



# Service Bulletin

Bulletin No.: 22-NA-107

Date: May, 2022

## TECHNICAL

**Subject: Service AWD Message in Driver Information Center (DIC) at Ignition On with DTC C056D Set**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Enclave	2020	2022	—	—	—	—
	Envision						
Cadillac	CT4	2020	2022	—	—	—	—
	CT5						
	XT6						
Chevrolet	Blazer	2019	2022	—	—	—	—
	Equinox	2018					
	Traverse	2018					
GMC	Acadia	2018	2022	—	—	—	—
	Terrain						

<b>Involved Region or Country</b>	North America, Brazil, Chile, Colombia, Guatemala, Europe, Middle East, Israel, Egypt, Uzbekistan, China, Cadillac Korea, GM Korea Company, Vietnam, South Africa
<b>Additional Options (RPOs)</b>	Equipped with RPOs F48 (AWD), G99 (Twinstar), and -G99 (Booster)
<b>Condition</b>	Some customers may comment on an intermittent Service AWD (All-Wheel Drive) lamp illuminated in the DIC at ignition on and as a result AWD functionality not available. However, AWD functionality will return at the next ignition cycle. Technicians may find DTC C056D set current or in recent history.
<b>Cause</b>	The cause of the condition may be software anomalies.
<b>Correction</b>	<ul style="list-style-type: none"> <li>• If DTC C056D is current and DIC Service AWD is illuminated, perform an ignition Sleep Cycle (shut the vehicle off, Open/Close Door and wait 3-4 minutes, start the vehicle again).               <ul style="list-style-type: none"> <li>– If DTC is still present and current, follow Service Diagnostics related to C056D.</li> <li>– If DTC is in History and DIC message Service AWD is no longer present, proceed to update RDCM (Rear Drive Control Module) software. Refer to the Service Procedure below.</li> </ul> </li> <li>• If customer concern was presence of DIC Service AWD message with no DTCs stored, proceed to update RDCM software. Refer to the Service Procedure below.</li> <li>• If this is a repeat concern and RDCM software was already updated, proceed to service diagnostics procedure related to the customer concern.</li> <li>• If the DTC C056D is current and will not clear, perform published diagnostics in Service Information. After a repair is made and verified, ensure that the RDCM has the latest software.</li> <li>• If DTC C056D is intermittent and customer indicates that AWD functionality returns after a key cycle, then update the RDCM with the latest available software.</li> <li>• If software has been updated after February 21, 2022, then perform published diagnostics as the vehicle already contains the software intended to correct this anomaly.</li> </ul>

## 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.
- Please verify that the radio time and date are set correctly before inserting USB drive into vehicle for programming, **otherwise an error will result.**
- 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.

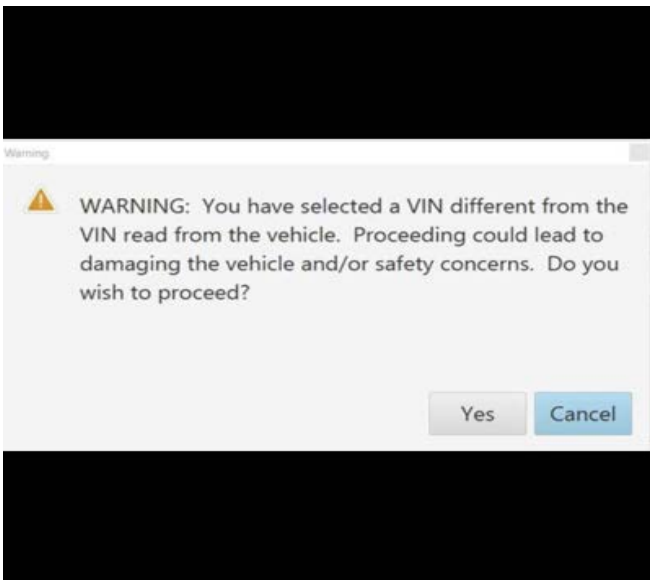
- For the TLC application, service technicians need to always ensure that the power mode (ignition) is "ON" before reading the VIN from the vehicle's VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in 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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**Important:** Techline Connect screen 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. Document the WCC on the job card. No further action is required. Refer to the Warranty Information section of this bulletin.

1. Reprogram the Rear Differential Clutch Control Module. Refer to *K47 Rear Differential Clutch Control Module: Programming and Setup* in SI.



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

### Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
2810695*	Rear Differential Clutch Control Module Reprogramming with SPS	Use Published Labor Operation Time

**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 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.
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 May 20, 2022

