

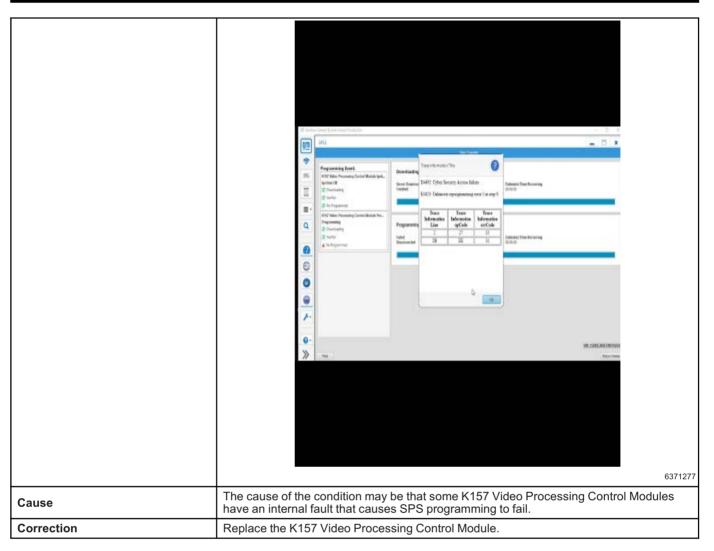
Service Bulletin

TECHNICAL

Subject: Replace Video Processing Module (VPM) When Programming Fails

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
Branu.	Model.	from	to	from	to		
Buick	Envision	2020	2023				
	CT5	2020	2021				
	CT6	2020	2020				
Cadillac	Escalade						
000000	Escalade ESV	2021	2023				
	XT4	2019	2023	_	_	_	_
	Equinox	2022	2023				
Chevrolet	Suburban	2021	2023				
	Tahoe	2021	2023				
	Terrain	2022	2023				
GMC	Yukon	2024	0000				
	Yukon XL	2021	2023				

Involved Region or Country	North America, Brazil, Chile, Colombia, Europe, Uzbekistan, Middle East, Israel, Cadillac Korea (South Korea), GM Korea Company, China
Condition	 Technicians may find that when attempting to program the K157 Video Processing Control Module, the following SPS2 errors may occur: E4492 Cyber Security Access Failure E4423 Unknown reprogramming error 5 at step 0



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 <u>www.gmdesolutions.com</u> 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.

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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 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. Replace the Video Processing Control Module. Refer to *Video Processing Module Replacement* in SI.
- 2. Reprogram the Video Processing Control Module. Refer to K157 Video Processing Control Module: Programming and Setup in SI.

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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.

3. 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.

Labor Operation	Description	Labor Time
3487888*	Replace K157 Video Processing Control Module for Programming Errors	1.9 hrs
*This is a uniq	ue Labor Operation for bulletin	use only.
Important: To carefully read	avoid warranty transaction reje and follow the instructions below	ections, w:
Labour Time [Top]		
Labour Operation Code:		
Additional labour op code i	nformation:	Claim Code:
		6125814
 The Warr in the "Ward of the "Ward" of the "Ward of the "	anty Claim Code must be accur arranty Claim Code" field of the	ately entered transaction.
 When model generate document field on the 	ore than one Warranty Claim Co d for a programming event, it is t all Warranty Claim Codes in th he job card. Dealers must also e the "Warranty Claim Code" field	de is required to ne "Correction" enter one of the

transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided

by SPS2.

Warranty Claim Code Information Retrieval

	VIN	Inostics Logging Warranty Nodele	Function	Warranty Claim Code	
A R. off		Cortasi Madule	Activistics		1-2
		69 - Body Control Module 63 - Antonials Level Control Mariato	Programming C#		test test driver
		Ignition C56 Serial Data Sateway Module	Property		test driver
1.0					Os Cancel

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 June 16, 2023

GM bulletins are intended for use by professional technicians, NOT a "<u>do-it-yourselfer</u>". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, <u>DO NOT</u> assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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