



# Preliminary Information

## PIP5540F Diagnostic Tip: Poor Engine Performance Or CEL On In Cold Ambient Temperatures On Vehicles Equipped With Turbocharged Gasoline Engines May Set One Or More Of The Following DTCs P0299 P2227

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
All	All	2000 - 2020	All	All	All	All

Involved Region or Country	North America
Condition	CEL on and poor engine performance in very cold ambient temperatures.
Cause	Possible poor engine performance with one or more of the following DTC's set due to restricted air flow during times of very cold ambient temperatures. (P0299, P2227)

Correction:

If you encounter one or more of the following DTC's P0299, P2227 or poor engine performance during very cold ambient temperatures of 32 degrees Fahrenheit (0 degrees Celsius) or lower.

**Important:** Before proceeding, please verify that all the latest service information including bulletins and PI's that pertain to this issue have been completed for the specific vehicle being serviced. Reference list below for specific bulletins and PI's.

**16-NA-405** Encore, Trax LUV

**17-NA-221** Encore LE2

**18-NA-069** Malibu

**18-NA-020** Envision, Equinox, Terrain

**PIP5495J: Check Engine Light On With P0299 Or P0234**

Inspect the air induction system including charge air cooler on turbocharged engines for signs of ice restricting the air flow or covering related pressure sensors.

If found, allow the ice to melt so that the moisture can be drained from the induction system including the charge air cooler without component damage.

Once any excessive moisture has been removed, retest and follow normal diagnostic steps for any symptoms found.

Version History

Version	7
Modified	01/04/2018 - Created on

01/18/2018 - Updated Title, Cause and Correction Section.  
12/06/2018 Updated to add 2019 model year  
01/11/2019- Updated to remove dtc P0171 P0172  
02/19/2019- Updated to change PI to diagnostic tip and added additional information advising dealer to complete all latest bulletin's pertaining to specific vehicle being serviced.  
10/14/2019- Updated PI to include bulletin numbers for reference  
01/14/2020- Updated to add 2020 model year.



© 2020 General Motors. All Rights Reserved.