TECHNICAL

Subject: Possible Crank No Start or Extended Crank with DTC P12A6

Brand:	Model:	Model Year:		Breakpoint Date:		Engine:	Transmission:
		from	to	from	to		
Buick	Encore	2021	2021	SOP	April 12, 2021	1.4L (LE2)	
	Encore GX	2020	2021	SOP	March 6, 2021	1.2L (LIH)	
	Regal	2019	2020	—	—	1.5L (LFV)	
Cadillac	CT5	2020	2020	—	—	3.0L (LGY)	
	Escalade	2021	2021	SOP	November 4, 2020	5.3L (L84), 6.2L (L87)	
	Escalade ESV						
Chevrolet	Camaro	2021	2021	SOP	February 15, 2021	2.0L (LTG)	
	Corvette	2020	2020	—	—	6.2L (LT2)	
	Equinox	2020	2021	SOP	January 14, 2021	1.5L (LYX)	
	Express	2021	2021	SOP	February 11, 2021	6.6L (L8T), 4.3L (LV1)	
	Malibu	2019	2021	SOP	January 15, 2021	1.5L (LFV)	
		2021				2.0L (LTG)	
	Silverado 1500 (New Model)	2019	2019	—	—	LV3, L82, L84, L87.	—
	Silverado 1500	2020	2021	SOP	February 11, 2021	4.3 (LV3) 5.3 (L82, L84) 6.2 (L87)	
	Silverado 2500HD/3500HD	2020	2021	SOP	February 11, 2021	6.6 (L8T)	
	Suburban	2021	2021	SOP	November 4, 2020	5.3L (L84), 6.2L (L87)	
	Tahoe						
	Trailblazer (VIN M)	2020	2021	SOP	March 6, 2021	1.2L (LIH)	
GMC	Savana	2021	2021	SOP	February 11, 2021	6.6L (L8T), 4.3L (LV1)	
	Sierra 1500 (New Model)	2019	2019	—	—	LV3, L82, L84, L87.	
	Sierra 1500	2020	2021	SOP	February 11, 2021	4.3 (LV3) 5.3 (L82, L84) 6.2 (L87)	
	Sierra 2500HD/3500HD	2020	2021	SOP	February 11, 2021	6.6 (L8T)	
	Terrain	2020	2021	SOP	January 14, 2021	1.5L (LYX)	
	Yukon	2021	2021	SOP	November 4, 2020	5.3L (L84), 6.2L (L87)	
	Yukon XL						

Brand:	Model:	Model Year:		Breakpoint Date:		Engine:	Transmission:
		from	to	from	to		
Holden	Astra Hatch & Wagon	2017	2020	—	—	LE2	—
	Astra Sedan	2017	2018			LE2	
	Commodore	2018	2020			LTG	
	Equinox	2018	2020			LYX	
	Silverado 1500	2020	2021			—	

Involved Region or Country	North America, Europe, Uzbekistan, Russia, Middle East, Palestine, Israel, Brazil, Chile, Paraguay, Colombia, Ecuador, Peru, Uruguay, Argentina, Japan, Thailand, GM Korea Company, Cadillac Korea (South Korea), Australia/New Zealand, Egypt, Other Africa
Condition	Some customers may comment on a possible crank no start or extended crank. Technicians may find DTC P12A6 set current or in recent history. This could be accompanied with a crank no start or extended crank issue and additional DTCs P00C6, P00F4, P0098, P2199 and/or P0096.
Cause	The cause of the condition may be a software anomaly in the Engine Control Module (ECM).
Correction	Reprogram the ECM.

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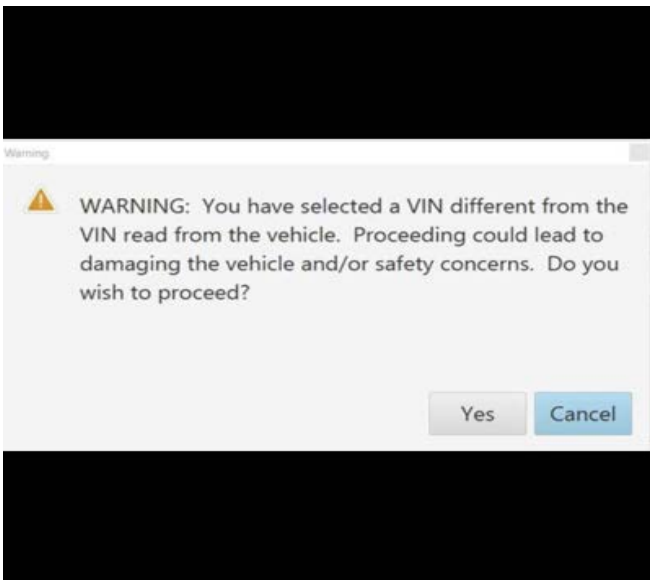
- For the TLC application, service technicians need to always ensure that the power mode (ignition) is "ON" before reading the VIN from the vehicle's VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.

- 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.

WARNING: You have selected a VIN different from the VIN read from the vehicle. Proceeding could lead to damaging the vehicle and/or safety concerns. Do you wish to proceed?

Yes　Cancel

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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 Engine Control Module (ECM). Refer to *K20 Engine 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.

2. Record the Warranty Claim Code on the 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
2887038*	Engine Control Module Reprogramming for Crank No Start or Extended Crank Condition	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.

Version	13
Modified	Released November 17, 2020
	December 18, 2020 – Added 2020 Truck Models and updated programming information in the Service Procedure.
	January 15, 2021 – Added the 2020 Chevrolet Corvette and North America to the Involved Region or Country section.
	February 08, 2021 – Added 2020 Cadillac CT5, 2019 Chevrolet Silverado 1500 and GMC Sierra 1500 and engine RPOs.
	February 23, 2021 – Added the 2021 Model Year to Chevrolet Silverado 1500, 2500HD/3500HD and GMC Sierra 1500, 2500HD/3500HD with Breakpoint dates, updated the Condition section with additional DTCs and updated the Involved Region or Country section.
	March 08, 2021 – Added 2021 Buick Encore GX and Chevrolet Trailblazer (VIN M) with breakpoints.
	March 19, 2021 – Added 2020 Buick Encore GX and Chevrolet Trailblazer (VIN M) and updated the programming template.
	April 05, 2021 – Added 2020 and 2021 Chevrolet Equinox and GMC Terrain and added Brazil to Involved Region or Country section.
	April 23, 2021 – Added the Buick Regal and Chevrolet Malibu models, updated the Involved Region or Country section and updated the programming bullet points under Service Procedure.
	May 07, 2021 – Added the Chevrolet Camaro and the 2021 Malibu with LTG engine.
	September 01, 2021 – Added the 2021 Buick Encore, Chevrolet Express and GMC Savana with breakpoint dates and engine builds and updated the Service Procedure.
	February 16, 2022 – Added Holden Models and updated the programming procedure.
	May 19, 2022 – Added the Holden Silverado 1500.