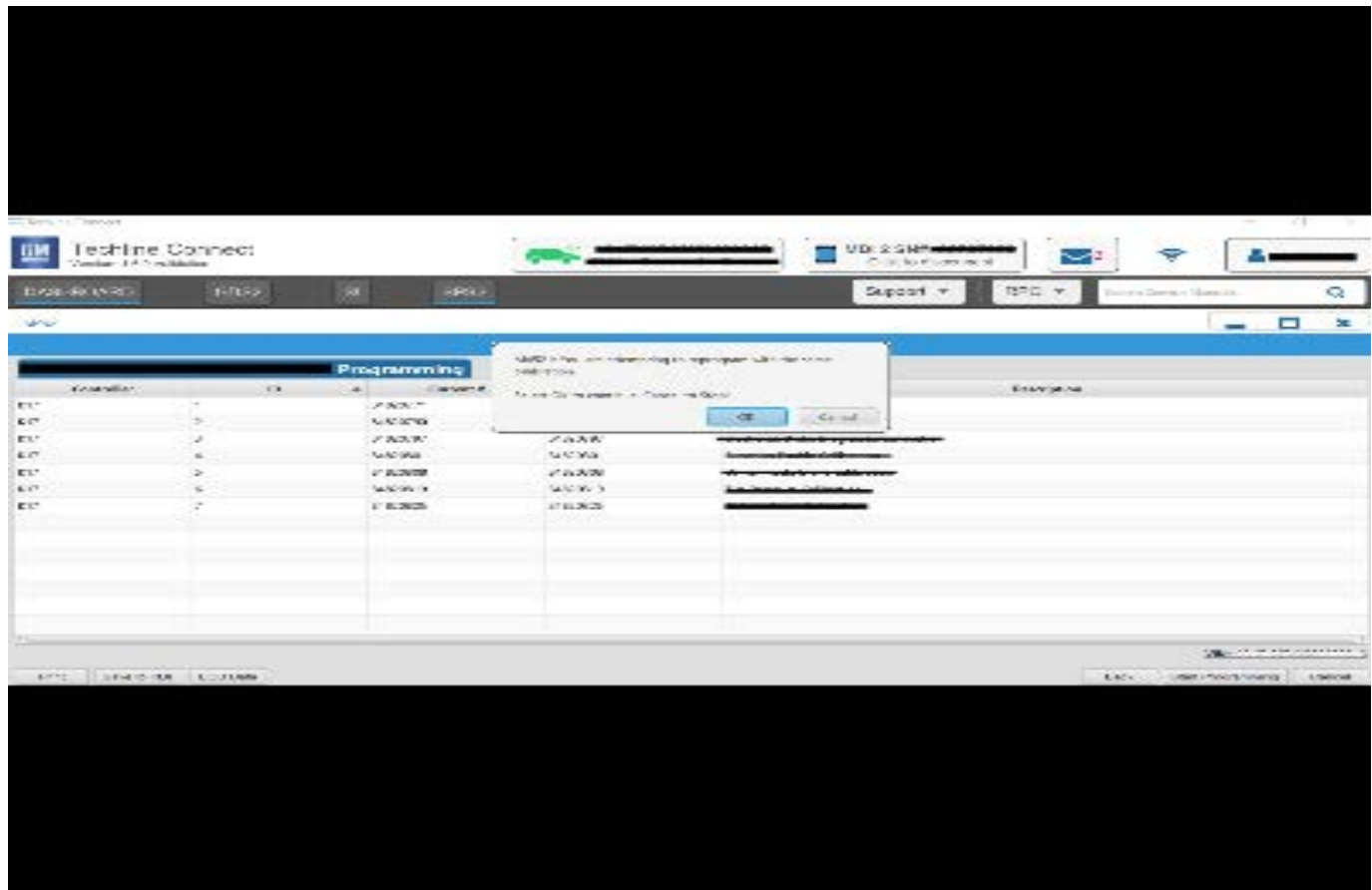
Caution: Be sure the VIN selected in the drop down menu (1) is the same as the vehicle connected (2) before beginning programming.



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



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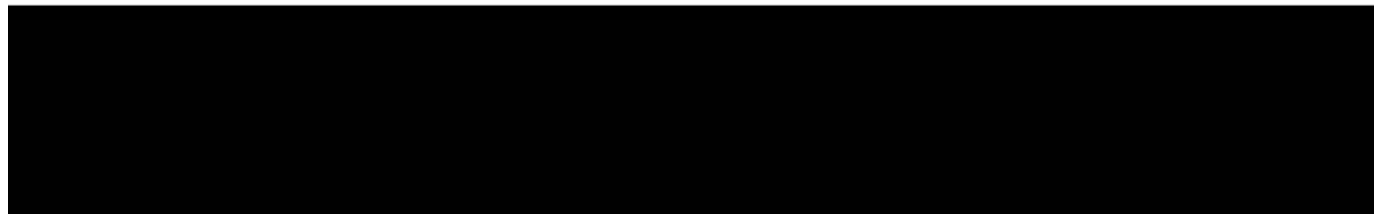
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Important: Techline Connect and TIS2WEB screens shown above.

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 Information section of this bulletin.

1. Reprogram the Power Steering Control Module. Refer to K43 Power Steering Control Module: Programming and Setup in the Service Manual.



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

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.

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| Labor Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Description                                                                        | Labor Time |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|
| 2888128*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Power Steering Control Module Reprogramming for Service Power Steering DIC Message | 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: <div>" The Warranty Claim Code must be accurately entered in the "SPS Warranty Claim Code" field of the transaction.<br/>" 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.</div> |                                                                                    |            |

**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.

|          |                                                                                                                                                            |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version  | 2                                                                                                                                                          |
| Modified | Released November 15, 2021<br>February 03, 2022 – Added the 2022 Model Year and Build Date and updated the programming procedure within Service Procedure. |

