



Preliminary Information

PIP5501B DTC P2101

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	Escalade Models	2017	All	All	6.2L L86	All
Chevrolet	Silverado	2017	All	All	4.3L LV3 5.3L L83 6.2L L86	All
Chevrolet	Suburban	2017	All	All	5.3L L83	All
Chevrolet	Tahoe	2017	All	All	5.3L L83	All
GMC	Sierra	2017	All	All	4.3L LV3 5.3L L83 6.2L L86	All
GMC	Yukon Models	2017	All	All	5.3L L83 6.2L L86	All
Involved Region or Country	North America					
Additional Options (RPO)	N/A					
Condition	Vehicles setting DTC P2101					
Cause	In 2017 the K2XX introduced a "Driver Door Open Prime" (DDOP) feature that improves cold startability. The engineering investigation has determined that an intermittent pulse on the ECM RUN/CRANK input (during vehicle door unlock), initializes the Electronic Throttle Control (ETC) diagnostics that falsely sets P2101 when the DDOP occurs as the customer opens the driver door. Many of the reported P2101 failures show that the vehicle battery was in a reduced charge state (new dealer stock or extended radio operation with the engine off).					

Correction:

1. Perform a freeze frame (FF) read with GDS2. If the following (FF) parameters for the P2101 match, then the cause of the P2101 is part of an engineering investigation. Do not replace any parts.

Parameter	Module	Value
Engine Controls Ignition Relay Command	Engine Control Module	OFF
Engine Controls Ignition Relay Control Circuit High Voltage Test Status	Engine Control Module	Not Run
Engine Controls Ignition Relay Control Circuit Low Voltage Test Status	Engine Control Module	Ok
Engine Controls Ignition Relay Control Circuit Open Test Status	Engine Control Module	OK
Engine Speed	Engine Control Module	0 RPM
Ignition 1 Signal	Engine Control Module	11.9 V
Power Mode	Engine Control Module	OFF
Engine Run Time	Engine Control Module	0 SEC
Ignition Accessory Signal	Engine Control Module	ON
Engine Controls Ignition Relay Feedback Signal	Engine Control Module	0.3 V

2. Perform the "Battery Inspection/Test" procedure in SI, using the GR8, and replace the battery if it fails the test.

3. Inspect for any high resistance and/or loose connections at both the battery fuse block and the positive or negative battery cables.

- It is imperative that both the positive and negative battery top posts protrude above the battery cable clamps 1-2 mm (0.040 - 0.080 in) to be properly installed, as shown below (5).
- Check both the positive and negative battery cable clamp nuts and make sure they are properly tightened to 7 Nm (62 lb in).
- After the positive and negative battery cables are fully installed and tightened to 7 Nm (62 lb in), grasp each battery cable near the battery post and make sure they are secure and that they do not spin on the post. If so, replace the battery cable.
- Inspect the battery fuse block cable connections for being loose by grasping each cable near the eyelet and verify they do not rotate on their respective stud. Verify each nut is torqued properly to 15 Nm (11 ft lb).
- Inspect the negative battery cable where it connects to the engine block and make sure it is not loose by grasping the cable near the eyelet and verify it does not rotate. Verify the cable nut is torqued properly to 45 Nm (33 ft lb).

6. Perform a loaded voltage drop test on the short positive battery cable (4), shown below, and the negative battery cable.

Note: When checking voltage drop, the voltage drop should be performed with the fuel system disabled (or hold the accelerator WOT) and while cranking the engine. MIN/MAX on the Digital Multi Meter (DMM) should NOT be used. The voltage drop should be monitored at a STEADY crank. The voltage drop should not exceed 200 mV. If the voltage drop is above 200 mV, replace the affected cable(s). This test should be performed during a cold engine crank and also after a hot engine soak

4. Clear codes

5. Run the engine for 1 minute, soak the vehicle for 5 hours (required to re-initialize the DDOP) and verify that the P2101 does not reset.

6. Return the vehicle to the customer.

Warranty Information

Labor Operation	Description	Labor Time
4081808*	Clear Codes and Evaluate	0.3 hr.
*This is a unique Labor Operation for Bulletin use only.		

Version History

Version	2
Modified	6/30/2017 to add vehicle lines



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